THE SHIP THAT SUNK IN VICTORY—1779

WINSTON'S CUMULATIVE LOOSE-LEAF

ENCYCLOPEDIA

A COMPREHENSIVE REFERENCE BOOK

Editor-in-Chief

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Author of "Civilization, an Historical Review of Its Element," "The Aryan Race," "Manual of Classical Literature," "Man and His Ancestors," "Famous Men and Great Events of the Nineteenth Century," and numerous other works. Editor of "Twentieth Century," "Biographical Dictionary," "Pamous Orators of the World," "Half Hours with the Best American Authors," etc., etc. Member of the "Academy of Natural Sciences of Philadelphia." "Geographical Society of Philadelphia," "Natural History Society," and "Society for Physical Research."

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KEY TO PRONUNCIATION

Three methods are used to indicate the pronunciation of the words forming the headings of the separate articles:

- (1) By dividing the word into syllables, and indicating the syllable or syllables to be accented. This method is followed where the pronunciation is entirely obvious. Where accent marks are omitted, the omission indicates that all syllables are given substantially the same value.
- (2) Where the pronunciation differs from the spelling, the word is re-spelled phonetically, in addition to the accentuation.
- (3) Where the sound values of the vowels are not sufficiently indicated merely by an attempt at phonetic spelling, the following system of diacritical marks is additionally employed to approximate the proper sounds as closely as may be done:

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a, as in fate, or in bare.
a, as in alms, Fr. &me, Ger. Bahn=â of Indian names.
a, the same sound short or medium, as in Fr. bal, Ger. Mann.
a, as in fat.
a, obscure, as in rural, similar to & in but, è in her: common in Indian names.
e, as in me=i in machine.
e, as in her.
I, as in pine, or as ei in Ger. Mein.
i, as in pin, also used for the short sound corresponding to ē, as in French and Italian words.
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eu, a long sound as in Fr. jeûne, =
Ger. long ö, as in Söhne, Göthe
(Goethe).

eu, corresponding sound short or medi-
um, as in Fr. peu=Ger. ö short.

ō, as in note, moan.
o, as in not, frog—that is, short or
medium.

ō, as in move, two.

th, as in tube.
u, as in tube.
u, as in tube: similar to è and also to a.

th, as in bull.

th, as in Sc abune=Fr. û as in dû,
Ger. ü long as in grün, Bühne.

th, the corresponding short or medium
sound, as in Fr. but, Ger. Müller.
oi, as in oil.
ou, as in pound; or as au in Ger. Haus.
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The consonants, b, d, f, h, j, k, l, m, n, ng, p, sh, t, v, and z, when printed in Roman type, are always given their common English values in the transliteration of foreign words. The letter c is indicated by s or k, as the case may be. For the remaining consonant sounds the following symbols are employed:

```
ch is always as in rich.
d, nearly as th in this = Sp. d in Madrid, etc.
g is always hard, as in go.
h represents the guttural in Scotch loch, Ger. nach, also other similar gutturals.
p, Fr. nasal n as in bon.
represents both English r, and r in foreign words, in which it is gen-
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erally much more strongly trilled.

s, always as in so.

th, as th in thin.

th, as th in this.

w always consonantal, as in soe.

x = ks, which are used instead.

y always consonantal, as in yea (Fr.

ligne would be re-written lêny).

zh, as s in pleasure = Fr. i.
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WINSTON'S CUMULATIVE ENCYCLOPEDIA

VOLUME VI

original act provided for a commission of diminished. See Music. five members; this was increased to seven Intestacy members in 1906, to nine members in

applies to common carriers (except Intestine (in-testin; Lat. intestiwater), including railroads, sleeping-car companies, petroleum pipe lines, and telephone, telegraph, cable and express combranous tube which extends from the panies. The act requires all rates to be right or pyloric orifice of the stomach to panies. The act requires all rates to be right or pyloric orifice reasonable and just; prohibits preferent the anus, and which tial rates, or undue or unreasonable preferences, or advantages in rates or facilifood from the stomties; forbids the charging of a higher ach, retains it for a rate for a shorter than for a longer haul longer or shorter peover the same line, in the same direction, riod, mixes it with the shorter being included within the bile, pancreatic juice, longer haul, or the charging of any greater and intestinal secrecompensation as a through rate than the tions, gives origin to aggregate of the intermediate rates subject the lacteal or absorbto the act. The commission is authorized ent vessels which take aggregate of the intermediate rates subject the lacteal or absorbto the act. The commission is authorized ent vessels which take
under certain circumstances to permit the up the chyle and conpooling of freights of different and competing railroads, and to permit the acquirent of the blood, and
sition by one carrier of the control of which, lastly, conveys
another carrier in any manner not involving the consolidation of such carriers into
ble products from the
a single system for ownership and operasystem. In man it is
tion. The act of February, 1920, authorizes the commission to make rates which the small intestine,
will yield the carriers a fair return. The w h ic h comprehends

INTESTINAL TUBE. will yield the carriers a fair return. The which comprehends rate of return is fixed at 5½ per cent, to the duodenum, jejuwhich may be added, in the discretion of num, and ileum; and the commission, not exceeding one-half of the large intestine, or equipment, for the two years March 1, 1920—March 1, 1922.

Interval (in'terval), in music, the distance between two given distance between two given distance between two given distance of the small intestine: these, gravity or acuteness. Intervals are sim-

Interstate Commerce Commission, an important body created by an named according to the distance of the two boundary notes. Thus the interval United States and signed by President of a whole tone (CD) is called a second, Cleveland on Feb. 4, 1887. This act was of a whole tone and a semitone (CE b) extensively amended by another act of March 2, 1889, and was supplemented by any major scale reckoning up from the later acts, notably the Elkins act of 1903, key-note are major. Intervals a semitone the Hepburn act of 1906, the Mann-Elkins less are minor. If they are a semitone act of 1910, the acts of 1912 and 1917, greater than major, they are augmented; and the transportation act of 1920. The if a semitone less than minor, they are original act provided for a commission of diminished. See Music.

(in-tes'ta-si), in law, the condition resulting from 1917, and to eleven members under the one's dying without having left a will. In transportation act of 1920.

The original act, with its amendments, next of kin. See Descent.



as the serous, muscular, and mucous coats. The innermost or mucous coat presents several interesting structures. Among these are the valuala conniventes, or closely folded transverse plaits of the mucous membrane, the functions of which would appear to be those of serving materially to increase the digestive surface or area of the intestine, and thoroughly mingle the ingesta with the secretions. The surface of the membrane is covered with innumerable fine projections termed villi, which give to it almost a velvety texture. Each villus is found under the microscope to be an outstanding process of the mu-cous membrane, containing internally an artery giving off minute ramifications, a vein by which the venous blood is re-turned, and, lastly, the lacteal or ab-sorbent vessel. The function of the villi, which are most numerous in the duode-num, is preëminently that of the absorption of the chyle or fluid product of digestion, as a preliminary to its transmission to the current of the blood or circulation. Four varieties of glands are also connected with the small intestine, the first three being named after their respective discoverers, Lieberkühn, Peyer, and Brünner, and the other variety oc-curring singly—the 'solitary' glands— and in groups—Peyer's patches. The exact functions of these bodies are not well known. The duodenum lies in the epigastric region, and makes three turnings, receiving by a common opening between its first and second flexure the bile-duct and the pancreatic-duct. The conversion of the chyme from the stomach into chyle is thus accomplished in the duodenum. The jejunum, commencing at the left side of the second lumbar vertebra, becomes insensibly and gradually continuous with the ileum, which, terminating the small intestine, becomes continuous with the large intestine in the right iliac fossa, and opens into the colon, or first portion of the large intestine, which is divided from the small intestine by the ileo-owcal Intoning, a musical modulation of the voice, differing from valve. Below the point at which the chanting chiefly in the fact that in the blind sac continuous with the color beautiful to the calence is more detailed. blind sac continuous with the colon, and known as the cœcum; and attached to the lower extremity of the cœcum, and communicating with the cæcal cavity, we find a little closed tube, to which the name of appendix vermiformis is applied.

We next find the colon to ascend in the

where, after making a curve like the letter S—sigmoid flexure of the colon—it terminates in the last portion of the intestinal tract. This last portion, known as the rectum, finally terminates in the anus. The large intestine measures from 5 to 6 feet in length; the small intestine measures from 16 to shout 24 or 26 feet measures from 16 to about 24 or 26 feet in length; so that the entire intestinal tract may be regarded as being about five or six times the length of the body itself. The three coats of the small intestine are repeated in the large intestine. The mucous or inner coat is not elevated to form villi in the large, as in the small intestine, and only two kinds of glands, the glands of Lieberkühn, and the solitary plands. are to be distinguished in the measures from 16 to about 24 or 26 feet glands, are to be distinguished in the large intestine. The function of the large large intestine. The function of the large intestine is chiefly excretory, but a certain power of absorption is also exercised by its vessels. The food is propelled along the entire intestinal tract by the alternate contraction of the longitudinal and circular muscular fibers, by which means it is gradually pushed along the tube with a vermicular or peristaltio movement. The ileo-cæcal valve serves to prevent regurgitation of matters into the prevent regurgitation of matters into the small intestine after they have passed into the colon. The mesentery is the term given to the fold of peritoneum by means of which the small intestines are attached to the spine. The blood-vessels supplying the intestinal tube are the superior and inferior mesenteric arteries and their branches, derived from the abdominal aorta. The veins of the intestines empty their contents into the vena portæ, which distributes itself through the liver, and from the blood of which the bile is se-creted by the hepatic or liver cells. The nerves of the intestines are derived from the sympathetic or ganglionic system of nerves, and have also a connection with the eighth cranial nerve—the pneumogastric nerve of the right side.

the divisions more rhythmical, and the music in continuous harmony. The pracmusic in continuous harmony. The practice prevails in the Greek, Roman, Anglican, and Lutheran churches.

Intoxication, the state produced by the excessive use of al-

coholic liquids. In the first stage the circulation of the blood becomes somewhat we next and the colon to ascend in the colonic liquids. In the first stage the cirright lumbar region, in front of the kidney. This portion is known as the asmore rapid, and all the functions of the cending colon. It then crosses the abminal cavity to the left side, and befreedom. In the second stage the effect comes the transverse colon; and finally on the brain is more decided. The pecularity of character that the left stage of the second stage the effect on the brain is more decided. descends as the descending colon, in front iarities of character, the faults of tem-of the left kidney into the left groin, perament, manifest themselves without

reserve; the secret thoughts are disclosed, and the sense of propriety is lost. In the next degree consciousness is still more the blood into the organized substance weakened; the ideas lose their connect of the various organs. tion; vertigo, double vision and other discomforts supervene; until finally the excitement partakes of the nature of delirium, and is followed by a more or less prolonged stupor, often by dangerous tained from the dahlia, artichoke, elecoma. In cases of extreme intoxication campane, potato, and other plants.

the stomachpump should be employed, if ordinary emetics fail to overcome the torpor of the stomach. Among the best antidotes are preparations of ammonia and strong infusions of coffee and The green tea. The body should be kept warm.

Intrench-

ment (intrensh') ment). any work that fortifies a post against the attack of an en-emy. The word is generally used to denote ditch or trench with a parapet. See Fortification.

Introit

(in'troit), a psalm or passage of Scripture sung or chanted while the priest proceeds to the altar to celebrate mass; now used for any musical composition designed for opening the church service.

Intuition (in-tu-i'shun), in philosophy, the act by which the mind perceives the agreement or disagreement of two ideas, or the truth of propositions, immediately, or the moment they are presented, without the intervention of other ideas, or without reasoning and deduction.

Intussusception shun), in pathology, the descent of a higher portion of intestine into a lower one: generally of the ileum into the colon. When it takes place downwards, it may be termed proposite; when upwards, retrograde.—In public halls, street tramways, breweries. (in-tus-su-sep'-

physiology, the process of nutrition, or the transformation of the components of

Invalides

(an-vå-lēd), HOTEL DES, & splendid hospital for abled soldiers at Paris, in the suburb of St. Germain, erected by Louis XIV between 1670 and 1673. A soldier must have served ten years to be received into this hospital on account of poverty or infirm-In vaults itv. under the dome lie the remains of Turenne and several other great French commanders. including those of Napoleon I, deposited here December 15, 1840.

Inventory

VERCARGILL Duck Creek INVERCARGILL AND BLUFF HARBOUR

> (in'ven-tu-ri), a list containing a short description, together with the values, of goods and chattels, made on various occasions, as on the sale of goods, transfer of movables for pecuniary considerations,

> movables for pecuniary considerations, decease of a person, etc.
>
> Inveraray (in-vér-á'ri), a Scotch royal burgh and seaport, capital of the county of Argyle, beautifully situated near the head of Loch Fyne, 42 miles northwest of Glasgow; the castle of the Duke of Argyll having the castle of the Duke of Argyll in the immediate vicinity. Pop. 1369.

> Invercargill (in-ver-kar'gil), a town

foundries, flour-mills, etc. The surrounding district is pastoral and agricultural. It is connected by rail with the port of Campbelltown 17 miles distant, and situated near the entrance to Bluff Har-bor. Here there is excellent accommoda-

ion for the largest vessels at all times of the tide. Pop. 7299.

Inverness (in-ver-nes'), a burgh of Scotland, capital of the county of the same name, and chief town Inverness (in-vernes), a burgh of how form the recognized divisions of the Scotland, capital of the Invertebrata. In these no structure county of the same name, and chief town analogous to the vertebrate spine is in the Highlands. It is beautifully situated, partly on low ground, partly on a they are generally placed on the outside gentle acclivity, on both sides of the of the body, and thus constitute an exo-Ness. The town is well built, among the skeleton, or outer skeleton—as opposed to chief edifices being the county buildings, a the endoskeleton, or internal skeleton of fine castellated structure, containing the the Vertebrata. The shell of the crab or court-house and iail: the town-hell the lobster is a familiar example. The limber fine castellated structure, containing the court-house and jail; the town-hall, the episcopal cathedral, and the Royal Acad-The industries include ship-building, rope-making, tanning, distilling, brewing, etc., and there is a considerable trade. Large vessels unload at the quays. Inverness received a burg charter from William the Lion in the twelfth century. Pop. 21.238.—The county, which is the largest in Scotland, stretches diagonally across the island from sea to sea, and includes on the west the island delivery of a fee or field by a lord to his of Skye, several smaller islands, and all vassal, thus, by external proof, affording the outer Hebrides, except the north part of Lewis. Area, 4255 square miles, of which a very small portion is under tillage. Great part of the surface is barren heath, useless except for sporting purposes, but a considerable portion is purposes, but a considerable portion is suited for rearing cattle and sheep. The surface generally is mountainous, and presents much fine scenery. Near the southwestern extremity of the Caledonian Canal is Ben Nevis, 4406 feet high, the loftiest mountain in Great Britain. The principal rivers are the Spey, Ness, and Beauly, on all of which there are valuable salmon fisheries. Some of the lakes are of considerable size, and heautifully are of considerable size, and beautifully situated. The largest is Loch Ness, forming part of the Caledonian Canal route. Extensive tracts are held as deer forests, in which the red and roe deer roam at will. The arable and productive land lies chiefly on the sea coast, and on the banks of the lakes and rivers. Gaelic the prevailing language. Pop. 90,104. Truartahrata (in-ver-te-brata), Gaelic is

Invertebrata collective term for the five great lower divisions or sub-kingdoms of the animal series, which agree in not having a vertebral column or backbone, used in contradistinction to the highest group of the animal kingdom, to which prelates with the ecclesiastical temporalithe name Vertebrata or Vertebrate anities. Henry IV, emperor of Germany, mals is given, all of which possess a vertebral column. In the system of Cuvier the Invertebrata were divided into severe penance for his acts of opposition.

the Radiata, Articulata, and Mollusca. Succeeding naturalists split up Cuvier's Radiata into the sub-kingdoms Protozoa (single-celled an imals), Cælenterata (sponges and corals), and Echinodermata (starfish, etc.). Those with the Annulosa (worms), Arthropoda (crustaceans, insects, etc.), and Mollusca (shellfish), now form the recognized divisions of the lobster is a familiar example. The limbs of Vertebrates are never more than four in number, while those of the Inverte-brata may be very numerous. Among Vertebrates also reproduction is purely and solely sexual; but in Invertebrata asexual reproduction is common, many of them reproducing their species by gemma-

evidence of possession; or the formal introduction of a person into some office or dignity. Investiture was often performed by the presentation of some symbol to the person invested, as a branch of a tree, etc. The investiture of persons with ecclesiastical offices or dignities is historically the most important phase of the subject. The estates and honors which composed the ecclesiastical temporalities were considered to partake of the nature of fiefs, and therefore to require similar investiture from the lord. Charlemagne is said to have introduced this practice, and to have invested the newly-consecrated bishop by placing a ring and crosier in his hands. The custom does not appear to have been opposed during the large of two centuring from his refer the lapse of two centuries from his reign, but the church at last protested strongly against it. Alexander II issued a decree against lay investiture in general. This was revived by Gregory VII (Hilde-brand), who, having succeeded in annulling the prerogative of the emperors to nominate or confirm popes, sought to disjoin entirely the ecclesiastical from the civil rule. In 1075 he issued a bull forbidding under penalty of excommunica-tion lay investiture and the enfeoffing of prelates with the ecclesiastical temporalivigorously resisted the pope, but was (1077) obliged to submit and perform

The struggle then begun with Henry IV by Gregory was carried on by his successors, and it was not till the papacy of Calixtus II, in 1122, that the question was settled in favor of the pope. By a concordat then arranged at Worms Henry V resigned forever all pretence to invest bishops by the ring and crosier, and rec-ognized the freedom of elections; the new bishop, however, was to receive his temporalities by the scepter. In England Paschal II was engaged in a contest little less fierce than that with the emperor. Anselm, the primate, refused to do homage to Henry I, for his see. The king asserted an unqualified right of investiture, which the pope as unqualifiedly denied. After a protracted struggle the controversy ended in England, as it did afterwards in Germany, by compromise. Paschal offered to concede the objections against homage provided Henry would forego the ceremony of investiture. To this he agreed (1107).



quantity, that is, the multiplication of a quantity by itself any number of times. Thus $2 \times 2 \times 2 = 8$; here 8, the third power of 2, is found by involution. Evolution is the opposite process.

Io (1'ō), in Greek mythology, the daughter of Inachus, beloved by Zeus, who, to protect her from the realousy of Hers

to protect her from the jealousy of Hers (Juno), changed her into a beautiful white heifer.

Iodine (l'u-din; Gr. ion, a violet), a peculiar non-metallic elementary solid substance, symbol I; atomic weight 127. It exists in the water of the ocean and mineral springs, in marine molluscous animals, and in seaweeds, from the ashes of which it is chiefly procured (see Kelp). It exists also in certain land plants and in colliber oil. It tain land-plants and in cod-liver oil. It is found in certain minerals, the water of certain rivers, and the rain-water of several towns. At the ordinary temperature of the atmosphere it is a solid crystalline body. It unites readily with Invoice (in'vois), an account in writchlands ing of the particulars of merchandise transmitted to a purchaser, giving price and quantity, note of charges, and chlorine, is a negative electric. Like and any other needful details. By sending an invoice along with goods a merchant gives official advice to his correspondent of the understood terms of a contract. If the goods are received and the invoice retained this will be held valid evidence in law of the contract.

Thypologyae (in-vo-10'ker), in botany, drons. The specific gravity of solid jodine Involucre (in-vo-lú'kér), in botany, a collection of bracts round a circle of flowers. In umbriferous plants it consists of separate narrow an exceedingly rich violet color, a charbracts placed in a single whorl; in many composite plants these organs are imbrigary in the second of in small doses has been of great service in certain forms of glandular disease. It is largely used in photography, in the preparation of aniline colors, and in other ways. It is very sparingly soluble in water, but dissolves copiously in alcohol and in ether, forming dark brown liquids. It possesses strong powers of combination and forms with the procombination, and forms, with the pure metals, and most of the simple non-metal-Hemlock Plant.

a, Involuce. bb, Involucels.

cated in several rows. The same name is also given to the covering of the sori of hydrogen it forms iodic acid. This ferns.

Involute (in'vu-lut), in geometry, the curve traced by any point of a string when the latter is unwrapped, under tension, from a given curve.

In sort of in yourgen it forms nyarogas acia. Inis is a colorless gas, which strongly reddens litmus, and decomposes many chlorides. Starch is a characteristic test of iodine, or many with it a compound of a deep blue color. This test is so delicate that Involution (in-vu-lū'shun), the calcu- a solution of starch dropped into water lation of any power of a containing less than a millionth part of

iodine is tinged blue by it. The great small, being only 60 feet by 20 feet. consumption of iodine is in medicine; it tached to it is a burying-ground, in w is employed in its pure state, but much various kings of Scotland, Ireland, more frequently in the form of iodide of Norway are said to have found their potassium, which has been found of great benefit in goitre, scrofula, disease of the liver and spleen, in syphilitic affections, rheumatism, etc., as well as in lead-pois-oning. Iodide of iron is another useful medicine, being employed in chlorosis, anæmia, and glandular affections.

Iodoform (1-5'du-form; CHIs), a substance analogous to chloro-

Ion (i'on), an ancient Greek tragic poet, a native of Chios, who flourished about 450 B.C. His tragedies were represented at Athens with great applause, and he is greatly commended by Aristophanes, Athenæus, etc.

the Southwest extremity of min by the feet Marquete R. R. are here. It the Sound of Iona, 1¼ miles wide, and has manufactures of furniture, automoabout 7¼ miles southwest of Staffa. The biles, etc., and lumber and farm interests. name is believed to be a misreading of The State Reformatory and State Hospital Iora, Ioua, a name that occurs in old are here. Pop. (1920) 6935.

MSS., but the most common ancient name Ionian Dialect. See Greek Lanwas I, Y, Hy (or similar forms). It Nora, loua, a name that occurs in old MSS., but the most common ancient name was I, Y, Hy (or similar forms). It was also commonly called I-colm-kil or I-columb-kill, that is, 'isle of Columba's relured of Columba's islands, a number of Greek I-columb-kill, that is, 'isle of Columba's islands, a number of Greek I-columb-kill, it is about 3 miles long by and southern shores of Greece, of which is mains of religious establishments of uncertain date, but popularly attributed to Columba, who took up his residence here in 563. They are all, however, of a much more recent date. The principal ruins lare those of the cathedral church of St. Mary, of a nunnery, five chapels, and of a building called the Bishop's House. St. Oran's Chapel, as it is called, is are oil, currants, valonia, wine, soap, supposed to be the most ancient; it is

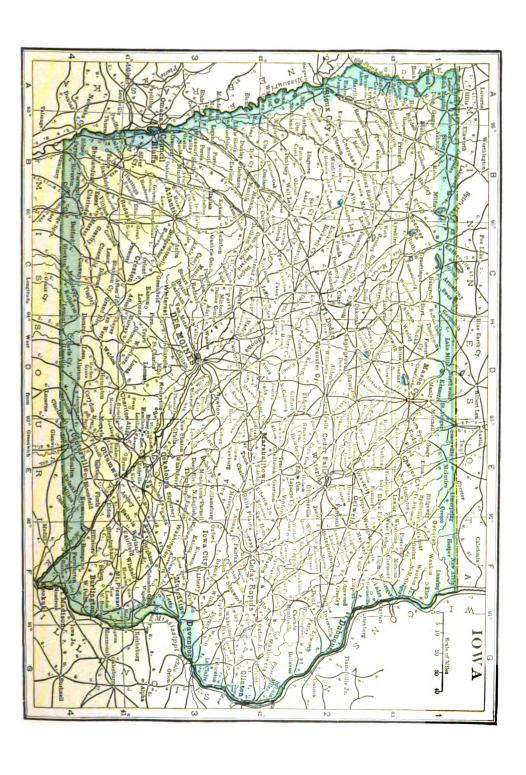
tached to it is a burying-ground, in which various kings of Scotland, Ireland, and Norway are said to have found their last resting-place. The most extensive ruin is that of the church of St. Mary, which is cruciform, surmounted at the intersection of the nave and the transept by a square tower of about 70 feet in height. The length of the transept is 70 feet, and that of the body of the church, east to west, 160 feet. The island is now easily reached in summer by steamers daily from Oban. Pop. 243.

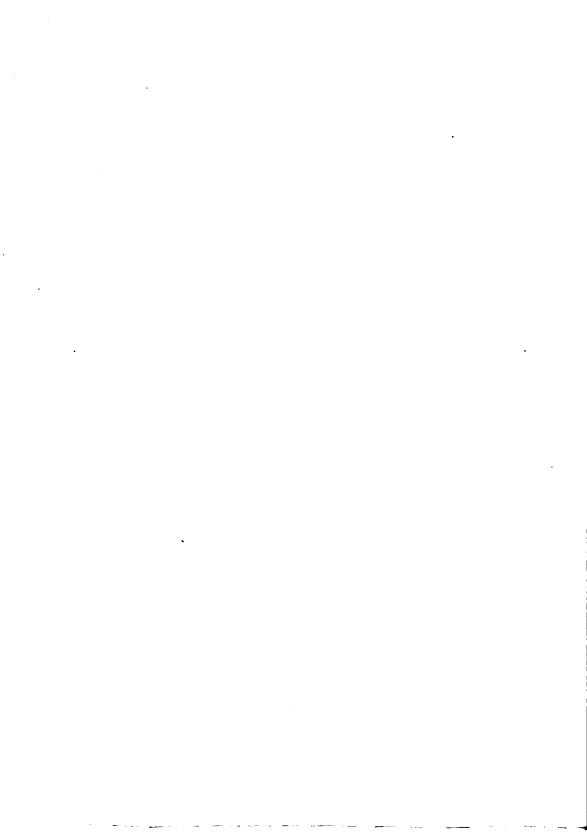
Ionia (1-0'ni-a), that part of the seaboard of Asia Minor which was inhabited by Jonian Grocks a beautiful

Iodoform (i-ō'du-form; CHIs), a substance analogous to chloroform in composition, but in which iodine replaces chlorine. It is in the form of small, solid yellow crystals, and is prepared by the action of alcohol and other bodies on iodine and potash. It is nearly insoluble in water, but dissolves in ether oils and alcohol. It is used in medicine as an antiseptic, and acts slightly as an anodyne; it is successfully applied to ulcers and sores of various kinds, and is used as a snuff for cold in the head. Iola (1-ō'la), a city, county seat of Allen Co., Kansas, on the Neosho River, 40 miles w. of Fort Scott. It is the center of the Kansas natural gas and agriculture early rendered them fields; has large zinc smelters, cement works, iron works, candy and overall factories, etc. Pop. (1920) 8513.

Iolite (i'u-lit). See Dichroite.

Ton (i'on), an ancient Greek tragic dependence they remained under Persia until this empire was overthrown by Alexander the Great, 334-331 B.C., when they became a part of the Macedonian Empire. Ionia, at a later period, became part of the Roman province of Asia, It was later devastated by the Saracens. Iona (ē-ō'na), an island of Scotland, one of the Inner Hebrides, belonging to the county of Argyle, separated from the southwest extremity of Mull by of the Pere Marquette R. R. are here. It





chiefly textile and ornamental. The religion is that of the Greek Church. The Ionian Islands often figure in the The reancient history of Greece, but only singly. ancient history of Greece, but only singly.

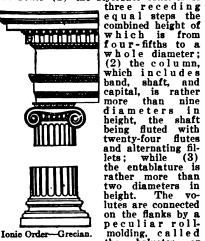
In 1386 Corfu voluntarily surrendered to Venice, and soon after the other islands placed themselves under its forces and attributes of matter itself. protection. In 1797 the French became It taught the doctrine of the immediate masters. In 1809-10 they were occupied unity of matter and life, according to by British troops, and in 1815 the seven which matter is by nature endowed with islands were formed into a republic, under the protectorate of Great Britain. The originator of this They were transferred to Greece in 1864.

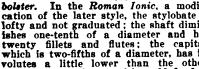
Pop. about 250,000. Pop. about 250,000.

Ionian Mode, an old ecclesiastical mode or scale represented by the modern scale of C major. Ionians.

Ionian Sea, the ancient name of the Mediterranean which lies between the south part of Italy and Greece.

Ionic Order, one of the orders of classic architecture, the distinguishing characteristic of which is the volutes of its capital. In the Grecian Ionic (1) the stylobate consists of





Ionic are found in the temple of Fortuna Virilis and the Coliseum at Rome.

Ionic School (i-on'ik), the earliest school of Greek philosin general, was Thales, who flourished about 600 B.G. The other chief philosophers of the school were Anaximander, Anaximenes, Heraclitus, and Anaxagoras.

see Greece (History) and See the separate articles.

Ionia.

the ancient name of the ancient name of the separate articles.

Ions (I'onz), the term given by Michael Paraday (1791-1867) to the components of chemical compounds set free by electrolysis, being distinguished as anions when set free at the positive pole, and as cations, when at the negative pole.

I. O. U., a written acknowledgment of debt, usually made in this form:—To Mr. A. B. I. O. U. Ten Dollars.—C. D. May 12th, 1889. An acknowledgment of debt made in this form requires no stamp. It is not negotiable. The letters I. O. U. are of course used instead of the words. I own you. used instead of the words 'I owe you.'

Iowa (l'ò-wa), one of the central United States, bounded on the who he diameter; (2) the column, which includes north by Minnesota, east by Wisconsin band, shaft, and and Illinois, south by Missouri, and west capital, is rather by Nebraska and South Dakota, from more than nine which it is separated by the Missouri diameters in River; area 56,147 square miles. It height, the shaft is well watered, its streams being all being fluted with affluents of the large rivers which twenty-four flutes bound it on the west and east. To the and alternating fillets; while (3) Cedar, Skunk, and Des Moines, with a the entablature is general s. E. course. To the Missouri rather more than flow the Big and Little Sioux and other two diameters in streams. The surface is undulating, nearly four-fifths consisting of prairies on the flanks by a coarse grass, forming excellent pasturage. The climate is very healthy, and winter more laurar roll-molding, called continues from December to March; the team Ionic, a modifithe baluster or summer heat is tempered by frequent cation of the later style, the stylobate is good, consisting of a deep black mould, lofty and not graduated; the shaft diminishes one-tenth of a diameter and has red clay, and gravel. The eastern and twenty fillets and flutes; the capital, central portions are rich in minerals. Coal which is two-fifths of a diameter, has its which is two-fifths of a diameter, has its is mined to a considerable extent, and zinc, volutes a little lower than the other, iron and lead are found. The coal-helds and a square abacus with molded edges cover an area of 20,000 sq. miles, the sovers the whole. The chief examples of lower measure being the most important. the Grecian Ionic are those of the Athenian Acropolis; while those of the Roman valued at \$13,152,088. Limestone, gyp-

sum, and clay are abundant. flour-milling, pork-packing, machinery, which grow cement works, etc. The length of rail-ways open for traffic is about 10,000 miles. diaphoretic. ways open for traffic is about 10,000 miles. diaphoretic. It possesses exceptional advantages for phigenia (if-i-je-ni'a), in Greek river trade, and the smaller streams supply abundant water-power. There is a ter of Agamemnon and Clytemnestra. To State University (at Iowa City) and a avert the wrath of Artëmis, whom flourishing State College of Agriculture Agamemnon had enraged by killing a conand Mechanical Arts (at Ames). The secrated hind, and who detained the settlement of Iowa began in 1833, when Greek fleet at Aulis that had been prethe first purchase of land from the Inpared for the Trojan war, Iphigenia was dians took place; its territorial governto be sacrificed on the altar; but a hart ment was instituted in 1838, and it was miraculously substituted for her, and admitted into the Union in 1846. The she was conveyed in a cloud to Tauris, capital and chief city is Des Moines. The She became a priestess there to Artëmis, other principal cities are Sioux City, and saved her brother Orestes when on Davenport, Cedar Rapids, Dubuque, Wa-Davenport, Cedar Rapids, Dubuque, Was the point of being sacrificed. terloo, Council Bluffs, etc. Pop. (1900)

2.231.853; (1910) 2,224,771; (1920)

Ipomæa (ip-o-me'a), a lar plants of the nat.

Iowa City, Johnson Co., Iowa, on warm regions. The species of most im-Iowa River, 54 miles w. by n. of Daven-portance is I. Purga. which yields the port. It is the sent of the Iowa State jalap of commerce. See Jalap. University (opened, 1855; 4400 students) Ipsambul (ip-sam'bul), ABUSAM'BUL, and other educational institutions. It has Ipsambul (ip-sam'bul), a village

medicine, of a nauseous odor and repulsive, bitterish taste, the dried root of adorned with several stupendous colossal several plants of the nat. order Rubiastiting statues of Rameses II (the ceæ growing in South America. All the kinds have nearly the same ingredients, sculpture yet discovered. but differ in the amount of the active principle which they contain. The best is the annulated wielded by the Contain. several plants of the nat. order Rubiacese growing in South America. All the kinds have nearly the same ingredients, but differ in the amount of the active principle which they contain. The best is the annulated, yielded by the Cephaëlis Ipecacuanha, a small shrubby plant, a native of Brazil, Colombia, and other



Ipecacuanha Plant (Cephaelis Ipecacuanha).

Iowa is still larger, from 15 to 20 grains, it ocsum, and clay are abundant. 10wa 18 still larger, from 15 to 20 grains, it oca great agricultural state, producing imcasions vomiting. It is also capable, by mense quantities of corn and oats, hay, being combined with other substances, of barley, etc., and also stands high in regard to dairy farming. The chief fruit crop is the well-known Dover's powder. The apples. Other industries include the name of American ipecacuanha is given manufacture of brick, farm implements, to the Euphorbia Ipecacuanha, a plant flour-milling, pork-packing, machinery, which grows in sandy places in North cement works, etc. The length of rail- America. It is emetic, purgative, and ways open for traffic is about 10 000 miles.

Ipomœa (ip-o-mē'a), a large genus of plants of the nat. order Con-Iowa City, a city, county seat of prostrate herbs, widely distributed in Iowa River, 54 miles w. by N. of Davenport. It is the seat of University (opened, 1855; 4400 students) and other educational institutions. It is the seat of the Iowa State Jalap of commerce. See Jalap.

Insambul (in-sam/bul)

manufactures of jewelry, flour. farm important factures of the Nile; plements, perfume, etc. Pop. 11.267.

Ipecacuanha (i p - e-kak-û-â/na), a most perfect and magnificent speciments of substance used in mens of Egyptian rock-cut temples expendicine, of a nauseous odor and repulisiting. The facade of one of them is

Ipsica. See Modica.

Ipsus (ip'sis), a small town of Phrygia,
Asia Minor, famous for a great
battle fought B.C. 301. See Antigonus.
Ipswich (ip'sich), a river-port of
England, capital of Suffolk,
on the Orwell. It contains many interesting specimens of mediaved architecture. ing specimens of mediæval architecture. The public buildings include a fine town-hall, a new post-office, a custom-house, county courthouse, cavalry barracks, theater, etc. The industries embrace agricultural implements, machinery, artificial stone, artificial manure, silk, tanpersonal right (comments right (comments) personal. Including a stone, artificial manure, shis, tanparts of South America. When given in ning, ropes, lime and cement, brewing, very small doses ipecacuanha improves shipbuilding, etc. Ipswich is a town of the appetite and digestive powers; in a great antiquity. It was originally called somewhat larger dose it may be given to Gippeswich, from the neighboring river increase the secretion from the muçous Gipping. King John gave it its first membrane of the air-passages; and in a charter. Pop. (1911) 73,939.

Iquique (i-kē'kā), a seaport of Chile, province of Tarapaca, recently a fishing village, but now a consider-able town with an important trade, its frontiers of Siberia, at the confluence of rise being due to the extensive deposits the Irbit and the Niza. It is noted for of nitrate of soda and borax, and the silver mines, etc., in its neighborhood. It has suffered much from earthquakes, and in 1879 was blockaded, bombarded, and finally captured by Chile. Pop. 42,-440.

land of the Aryans), the name given by the ancient Persians to their native land, and still used by the modern Persians, though it is also employed in a wider sense to designate the whole of the country from the Indus to the Tigris, in contradistinction to Turan, the name often employed as synonymous, with Turkes-

guages belonging to the Indo-European at a short distance from the coast, the guages belonging to the Indo-European at a short distance from the coast, the stock, closely allied to the Indian group, interior having the form of a vast plain, and called by some philologists Persian, in which are extensive tracts of bog. The from the best-known member of the fam-Macgillicuddy's Reeks, in the southwest, ily. The two oldest known Iranian lanare the highest, the culminating summit guages are the Old Persian of the being Carrantual, 3414 feet. The mouncuneiform inscriptions and the Old Bactains of Wicklow, in the southeast, reach trian or Zend. the latter the language the height of over 3000 feet (Lugnator which the Zend. average write quills is 3039). Rivers are not only in which the Zend-avesta or sacred writ-ings of the Parsees is composed. The numerous but are very equally distributed Middle Iranian languages are the Peh-over the surface. The Shannon, in the levi, and still later the Parsee, which are west, the largest river of Ireland if not of

Ipswich, a town in Essex County, most important of the New Iranian lanswich River, three miles from the sea has been produced a very rich and celeand 27 miles N. N. E. of Boston. Its brated literature. The Afghan or Pushtu, industries include cotton and woolen hosiery, heels, isinglass, bricks, etc. Pop. separate branches of the Iranian family. (1920) 6201.

Trawadi (ir-i-widdi). See Iranian family. Irawadi (ir-a-wa'di). See Irrawad-

Irbit (er-bet'), a town in Russia, in the

reland (Ir'land; in Irish, Erin; in Latin, Hibernia), the more western and smaller of the two principal islands of which the United Kingdom of Great Britain and Ireland is composed, of the Sultan of Turkey directed is separated from Great Britain and Ireland is composed, is separated from Great Britain on the cast by the North Atlantic Ocean. Measured diagonally, the great-sia, separated from the Caspian Sea by the North Atlantic Ocean. Measured diagonally, the great-sia, separated from the Caspian Sea by breadth is 212 miles; the central breadth, Ghilan and Mazanderan; area, about 138,000 sq. miles, a large part of which in the east is occupied by salt deserts, 531 square miles. The area is 32, in the east is occupied by salt deserts, 531 square miles. Ireland is divided into four provinces of Leinster, Ulster, Munsome fine valleys and rich plains. The ster, and Connaught, and into 32 counties.

The Population is 404

Ispahan.

The population in 1841 was 8,175,124;
Irak Arabi (a-rä'bē), the district lying between the rivers partly owing to the famine resulting from their course, corresponding nearly to the ancient Babylonia.

Iran (ë-rän'), or Eran (Old Persian, Aryana; Zend, Airyana, that is, land of the Aryans), the name given by the ancient Persians to their neutron lond. erick, and Londonderry.

Surface.—The coast, forming a line of nearly 3000 miles, is, in general, bold and rugged, and is diversified by numerous indentations, some of which run far into the land and form excellent natural harbors. There are a considerable numtan. Iranian Languages (e-rän'i-an), a family of lanfamily of langenerally speaking, rise in isolated masses preserved in the commentaries to the the United Kingdom, is navigable to its Zend-avesta. The latter approaches source in Lough Allen, forming a water-pretty closely to the modern Persian. The way of 240 miles. The other rivers of

Ireland Ireland

most importance are the Bandon, Lee, isles, as for instance the strawberry-tree Blackwater, Suir, and Barrow, which or arbutus, found in the southwest. enter the sea on the south, the Liftey Agriculture.—As regards agriculture, and the Boyne, entering the sea on the east, the former having the capital at its mouth, the latter being the largest river which discharges itself into the Irish Sea on the east coast; and the Bann and the on the east coast; and the Bann and the Foyle, which have their mouths at no great distance from each other on the north coast. Ireland possesses a large number or lakes (or loughs). Lough Neagh, in the northeast, is a quadrangular expanse 17 miles long by 10 broad, and is the largest lake of the United Kingdom. Among the others the lakes of Killarney, in the southwest, are preminent for beauty, and attract numerous visitors. ous visitors.

Geology and Minerals.—The mountains are formed of vast masses of primary and metamorphic rocks, while the secondary formations spread over the interior. Basaltic rocks are almost entirely confined to the northeast, where they often form colonnades, of which the Giant's Causeway is a celebrated specimen. Granite has its largest development in the southeast, where it forms the great mass of the mountains of Wicklow. It is more sparingly developed in the west and northwest (Donegal), as well as in the northeast. The lower rocks of the Silurian system form no inconsiderable portions of the whole island, covering large portions of the north-northeast and southwest as well as parts of the west. The Old Red Sandstone has its largest continuous development in the county of Cork, but rises to the surface at numerous isolated spots. The rocks next in the series belong to the Carboniferous system; at the bottom of which lies the Mountain Limestone, the most largely developed of all the rocks of Ireland, occupying almost the whole interior. In some cases, particularly in the southwest, the coal measures occupy considerable areas, but the quality of the coal is generally very inferior, and it is worked only to a very small extent, the yearly output being only about 100,000 tons. The strata higher in the geological series than

Climate.—The climate is on the whole supplemented by the Land Purchase Act moister, milder, and more equable than of 1903.

that of the greater part of Britain. It is highly favorable to vegetation, and employments the linen manufacture is the allows plants to winter in the open air chief and is in a very flourishing conthat can do so in very few places in dition. It has increased in a remarkable Britain; some species of plants also being manner within the last fifty or sixty peculiar in Ireland alone of the British years, and Belfast, its center, has now

Ireland has great advantages, for though there is a great extent of moorland, there is also a very large area of arable surface, covered with a deep friable loam of remarkable richness. Notwithstanding, agriculture on the whole is in a backward state, a result largely due to the smallness of the holdings, and to the evils of overcropping. However, a steady diminu-tion is now taking place in the number of very small holdings. The rearing of of very small nothings. The rearing of live stock and dairy-farming are largely carried on. By far the largest grain crop is oats; the chief green crop is potatoes, which cover an area about one and a half times as large as in Great Britain. Potatoes had become the main food of the people by the end of the seventeenth century, and a potato famine occurred as early as 1739. Another staple crop, especially in the north, is flax. Much benefit very gradually accrued to Irish agriculture from the operation of the Irish Land Act of 1881, the main provisions of which have been briefly summarized under the terms 'fair rent,' fixity of tenure,' and 'free sale.' By the first of these every tenant who objects to his rent or the rent the landlord wishes to exact, is entitled to have a 'fair rent' fixed for him by a court, this rent to remain unaltered for fifteen years. By 'fixity of tenure' the law recognizes that the tenant has a certain right in his Britain. Potatoes had become the main that the tenant has a certain right in his holding in virtue of which he is not to be arbitrarily removed from it without compensation, and which enables him on compensation, and which enables him on leaving his farm to obtain the best price he can get for yielding up his possession. The 'free sale' of this right of tenancy is restricted only in so far as that it must be to one person only (except under agreement with the landlord), that the landlord may object on sufficient grounds to the person purchasing and that he also to the person purchasing, and that he also has the right of preemption. At the expiration of the fifteen years the landlord may resume possession of the holding on paying the tenant compensation for improvements effected by him, and also paying him the value of his tenant-right, both being determined by the court should strata higher in the geological series than the coal are very partially developed. Of other minerals than coal Ireland yields small quantities of iron ore, lead ore, slate, alum, salt, etc.

Climate.—The climate is on the whole climate and more equable than of 1903.

Industries and Trade.—Of industrial industrial areas and the coal are very partially developed. Paying him the value of his tenant-right. Such that the parties be unable to agree. This act, amended and extended in 1887, has been supplemented by the Land Purchase Act

become the first city of Ireland. The woolen manufacture at the outset out-stripped that of linen; but it was hampered by unjust restrictions imposed by Parliament at the instance of the woolen manufacturers of England. The brewing of porter and distillation of whiskey form important industries. The fisheries employ a considerable number of persons, but far fewer than they should. The salmon fisheries are valuable and are increasing in value. The trade is only of a moderate bulk. The main articles of a moderate bulk. The main articles of export consist of agricultural produce, the greater part of which finds its market in Great Britain. These articles include grain, live stock, salt and fresh meat, eggs, butter, etc. Of manufactured articles linen is the chief export; whiskey and porter are also exported. The trade with foreign countries in presidently with foreign countries is inconsiderable. The inland trade is much facilitated by the rivers and canals, on the improvement and construction of which respectively

large sums have been spent. Religion.—The prevailing religion is the Roman Catholic. The Reformation never made much progress, and though the Protestant Episcopal Church was established by law it was only the church of a small minority. In 1869 an act was passed for its disestablishment. Previously the clergy were supported by a tithe rent-charge, the proceeds of the church lands, etc., but by the new act, taking effect from January 1, 1871, the property and tithes formerly belonging to the church were vested in commissioners, who had charge of the winding up of the church's financial affairs, and their powers were in 1881 transferred to the Irish Land Commission, who are now engaged in completing the work. Part of the funds thus liberated has been expended on education and the relief of distress. At the head of the Roman Catholic Church are four archbishops, who take the title of Armagh, Dublin, Cashel, and Tuam, and twenty-four bishops. The whole of the Irish Roman Catholic clergy are sup-ported solely by voluntary contributions. The number of priests is 3200, more than The number of priests is 3200, more than told of affairs. As in England, the half being curates. There are numerous chief legal functionaries are a lord chanmonasteries and convents. The Presby-cellor, a lord chief-justice, and a master terian Church is chiefly confined to of the rolls. The Irish police force is Ulster, where it may be said, especially a semi-military body, paid out of the Conin the counties of Down and Antrim, to be the leading religious denomination. Its ministers are supported by voluntary ontributions, seat-rents, and church Western Europe generally, the earliest infunds. According to the census of 1911 habitants are believed to have been of there were in Ireland 3,242,670 Catholics Iberian race, and, therefore, akin to the (73 p. c. of population); Episcopal, 576,—modern Basques. They were followed 611; Presbyterian, 440,525; Methodist, by the Celts, different tribes of whom 62,382; Independent, 9138; Baptist, 8123.

Education.—The principal educational institutions are Dublin University and the three Queen's Colleges of Belfast, Cork, and Galway. The Queen's Colleges were formerly connected with an examinwere formerly connected with an examining and degree-conferring body (Queen's University); but for this a similar body, the Royal University of Ireland, was substituted in 1882, £20,000 being yearly granted from the surplus funds of the Irish Church. The Royal College of Science, established in 1867, supplies a complete course of instruction in science applicable to the industrial arts. The science, established in 1904, supplies a complete course of instruction in science applicable to the industrial arts. The Catholic University of Ireland, established in 1854, consists of University College, Dublin, St. Patrick's College, Maynooth, and several other colleges. The seminaries for the education of the Catholic priesthood are numerous, the most prominent being the College of Maynooth, founded in 1795, and formerly receiving annually from government £26, 360, for which, by the Irish Church Act of 1869, a sum of £372,331 was paid in compensation. The General Assembly's Theological College, Belfast, and the Magee College, Londonderry, are Presbyterian colleges. The chief elementary schools are those under the superintendence of the Commissioners of National Education. (See Britain.) In 1878 an act was passed setting apart £1,000,000 act was passed setting apart £1,000,000 from the Irish Church surplus fund for the promotion of immediate secular education by means of special examinations,

exhibitions, prizes, etc.

Government.—Ireland, by the Act of Union, became in 1801 an integral part of the United Kingdom, and shares in its legislation by means of twenty-eight representative peers in the House of Lords. and 103 representatives in the House of Commons. The representative peers are elected for life by the whole body of Irish peers. The lord-lieutenant, who represents the sovereign, is the head of the executive, and holds his court in Dublin Castle. He is assisted by a privycouncil and a chief-secretary, who takes the most active part in the administra-tion of affairs. As in England, the

solidated Fund.

History.—The beginning of the history of Ireland is enveloped in fable. As in Ireland Ireland

Its internal condition, however, was far summoned, and the laws it was intended from satisfactory. Divided among a to enact. At the beginning of the sixnumber of hostile kings or chiefs, it had been long torn by internal wars, and for island still remained unconquered by the nearly two centuries ravaged by the English. The native Irish lived according Danes, numbers of whom settled in the to their old customs under their own country, when, in the beginning of the chiefs, and resisted all attempts to Anglieleventh century, Brian Boroimhe united the greater part of the island under his Henry VIII assumed (by act of the Trich Parliament) the title of King of proceeded throughout continental Europe. scepter, restored tranquillity and sub-

dued the northern invaders. After the death of Brian at the close of the battle of Clontarf, 1014, gained against the Danes and their Irish allies, the island relapsed into its former state of division and anarchy. In this state of matters Henry II of England obtained a papal bull giving him the right to subdue it, and the way was paved to this when Dermot, prince of Leinster, who had been driven from the country, was reinstated by the aid of Richard de Clare (Strongbow) and other Norman nobles. In 1172 Henry entered Ireland himself, and partly through the favor of the clergy and his affability, the great princes did homage to him and acknowledged his supremacy. Many Norman barons and their followers now settled in the country but the Through the throug Many Norman barons and their followers now settled in the country, but the English power was far from being established over it. For long only a part was recognized as English territory (generally known as 'the Pale'), and this was governed by various nobles, subject to a viceroy. The nobles quarreled among themselves, and were very often at open feud. In 1315 Edward Bruce, brother of the Scotch king, landed at the head of a large force, and was crowned king, but was defeated by the English in 1317 near Dundalk. The English power was greatly reduced by this expedition, however, and a number of the barons renounced their allegiance to England, and adopted the Irish language, laws, manners, and customers.

rise to such names as Firbolgs, Milesians, lish rule became so weak that the viceroy etc. Among these the Scots were the found it necessary to protect the Pale by latest, and latterly got the upper hand, payments of money to the Irish chiefs, so that their name became generally and this state of matters long continued. applied to all the inhabitants. There in the reign of Henry VII (1495) was is no evidence that the Irish had the use passed Poyning's Act (so called from Sir of letters before the middle of the fifth Edward Poyning, lord-deputy of Ireland), century, when Christianity and Christian which provided that all former laws literature were introduced by St. Patrick. passed in England should be in force in Subsequently Ireland became the seat of Ireland, and that no Irish Parliament, western learning, and its monasteries that is, the Parliament of the English were the schools whence missionaries settlers, should be held without previously proceeded throughout continental Europe. settlers, should be held without previously stating the reasons why it was to be summoned, and the laws it was intended

Irish Parliament) the title of King of Ireland, instead of Lord, which he had before borne as a vassal of the pope, and the Irish chiefs generally acknowledged his authority; but the change of religion was bitterly opposed, and Mary was easily able to undo all that had been done in this direction by her two predecessors. Elizabeth imposed a Protestant clergy upon the people, and her reign was marked by a series of risings, which terminated in the reduction of the whole island. Great stretches were taken from the Irish chiefs, and distributed among English noblemen and others, who were Engise noblemen and others, who were to settle their new estates with English farmers. Little was done in this way, however, compared with the great plantation of the North by James I, under whom 800,000 acres of land in Ulster were declared forfeited, a large part of this being entirely withdrawn from the Irish, and divided among Scotch or English settlers. In 1641 there began an attempt to shake off the English yoke, in which great atrocities were perpetrated attempt to shake off the English yoke, in which great atrocities were perpetrated on both sides. In 1640 Cromwell was appointed lieutenant, and energetically, but cruelly, reduced the whole country within nine months. The next struggle was that which followed the Revolution, when James II landed in 1689 and honed Dundalk. The English power was greatly when James II landed in 1689, and hoped reduced by this expedition, however, and to regain his crown by French and Irish a number of the barons renounced their aid. He failed to reduce Londonderry, allegiance to England, and adopted the Irish language, laws, manners, and customs. This led to the passing of the statute of Kilkenny (1367), forbidding, year (1690) William III arrived, and under severe penalties intermarriages between English and Irish, the assumption of Irish names by persons of English Boyne, near Drogheda. In 1691 another blood, the use of the Irish language, the native (Brehon) law, etc. But the Engwhen James II landed in 1689, and hoped

Ireland

James, capitulated, a treaty being concluded at the same time, by which the Catholic Irish were to be allowed the free exercise of their religion. The Treaty of Limerick was ill kept by the English. By a decree of Parliament upwards of 1,000,000 acres were conficated and divided among Protestants. Cruel and divided among Protestants. Cruel penal laws were passed against those who adhered to the Catholic religion. The adhered to the Catholic religion. The Catholic ecclesiastical dignitaries were banished; the subordinate priests were not allowed to leave their counties; no Catholic ecclesiastical dignitaries were not allowed to leave their counties; no Catholic ecclesiastical dignitaries. Catholic could hold a public office, acquire

Catholic could hold a public omce, acquire landed property, enter i ito a marriage with a Protestant, etc.

Although these laws were not always rigorously carried out, yet they excited great bitterness of feeling, and produced frequent revolutionary associations (Whiteboys and others), which mark the history of Ireland. In 1778 the penal laws against the Catholics, though not repealed, were made much more lenient. repealed, were made much more lenient. Catholics were henceforth permitted to acquire landed property, to erect schools, and to observe their own religion under fewer restrictions. In 1782 Poyning's Act was repealed, and freedom of legislation allowed to the Irish, though Catholics were still excluded from Parliament, and did not even have the fran-chise till 1793. The French revolution had a great effect on the minds of the Irish people, and it was partly through this influence that the Society of United Irishmen was formed, and that rebellion broke out in 1798. Great atrocities were perpetrated, but the rising was speedily crushed. A body of French soldiers, 1500 strong, landed in Killala Bay, but were compelled to surrender.

The British government now resolved and another act was passed to improve to unite the Irish and English Parliathe tenure of land, in 1870, ments, and an act providing for the legistration of the legistrati lative union of the two countries passed the Irish Parliament in May, 1800, and the British Parliament in July of the same year, in virtue of which the union was effected on the 1st of January. 1801. But although this measure bound the destinies of the two countries still more closely, yet it was far from putting more closely, yet it was far from putting an end to the troubles which had so long divided them. In 1820, mainly through the efforts of O'Connell, the Catholic Emancipation act was passed, under which Catholics could take a seat in Parliament and were admitted to most public offices. (See Catholic Emancipation.) The Irish national party now tried to repeal the Union, for which purpose O'Connell founded the Reneal Associatic. This movement collapsed in

Limerick, the last place that held out for 1843, and afterwards the potato famine James, capitulated, a treaty being concluded at the same time, by which the interests into the background. To mituatholic Irish were to be allowed the gate this calamity Parliament granted free exercise of their religion. The enormous sums of money; yet thousands Treaty of Limerick was ill kept by the died from starvation, and hundreds of English. By a decree of Parliament uptrophysical to the property of the potato family and the potato family of chical outbursts, agrarian murders, and other acts of violence distracted the land. Meanwhile O'Connell died, and his party was replaced by one still more advanced, called the Young Ireland party. In these circumstances the French revolution in 1848 had a great effect upon Ireland. The leaders of the Young Ireland party, Smith O'Brien, Mitchel, Juffy, Meagher, and others, entered into relations with the provisional government at Paris, and the people began openly to exercise them-selves in the use of arms. But the rebellion turned out a mere fiasco. After the famine and great emigration a general improvement became visible among the inhabitants. Agriculture revived, and the manufacturing industries began to compete with those of England.

The year 1865 witnessed a new conspiracy designed to separate England and Ireland. This originated in the United States, when the numerous Irish during the civil war in that country hoped for a rupture between it and England, of a rupture between it and England. of which they might take advantage. This conspiracy, the members of which called themselves Fenians (see Fenians), soon spread to Ireland; but before they could take any overt action in that island their design was stifled by the British government (1865-66). The ministry now resolved to do all in their power to render the Irish people loval and consender the Irish people loval and conrender the Irish people loyal and contented; and accordingly the Irish Episcopal Church was disestablished in 1869.

In 1871 the cemand for local self-government—'Home Rule'—made itself felt. It was led by the 'Nationalists,' who did not insist upon absolute sever-ance from Great Britain, but merely demanded the setting up of an Irish Parliament for matters exclusively Irish. In 1880 Ireland became the scene of an agitation carried on mainly by a body known as the Land League. The movement was so lawless that two special acts. a 'coercion' act and a peace preserva-tion act, were passed. Still further to redress Irish grievances a land act was also passed in 1881, the chief provisions also bassed in 1881, the chief provisions of which have already been mentioned. The Land League was suppressed, but a body called the National League was soon organized in its place. In 1885, \$6 Nationalist members (under the leadership of Mr. Parnell) were returned to l'arliament, and their pressure on the government led to Mr. Gladstone's scheme in 1886 and 1893, by which Ireland was to receive a Parliament of her own and the Irish members to be withdrawn from the Imperial Parliament. This and the accompanying scheme for the buying out of Irish landlords were rejected by Parliament and the majority of the constituencies. The third Home Rule Bill, introduced by Mr. Asquith in April, 1912, and finally enacted into law, May 25, 1914. met with violent opposition in parts of Ulster where the population is Protestant. Preparations were made for armed resistance, and a volunteer army of 100,-000 drilled for service; but the outbreak of the European War in 1914 put an end to demonstrations. (See Britain and Home Rule.) A serious revolt by a faction calling themselves the Sinn Fein Society (meaning 'Ourselves Alone'), began April 24, 1916, Dublin being its chief seat. It was vigorously suppressed after a week's time. It caused the loss of property estimated at \$1,900,000, and the lives of 340 soldiers and citizens; 1000 were taken prisoners of whom fifteen were executed, including Sir Roger Casement, a former British consul and leader private dwellings were burned. Terence MacSwiney, mayor of Cork, imprisoned as a supporter of Sinn Fein, refused food and a supporter of Sinn Fein, Feinsel tood and Fish Mational Theater, including feater, died in prison. At the beginning of 1921
I. M. Synge, Lady Gregory, etc.
another Home Rule Bill was enacted, providing for two parliaments in Ireland.

Language and Literature.—The Irish in 1838, and came to the United States in the Language and Literature.

Language and Literature.—The Irish language belongs to the Gaelic or Gaedhelic branch of the Celtic stem of languages, being closely akin to the Gaelic guages, being closely akin to the Gaelic War, and afterwards became rector of the of Scotland and the Manx, and more cathedral at St. Paul, Minn. In 1888 he remotely allied to the British dialects was made archbishop of St. Paul. Yale (Welsh, Cornish, and Armoric). The conferred the degree of LLD. upon him modern dialects or varieties of Irish, in 1901. He died Sept. 26, 1918.

which differ very much from the ancient, which differ very much from the ancient, are spoken by the rural classes in Connaught and Munster, and the more remote parts of Ulster. In 1901 there were 64,000 people in Ireland who spoke Irish only, and over 885,000 who could speak it along with English. Gaelic may be considered a comparatively modern form of ancient Irish.

Irish literature is varied and extensive. One of the earliest historic pieces is a metrical life of St. Patrick. Among the most important of the heroic tales is the Tain Bo' Cuailnge or Cattle Spoil of Cualnge, the center of a series of epic tales. A number of poems and tales, forming a cycle of their own may be called Ossianic; most of them are comparatively modern. The glosses written into Latin works of Irish ecclesiastics, in the monasteries on the Continent founded during the seventh and eight centuries, are among the oldest specimens of the language. Many bardic remains belong to the period of the English conquest, but after that date Irish poetry declined. Many bards, however, who were still maintained by the native chiefs, helped by their songs to keep up a national feeling hostile to the English domination. The native authorities for Irish history may ment, a former British consul and leader native authorities for Irish history may of the uprising, and Padraic (Patrick) go back to St. Patrick at the very earliest. Pearse, who was provisional president of The oldest of kings dates from the middle the 'Republic of Ireland.' Redmond, the of the eleventh century. The oldest and leader of the moderates in Ireland, plended by far the ablest annalist, whose works for the enforcement of the Home Rule Bill; have been at least partially preserved, is but Lloyd George, who succeeded Asquith Tighernach O'Brian, who belonged to the as premier, declared Ulster must not be royal family of the O'Connors of Concerced. The Sinn Fein party grew in naught. He died in 1808. The other chief power and prevented the extension of the annals are the Ulster Annals, the Annals conscription law to Ireland. At the election of Innisfail, and the Annals of the Four of December, 1918, Sinn Fein representaconscription law to Ireland. At the election of Innisfail, and the Annals of the Four of December, 1918, Sinn Fein representatives won by great majorities. On Janupilers). The most important Irish ary 21, 1919, they proclaimed Ireland a manuscripts are contained in the library republic, with Eamonn de Valera as President. During 1919 and 1920 anarchy Academy, Dublin, in the Bodleian Liprevailed in the island. British police and soldiers were slain by Sinn Feiners; and in reprisal Irish men and women were shot down by British forces. The City Hall of George Russell, 'A.E.'; the novelist. Cork and other public buildings and many George Moore; the poet, William Butler private dwellings were burned. Terence Yeats; the dramatist, George Bernard MacSwiney, mayor of Cork, imprisoned as Shaw; and the Annals of the Four Mathematics are contained in the library republic, with Eamonn de Valera as Presidents. Academy, Dublin, in the Bodleian Liprevailed in the British Museum. Among soldiers were slain by Sinn Feiners; and modern Irish writers may be mentioned the leader of the Celtic Renaissance, down by British forces. The City Hall of George Moore; the poet, William Butler Yeats; the dramatist, George Bernard MacSwiney, mayor of Cork, imprisoned as Shaw; and the Annals of the Four Mathematics are contained in the library republic, with Eamonn devalues are contained in the library republic, with Eamonn devalues are contained in the library republic, with Eamonn devalues are contained in the library republic, with Eamonn devalues are contained in the library republic, with Eamonn devalues are contained in the library republic, with Eamonn devalues are contained in the library republic, and the Royal Irish are contained in the library republic, and the Royal Irish are contained in the library republic, and the Royal Irish are contained in the lisland and police and sold and police and sold and police and sold Shaw: and the various playwrights of the Irish National Theater, including Yeats,

his boyhood. He studied theology in France, served as chaplain in the Civil

Irenæus (ir-e-nē'us), SAINT, Bishop ing, and exported for umbrella handles, of Lyons, a pupil of Polyetc. carp, was probably a native of Smyrna, and born between 120 and 140 A.D. He mostly between 120 and 140 A.D. He mostly between 120 and 150 an and born between 120 and 140 A.D. He der of endogenous plants, is generally supposed to have suffered mostly herbaceous, and with equitant martyrdom at Lyons, in the persecution leaves (that is, leaves overlapping en-

martyrdom at Lyons, in the persecution leaves (that is, leaves overlapping enunder Septimius Severus in 202. He tactively opposed the Gnostics. Only mens with extrorse anthers, and an insome fragments remain of his Libri V ferior ovary; natives chiefly of the middle adversus Haereses, written in Greek. There is, however, a very ancient Latin tersion.

Irene (I-re'ne), Empress of Constantinople, was born at Athens about 752 A.D., and in 769 married Leo IV, after whose death she (780) became regent during the minority of her son, Constantine VI. She had during the life of her husband been banished from the imperial palace for her devotion to the worship of images; but in 788 A.D. which vary according to the angle of a council of bishops held at Nice under the leaves (that is, leaves overlapping enunded in the particular in a parallel manner), three states the leaves (that is, leaves overlapping enunded in the parallel manner), three states the leaves (that is, leaves overlapping enunded in the parallel manner), three states measure in the parallel manner), three states the parallel manner), the parallel manner), there states the parallel manner), there states the parallel manner), the parallel her auspices restored image worship in Iridium (1-rid'i-um), a metal of a the Eastern Church. When Constantine had grown up he took the reins of govdiscovered in the black scales which reernment himself, and reigned alone seven main when native platinum is dissolved ernment himself, and reigned alone seven main when native platinum is dissolved years, when his mother had him arrested in aqua regia; specific gravity about 22.4; and his eyes put out, and he was at last symbol Ir. It takes its name from the murdered. Irene was the first woman variety of colors it exhibits while diswho reigned over the Eastern Empire. solving in hydrochloric acid. It is the She had ordered many nobles into banishment to secure more firmly her power, number of alloys, one of which, iridoshut Nicephorus, her treasurer, through mine, occurs native. The alloy with their influence gained the imperial throne, and exiled her in 802 to the isle of Lesbos, gold in appearance, while that with copper shere is very hard, pale red in color and

and exiled her in 802 to the isle of Lesbos, where she died of grief in 803.

Ireton (Ir'ton), Henry, a Parliamentary general in the English revolution, was born in Nottinghamshire in 1610. Descended from a good family, he was brought up to the law; but when the civil contests commenced he joined the Parliamentary army, and by the interest of Cromwell, whose daughter Bridget, he married in 1646, he became commissary-general. He commanded the left wing at Naseby, which was defeated by the furious onset of Rupert, and himself made prisoner, but some hours after self made prisoner, but some hours after the personification of the rainbow, he recovered his liberty. He was an implacable enemy of the king, had a printipular hand in framing the ordinance for wings attached to her shoulders and a his trial, and sat himself as one of the herald's staff in her left hand, representatively. Ireton accompanied Cromwell to tive of her office of messenger. Ireland in 1649, and was left by him as Iris, the muscular curtain stretched lord-doubty. He reduced the netwest to Iris, vertically in the superior part of judges. Ireton accompanied Cromwell to tive of her office of messenger. Ireland in 1649, and was left by him as lord-deputy. He reduced the natives to obedience with great rigor, but cruelly. He died of the plague before the walls forming the colored circle around the of Limerick, 1651, and was buried in Westminster Abbey 1652.

Iriartea (ir-i-ar-te'a), a genus of Limerica (ir-i-ar-te'a), a genus of South American palms, tall-growing trees, of which one species, I. of the genus Iris, some of which are exorrhiza, the pashuiba or paxuiba palm, medicinal and others merely ornamental, yields a hard kind of wood used for build-

per is very hard, pale red in color, and ductile.

Iridosmine (I-ri-dos'min), IRIDOS-MIUM, a native compound of iridium and osmium, forming an osmide of iridium, in which the iridium is partly replaced by platinum, rhodium and ruthenium. It is used for pointing gold pens, and iridium is obtained from it.

(I'ris), in Greek mythology, the Iris fleet golden-winged messenger of the Olympian gods. Iris was originally

Asia, and America. They usually grow seisk, Yakutsk, Trans-Baikalia, Lake Bain wet places, bearing flowers of various kal, and Chinese Turkestan, has an area colors, but the prevailing tint is blue. of about 287,000 sq, miles, and a populative stinking iris (I. fatidissima) of tion of about 500,000, a number of whom southern England has purple flowers and are persons banished from Russia. ill-smelling leaves. Orris-root consists of Iron (I'ern), the most universally distinct root-stock of some species, as I. from the most universally distinct and the most generally florentina. The most admired species are applied of all the metals (Lat. ferrum; the Persian (I. persica), the snake's head (I. tubcrosa), the Chalcedonian, the Spanish, and the English.

North Channel, 130 miles long and about with oxygen, but it is also found in com-60 miles wide. It contains the islands bination with several other elements, and (10 miles wide. It of Anglesey and Man.

North Channel, 130 miles long and about (10 miles wide. It contains the islands of Anglesey and Man.

Irish Terrier (ter'i-er), a breed of the terrier class that has come into great popularity. This dog meteoric. The former occurs in small is held to be indigenous in Ireland, and is not the result of any cross, though the breed has been greatly developed and improved largely since 1874, when it began to attract attention at the bench-shows. The color of the coat went through various selective changes from lint-white, established standard for this breed. The principal points of the Irish terrier are: A long head, with flat skull, narrow bear went the ears; strong and muscular jaws; the jaws and head together giving a square aspect of conformation. Ears who had sometimes, although rarely, native or in the metallic state. There are two varieties of native iron, the tellurio and the metallic state. There are two varieties of native iron, the tellurio and the metallic state. There are two varieties of native iron, the tellurio and the metallic state. There are two varieties of native iron, the tellurio and the metallic state. There are two varieties of native iron, the tellurio and the metallic state. There are two varieties of native iron, the tellurio and the metallic state. There are two varieties of native iron, the tellurio and the metallic state. There are two varieties of native iron, the tellurio and the metallic state. There are two varieties of native iron, the tellurio and the metallic state. There are two varieties of native iron, the tellurio and the metallic state. There are two varieties of native iron, the tellurio and the metallic state. There are two varieties of native iron, the tellurio and the metallic state. There are two varieties of native iron, the tellurio and the metallic state. There are two varieties of native iron, the tellurio and the metallic state. There are two varieties of native iron, the tellurio and the metallic state. There are two varieties of native iron, the tellurio on the

Irish Moss. See Carrageen.

Irish Sea, the sea between Great is so ductile that it can be drawn into of St. George's Channel and south of the Channel 130 miles long and shout with overest heart's crust in combination with overest heart of section; and two pieces can be perfectly welded together when raised to a white heat. It

Irkutsk (ir-kötsk), a town in South- and extremely infusible. It is most com-Irkutsk (ir-kötsk), a town in Southern Siberia, capital of government of same name, at the junction in beds and large masses. Some mounof the Irkut with the Angara, about 40
miles from Lake Baikal. It is the resientirely of this variety of ironstone. In
dence of the governor-general of Eastern
Sweden it exists in great abundance and
Siberia, has a cathedral and a number of purity, and good bar-iron is produced from
public buildings. Manufactures woolens,
it. It is plentiful also in Norway and
linens, leather, etc., and carries on a good
trade in tea and other articles imported
in North America occurs in beds in granfrom China, furs, etc. Pop. 108,166.—The
government, which is bounded by Yenis-

Various parts of Great Britain also possess deposits of magnetic ore. Its specific gravity varies from 4.24 to 5.4.

2. Hæmatite or Specular Iron Ore, Red Hæmatite. This mineral in its purest state contains about 70 per cent. of iron. Specular ore is a deep steel-gray in color, with a brilliant, and often iridescent tar-nish externally; its fracture exhibits a brilliant luster. It is opaque in large fragments, but the edges of small thin scales are of a blood-red color by transscales are of a blood-red color by transmitted light. It occurs crystalline and lamellar, hard and massive, earthy and friable. This ore is found in the older rocks, especially gneiss and granite, both in beds and veins. Great Britain has vast deposits of hæmatite in Cumberland, Lancashire, Devonshire, and Cornwall, the red ores being chiefly utilized by British greaters. France Germany Russis and posits of the crystalline variety. 3. Brown Iron Ore, Brown Hæmatite. This variety consists essentially of hydrated ferric oxide, and contains when pure about 50 per cent. of iron along with about 16 per cent. of combined water. Brown iron ore occurs plentifully in France, Germany, Belgium, and in England, chiefly in the Forest of Dean, in Devonshire, Lincolnshire, and near Durham. Brown hæmatite is generally a yellow powder, sometimes passing into a brown or velvet black. It affords a very malleable and much harder iron than the red ore, and very good steel. Before the blowpipe it blackens and magnetizes but after calcination and cooling the powder becomes red, and in this state is much used for polishing metals. There are also many varieties of brown hæmatite, to which distinctive names are applied. Bog iron ore is a variety of brown hæmatite which occurs in most European and many American countries, and is so named from its being chiefly found in marshy places. It is considered to be of recent formation, and It is the iron obtained from it can but rarely consists essentially of ferrous carbonate. calcination; the black-band variety, which In its purest state it contains 48.27 per almost supplies its own fuel, from 40 to cent. of iron, and occurs in the older rocks 50 per cent. and in limestone strata in veins and beds. The chief deposits of this mineral are in Styria and Westphalia, and large deposts which act will be readed, and in Great Britain. This ore of the ores to be treated, and the due is very valuable for making steel, being admixture of different varieties; the most free from those substances which act suitable fuel; the production and maininguriously in its manufacture. Spathic tenance of a high and even temperature; ironstone is often associated with con-

siderable quantities of clayey and coaly matter; when the former substance predominates the ore is known as argillaceous or clay-band ironstone; when the coaly matter is in excess the ore is called carbonaceous or black-band ironstone. These varieties occur in most of the coal-fields of Great Britain, and supply the greater part of the iron produced there. It is also worked in France at the coal-fields of the Gard, of the Aveyron, and near St. Etienne. In America this ore also occurs, widely distributed. The color of the clayey carbonates of iron varies from reddish-brown through yellow-brown to dark brownish-black. 5. Iron Pyrites. This mineral, when pure, consists of 53.33 per cent. of sulphur combined with 46.67 per cent. of iron, and is the most widely distributed of all the ores of iron. smelters. France, Germany, Russia, and It occurs in many forms disseminated in North and South America, have large deposits of the crystalline variety. 3. Brown minerals, sometimes inclosed in them. The ordinary color is brass-yellow, but owing to decomposition often assumes grayish and brownish tints. Before the blowpipe it melts, giving out a sulphur-ous odor, and leaving a blackish slag, which is magnetic. This ironstone is chiefly used as a source of sulphur, but in Siberia it is worked for the small per-centage of gold it contains.

Before the ores pass into the smelter's hands they are subjected to the preliminary process of calcination or roasting. The object of this operation is to separate the smelter's subject to the smelter's hands are subject to the smelter's smelter and subject to the smelter are smelter and subject to the smelter are smelter and smelter are smelter are smelter and smelter are smelter as the smelter's smelter are smelter as the smelter's smelter arate water, carbonic acid, sulphur, and other volatilizable substances from the ore, and at the same time to render the ore more porous. This is now generally effected by placing the ironstone over a coal-fire at the bottom of a kiln; when the ore is red-hot a fresh layer, 8 or 9 inches in depth and mixed with coal, is added, and so on until the kiln is filled. When the bottom layer is cold it can be withdrawn, and the process thus becomes continuous. Formerly ores were roasted in piles in the open air, but this wasteful the fron obtained from it can but latery in piece in the open and, but the best be used for sheet-iron, and never for wire. and irregular method is now only resorted 4. Spathic Iron Ore. This mineral, as to in localities where time and fuel are the name implies, resembles rather an of little consideration. Ironstone loses earthy than a metallic substance, and calculation the block-hand variety which

> The smelting of the iron is the next process, that is, the production of the metallic iron from the ore. The iron

nace. This apparatus consists of a cylindrically-shaped furnace, varying from 7 to 10 feet high, and having an internal diameter of about 3½ feet; it is composed of thick iron plates strongly riveted together, protected inwardly by a layer of binding sand about 9 inches thick, the whole being lined with fire-clay bricks. See Casting.

To obtain malleable or wrought iron, it is necessary to free the pig-iron from the sulphur, phosphorus, silicon, and excess of carbon it contains, as these sub-stances lessen the tenacity of the iron, or plates. But a small quantity of carbon cold without exhibiting the least sign of (under 1 per cent.) is essential to the fracture. If iron breaks off when bent formation of good malleable iron; per- in a cold state it is said to be cold-short: feetly pure iron would be too soft. The while if it stands this treatment, but be-

to mix with the ores as shall form with furnace, but since the introduction of the non-essential constituents of the iron- Danks' and other furnaces, and the sub-stone a slag which shall remove all hurtful stitution of machine for hand-labor, this the surface of the molten iron and flow abandoned. In the ordinary puddling-easily from it. The most advantageous furnace there is a hearth, on which the combination of ores can only be deterpig-iron is placed, and a grate separated mined by experience, but as regards fuel from it, in which the fuel is placed. In there is generally no choice. Until the this furnace the iron is subjected to a beginning of the seventeenth century char-great heat, but it is only the heated gases coal was exclusively used for iron-smelt-that are allowed to play upon the metal, coal was exclusively used for iron-smelting, but coal and coke have now taken the shape of the furnace being designed its place, except in those countries where to throw the heated gases down on to forests still abound and charcoal can be the surface of the molten mass on the procured readily and cheaply. Chief among iron-smelting appliances is the aperture through which the puddler blast-furnace, and the great progress made in the production of pig-iron during the production of pig-iron during the production of pig-iron during the up the metal, thus assisting in the process past 30 years is largely due to better of oxidation. When the iron is sufficiently constructed furnaces. In those of the most recent type the waste gases of the balls or blooms weighing each about 60 furnace are utilized for raising heat and steam, with a consequent large saving in the furnace is closed, and the temperature which were formerly lost are also collected into blooms the door of the furnace, all tending to reduce cost of manufacture. (See Blast-furnace.) The molten iron, as it runs from the furnace, melted gases to whom to the furnace which is at the same time welded into a en iron, as it runs from the furnace, melted slag is thus forced out of the ball, is conducted along channels excavated in which is at the same time welded into a strong binding sand into molds of the compact mass of metal, ready to go same material, in which it solidifies, form-though the puddling rolls, which consist ing what is known as pigs. For casting of grooved iron cylinders. These cylin-purposes the pig-iron is generally melted ders revolve in opposite directions, so in a special furnace, called a cupola furnace. This apparatus consists of a cylindrically-shaped furnace, varying from slag remaining in it is squeezed out. The 7 to 10 feet high, and having an internal iron while still hot is cut into pieces by diameter of about 3½ feet; it is compact in the same pair of shears, which pieces are bound posed of thick iron plates strongly riveted together by wire, and subjected to together by wire, and subjected to the operation of re-heating or passing through the mill-furnace. The bars are heated to a welding temperature, then again passed through the rolling-mill, whereby they are converted into a single whereby they are converted into a single-bar. This bar may be again bent upon itself and again rolled, thereby producing what is known as best bar or wire iron. This iron is very tough and tenacious: and render it unfit for rolling into bars it may be bent or even tied in a knot when formation of good malleable iron; perfectly pure iron would be too soft. The while if it stands this treatment, but bemeans by which the elimination of foreign materials from, but retention of a small amount of carbon in, the iron are accomplished are partial oxidation of the iron, eign elements influences these two propsucceeded by the removal of the foreign erties of iron in a marked degree; thus substances in the form of oxides, partly by a very small amount of sulphur, even such volatilization and partly by combination a quantity as .05 per cent.. causes barwith the already oxidized iron in the form from to become red-short. Bar-iron posof slag. This is done by the process of sesses a specific gravity varying from 7.3 puddling. Formerly the iron-puddler submitted the pig-iron to a refining process at being about 2900° Fahr., and of castprevious to passing it into the puddling-

By the Siemens regenerative and other dissolves this metal easily, but if consimilarly constructed furnaces, malleable centrated, it has no action in the cold, iron and steel are now prepared directly whereas, on heating to ebuilition, the iron from the ore. In recent years 'mallea- is dissolved with evolution of sulphurous ble castings' have been introduced. The acid gas. Iron is also dissolved in hydrocastings are made of ordinary east-iron, and rendered malleable by the removal The principal iron manufacturing coun-of the carbon. In large cast-iron pots the tries are the United States, Great Britcastings are laid with alternating layers ain, Germany, rrance and Belgium. The of powdered red hæmatite, and the whole production of iron and steel has made is kept at a temperature of about 1650° rapid strides in the United States. This Fahr., or cherry-red heat, for 72 hours. On cooling, the castings are found to consist of nearly pure iron, and to be per-fectly malleable, and, therefore, workable.

If iron is heated frequently or care-lessly it ceases to be fibrous and loses its tenacity; it is then said to be burnt. To restore it to its original condition, a fresh and very careful forging is generally needed. This may also be done by heating the piece of iron to bright redness, and plunging it into a boiling saturated some tion of sea-salt until it is of the same temperature, about 230° Fahr. After is of great value medicinally, especially as a tonic and restorative of the blood.

between iron and steel, and many varieties of metal come into the market under the name of steel which in reality are alloys of iron with other metals, such as wolfram, manganese, chrome, etc. It is of the characteristics of true steel is that perchloride, etc. Mineral waters often it hardens when heated and then suddenly owe their useful properties to iron, being cooled in water; but wolfram steel, for then known as chalybeate springs. Instance, exhibits the very opposite property. Experienced workmen can distinguish iron from steel by the musical note emitted on striking. A more certain 100-150 feet, with heavy, strong, and method consists in treating the metal with durable timber. It is, however, difficult diluted nitric or sulphuric acid. If the to work and apt to be 'shaky.' surface remains unaltered or nearly so. Iron and Steel-clad Vessels, when touched with a drop of either acid,

a strong lustre, very tenacious, capable of receiving a high polish, and so soft as to be easily cut with a knife. It may be obtained by heating nitride of iron in a stream of hydrogen, or by electrolytic precipitation but, according to Matthiessen, however metallic iron is obtained it always contains a trace of sulphur. In its chemical analogies iron is closely related to the metals cobalt, nickel, and chromium; it belongs to the hexad group

chioric acid and in aqua regia.

country has now a much larger output than any other, and from being an importer has become a great exporter. Great beds of iron ore occur in Pennsylvania, West Virginia, Tennessee, Alabama, in Michigan and other States bordering Lake Superior, in Missouri, Arkansas, Wyo-ming and some other States. There are immense beds of bog-iron in Washington. Pennsylvania is the greatest iron-produc-ing State. For the manner in which

It is not always easy to draw the line chlorosis, in rickets and scrofula, and in convalescence from various illnesses. In neuralgia it is often beneficial, and especially when given along with quinine. Some of its preparations have a styptic or astringent effect. It is given in many admitted by all metallurgists that one forms, as the carbonate, citrate, sulphate, of the characteristics of true steel is that perchloride, etc. Mineral waters often

when touched with a drop of either acid, the metal is iron; in the case of steel a a term now applied to all vessels problack mark will be left, owing to the tected from the fire of heavy guns by liberation of carbon.

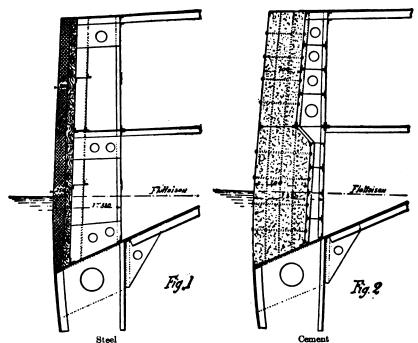
Pure iron is a silver white metal, with backed by wood. The iron-clad is coma strong lustre, very tenacious, capable paratively a modern invention, and it of receiving a high polish, and so soft as was not until 1859 that Britain began to be seedly out with a winfe. introduce such vessels into her navy; but since that time greater changes have taken place in the construction of war-ships than in all previous ages. The idea of protecting vessels by iron was first practically applied to some floating batteries by the French in the Crimean war. The shells thrown by the cannon then in use were calculated to make terrible havoc of metals, and forms a large series of among the crowded crews of the wooden salts. The atomic weight of iron is 55.9 battleships of that period and some extra or 56. Iron dissolves slowly in dilute protection became necessary. The first nitric acid; if not diluted, this acid rapiron-clad, La Gloire, was constructed by idly oxidizes it. Dilute sulphuric acid the French in 1858, a wooden ship

sheathed from end to end in 4½ in. iron vessel suffered seriously and the crews plates, an armor then considered invulescaped almost unburt, was a practical nerable. The first British iron clad, the lesson in naval warfare that over-



A. Iron plating, Teak backing. C. Ship's side.

Warrior, was launched in the Thames in December, 1860, an iron Throughbut that war the value of the frigate with air-tight new idea was abundantly proved by the compartments, 4½-in. use of iron-clad river boats and turreted iron armor and 18-in. monitors in ocean and harbor conflict, and wood backing, the two after the close of the war the principal ends of the vessel unnations set themselves actively to work in protected. It remained, building fleets of iron and steel-clad warhowever, for the United vessels. This was especially the case with States to demonstrate England and France, the remaining nastates to demonstrate England and France, the remaining nather practical value of tions showing much less alacrity and the this new idea in naval United States giving little signs of folwarfare. This took lowing up the lesson it had taught. The place in 1862, when the American Monitors had proved the value first battle ever fought of the turret method of carrying and between iron-clad ships working guns. In this the heavy guns took place in Hampton were carried in revolving iron turrets of Roads the Confederate strength which rose above the Roads, the Confederate great strength, which rose above the broadside-ship Merrimac engaging with deck, having openings only for the muzthe Monitor, the turret-ship devised by zles of the guns. This was quickly ap-



Comparative Diagrams of Cement Armor and Steel Armor

Captain Ericsson. The result of this plied to the new British ships, while the memorable conflict, in which neither French adopted a new idea, known as

ployed, the heavy guns firing over the edge of the turrets, and being in some cases so mounted that they could be lifted cases so mounted that they could be lifted lowing directions: for the battleship, a to fire and lowered again, there being reduction in the size of the largest guns, them. The principal advantage of this rial and higher velocity of projectiles; an type was the height at which guns could increase in the size of rapid-fire guns; a be carried above the water-line; this, however, being offset by a considerable greater proportion of the ship covered by danger to guns and crews. As for the old same; an increase in speed and field the broadside method of carrying guns above the size of rapid-fire guns; a much improved quality of armor, with a however, being offset by a considerable greater proportion of the ship covered by danger to guns and crews. As for the old same; an increase in speed and field the broadside method of carrying guns above the same and field the broadside method of carrying guns above the same and field the same and the broadside method of carrying guns, this practically vanished except in the case of the minor armament and the machine guns, which were necessarily more exposed.

The basis of all protection on the modern war vessel is the protective deck, and it is common to the battleship, armored and protected cruisers and many gunboats. It is a heavy steel deck covering the whole and machinery, the magazines and the shell rooms, the ammunition passages and all the parts where an explosion would be most dangerous and would create the Iron Crown, a golden crown set with greatest havoc. For safety every opening on this deck is covered with a heavy steel which anciently the kings of Italy were her water-line, for, if a shell should enter Christ. The order of the Iron Crown was and explode here, tearing a large hole, founded in 1809 by Napoleon, as king of the vessel would quickly capsize and sink; Italy, and refounded seven years later as it is here, therefore, that the heaviest an Austrian order of civil and military armor, called the water-line belt, is usumerit. ally placed. A warship might as well be Iron Gate, a narrow part in the sunk, however, as rendered useless in battle and the one thing that modern payed low where it leaves Austrian territory. fire and automatic guns; as a result of ing navigation serious and formerly in-this all the later battleships, armored possible. cruisers and protected cruisers alike, have Tron Hat a headpiece of iron somecruisers and protected cruisers alike, have increased the protection of the broadside batteries and exposed gun positions, even armor from the twelfth to the seventeenth at the expense of the water-line belt. The foregoing description, in a general way, Iron Mask, The MAN WITH THE, an portrays the disposition of armor usually

the barbette method. In this, open towers respects, an improvement on her imme-or turrets rising above the deck were em-diate predecessor; there is some uncer-ployed, the heavy guns firing over the tainty, however, as to the best type. The trend of development has been in the folsame; an increase in speed and fuel capacity, and a saving in machinery weights due to the introduction of the water-tube boiler and to a generally higher grade of material; the increasing use of oil as fuel, and, finally, a gain in size of the whole vessel.

Iron Cross, a Prussian order, instituted March 10, 1813, by Frederick William III, to be conferred for distinguished services in war. It was made of iron to commemorate the grim 'iron' period at which it was created. the ends to the heavy stem and the stern cross of iron, edged with silver, and is posts. At the sides it usually slopes, worn round the neck or at the buttonhole. meeting the sides of the ship 3 or 4 feet The order was revived by William I in below the water-line. Below this heavy 1870, on the eve of the great war with deck lie the vitals of the vessel, the boilers France. The grand cross shell rooms, the ammunities 1870, on the eve of the great war with France. The grand cross, a cross double the size, is presented exclusively for the gaining of a decisive battle or the capture or brave defense of a fortress.

Iron Crown, a golden crown set with grating to prevent, as far as possible, crowned. It has received the above name fragments of shell from passing below. from an iron circle in it, forged, according The most vulnerable part of the vessel is to tradition, from a nail of the cross of her water-line, for, if a shell should enter Christ. The order of the Iron Crown was and available to the control of the cross of the resulting a large below founded in 1000 by Newsley as the resulting a large below founded in 1000 by Newsley as the resulting a large below founded in 1000 by Newsley as the resulting a large below founded in 1000 by Newsley as the resulting a large below for the resulting a large below for the resulting a large below for the resulting a large below the resulting a large be

sunk, however, as rendered useless in bat-tle, and the one thing that modern naval low where it leaves Austrian territory battles have shown, is the absolute im- and becomes the boundary between Servia possibility of working the guns when they and Roumania. The water rushes through are exposed to a modern battery of rapid- it in dangerous rapids and eddies, render-

employed on the battleship type, but it in various French prisons, who for a long may be considered to apply as well to time excited much curiosity. All that is armored cruisers, although the latter are known of him is that he was above midgiven greater speed at the expense of pro-dle height, of a fine and noble figure, and tection and armament. The design and delicate brownish skin, that he had a building of battleships shows a constant pleasant voice, was well educated, and development. Each new vessel is, in many fond of reading and guitar playing, and

that he died in the Bastile in 1703. mask he were seems to have been of black sideros vera of Java. him many names. He was stated to be Ironwood, Michigan, 135 miles w. of nim many names. He was stated to be in turn the Count of Vermandois (a natural son of Louis XIV and De la Vallinder), the Duke of Beaufort, the Duke of valuable timber in vicinity. Pop. (1910) Monmouth, the son of Anne of Austria 12,821; (1920) 15,739. (mother of Louis XIV) by some favorite, Irony a form of speech in which the these assertions have been unable to stand meaning intended to be conveyed in conand twin-brother of Louis XIV, but all a form of speech in which the these assertions have been unable to stand meaning intended to be conveyed is conthe test of thorough investigation. What trary to the natural meaning of the words, seems most probable is that he was Count Irony, as a rhetorical device, becomes a seems most probable is that he was Count frony, as a rultorical device, becomes a Girolamo Matthioli, first minister of the most effective weapon for ridiculing an Duke of Mantua, who had betrayed the interests of Louis XIV by failing to secure for him, as he had pledged himself to do, in consideration of a large bribe, once powerful confederacy of six North possession of the fortress of Casale which American Indian tribes (Mohawks, Oneipossession of the fortress of Casale which gave access to the whole of Lombardy. For this offense the court of Versailles lured him to the French frontier, secretly arrested and imprisoned him in the fortress of Pignerolo. The secret was preserved so carefully, on the supposition that Matthioli was the ill-fated prisoner, because his gainer and detertion were because his seizure and detention were flagrant violations of international law and likely to cause trouble.

Iron Mountain, a city of Michigan, capital of Dickinson county, 51 miles W. of Escanaba. It was organized in 1888 from part of Brei-

shackles, fetters, or bilboes, es-Irons, the ankles of prisoners on board ship in former times.

Ironsides, Old, a name given to the much larger than they really are.
U. S. frigate Consti- Irrational Quantities (i-rash'untution (q. v.).

the center of an iron ore, coul and fireclay district; has various iron industries, eement works, wood-working plants, etc. Pop. (1920) 14,007.

Iron-wood, a name given to various irrational quantity, 3.14159...

Tress from the quality of their timber. The iron-wood or hophornbeam of America (Ostrya virginica), nat. order Cupuliferæ, is a tree with a trunk not exceeding 6 in. in diameter, various mouths and forming a great delta, with very hard wood, so heavy that it its source is in East Tibet. The Irrasinka in water, and foliage resembling waddy is the main arrery of durmsh the nat. order Cupulifers, is a tree with a trunk not exceeding 6 in. in diameter, with very hard wood, so heavy that it sinks in water, and foliage resembling that of birch. The species of the genus Sideroxyton, known as iron-wood, are natives of the tropics and also of New Zealand, the Cape, etc. The S. inerme. or smooth iron-wood of the Cape, has long been cultivated in the greenhouses of Bassein on two of its mouths. T Europe. Diospyros Ebenum (the ebony) of the river is about 1200 miles,

The is also named iron-wood, as is the Metro-

das, Senecas, Onondagas, Cayugas and Tuscaroras). They formerly resided on the Mohawk River, and extended their conquests to the Mississippi and beyond the St. Lawrence. Warlike and well organized, it is probable that but for the settlement of the whites they would have secured dominion from Canada to the Gulf of Mexico. They came into early conflict with the French and proved a barrier to their southward advance from Canada. Some of the tribes are now extinct, some have made considerable advances in civilization, while others have tung township, has extensive iron mines fallen into a state of squalid misery, and ships large quantities of excellent Part of the Canadian Indians are Iroquois. ore. Pop. (1920) 8251.

Tradiation (ir-rā-di-ā'shun), that ef-Irradiation (ir-rā-di-ā'shun), that effect on the eye through shackles, fetters, or bilboes, especially those used to confine so f prisoners on board ship in faces and self-luminous bodies, when mes.

al), or Ironton, a city, county seat of Law-Surds, are quantities which we cannot rence Co., Ohio, on Ohio exactly determine, because they cannot River, 134 miles s. E. of Cincinnati. It is be expressed in terms of a primary unit. the center of an iron ore, coal and fireclay Thus 1/2 is an irrational quantity, being

> waddy is the main artery of Burmah, the bulk of the trade is carried on by its means, the valleys through which it flows are the most fertile and populous, and on its banks are the principal towns (Mandalay, Ava, etc.), with Rangoon and Bassein on two of its mouths. The length

as used in Italy is ap-Irredentism, plied to the policy that has for its object the reclaiming of certain sections of territory peopled by Italians but under the government of Austria-Hungary. The Italian phrase, Italia Ir-Hungary. The Italian phrase, Italia Irredenta, so frequently employed during the war, means 'unredeemed Italy.' After 1861, when the present kingdom of Italy was established, the Papal States, Venetia, the district around Trieste and the district around Trent, were still—though inhabited mainly or in part by Italians—not included in the kingdom. Venetia and the Papal States were appeared in 1868. the Papal States were annexed in 1868 and 1870. This process of winning Italy from foreign control came to be called irredentism, and after 1870 the term Italia Irredenta was applied to Trieste and the Trentino, these being territories still unredeemed. Irredentism steadily deliming the inclusion of Italia ir clined following the inclusion of Italy in Elephant Butte dam on the Rio Grande, the Triple Alliance in 1882, but gained in force after the annexation of Bosnia reservoir in the United States, and the in force after the annexation of Bosnia reservoir in the United States, and the and Herzegovina by Austria-Hungary in longest roller crest dam in the world 1908. 'For Greater Italy' was the located on the Grand River in Colorado. The net construction cost to June 30, slogan that inspired the gallant Italian The net construction cost to June 30, soldiers in their spectacular attack on the 1919, was \$123,853.000. slogan that inspired the gallant Italian Soldiers in their spectacular attack on the Austrians in 1917 and 1918, which succeeded in reclaiming the whole of the Boise project in Idaho, 327,552 acres; nct cost of construction to June 30, 1919, Irrigation (ir-i-ga'shun), the art of tiveness of soils by the artificial supply of water to them. This is as old as agriculture, and references to it exist in very early records, especially in Egypt, India and China. In countries with very small rainfall, and subject to droughts, agriculture without irrigation works in India. The subject to the Ganges Canal, 445 m. long. Irrigation has long Canal, 445 m. long. Irrigation has long here reastised in Michael and after a course of 1800 miles fells into the Ohi It repairs to June 30, 1919, \$11,973,276. The next is the North Platte in Nebraska-Wyoming, 251.715 acres; cost, \$10,549,095 to June 30, 1919.

Irritability (17-1-ta-bil'i-ti), to at the function of a nerve or muscle in which it responds to certain stimuli, or that property in plants by which stimuli cause movements, as in the Sensitive plant.

Irtish (ir'tish), a large river of North-ern Asia, rises in the Altai Mountains in Chinese territory, forms Lake Zaisan, then flows N. N. w. through Asiatic Russia. and after a course of 1800 miles fells into the Ohi It responds to certain stimuli, or that property in plants by which stimuli cause movements, as in the Sensitive plant. greatest irrigation work is the Ganges Lake Zaisan, then nows N. N. w. turougu Canal, 445 m. long. Irrigation has long Asiatic Russia, and after a course of been practiced in Turkestan and it was the basis of the Babylonian kingdom of ceives the waters of several important the far past. In the south of Europe, rivers, and has important sturgeon fishparticularly in Italy and Spain, irrigation works of a high order have existed from Irvine (er'vin), a seaport of Scotland, ancient times. In the western States

operation of irrigation works in the arid and semi-arid States of the West. Thirty projects have been authorized for conprojects have been authorized for construction or operation for irrigation of lands in Arizona, California, Colorado, Idaho, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oregon, South Dakota, Texas, Utah, Washington and Wyoming. These projects aggregate 3,200,000 acres and the major works aid in serving an additional 1,000,000 acres. The Service has built on the 30 projects

The Service has built on the 30 projects over 12,000 miles of canals, ditches and drains, including 100,000 canal structures and involving the excavation of 174,000,-000 cubic yards of materials. In connection with this work there have been constructed 100 storage and diversion dams with an aggregate volume of 13,700,-000 cubic yards, including the Arrowrock dam, highest in the world (349 feet), the

ancient times. In the western States in Ayrshire, on the Irvine, 24 it is largely employed. There are many miles southwest of Glasgow. It has a systems of distributing the water in irri-good harbor, and there are chemical works systems of distributing the water in irrigidation to suit the special requirements of different surfaces. The work is done by the construction of great dams, fitted to hold back the waters of mountain streams and of the melting snows of winter and feed them to the land during the farming season.

The United States Reclamation Service was organized as a bureau of the of the Established Church, was appointed Interior Department, under the Reclamation 1819 assistant to the celebrated Dr. tion Act of June 17, 1902. It is engaged Chalmers in Glasgow. In 1822 he bein the investigation, construction and and his mannerisms, soon brought him into notice, and for a time the great as well as the fashionable flocked to hear him. In 1823 he published a work called f'or the Oracles of God, Four Orations, which sold extensively. About two years later he wrote an Introductory Essay to Bishop Horne's Commentary on the Book of Psalms, considered one of the best products of his pen. His theological peculiarities were well set forth in a collection of Sermons, Lectures, and Occasional Discourses, issued at London in 1828. These attracted much attention, and brought him shortly afterwards into conthat in 1832 he was dispossessed of his living in London, and in 1833 the presbytery of Annan, which had licensed him, deposed him from the ministry. He was charged with holding Christ guilty of original and actual sin, and denying the doctrines of atonement, satisfaction, imputation, and substitution. He was a believer in the speedy coming of Christ, and held that miraculous gifts of apostolic times had not ceased to be bestowed on the Christian Church. An excellent biography of Irving was written by Mrs. Oliphant. See Irvingites.

Irving, HENBY, (originally John Henry Brodribb) an English actor, born in 1838. He was for a time a clerk in London, but adopted the theatrical profession, his first appearance being at Sunderland in 1856. After playing for nearly three years in Edinburgh he ap-peared at the Princess' Theater, London, in 1859. After a short stay here, and a few months in Glasgow, he went to Manchester, where he remained for five or six years. Having returned to London in 1866 he took part in the Belle's Strategem, Hunted Down, Uncle Dick's Darling, ctc.; but his first marked success was as Digby Grant in Albery's Two Roses (in 1870), which was followed by his powerful impersonation of Mathias in The Rells (founded on Erckmann-Chatrian's Polish Jew). His next noteworthy parts were Charles I, Eugene Aram, and Richelieu in the plays so named. In 1874. elieu, in the plays so named. In 1874, at the Lyceum Theater, he sustained the part of Hamlet so successfully as to raise

Chapel, a Presbyterian place of worship Night, Faust, Macbeth, etc., playing in in London. His impressive eloquence, them the principal character along with combined with singularity of appearance, Miss Ellen Terry. His appearances in Miss Ellen Terry. His appearances in the English provinces were equally successful with those in London, and he met with equal favor in his repeated visits to the United States. He was knighted in 1897. Died suddenly at Bradford, England, in 1905. He was buried in Westminster Abbey.

WASHINGTON, one of the best Irving, in New York in 1783; died in 1859. He was the son of a Scotsman who had emigrated to New York before the Revolution, and had become a merchant of some standing. He was educated for the legal standing. He was educated for the legal profession, but his tastes were in the direction of literature, and already in 1802 his Letters of Jonathan Oldstyle appeared in the New York Morning Chronicle. Shortly afterwards, being threatened with pulmonary disease, he sailed for Europe, visited most continental countries, and did not return to America until March. 1806. In the same year he until March, 1806. In the same year he was called to the New York bar. His pen was now very busy, and his sketches of Dutch character, in his Knickerbocker's History of New York, which made its appearance in December, 1809, proved him possessed of quaint and genial humor to a high degree. About this time he joined his two brothers as a sleeping partner in a mercantile venture, and in 1815 he visited England. The failure of his brothers' business made him resolve to follow literature as a profession, and to follow literature as a profession, and he settled in London. A series of papers which he now wrote, entitled The Sketchbook, first published at New York, 1818, met with such success that an enlarged edition was published in London two years later. For seventeen years, until 1832. Irving resided in Europe, principally in England, France and Spain. This was a period of great literary activity and brought forth some of his most famous brought forth some of his most famous works, such as Bracebridge Hall. The Tales of a Traveler, and The Life of Columbus, for which 1000, 1500 and 3000 guineas respectively were paid him by the publishers. He also acted for a time as secretary to the American Embassy in London, and the University of Oxford honored him in 1831 with the degree of B.C.L. Having returned to New York in the spring of 1832 he accompanied the expedictor for the removal part of Hamlet so successfully as to raise degree of B.C.L. Having returned to himself to the first place among English New York in the spring of 1832 he accomactors. His chief Shakesperean parts panied the expedition for the removal of subsequently plaved are Macbeth, Othello, the Indian tribes beyond the Mississippi, and Richard III. In 1878 he leased the and collected the material for his Tour Lyceum Theater for himself, and nut on on the Prairies, published in 1835. From the stage in excellent style Othello, The 1842 to 1846 he acted as United States Merchant of Venice. Much Ado About ambassador at Madrid, and on his return Nothing. Romeo and Juliet, Twelfth in that year he retired to his countryseat at Sunnyside. His biography of empire, and repelled an inroad of the Oliver Golasmith, Mahomet and His Successors, and the Life of Washington Constantine Ducas in 1059, and retired (1855-56) occupied his last years. Other to a convent, where he died in 1061, works of his are: The Conquest of Granada, Tales of the Alhambra, Legends of the Conquest of Spain, Voyages of the King John II of Castile (iz-a-bel'a), adventures of sort of Ferdinand the Catholic, was born Captain Bonneville and Astoria. His famous story of Rip Van Winkle belongs to the Sketch-book.

Tryincitae (ér'ving-Its), a name given

Irvingites (ér'ving-lts), a name given to believers in, and followers of, Edward Irving, forming a sect properly designated as the Catholic Apostolic designated as the Catholic designated as the Catholic Apostolic designated as the C tolic Church. They have a considerable number of churches in the United Kingdom, and a few unimportant congrega-tions exist also in Germany, France, Switzerland, Canada and the United States. Their chief distinguishing feature is the belief in a revival of the spiritual father three years after, her mother being gifts of the first ages of the church, such appointed queen-regent. The early years gifts of the first ages of the church, such as speaking in 'unknown tongues,' and as speaking in 'unknown tongues,' and prophesying. In their constitution, which they claim to be r development of the primitive church, they adopted the four-fold ministry of 'apostles, prophets, evangelists and pastors and teachers' (Eph. iv, 11). Two years after Irving's death the number of apostles had been completed to twelve. They recognize all Christian communities, and embody in their ritual portions of those used in different sections of the church, including ferent sections of the church, including the Roman and Greek Catholic. The ministry is supported by tithes. The second coming of Christ is a hope of the members.

Irvington, a town of Essex County, New Jersey, 3 miles s. w. of Newark. It has smelting works and steel, rope, and tool factories, and many other industries; also a large freight depot of the Lehigh Valley R. R. Pop. 25,480.

Isaac (1'zak; Heb. 'he will laugh'), one of the Hebrew patriarchs, the son of Abraham by Sarah, so called the state the Leughter and gladness occasion. to denote the laughter and gladness occa-sioned by his birth. He is remarkable as the offspring of very old age, Sarah being ninety and Abraham a hundred years old at the time of his birth; for his miraculous escape from death as a burnt offer-

and sagacity, and contributed no small share to the many remarkable events of the reign of Ferdinand V, including the introduction of the Inquisition, 1480; the discovery of America by Columbus, 1492, to which she lent material and moral aid; and the conquest of Granada, and the expulsion of the Moors.

Isabella II, ex-queen of Spain, daughter of Ferdinand III, was born in 1830, and succeeded her of her reign were disturbed by a rising in favor of her uncle, Don Carlos, who, if the Salic law had not been set aside, would have ascended the throne instead of her, but this was finally quelled in 1839. She was declared of age in 1843, and in 1846 was married to her cousin, Don Francisco d'Assisi. Her reign was so despotic and her life so licentious that a revolution took place in 1868, which drove her from the country. She resigned her claims to the crown in favor of her son Alfonso, who ascended the throne in 1875. She died in 1904.

(I-se'us), an Athenian orator. Isæus who lived between 420 and 348 B.C. He was a pupil of Lysias and Isocrates, and, like them, became a teacher of eloquence and writer of orations, chiefly judicial. Eleven of his orations are extant. His style is clear, forcible, and concise.

Isaiah (I-zā'ya: Heb. Yeshayahu, Salvation of Jehovah'), the first of the great Hebrew prophets. He began his predictions in the last years of Uzziah's reign. Of his father, Amoz, we know nothing, and of the circumstances of his life but little. We know, however, that he had great influence over the kings and people of Judah. and he is supposed to have died at a good old age at Jerusalem, at the beginning of Manaseh's reign. The first portion of the writings that pass under his name consists chiefly of declarations of the lous escape from death as a burnt offerkings and people of Judah. and he is
ing; and for the fraud perpetrated upon
him, at his wife Rebecca's instigation, by
his son Jacob, to the injury of Esau. He
died at Hebron 180 years old, and was
buried in the cave of Machpelah, the restburied in the cave of Machpelah, the restlong place of Sarah and Abraham, and of
Rebecca.

ISAAC I, Comnenus, Emperor of Constantinople, raised to the
future for Israel. The style throughout
throne in 1057. He brought about great
is clear and simple, yet dignified and subreforms in the administration of the ship of the last 27 chapters is denied by is generally fertile, and produces abunsome eminent critics, who unite in ascribdant cereal and leguminous crops; the

Isauria (I-sa'ri-a), in ancient geography, a country in Asia Minor, bordering on Lycaonia, Phrygia, Pisidia, Cilicia, and Pamphylia. Its capital, Isaura, was destroyed by the Romans. Ischia (is'ki-à), an island of Italy, 26 square miles in extent, in the Gulf of Naples, with beautiful scenery and a fertile soil, producing excellent wine and fruits. It is entirely volcanic in character, and is noted for its warm mineral springs and volcanic convulsions. In 1881 and 1883 earthquakes caused great loss of life and property. Several shocks have been experienced since, but without disastrous results. The capital, Ischia, with some 7000 inhabitants, is a favorite resort of tourists in Italy. Other towns are Casamicciola and Forio, both of which suffered severely in 1883. Pop. 26,891.

Isère, It is generally mountainous, the highest summit being Le Grand Pelvoux, 13,158 feet. The whole department belongs to the basin of the Rhone, which drains a over the Councils of Seville, 619, and great part of it directly, the only other Toledo, 633; and died at Seville in 636. Important river being the Isère. The soil Several of his works, which embrace

some eminent critics, who unite in ascrib-ing them to a later prophet, perhaps also vine and mulberry being also cultivated. called Isaiah, while others believe that Lead, copper, and iron are found in con-the name Isaiah stands for a school of siderable quantities; also coal, marble, prophets; but the integrity of the book has still many able defenders.

ISAT (ê'zâr), a European river which furnaces. There are numerous paper, rises in Tyrol, about 6 miles N. E. silk, and cotton mills. Grenoble is the of Innsbruck, enters Bavaria, flows past capital. Pop. 562,315. Munich, and latterly joins the Danube; Iserlohn (ê'zêr-lôn), a town of Prus-course above 190 miles.

ISERION (ê'zêr-lôn), a town of Prus-sia, province of Westphalia,

Isatis (1'sa-tiz), the genus of plants with manufactures in brass, bronze, tin, to which woad belongs. and iron, cutlery, zinc and iron furnaces. and iron, cutlery, zinc and iron furnaces, etc. Pop. (1910) 31.214.

Isernia (e-zer'ne-a; Latin, Æsernia), an episcopal city of South Italy, on a spur of the Apennines, province Campobasso. Pop 9322.

Ishim (ish-em'), a river of Western Siberia, a tributary of the Irt-

Ishmael (ihs'mā-el; Hebrew, Yish-mael, 'Whom God hears'), the son of Abraham by Hagar. He married an Egyptian wife, and had twelve sons and one daughter, who became the wife of Esau. He died when 137 years old. It was predicted that he was to become 'a great nation,' and the Arabs, especially the Bedouins, are often regarded as descendants of Ishmael.

Ishmaelites (ish'māl-itz), ISHMEEL-ITS, the descendants of

Iso (ē-sā'o), or Sabino, a picturesque lake in Upper Italy, between Brescia and Bergamo, and formed by the are extensive iron mines, with very rich waters of the Oglio; length 15 miles; ore, large quantities of which are shipped.

Isère (ë-săr), a river which rises in tally, crosses Savoy, enters Isidore (iz'i-dōr), the name of three France by the department of Isère, to which it gives its name, and joins the Rhone 5 miles above Valence; length about 190 miles, of which nearly 90 are navigable. miles above Valence; length who flourished at the beginning of the miles, of which nearly 90 are a department of Southeastern France; area 3185 square miles, country, and consequently available and consequently available areally mountainous the bighest country, and consequently exercised a powerful influence over the development of Latin Christianity. He was made bishop of Seville in 600 or 601, presided

Isidorian Decretals, a spurious collection of decretals belonging to the ninth century, which were for a long period regarded as

article is obtained from the same part in Isis, article is obtained from the same part in the cod, hake, etc. It is the basis of the Russian glue, which is preferred to all the Thames, before its junction with the Thames, before its junction wi and separated from galic acid, the former giving it a yellowish-white precipitate. Isinglass boiled in milk forms a nutritious jelly, and a solution in water, with a very small proportion of some balsam, apread on black silk, is the court plaster of the shops. It is also used in fining sherries and other white wines, and in making mock pearls, stiffening linens, silks, gauzes, etc. With brandy it forms a cement for porcelain and glass.

Isis (i'sis), the principal goddess of the Egyptians, the sister and wife of Osiris, representing the moon, as Osiris did the sun. The Egyptians believed that Isis first touch the sun to the control of the sun to the control of the sun to the control of the sun. The Egyptians believed that Isis first touch to the sun to the control of the sun to the control of the sun to the control of the sun. The Egyptians believed that Isis first touch to the sun.

did the sun. The Egyptians activities, by the United States, but this was one that Isis first taught them agriculture, by the United States, but this was one that Isis first taught them agriculture, by the United States, but this was one that Isis first taught them agriculture, by the United States, but this was one that Isis first taught them agriculture, by the United States, but this was one that Isis first taught them agriculture, by the United States, but this was one that Isis first taught them agriculture, by the United States, but this was one that Isis first taught them agriculture, by the United States, but this was one that Isis first taught them agriculture, by the United States, but this was one that Isis first taught them agriculture, by the United States, but this was one that Isis first taught them agriculture, by the United States, but this was one that Isis first taught them agriculture, by the United States, but this was one that Isis first taught them agriculture, by the United States, but this was one that Isis first taught them agriculture, by the United States, but this was one that Isis first taught the Isis first taught them agriculture, by the United States, but this was one that Isis first taught them agriculture, by the United States, but the Isis first taught them agriculture, by the United States, but the Isis first taught them agriculture, by the United States, but the Isis first taught the Isis fi



forms. In one representation she has the form of a wo-man, with the horns of a cow, as the cow was sacred to her. She is also known by the atthe of tributes lotus on her head, and the sistrum in her hand, a musiinstrument accompanied by her infant son,

divinity, history, philosophy, etc., were Rome caused its frequent prohibition translated into English as early as the middle of the sixteenth century.

Rome caused its frequent prohibition It was, however, repeatedly remiddle of the sixteenth century.

The Romans never considered the It was, however, repeatedly re-The Romans never considered the worship, which was introduced among them by Sulla (B.C. 86), altogether repu-table, and its attendant immorality was which were for a long period regarded as authentic. See Decretals.

Isinglass (i'zing-glas), a gelatinous substance, of which the best kind is prepared from the swimming bladder or sound of the sturgeon, dried and cut into fine shreds, while the American article is obtained from the same part in a substance of America.

the upper part of the river Thames, before its junction with

will of God, is the name given in Arabic to the religion originated by Mohammed. The fundamental doctrine of Islamism, and the only one it is necessary to profess to be a Moslem, is expressed in the common formula of faith: 'There is no God but Allah, and Mohammed is his prophet, to which the Shiahs or Shiites, that is, the majority of Persian and Indian Mos-lems, add 'and Ali is the vicar of God.' See Mohammedanism.

Island (i'land), a portion of land en-tirely surrounded by water, and which the Egyp-smaller in size than the great masses of tians used in the land known as continents. Islands are of worship of the all sizes, from mere dots of land or rock gods. She is often in the sea to a great mass like Australia. which is often spoken of as a continent. Islands are divided into two distinct classes: continental islands, lying in proxcelebrated Egypimity to continents, and pelagic or tian statue she was shown with her oceanic, from their position in the oceans. face veiled. She was particularly worshiped in Memphis, and at a later period throughout all France From From From From From Services. shiped in Memphis, and at a later period gin of the continents, and are generally throughout all Egypt. From Egypt her of the same geological structure. Pelagic worship passed over to Greece and Rome, islands are mostly of volcanic or coral and the abuses which it occasioned at formation. A cluster of islands, such as

the West Indies, the Canaries the Ismid (is-mēd'), Izmid, a town of Asia Hebrides, etc., are called an archipelago. Islands of the Blessed. according seat of a Greek metropolitan and an Islands of the Blessed. Grecian mythology, islands which were ancient Nicomedia. Pop. 20,000. supposed to lie westward in the ocean, Isnik. See Nicaa. deeth lived in perpetual benefits the state of Zeus, snatched from death, lived in perpetual benefits. death, lived in perpetual happiness.

Isle of France. (11). See Mauritius.

Isle of Man. See Man.

part of Argyllshire, and separated by the Isocheimal Lines. See Isothermal Sound of Islay from the island of Jura. Area, 246 square miles. Pop. 6387.

Isle of Pines, in the W. Indies, is about 30 miles s, of Cuba, of which it forms a dependency; area about 1200 square miles. The ownership of the island was left unsettled by the treaty of 1903; but in April, 1907, the American territory. Pop. about 3200.

Isle of Wight. See Wight.

Islip, a town of Suffolk Co., N. Y., 40 miles E. of New York city, contains a village of the same name, on Great Suffolk Bay. It has a large trade in fish and oysters, and is a well-known summer resort. Pop. (1910) 18,346.

Ismail, a town and river-port in the Russian government of Bessarabia, stands on the north bank of the Kilia branch of the Danube, 48 miles from the mouth of that river. It was formerly a Turkish fortress. Pop. 34,000.

Ismailis, a Mohammedan sect. Like the rest of the Shiah, or party of Ali, they held that the dignity of lmam, or head of the true faith, was inherent in the house of the Prophet and the line of Ali. They arose in Syria and Persia, taking their name from one Ismail (about 770 A. D.), whom they regarded as the seventh and last of the Imams.

Isleworth, a Middlesex parish, on the left bank of the Thames, 12 miles w. s. w. of London, England; noted for its market gardens and nurseries. Pop., including Heston, 43,316.

Telinoton once a suburb of London,

Islington, one of the metropolitan boroughs, is situated 2 miles N. of St. Paul's. The Agricultural Hall (1861), where the great national cattle and horse shows are held, accommodates 50,000 people. Pop. (1911) 327,423.

(is-må-ē'lē-å), a trading post Ismailia Nile. Pop. (1907) 10,373,

Isobaric Lines (1-8u-Dar In), drawn on a map or (i-su-bar'ik), lines globe through all places where the barometer is at the same height at a certain time. Telegraphic communication enables Islay (1/11), an island of Scotland, one these lines to be drawn with some accu-

Isochronism (I-sok'run-izm; Gr. isos, the property by which a pendulum, or a balance wheel, or an oscillating particle (as of air) conveying sound vibrates through longer or shorter arcs in the same the treaty of 1903; but in April, 1907, the time (or nearly so). Given a certain Supreme Court decided that it was not length of spring, all the vibrations, large or small, are isochronous. If the spring is shortened the large vibrations take place quicker than the short ones; if, on the contrary, the spring is lengthened, the small arcs are performed quicker than the large ones. For small oscillations a pendulum is almost exactly isochronous, but it is only with the cycloidal pendulum that perfect isochronism is obtained.

(I-su-klī'nik). See Isogonic Lines. Isoclinic Lines (I-sok'ra-tēz), an ancient Greek orator, born at Ath-Isocrates ens 436 B. c. He spoke seldom in public: but he prepared orations for others, and trained many able orators, among his pupils being Isœus, Hyperides, Lycurgus, etc. His patriotism was sincere, and his desire for the freedom of Greece so intense that he starved himself to death in his ninety-eighth year from grief at the unhappy battle of Cheronæa. He was master of a graceful literary prose style, but was accused of being too florid and of carrying elaboration too far, his periods being formed with endless labor. Twenty-one of his orations are still ex-

Isogonic Lines (I-su-gon'ik), lines drawn on a map through all places where the declination of the magnetic needle is the same. Isoclinic lines are drawn through places where the inclination or dip of a mag-netic needle is the same; the zero isoclinic line (drawn through places where there is no dip) is called the magnetic equator.

Isola Bella (ē'zō-lä), one of the Borromean Islands in Lake Maggiore. See Borromean Islands.

Isola Grossa, a long, narrow island the same mean temperature during the coldest month in the year. coast of Dalmatia.

Isola Madre, one of the Borromean Islands (which see).

equal circumferences or perimeters.

Isopoda (i-sop'o-da; Greek, isos, equal; pous, podos, foot), an order of crustaceans having sessile eyes however, and Ispahan is the emporium and a depressed body; the thoracic and of the inland commerce of Persia. Pop. abdominal rings free, except the first 80,000, not more than one tenth of former. thoracic, which is united with the head. Israel and Israelites. See Jews. The feet are of equal size and move in the same direction. The Isopoda vary widely in habits; some, like the wood-lice, are terrestrial, and inhabit damp situations, such as under stones, and moss, and under the bark of trees; others live as parasites on fishes, and in the gill chambers or on the outer surface of shrimps, crayfish, and other higher crustaceans; and deep human emotion.

Israel, and Israelist. See Jews.

Israels (ëz-rā-āls'), Josef, Dutch painter, born a Gröningen.

1824, of Jewish parentage. He attracted attention in the Parasis Salon of 1857 and soon gained world fame by his works, parasites on fishes, and in the gill chambers or on the outer surface of shrimps, crayfish, and other higher crustaceans; and deep human emotion.

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Israels (in Israelis (i

marine, others inhabit fresh water.

Isothermal Lines (1-su-ther'mal), tral Asia, in the Russian province of Semirechensk, south of Lake Balkhash, map or globe through places which have the same mean annual temperature. (See Climate.) Isotheral lines are drawn through places having the same mean through places having the same mean creasing in size.

Isocheimenal or Isocheimal Tasoire (is-wär), a French town, department of Puy-de-Dôme, 19 lines are drawn through places having miles s. s. E. from the departmental capital c

Isotonic Sea-water (1-sō-ton'ik). a solution of seawater having salts dissolved in such pro-Isomerism (I-som'er-izm; Gr. 1808, portion as to occasion no change of volequal; meros, a part), ume in red blood corpuscles brought into literally equality of parts, a chemical contact with the solution. The idea of term first applied by Berzelius in the case the use of injections of isotonic sea-water term first applied by Berzelius in the case the use of injections of isotonic sea-water of bodies which, although identical in in the treatment of disease first occurred composition, that is, as regards number about 1892 to Réné Quinton, then profesand nature of atoms, have nevertheless sor of biology in the University of France. different chemical properties. It is supposed to be due to different grouping of ducted by Quinton and others. It was the atoms of each molecule, or to the shown that a dog which had been bled alwarying amount of energy employed in its most to death could be revived by the injection of a similar amount of sea water. varying amount of energy employed in its most to death could be revived by the information.

Isomorphism (1-su-morf'izm; Gr. In a few days the dog was as well as ever tsos, equal, morphe, and its blood, when analyzed, was found form; that is, 'equality in form'), is the to contain a greater proportion of hemophenomenon observed where chemical bodies composed of different elements, but equal in atomic quantity and combination, affect the same crystalline form. It was formerly supposed that every subscance had its own peculiar crystalline form. Mitscherlich, however, showed that tion, typhoid fever, auto-intoxication, incertain elements or groups of elements may replace one another in salts without altering the crystalline form of the compound.

Isomorphism (1-su-morf'izm; Gr. In a few days the dog was as well as every and its blood, when analyzed, was found form; In a few days the dog was as well as every like to contain a greater proportion of hemophenomenon observed where chemical blood, when analyzed, was found its blood, when analyzed, was found form; In a few days the dog was as well as every like to contain a greater proportion of hemophenomenon observed where chemical blood, when analyzed, was found form; In a few days the dog was as well as every like to contain a greater proportion of hemophenomenon observed where chemical blood, when analyzed, was found its blood, when analyzed, was found form; In a few days the dog was as well as every and its blood, when analyzed, was found its blood, when analyzed, was fo

Isonandra (is-o-nan'dra), a genus of plants, order Sapotacese, one species of which, I. gutta, is known as the gutta-percha tree.

Isoperimetrical (I-so-per-i-met'rikal), in geometry, a term applied to figures which have equal circumferences or perimeters.

Isopoda (I-sop'o-da; Greek, isos, The manufactures are still extensive.

Isopoda (I-sop'o-da; Greek, isos, The manufactures are still extensive. The manufactures are still extensive, Israel, and IsraeLites. See Jews.

tal, Clermont. Manufactures articles in cultivated. copper, and has numerous oil-mills. Pop. 144,173. (1906) 5274. The large control of the control of the cultivated of the c

Issoudun (is-ö-dun), a French town, department of Indre, 17 miles N. E. of the departmental capital, Châteauroux. It has manufactures of steam engines, agricultural implements, woolens, cottons, etc. Pop. (1906) 10,566.

Issue (ish'ū), in law, the point or matter depending in a suit on which two parties join and put their cause to

Issus (is'sus), anciently a town of Cilicia, in Asia Minor, on the Gulf of Issus. Here Alexander of Macedon gained a complete victory over Darius (B.C. 333).

Issy (6-se), a suburban quarter in the tion:-

Istambol. See Constantinople.

Istar (is'tar), the ancient Babyloman god of war and destruction.

Isthmian Games (ist'mi-an), public games of ancient Greece, so called because they were celebrated on the Isthmus of Corinth, and brated on the Isthmus of Corinth, and having a similar character to the Olympian, Nemean, and Pythian games. The Greeks in general took part in them, and the principal exercises were boxing, wrestling, foot, horse, and chariot races, and throwing the discus. They were celebrated in April and May, in the first and third year of each Olympiad, and the victors were rewarded with wreaths of pine leaves. The origin of these games is lost in antiquity, but they were gen-

are the Isthmus of Panama, connecting Sea coast of Africa, Somaliland on the North and South America, and the Gulf of Aden, and Tripoli, which was Isthmus of Corinth, connecting the Morea taken from Turkey in 1911. with Northern Greece.

Area, 1900 square miles.

Italy (it'a-li), a kingdom in Southern Europe, consisting in the main of a large peninsula, having a singular resemblance to a boot in shape, stretching southwards into the Mediterraneau, but also including a considerable portion of the mainland and the islands of Sicily, Sardinia, Elba, Ischia, Lipari Islands, etc. It is bounded on the north and two parties join and put their cause to northwest by the Alps, which separate trial. It is a single, definite, and material it from Austria, Switzerland, and France, point issuing out of the allegations of the and on the northeast by Austria; elseparties, and consisting regularly of an affirmative and negative. It is either an or the Adriatic, an arm of the latter. issue in law to be determined by the The area is about 110,000 square miles. Court, or in fact to be ascertained by a for administrative purposes it is divided into the interval. grouped under sixteen departments (compartimenti territoriali), some of them consisting of only a single province. The following table furnishes a list of the departments, with their area and popula-

	Area in	Population
Departments.	sq. m.	(1911).
Piemonte (Piedmont)	. 11.336	3,424,538
Liguria		1.196.853
Sardinia (Island)		852.934
Lombardia (Lombardy)		4,786,907
Venetla		3,526,625
Emilia		2,667,510
Marca (The Marches)		1.088.875
Umbria		685.042
Toscana (Tuscany)		2.694,453
Roma (Rome)		1.298.142
Aruzzi e Molise		1.427.642
		3.347.925
Campania		
Calabria		1,404,076
Sicilia (Sicily)		3,683,380
Apulia		2,128.632
Basilicata	. 3,845	473,119

Kingdom of Italy.....110,550 34,686,653

From 1861, when the Kingdom of Italy pine leaves. The origin of these games is lost in antiquity, but they were generally regarded as originated in honor of Poseidon (Neptune). See Games.

Isthmus (ist'mus, is'mus), in geography, aneck of land by which two continents are connected, or a penintwo continents are connected,

Physical Features.—Among the prin-Istria (istri-a), a peninsula of tricipal physical features of Italy are the angular form, projecting into Alps, on its northern frontiers, and the the northeast corner of the Adriatic Sea, chain of the Apennines, which run down the northeast corner of the Adribute sea, chain of the Apendines, which run down part of the Austro-Hungarian Dominions, the middle of the peninsula through The surface is mountainous, particularly its whole length to the Straits of Messina, in the north. The soil is generally thin while numerous branches are thrown off and gravelly, but the forests, which are laterally, and form an endless succession extensive, yield excellent timber, and the of wooded hills, olive-clad slopes, and vine, olive, and mulberry are successfully fertile valleys. In the north, enclosed



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Vesuvius in South Italy and Etna in adopted is in most parts defective, and Sicily. The eastern shore of Italy is large areas remain untilled. The best generally flat and uninteresting, present-cultivation, aided by an excellent system ing particularly along its northern part a of irrigation, is found in Lombardy, series of sandy islands and lagoons, which dam up the mouths of the rivers, and occasion the formation of pestilential On the west coast the same thing is occasionally seen, as in the case of the Pontine Marshes and the Tuscan Maremma; but as a rule the west coast is more elevated, and often presents dethe extreme south, cotton and sugar-cane lightful scenery, as round the Gulf of are cultivated. Fruits are the object of Genoa and the Bay of Naples. The only attention everywhere; and in the cultiviver of any magnitude is the Po, which vation of the olive in particular Italy has a length of about 450 miles before surpasses all other European states. The it enters the Adriatic. It is fed by fruits include oranges and lemons in streams both from the Alps and the Apenthe Weiser Adde Orlice to from first people's proposed abouth, besides streams both from the Aips and the Apenines, the Ticino, Adda, Oglio, etc., from figs, peaches, apricots, almonds, etc.
the former, the Trebbia, Secchia, etc., from There is a very large production of wine,
the latter. The Adige (in Germany, the but only a few of the wines have any
Etsch) has its mouth at no great distance reputation in other countries. The rear-Etsch) has its mouth at no great distance reputation in other countries. The rear-from the Po, and is partly fed in the ing of live-stock is an important industry, same way. In the peninsular part of The cheese of Italy is famous, especially Volturno, etc. There are a number of Manufactures.—Since the consolidation lakes, of which the most important are of the Italian kingdom, the manufactures

dance of water-courses, serve to maintain a pleasant temperature. Yet this region is at times extremely cold, especially in the interior of the great plains. In general the climate of Italy is healthy, except marshy districts such as the rice plantations of Lombardy, the Tuscan Maremma, the Campagna of Rome, and

regions.

Vegetable Products, Agriculture.—The
natural productions of the soil of Italy are as various as its climate. In the with France and Algeria, Great Britain, Alpine regions all plants belonging to Austria, and Germany. The chief imtemperate climates flourish, while the ports are wheat, raw cotton, and cotton southern regions possess almost a tropi- manufactures, coal, iron and machinery,

nines, is a vast and fertile plain, intersupport of the population, and the land, sected by the Po and its tributaries. Two where not mountainous is concern; active volcances belong to the land, Venetia, Piedmont, Tuscany, and the parts of Emilia adjoining the Po. Most kinds of cereals, including rice and maize, are cultivated, and the wheat in particular is of fine quality, but is not sufficient for the home consumption. Hemp, madder, flax, tobacco, hops, saffron, and, in surpasses all other European states. The fruits include oranges and lemons in the warm regions of the south, besides

lakes, of which the most important are of the Italian kingdom, the manufactures Lakes Maggiore, Lugano, Como, and of the country have made considerable Garda in the Alpine region; Lakes Trasimene, Bolsena, and Amano in the Apenine region. Italy is rich in useful minerals, but the scarcity of coal prevents in advance of all the other countries of the full development of mining industry. Europe. Lombardy, Piedmont, and Vene-Sulphur, salt, iron, and marble are the tia are the great centers for its preparachief, though small quantities of lead, tion. Nearly 3,000,000 spindles are employed in spinning. The weaving is less obtained.

Climate—In the south of Italy the also centered in Upper Italy, chiefly in Climate.—In the south of Italy the also centered in Upper Italy, chiefly in climate resembles that of Africa, being Lombardy, and have much increased of dry and burning and subject to the sirocco. In the northern regions, the neighborhood of the Alps, and the abundance of water-courses serve to maintain Lombardy at a standard to the standard of the Lombardy, and have much increased of late. Woolen manufactures are also chiefly carried on in Upper Italy. In the iron industry the department of Lombardy stands at the head; more particularly stands at the head; more particularly stands at the head; ticularly the provinces of Brescia, Como, and Milan. Tanning, the manufacture of linen, of paper, gold and silver wares, articles in bronze, musical instruments, the making of gloves, boots and shoes, felt and silk hats, are also considerable industries. The manufacture of tobacco the Pontine Marshes, responsible for the is a state monopoly. Of special repute spread of malarial fevers. The Riviera are the cameos and mosaics of Rome, or coast of the Gulf of Genoa is a Naples, and Florence; the filigree and avorite winter resort from more northern coral work of Genoa; the plaited straw and the carthenage of the c and the earthenware manufactures of Italy generally.

Trade.—The foreign trade is mainly

wool, sugar, coffee; the chief exports, raw silk, olive oil, wine, fruits, eggs, coral, hemp, marble, rice, sulphur. The principal ports are Genoa, Leghorn, Messina, Naples, Palermo, Venice, Brindisi and Catania. The total length of railways opened for traffic in 1910 was about 11,000 miles; of telegraph lines, 40,000 miles, nearly two-thirds of the whole

miles, nearly two-thirds of the whole belonging to the government.

Constitution and Government.—The constitution of the Kingdom of Italy is a limited monarchy, based upon the Fundamental Statute granted by King Charles Albert to his Sardinian subjects March 4, 1848. The king, who is hereditary, exercises the power of legislation only in conjunction with a national parliament, consisting of two chambers. The first chamber is called the senate, and first chamber is called the senate, and is composed of the princes of the blood, and an indefinite number of members appointed for life by the king. The second chamber is called the chamber of deputies, and consists of 508 members, who are elected by a majority of all the citizens above twenty-one years of age who are in the enjoyment of civil and political rights. Each province has the right of independent administration, and the executive power is intrusted to a provincial council. In each province the power of the state is represented by a power of the state is represented by a council. The executive power of the state is exercised by the king through responsible ministers. In 1911 the budget estimates were, total revenue, \$490,670,190; expenditure, \$480,706,677; public debt, \$2,645,000,000.

Army and Navy .- All men capable of Army and Navy.—All men capable of bearing arms are under obligation of military service from their twenty-first to the end of their thirty-ninth year. Of the young men of the age of twenty-one, 80,000 are levied annually for the standing army, while the rest are entered in the army of reserve. In 1910 the strength of the standing army on the war footing was in all 1.043,000; the number unorganized but available for duty was estimated at 1,200,000, making the total for the whole military service 2,243,000. The navy was made up of 13 battleships and 22 cruisers, with a large number of

and 22 cruisers, with a large number of torpedo boats and destroyers.

Religion and Education.—The Roman Catholic is the state religion, but all other creeds are tolerated, and adherents of all religions have equal municipal and of all religions have equal municipal and stimin, Ancona, and other maritime political rights. The pope has his seat at cities on the Adriatic, and almost all the Rome, and his palaces of the Vatican coasts of Lower Italy, remained unconand the Lateran, and his villa of Castel quered, together with Sicily and Rome. Gandolfo, are not under the jurisdiction The slight dependence of this part of of the state. In 1861 the law annihilating Italy on the court of Byzantium disap-

ecclesiastical jurisdiction and the privileges of the clergy was extended to the whole of the kingdom, and in 1846 a bill was passed for the suppression (with certain exceptions) of religious houses throughout the kingdom. Elementary education is nominally compulsory, and is entirely supported from the municipal rates; but the number who can neither rates; but the number who can better read nor write still remains very large. For secondary instruction there are a large number of gymnasia and technical schools, and for the higher education there are no less than twenty-one universities, many of them of ancient foundation, and at one time of considerable renown. The oldest are those of Bologna (founded in 1119), Padua (1228), Naples (1224), Rome (1244), Perugia (1320), Pisa (1329), Siena (1349), Pavia (1390), Turin (1412), and Parma (1492) (1422).

Money, Weights, and Measures.—The present monetary system of Italy is the same as that of France, the lira being equal to the franc, and divided into 100 centesimi, as the franc is into 100 centimes. The lira is accordingly equal to about 19 cents. The weights and measures of Italy have also been adopted from France, with only such modifica-tions in their names as are necessary to

give them an Italian form.

History.—The ancient history of Italy will be found under Rome. The modern history begins with 476 A.D., when Odoacer, chief of the Herulians, a German tribe which had invaded the country, was proclaimed king of Italy. After a reign of twelve years he and his followers were overpowered by the Ostrogoths under Theodoric the Great. The Ostrogoths were in turn subdued by Byzantine troops, and Italy came under the dominion of the Eastern emperors, who ruled through an exarch residing at Ravenna. In 568 the Lombards (Langobardi), a German people originally from the Elbe, and have their king Albain conversed the led by their king. Alboin, conquered the Po basin, and founded a kingdom which had its capital at Pavia. The kingdom of the Lombards included Upper Italy, Tuscany, and Umbria, with some outlying districts. But on the northeast coast the inhabitants of the lagoons still retained their independence, and in 697 elected their first doge, and founded the republic of Venice. (See Venice.) Ravenna, the seat of the exarch, with Romagna, Rimini, Ancona, and other maritime

kind of paternal authority of the bishop, grew steadily in these troubled times, especially in the struggle against the Lombard kings. In consideration of the aid expected against King Astolphus, Pope Stephen III (754) not only anoint-ed the king of the Franks, Pepin, but anpointed him patrician or governor of Rome. In return Pepin presented the Rome. In return Pepin presented the exarchate of Ravenna, with the five mariexarchate of Ravenia, with the live liaritime cities, to the pope, thus laying the foundation of the temporal power of the holy see. At the invitation of Pope Hadrian I, Charlemagne made war upon Desiderius, the king of the Lombards, took him prisoner in his capital, Pavia (774), and united his empire with the Prankish monarchy. Italy, with the ex-1741, and united his empire with the ex-Prankish monarchy. Italy, with the ex-ception of the duchy of Benevento and the republics of Lower Italy, thus be-came a constituent part of the Frankish monarchy, and the imperial crown of the West was bestowed on Charlemagne (200). On the breaking up of the Cre-(800). On the breaking up of the Carlovingian empire Italy became a separate kingdom, and the scene of strife between Teutonic invaders. At length Otto the Great was crowned emperor at Rome (961), and the year after became emperor of what was henceforth known as the Holy Roman Empire.

During the following continues the following the followi

During the following centuries the towns and districts of North and Middle Italy gradually made themselves independent of the empire, and either formed themselves into separate republics or fell under the power of princes bearing various titles. A large part of Middle Italy at the same time was under the dominion of the popes, including the territory granted by Pepin, which was afterwards enlarged on several occasions. In Southern Italy there were in the time of Charlemagne several independent states. In the ninth century this part of the penin-sula, as well as Sicily, was overrun by Saracens, and in the eleventh century by Normans, who ultimately founded a king-dom which embraced both Lower Italy and Sicily, and which, though it more than once changed masters, continued to exist as an undivided kingdom till 1282. united with the crown of Spain. With continual conflict with secret political Spain the kingdom remained till 1713, societies. The leading spirit in these agiven Naples and Sicily were divided by tations in the second quarter of the ninethe Treaty of Utrecht, the former being teenth century was Giuseppe Mazzini,

peared almost entirely in the beginning of given to Austria, the latter to the Duke the eighth century. The power of the of Savoy. In 1720 they were again pope, though at first recognized only as a united under Austria, but in 1734 were conquered from Austria and passed under the dominion of a separate dynasty be-longing to the Spanish house of Bourbon. See Sicilies, Kingdom of the Two.

The history of mediæval Italy is much taken up with the party quarrels of the Guelfs and Ghibellines, and the quarrels and rivalries of the free republics of Middle and Upper Italy. In Tuscany the party of the Guelfs formed themselves into a league for the maintenance of the into a league for the maintenance of the national freedom under the leadership of Florence: only Pisa and Arezzo remained attached to the Ghibelline cause. In Lombardy it was different, Milan, Novara, Lodi, Vercelli, Asti and Cremona formed a Guelf confederacy, while the Ghibelline league comprised Verona, Mantua, Treviso, Parma, Placenza, Reggio, Modena and Brescia. Commercial rivelry impulled the maritime republicate. gio, Modena and Brescia. Commercial rivalry impelled the maritime republics to mutual wars. At Meloria the Genoese annihilated (1284) the navy of the Pisans, and completed their dominion of the sea by a victory over the Venetians at Curzola (1298). See Pope, Genoa, Elorance etc.

Florence, etc.
Up till the time of the Napoleonic wars Italy remained subject to foreign domination, or split up into separate republics and principalities. The different states were bandied to and fro by the chances and intrigues of war and diplomacy between Austria, Spain and the House of Savoy. During the career of Napoleon numerous changes took place in the map of Italy, and according to an act of the Congress of Vienna, in 1815, the country Congress of Vienna, in 1815, the country was parceled out among the following states:—(1) The Kingdom of Sardinia, consisting of the island of Sardinia, Savoy, and Piedmont, to which the Genoese territory was now added. (2) Austria, which received the provinces of Lombardy and Venetia, these having already been acquired by her either before or during the time of Napoleon. (3) ready been acquired by her either before or during the time of Napoleon. (3) The Duchy of Modena. (4) The Duchy of Parma. (5) The Grandduchy of Tuscany. (6) The Duchy of Lucca. (7) The States of the Church. (8) The Kingdom of the Two Sicilies. (9) The Republic of San Marino. (10) The Principality of Monace. The desire for union and independence had long existed in the hearts of the Italian people, and the oppression of the then rulers, the French, cipality of Monace. The desire for union by the aid of Pedro of Aragon (see and independence had long existed in the *Sicilian Vespers*), and remained separate hearts of the Italian people, and the till 1435. It was again separate from governments at Naples, Rome, Lombardy, 1458 to 1504, when both divisions were and other centers of tyranny were in united with the crown of Spain. With continual conflict with secret political conflict with secret political spain the kingdom remained till 1713, societies. The leading spirit in these aginations in the second quarter of the ninewho in the end contributed much to the son, Humbert I, under whom the general liberation of 1848 brought a crisis. The Prench history of the country was unevent-Revolution of 1848 brought a crisis. The population of Lombardy, Venetia, Parma. ministry from office in 1893, and Signor and Modena took up arms and drove the Crispi was invited by King Humbert to Austrian troops in retreat to Verona. form a new cabinet. In 1896, attempt-Charles Albert, king of Sardinia, then ing to establish a protectorate over Abysdeclared war against Austria, and was at sinia, the Italians were defeated with first successful, but his forces were severely defeated at Novara (March, 1849), Marquis di Rudini. Humbert was assawhen Charles Albert abdicated in favor of his son, Victor Emmanuel. Meanwhile by his son as Victor Emmanuel III. Unter the pope had been driven from Rome, and ta Roman republic had been established by his son as Victor Emmanuel. III. Unter a Roman republic had been established power in Turkey, the foreign policy of under Mazzini and Garibaldi, the leader of the volunteer bands of Italian patriots. tember 20, 1911. Italy declared war Rome was, however, captured by the against Turkey, claiming that Italian enferch, who came to the aid of the French, and the old absolutism was restored. Similar attempts at revolution in Sicily and Naples were also crushed, but the secret societies of the Inations of North Africa, and indeed, after a year's contest, in victory for the Italian troops. In 1859, after the war of the French and Sardinians against Austria, the latter power was compelled to cede Lombardy to Sardinia, and in the same year Romanness of Savoy and Nice to France. In the south the Sicilians revolted, and supported by a thousand volunteers, with whom Garibaldi sailed from Genoa to their aid, overthrew the Bourbon government in Sicily. Garibaldi was progress of Savoy and Nice to France. In phore of the south the Sicilians revolted, and supported by a thousand volunteers, with whom Garibaldi sailed from Genoa to the who in the end contributed much to the

son, Humbert I, under whom the general

dinia intervened and completed the revolution, when Garibaldi, handing over his conquests to the royal troops, retired to Caprera. A plebiscite confirmed the union with Piedmont, and Victor Emmanuel was proclaimed King of Italy, thus suddenly united almost, in Mazzini's in preparation for possible hostile relative phrase, 'from the Alns to the sea.' Only tions, General Cadorna, its capable the province of Venice and the Roman territory still remained outside. The former was won by Italy's alliance with regular army of Italy and the gathering Prussia in 1866 against Austria. The of military supplies for possible contintemporal power of the pope was still secured by French troops at Rome, till the French garrison was withdrawn at the outbreak of the Franco-German war in 1870, when Italian troops took possession of the City in the name of King Victor the seaport of Trieste belonged to Italy Emmanuel. On June 30, 1871, the seat of government was formally removed from Florence to Rome. In 1878 Victor Emmanuel eventually yielded to the demanuel died, and was succeeded by his government eventually yielded to the demanuel even dinia intervened and completed the revolu-tion, when Garibaldi, handing over his rather with the so-called Entente powers conquests to the royal troops, retired than with the Teutonic empires. During

sire of the nation, and on May 24, 1915, Italy formally declared war against Austria. The contest that followed was one of remarkable character. It was almost completely a mountain war, the battle fronts being stretched along the highest altitudes at which warfare has ever been carried on. All the advantageous positions were in which present the Augustians was almost present that forward in the same tions were in prior possession of the Austrian forces, which had to be faced in their nests amid the snow-clad Alpine summits at a height of 10,000 feet above sea level. It was a powerful, well-supplied and well-organized army with which General Cadorna began this work. The Tyrolese Cadorna began this work. The Tyrolese 1918. Italy had a million casualties, and mountain city of Trent, which dominates her war expenditure was \$12,000,000,000. a region claimed as a normal part of As a result of the war Italy gained a Italy, was one of the strongholds upon large section of territory formerly held which Italy centered its efforts, the other being the seaport of Trieste at the north-the Irredenta (q. v.) being reclaimed, ineastern extremity of the Adriatic Sea, cluding Trieste and the Trentino. D'Analso claimed as former Italian territory, nunzio (q. v.) took Fiume by a comp. The war directed towards these strong-holds of Austria continued for over two years, the Italian forces pushing their way northward and east ard, over the mountain summits and through their valleys, the army fighting with a courage and energy that gave them a strong hold on the approaches to the points of vantage. This vigorous forward movement of

This vigorous forward movement of the Italian armies was of great advantage to the Entente powers, which Italy had informally joined. It held a great part of the Austrian army in the Tyrolese moun-tain region and deprived Germany of the aid of the latter to an important degree. Italy began her advance just at the time that the Russian army was obliged to re-treat from Galicia, and Cadorna's strong army may have saved the forces of Russia from complete disaster. The same may be said of the war on the western frontier. At the time when the German attack on Verdun began Cadorna made a strenuous advance along the Isonzo River, this preventing Austria from sending to the aid of the German Crown Prince the large number of troops and artillery which had been prepared for that purpose. At a later date, when the Austrians had gained a small section of Italian territory, Ca-dorna attacked them with such energy that it was impossible to move troops against the Russians who at this date, against the Russians who at this date, July, 1916, were penetrating the Carpa-thians in their most vigorous movement of offense. The great effort of Italy during 1917 was directed against the port of Trieste, the army pressing forward from point to point over the mountain ridges by which nature had guarded that strong-

In November, 1917, however, the Austrians, heavily reinforced by the Germans, made a sudden assault upon the Italians, who had been demoralized by peace propaganda, and the shattered armies were comganda, and the snattered armies were com-pelled to retreat to the line of the Piave. General Diaz replaced Cadorna, and a new attitude of defiance swept through the ranks. Aided by detachments of French and British troops the Italians flung themselves on the Austrians with irrestitle imperturity and compelled the irresistible impetuosity and compelled the enemy to surrender. The armistice with Austria-Hungary was signed November 3, 1918. Italy had a million casualties, and

ltaly, Literature of.—The Italian language is one of the Romance tongues, or tongues derived from the Latin, and is therefore a sister of French, Spanish, and Portuguese. It is derived not from the literature language. literary language of Rome as we know it, but from the old popular dialect or Lingua Romana rustica. German races contributed words to its vocabulary. Latin kept its place so long here in its natural home that the new popular speech was slow to develop; and in fact the earliest literary restricts. iest literary products of Italy are poems written in the Provencal and French languages. But about the close of the thirteenth century native poets arose, who in-deed imitated the Provençals as to the form of their compositions, but wrote in their own language. Among the most important of these early poets is the Florentine, Guido Cavalcanti (died 1300), who contributed much to the development of Italian language and poetical style. But the great luminary of this period, and by far the greatest poetic genius which Italy has produced, was Dante (1265-1321). (See Dante.) In Italian prose the oldest (See Danie.) In Italian prose the oldest book is Ristoro d'Arezzo's Composizione del Mondo, written about the middle of the thirteenth century. In this department Dante also takes a high place with his Vita Nuova, and Convito. Francesco Petrarca (Petrarch, 1304-74), another of the great lights of Italian literature, exhibits in his sonnets and cancon a vain the great lights of Italian Interature, exhibits in his sonnets and canzoni a vein less profound and transcendental than Dante's, but more humanly tender and passionate. Boccaccio (1313-75), a writer of great erudition and fertility, who produced classical translations, biographics, are is Italy's first great story. hold, until it began to seem as if Austria's poems, etc., is Italy's first great story chief seaport was doomed and the great teller. He is the master of the ornate effort of Cadorna and his army was to classical style in prose to which he first lead to a vital Austrian defeat. dred tales. Among the other productions of the time are the historical works of Giovanni Villani and Dino Compagni, the latter of great value, though doubtful authenticity, the travels of Marco Polo, and the letters of St. Catherine of Siena.

classics. This period is known as the Renaissance, or the revival of arts and letters. Italy had at this time become wealthy by commerce, and was enjoying comparative peace. Her cities were full of learned Greek refugees from Constantinople; many of her states were ruled by families such as those of the Medici at Florence, the Este in Ferrara, the Gonzaga in Mantua, whose names are identified with the most munificent patronage ger of the national literature and language being neglected, but towards the end of the century Italian literature revived with the Canto Carnascialesco of

among humorous and burlesque writers, among numorous and buriesque writers, and Bandello among story tellers. Better known, however, are Giorgio Vasari (1512-74), himself an eminent painter, but more celebrated as a delightful gossip on art and artists; Benvenuto Cellini (1500-70), the famous artist in metal, whose surchiography is one of the most. (1500-70), the famous artist in metal, treatises on legislation and penal laws. Whose autobiography is one of the most instructive lights on the spirit and manners of the age, and Giordano Bruno of the nineteenth century Italy in par- (1550-1600), a bold speculator and unticular received a much-needed stimulus. In poetry Ugo Foscolo (1776-1827), In the period which followed poetical and

is the Decamerone, a collection of a hun-imaginative literature degenerated into mannerism and affectation. Of exceptional power was Alessandro Tassoni (1565-1635), who wrote the Secokia Reptta, a burlesque epic, and unquestionably the most important poetical production in Italian of the seventeenth century. and the letters of St. Catherine of Siena. in Italian of the seventeenth century. Among the comic poets of the time are Salvator Rosa, also, better known as a painter, wrote satirical verse of some orgagna and Antonio Pucci.

During the fifteenth century the intellectual energy of Italy was almost entirely absorbed in the study of the ancient relassics. This period is known as the celli (1608-1647), Viviani (1622-1703); Renaissance, or the revival of arts and letters. Italy had at this time become relia (1568-1639), and Giambattista weekly by commerce and was enjoying Vico. (1668-1744). Among historians nella (1908-1959), and Giamogaussians Vico (1668-1744). Among historians the names of Sarpi, Davila, Bentivoglio, and Pietro Giannone deserve mention. Towards the end of the century a new school of poetry arose, which was mainly a reaction against the existing turgid and affected style. The Academy of Arabia was instituted (1890) to promote field with the most munificent patronage cadia was instituted (1690) to promote of learning and art. In the midst of this simplicity of style and the choice of classical enthusiasm there was some dan-simple pastoral subjects. The Arcadians produced no considerable poet, the chief names being Crescimbeni, Gravina, Frugoni and Zappi.

About the middle of the eighteenth cen-

Lorenzo de Medici and Ballate of Poliziano, the chivalrous epic Orlando Intalian literature, which was preceded namorato of Boiardo, the Morgante Maggiore of Luigi Pulci, and the Mambriano of Francesco Bello (Cieco of Ferrara).

During the first half of the sixteenth century the Renaissance movement paragraphs. of Francesco Bello (Cieco of Ferrara).

During the first half of the sixteenth century the Renaissance movement perfected literature. Gasparo Gozzi (1713-86) in itself in every kind of art. In history the periodical L'Osservatore, and Giuthe most noted names are Machiavelli seppe Baretti in a journal called the (1469-1527), and Francesco Guicciardini Frustă Letteraria, contributed perhaps (1482-1540). Among the great poets of more than any others, by their forcible the period are Lodovico Ariosto (1474-and lively satire, to bring about this 1533), author of Orlando Furioso, a romantic epic, written in continuation of libretti of Pietro Trapassi (1698-1782), the Orlando Innamorato of Boiardo, and better known by his assumed name of Torquato Tasso (1544-95), whose Gerusa-Liberata is Italy's chief heroic though tending to over-refinement of senthe *Orlando Innamorato* of Boiardo, and better known by his assumed name of Torquato Tasso (1544-95), whose *Gerusa*- Metastasio, had considerable merit, *lemme Liberata* is Italy's chief heroic though tending to over-refinement of senpoem. Among the lyrists of this centiment and expression. In 1713 Scipione tury we may mention Guidiccioni of Maffei, celebrated also as an archeolo-Lucca, Pietro Bembo, Michelangelo gist, produced the tragedy of *Merope*, Buonarroti, and Vittoria Colonna. Berni, highly lauded at that time. But the two Cammelli and Grazzini deserve mention great names in the Italian drama are, ground humorous and humerous writers in company Carlo Goldoni (1512-74), and Maiei, celebrated also as an archeologist, produced the tragedy of Merope, highly lauded at that time. But the two great names in the Italian drama are, in comedy, Carlo Goldoni (1512-74), and in tragedy, Vittorio Alfieri (1749-1803). Towards the end of the century the writings of the publicists. Gaetano Filangieri and Cesare Beccaria indicated the growth of a social science under the cover of of a social science under the cover of treatises on legislation and penal laws. From the intellectual and political fer-

traditions, writes with the force and Ithaca novelty of a new epoch. Vincenzo Monti (1768-1837). and Pietro Colletta (1776-1837). has given Italy a few lyrics of the first rank, but his greatest work was I Promessis Sposi, a historical novel, emi-rank put his greatest work was I Promessis Sposi, a historical novel, emi-rank put his preatest work was I Promessis Sposi, a historical novel, emi-royal seat of Ulysses, and its minutely described in the Odyssey. Schliemann has objective creation of character. A place admost equally high is held by Giacomo has identified several sites mentioned by Leopardi (1798-1837), the greatest lyric Homer. Vathi, the modern capital, trades poet since Dante, and one of the most largely in oil, wine, raisins, and currants, perfect writers of prose. The historico-political writings of Vincenso Globerti (1801-52), and Guiseppe Mazxini (1805-172) contributed powerfully to stimulate national feeling. After the year 1850 political literature became less important. The dominating figure of this later period University (q. v.): Ithaca Conservatory was Glosue Carducci (1836-1907), who opposed the Romantics, and who, though so great as a poet, was also a distinguished critic and historian. Other poets are the older schools, and Giacosa and Rapisardi. The dramatists include Cossa, steechetti). Ada Negri, Baccelli and Rapisardi. The dramatists include Cossa, visiting Western countries he became an Testa, Martini, and Ferrari, representing the modern. Ga. briele d'Annuncio (born 1848), who has produced extraordinary works not only in drama but in poetry and fiction, may be included the proposed the Romanties include Cossa, visiting Western countries he became an Rapisardi. The dramatists include Cossa, visiting Western countries he became an Rapisardi. The dramatists include Cossa, visiting Western countries he became an Rapisardi. The dramatists include Cossa, visiting Western countries he became an Rapisardi. The dramatists include Cossa, visiting Western countries he became an Establication of proposition of proposition of the Costa Control of the Countries of the Country

(ith'a-ka), now THIAKI, one novelty of a new epoch. Vincenzo Monti (1754-1828), had a rich poetic vein and west of Greece, between the mainland and a facile talent. Giambattista Niccolini (Cephalonia, 17 miles long, and not above (1781-1861), another poet of the same 4 broad. It is rugged and uneven, and school, espoused liberal ideas and opened divided into nearly equal parts, connected a new path to Italian tragedy. The historians of the period were Carlo Botta are industrious agriculturists and mari- (1766-1837), and Pietro Colletta (1775- ners, and build and fit out a considerable 1831). Alessandro Manzoni (1784-1883) number of vessels. They seem to be of has given Italy a few lyrics of the first pure Greek race, and the women are rank, but his greatest work was I Profamed for their beauty. Ithaca was the meast Sposi, a historical novel. emiof the Ionian Islands, on the

Itu (ĕ'tö), Hitu', or Ytu', a town of Brazil, province of Sao Paulo, on the Tiete. Pop. 10,000.

Ituræa, Ituræa (ĕ'tō'), a district on the north of ancient Palestine, stretching northeastward from Ives Mount Hermon.

Iturbide (ëtur'bë-dā). Augustin de, a distinguished Spanish-American, born at Valladolid, in Mexico, in 1787. On the breaking out of the revolutionary troubles in Mexico he joined the royalist party, and displayed such valor and ability that in 1815 he rose to the chief command of the army, but latterly went over to the other side, quickly bore down all opposition, and became so popular that he proclaimed himself Emperor of Mexico in 1822. His reign was full of trouble, and came to an end in less than a year, by his abdication. Congress granted him a yearly pension on condition of his leaving the country, and he resided in Leghorn about a year, when he made an attempt to recover the crown.

Ite landed with but a single attendant, and was arrested and shot, 1824.

Itzehoe (it'se-hō), a town of Prussia, in Schleswig-Holstein, in a valley enclosed by wooded hills, on the Stör, 32 miles northeast of Hamburg. It is the oldest town in the duchy, being founded by Charlemagne in 809. Pop. 15,649.

Iulus (i-ū'ius), a genus of Myriapoda, including order Chilognatha, including warm like animals known as milliades.

worm-like animals known as millipedes, allied to the centipedes.

(e'van), or Iwan, the name of several rulers distinguished in Russian history.—IVAN III (or I), grand-prince of Moscow, was born in 1440; ascended the throne in 1462; died in 1505. He greatly enlarged his heredinary possessions and married Sorbic tary possessions, and married Sophia, niece of the last Byzantine emperor, thus introducing the double-headed Byzantine eagle into the Russian coat of arms. He was the first that bore the title of Czar of Great Russia, and proclaimed the unity Great Russia, and proclaimed the unity an elephant's tusk is 60 lbs., but some are and the indivisibility of the Russian dofound weighing 170. Ivory is an imporminions.—Ivan IV (or II), grandson of tant article of African trade, and the the former, was born in 1530; succeeded number of elephants annually killed must in 1534, was crowned in 1547; died in be great; indeed, the extermination of 1584. His atrocities gained him the name this noble animal is only a question of of The Terrible. Yet he did much to civilize and improve his people, introduced IVOTY, VEGETABLE. See Ivory-palm. learned men, artists and mechanics into Russia, and concluded a commercial treaty with England. He killed his eldest son in a fit of rage.

Ivanovo (ē-vo'nō-vō), a town of Russia, government of Vladimir, an important center of the Russian cotton manufacture, and hence styled 'the Russian Manchester.' Pop. (1912) 167,726.

Tvory Coast, part of the c Guinea, betwee Apollonia and Cape Palmas. The portion of it belongs to Britain.

Ives (ivz), Sr., a seaport town of England, in Cornwall, picturesquely situated on St. Ives Bay, 18 miles w. N. w. from Falmouth. Pop. 7179.

(Ivz), FREDERICK EUGENE, American inventor especially noted for his work in photography, born at Litchfield, Conn., Feb. 17, 1856. He has invented processes in halftone, photoengraving, orthochromatic photography, and color photography.

Iviça (é'vith-a; ancient Ebüsus), an island of the Mediterranean belonging to Spain, 52 miles from Majorca, one of the Balearic Islands; area, 190 square miles; pop. 25,505. It is fertile, producing corn, wine, oil, fruit, etc. Salt forms, with fish and wood, the chief export. The capital is of the same name, and has a good harbor. Pop. 23,524.

Ivory (I'vu-ri), the osseous matter of the tusks of the elephant, and

the tusks of the elephant, and of the teeth or tusks of the hippopotamus, walrus, and narwhal. Ivory is esteemed for its beautiful white or cream color, its hardness, the fineness of its grain, and its susceptibility of a high polish. That of the African elephant is most esteemed by the manufacturer for its density and whiteness. It is used as a material for knife-handles, pianoforte keys, etc. The lvory of the hippopotamus is preferred by the dentist, being free from grain and much harder and of a purer white than that of the elephant. The shavings and sawdust of ivory may by burning be converted into a black powder, used in painting, named ivory black. Ivory may be noted. be stained or dyed; a black color is given it by a solution of brass and a decoction of logwood; a green one by a solution of verdigris; and a red by being boiled with Brazil wood in lime-water. The use of ivory, chiefly for ornamental purposes, was well known in early ages. Among the Greeks it was employed for statuary purposes, etc. The medium weight of an elephant's tusk is 60 lbs., but some are found weighing 170. Ivory is an impor-tant article of African trade, and the number of elephants annually killed must

Ivory, Vegetable. See Ivory-palm.

Ivory-black, a fine kind of soft black pigment, prepared from ivory dust by calcination, in the same way as bone-black. See Bone-black.

Ivory Coast, part of the coast of Guinea, between Cape Apollonia and Cape Palmas. The eastern portion of it belongs to Britain.

Ivory-nuts. See Ivory-palm.

ture and color. It is therefore often wrought into buttons, knobs for doors or ture and color. drawers, umbrella handles and other articles, and is called Vegetable Ivory. The seeds are also known as Corozowits, and are imported in considerable

quantities.

Ivrea (iv-rā'ā), a town of North Italy, province of Turin, picturesquely situated on the Dora Baltea, with a Cape of Good Hope, and prized for their cathedral, said to have been founded in large and showy flowers.

Ixion (iks'i-a), a genus the Iris family, natives of the Cape of Good Hope, and prized for their large and showy flowers.

Ixion (iks'i-a), a genus the Iris family, natives of the Iris family, n

Ivry-la-Bataille (iv - re - la - ba - ta who for his wickedness was punished in the infernal regions by being tied to a France, 40 miles w. of Paris, where a perpetually revolving fiery wheel. battle was gained by Henry IV in 1590

Ixmiquilpan (es-me-kwel/pan), a over the forces of the League.

Ivry-sur-Seine (iv-rē-sūr-sen), a of Hidalgo, 80 miles north of the city town of France, on of Mexico, with silver mines in its neighthe Seine, 3 miles s. s. E. from Paris. borhood. Pop. about 12,000.

It has a fine church, the remains of an old castle, asylum for lunatics, various man
(iks - o'dēs), the 'Ticks'

(which see).

the Seine, of mines of an old castle, asylum for lunatics, various manufactures, and extensive wine cellars hewn out of the rock. Pop. 35,455.

Ivy (I'vi), a climbing plant of the genus pineapple family.

Ivy Hedera (H. Helix), nat. order Araliaceæ. The leaves are smooth and shining, varying much in form, from oval entire to three and five lobed; and their perpetual verdure gives the plant a beautiful appearance. The flowers are greenish and inconspicuous, disposed in globose umbels, and are succeeded by deep green umbels. umbels, and are succeeded by deep green 22 UCHI 90 miles southeast of the capor almost blackish berries. H. Helis ital, at the base of Popocatepetl, the centre common ivy) is found throughout ter of a rich sugar region. Pop. about 9000.

parts of Asia and Africa. It is plentiful almost the whole of Europe, and in many Ivory-palm (Phytelephas macrocaria), a low-growing, palm-like plant, order l'andaneceæ, native of the warmer parts of South America. It cultivated on account of the large size has a creeping caudex or trunk, terminal pinnatifid leaves of immense size, male and female flowers on different plants, and fruit in the form of a cluster of ard fruit in the form of a cluster of and becomes several inches thick. The drupes, weighing about 25 lbs. when ripe. Each drupe contains 6 to 9 seeds, as into very thin plates may be used for large as a hens egg, the albumen of south of Europe it is employed in making hard, resembling the finest ivory in texture and color. It is therefore often celebrated from remote antiquity, and was held sacred in some countries, as Greece and Egypt. Its medicinal properties are unimportant. Chinese ivy (Parechites Thunbergii) is a climbing shrub with privet-like leaves and sweet-

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the tenth letter in the English alpha-open, and the seventh consonant. The sound of this letter coincides exactly with that of g in genius. It is therefore that of g in genius. It is therefore of the poinced of the that of j in gensus. It is therefore classed as a palatal, and is the voiced sound corresponding to the breathed sound ch (as in church). The sound does not occur in Anglo-Saxon, and is introduced through the French. As a character it was formerly used interphengently with i and the seneration.

character it was formerly used inter-changeably with i, and the separation of these two letters in English dictionaries is of comparatively recent date.

Jaal-Goat (jā'al-gōt; Capra Jaala), a species of goat found in Egypt, Abyssinia and Mount Sinai.

Jabalpur (ja'-bal-pör), Jubbullfork, a town of Hindustan, capi-tal of Jabalpur district, Central Prov-inces, a modern town with wide and regu-lar streets, an important railway station and center of trade, situated amid rocks wood, and tiger the level of the sea. It has a school of industry, in which large quantities of also called Jacaranda, and some species tents and carpets are made. Pop. 100,650. of it yield rosewood. It belongs to the The district has an area of 3918 sq. nat. order Bignoniacem. miles, a pop. of 687,233. A division or commissionership of the Central Provinces has also the same name. It has ligator sclerops. lar streets, an important railway station

Jaborandi (ja-bo-ran'di), a powerful Jack (jak), from Fr. Jacques, James, which being a very common per-leaves and root of one or more plants of sonal name in France, came to stand for the genus Pilocarpus, order Rutacese, na- any common fellow or menial, and was

feet. They live in damp woods, and feed in a game of bowls, and a small pike as on insects. Most, is of tropical America. Most, if not all, are natives

They inhabit marshes in hot climates, and somewhat resemble the moorhen, to which they are very closely allied.

Jacaranda

(jak-a-ran'da), a name of several South American trees, nat. order Leguminosæ, yield-ing the fancy woods known as violet-wood, king-

Jabiru store, and inhabiting South America, Africa and Australia.

Jacobs Stores.

Jacobs Stor

tives of Brazil. It causes a great increase substituted for the equally common Engof the saliva and profuse perspiration. of the saliva and profuse perspiration.

Jacamar (jak-a-mar'; Galbūla), a justice terms as boot-jack, smoke-jack, genus of brilliant birds roasting-jack, etc., and also in several nearly allied to the kingfishers, differing senses alone, as to the knaves in a however by the form of their beak and jack of cards, the small bowl aimed at the same of bowls and a small price are same of bowls. opposed to the full-grown fish. There are also such uses as Jack-of-all-trades, Jack-Jacana (jak'a-na), the common name knife, Jack-fool. Jack-ass, Jack-pudding, of grallatorial or wading etc.; also a jack is an apparatus for birds of the genus Parra, having long raising great weights by the application toes with very long nails, so that they of strong screws. The flag called a jack

is strictly one displayed from a staff on comes from its erect spathe, standing the end of the bowsprit. See *Union Jack*. within the long sheath of its petioles.

Jack or Jaca (Artocarpus integrifo- The fruit is bright scarlet berries. Jack, or Jaca (Artocarpus integrifo- The fruit is bright scarlet berries.

genus, a native of India. The fruit Jack-Rabbit, or jackass rabbit, a grows to a larger size than the breadfruit, often weighing more than 30 lbs.; It has very long ears and its gait is a going of long large.

and Africa. The general color is a dirty the Michigan Central Railroad: an imporyellow. The jackal is gregarious, hunting tant railroad center, with eight railroad in packs, rarely attacking the larger divisions radiating in all directions. Its quadrupeds. They feed chiefly on carlargest industries include manufactures of rion, and are nocturnal in habits. The automobiles, auto parts, agricultural imjackel interbreeds with the common dog, plements, corsets, machinery, etc. Pop. and may be domesticated. The common (1910) 31,433; (1920) 48,374.

The jackal follows the trail of the larger carnivora as they roam the country for 180 miles N. of New Orleans, in an extension of the state of t The jackal follows the trail of the larger carnivora as they roam the country for 180 miles N. of New Orleans, in an extenprey, in the hope of securing some share of the creatures which they destroy or road center and has important industries wound. It has been called the Lion's including cottonseed-oil mills, iron foundries, lumber and wood-working mills, etc. with the larger animal. As a matter of fact the lion is the jackal's provider often times. The black-backed jackal (C. mesomelas) is an inhabitant of South Africa and abounds in the Cape Colony, Union of South Africa; sometimes called the Cape jackal. It is similar in size to of Portsmouth, on Baltimore & Ohio and the common jackal, but is distinguished other railroads. Coal and iron are largely the cape jackal. It is similar in size to of Portsmouth, on Baltimore & Ohio and the common jackal, but is distinguished other railroads. Coal and iron are largely from that animal by the mottled black mined and there are iron furnaces, rail-and white spots on its back. Jackals are road shops, etc. Pop. (1920) 5842. hunted with foxhounds and greyhounds in some parts of India.

Jackson, a city, county seat of Madison Co., Tennessee, on Forked Jack-a-Lantern. See Ignis Fatus. Deer River, 78 miles N. E. of Memphis. It has various industries and chiral terms.

Jackass, LAUGHING. Jackass.

and whitish eyes; hinder part of the head and neck of a grayish color, back and wings glossy black. The average length is about 12 inches. The nests are built in towers, spires, and like elevated situations, and often in towns. The eggs, from five to six, are of a greenish color. Its food consists of worms, insects and larvæ. Like the rooks, they are gregarious. They are readily domesticated, and may be taught to pronounce words distinctly.

but it is not so palatable.

Jackal (jak'al), an animal of the dog Jackson, a city, county seat of Jackson, son county, Michigan, 76 genus (Canis aureus), resembling a dog and a fox, a native of Asia miles west of Detroit, on the main line of and Africa. The general color is a dirty the Michigan Central Railroad: an impor-

has various industries, and ships thou-See Laughing sands of bales of cotton annually; also has large grain and truck interests. It is

Jackass, Jackass.

Jackass, Jackass.

Jack-boots, large boots reaching the home of Union University and Membrash for protection for the legs.

Jackdaw (jak'da: Corvus monedūla), a common European bird of the crow family, smaller than the rook, having a comparatively short bill and whitish eyes; hinder part of the head and neck of a grayish color, back and fight in the cause of independence. After fight in the cause of independence. After losing two brothers in the struggle and is about 12 inches. The nests are built in towers, spires, and like elevated situations, and often in towns. The eggs, from five to six, are of a greenish color. Its food consists of worms, insects and larvæ. Like the rooks, they are gregarious. They are readily domesticated, and may be taught to pronounce words distinctly.

Jack-in-the-Pulpit, the popular name given to a species of Arum, common in wet woodlands in the United States. The name himself receiving a severe wound, he left

Jacksonville

to his estate in Tennessee and died there on June 8, 1845.

Jackson, Charles Thomas, scientist, was born at Plymouth, Massachusetts in 1805, and was graduated at Harvard Medical College in 1823. He was appointed State geologist of Maine in 1836 and of New Hampshire in 1840, and published reports on their geology; also Mineralogy and Geology of Nova Scotia. He claimed to have been the first to point out, in 1832, the applicability of electricity to telegraphy, and also to have been the original discovere of annesthetics. He received for this the Montegau prize of 2500 francs from the French Academy of Sciences in 1852. He died in 1880.

Jackson, Helen Hunt, authoress, was

died in 1880.

Jackson, bern at Amherst, Massachusetts, in 1831; died in 1885. She married a Mr. Hunt, who died in 1863, and afterwards a Mr. Jackson. Removing to Colorado Springs, Colorado, she became warmly interested in the treatment of the Indians by the government, and strove earnestly to better their condition. She was appointed in 1883 to investigate place of resort. It has a large trade in the condition of the Nassau Indians of various other industries. It has

econd-lieutenant's commission, and was tions, among which are the Illinois Colsenaged in the Mexican war, and for his lege, the State asylums for the blind, the gallantry was made a captain, and after- insane and the deaf and dumb. It has

in serious revolt, and completely defeated them. He was subsequently ordered to the defense of New Orleans appointed professor of mathematics and against the British invasion of 1814, artillery tactics in the military institute and in 1815 repulsed the invading forces with great loss. In 1817-18 he fought against the Seminole Indians of Florida, worsted them, and in 1821 was made dier-general. He commanded the reserve governor of Florida, which Spain had sold to the United States. He was elected United States Senator again in 1823, his troops and his own coolness in the had the largest yote, he failed to obtain a majority over the other candidates, June, 1862, he repelled Fremont at Cross and lost the election by the vote of the House of Representatives. He was Republic. He took a leading part in elected in 1828 and again in 1832, and the second battle of Bull Run, captured Harper's Ferry in September, during by his influence. An honest and upright man, he was dictatorial and obstinate, and his career was sullied by several acts of undue severity. In 1837 he retired to his estate in Tennessee and died there on June 8, 1845. Thomas, scientist.

carly Spanish missions. She wrote on and various other industries. It has the Indian subject A Century of Disseamship communication with northern honor, also Verses by H. H., Bits of ports. Pop. (1910) 57,699; (1920) 91,558. Talk, etc. Talk, etc.

Jackson, Thomas Jonathan, better a general in the Confederate army, born in 1824 in Virginia. In 1842 he entered in the Confederate army at West Point as its public buildings, and for the elegance of the military academy at West Point as its public buildings, and for the number cadet. Four years later he received a of its educational and charitable institutions. large woolen mills, cigar factories, plan- are the philosophic novels, Allwill's Brief-

took up his abode with his uncle Laban. Here he served twenty years, and obtained Leah and Rachel as his wives. On his return to Canaan he was met by an angel, with whom he wrestled all night, and having gained the victory was thereafter named Israel, that is, the hero of God. Hence the Hebrews from him are called Israelites. A severe blow to him in his old age was the loss of his favorite son Joseph, whose brothers had sold him to Ishmaelite merchants, and led Jacob to believe that he had been devoured by wild beasts. Joseph subsequently became the highest officer at the court of Pharaoh in Egypt, and thus was the means of bringing the whole house of his father to that country. Jacob died. aged 147 years, approximately about 1860 B.C., and according to his wish was buried in the tomb of Abraham, before Mamre in Canaan.

(ja-kob-ä-bäd'), a town of Jacobabad Hindustan, the military and civil headquarters of the Upper Sind frontier district, Bombay. Pop. 11,552.

Jacobean Architecture, applied to the later style of Elizabethan architecture from its prevailing in the time of James I (L. Jacobus, James). It differed from the pure Elizabethan chiefly in having a greater admixture of debased Italian forms.

Jacobi (yà-kō'bi). FRIEDRICH HEIN-RICH. a German philosopher, born in 1743; died in 1819. He first en-gaged in commerce, but quit business on receiving a public appointment. He formed acquaintance with many of the most eminent literary men of the day, including Goethe, Wieland and Herder. Subsequently he was made president of the Bavarian Academy at Munich, retiring in 1813. His views had some analogies with those of Hamilton and the Scotch school. Thought, he affirms, cannot explain facts but only connect them. The existence of objects that affect us cannot be demonstrated, but we are directly con-

Jacob (ja'kub), the son of Isaac, and the Jewish patriarchs, and the Jewish patriarchs, and the last of the Jewish patriarchs, and the den Glauben, or Idealism and Realism. Tacobins (jā'ku-binz), the most faily obtained from the blind and infirm place of his brother Esau, he was obliged to the from the anger of his brother, and took up his abode with his uncle Laban.



Jacobean Architecture.-Waterston Hall, Dorset.

On the removal of the court and national assembly to Paris it acquired importance and rapidly increased. It adopted the name of Société des Amis de la Constitution, but as it met in a hall of the former Jacobin convent in Paris, it was called Jacobin convent in Paris, it was called the Jacobin Club. It gradually became the controlling power of the revolution, and spread its influence over France, 1200 branch societies being established before 1791, and obeying orders from the headquarters in Paris. In 1791 the publication of the Journal de la Société des Amis de la Constitution increased the zeal and number of the societies. The Jacobins were foremost in the insurrectionary movements of June 20 and August 10, 1792; they originated the for-midable commune de Paris, and changed their former name to Les Amis de la Liberté et de l'Egalité. For a while vinced of their existence in the act of per-ception. The knowledge of God is pres-ent to us through the heart in virtue of was their most influential member; they the divine spirit within us, which comes ruled through him during the Reign of directly from God. His most noted works Terror, and were overthrown after his

herents of the dethroned King James II slight astringency. hard his posterity. In Ireland they were Jacquard (zhåk-är), Joseph Marie, and his posterity. The England the revolution was accomplished with the machine for figured weaving named after apparent consent of all parties; but in a him, was born at Lyons in 1752. His year or two the Jacobite party gained considerable influence, and continued to disturb the government of William throughout his reign. After the accession of Anne and the death of James their efforts slackened for a time; but towards the close of her reign they revived. Bolinbroke and Oxford, with others of the Tory ministers of Anne, were in treaty with the son of James II, and either really or pretendedly negotiated for a restoration. On the arrival of George I in 1715 a rebellion broke out in Scotland, fluence until the unsuccessful rebellion in 1834. of 1745 put an end to its political importance, though some ultra-Jacobites did ring their allegiance to the house of for weaving figured goods in various Brunswick till the death of Cardinal colors. See Weaving.

York, in 1807. The hopes and wishes of the Scottish Jacobites found expression to the property of the pr interesting portion of the national literature. Christians

Monophysite dai (578), during the reign of Justinian, Gaston Pheous, count of Pois. The Jacques Rominto a distinct religious sect. The Jacquerie is derived from Jacques Boninto a distinct religious sect. The Jacquerie is derived from Jacques Boninto a distinct religious sect. The Jacquerie is derived from Jacques Boninto a distinct religious sect. The Jacquerie is derived from Jacques Boninto a distinct religious sect. The Jacquerie is derived from Jacques Boninto a distinct religious sect. The Jacquerie is derived from Jacques Boninto a distinct religious sect. The Jacquerie is derived from Jacques Boninto a distinct religious sect. The Jacquerie is derived from Jacques Boninto a distinct religious sect. The Jacquerie is derived from Jacques Boninto a distinct religious sect. The Jacquerie is derived from Jacques Boninto a distinct religious sect. The Jacquerie is derived from Jacques Boninto a distinct religious sect. Jacquerie is derived from Jacques Boninto a distinct religious sect. Jacquerie is derived from Jacques Boninto a distinct religious sect. Jacquerie is derived from Jacques Boninto a distinct religious sect. Jacquerie is derived from Jacques Boninto a distinct religious sect. Jacquerie is derived from Jacques Boninto a distinct religious sect. Jacquerie is derived from Jacques Boninto a distinct religious sect. Jacquerie is derived from Jacqueri and are governed by two patriarchs, apand are governed by two patriarchs, appointed by the Turkish governors, one of law, a boasting or giving out by a party pointed by the Turkish governors, one of law, a boasting or giving out by a party whom, with the title of the Patriarch of that he or she is married to another, whom, with the title of the Patriarch of the or she is married to another, whereby has his seat at Diarbekir; the whereby a common reputation of their Antioch, has his seat at Diarbekir; the whereby a common to other resides in a monastery near Mardin, marriage may follow. under the style of Patriarch of Jerusalem. Circumcision before baptism and the doctrine of the single nature of Christ (hence their name Monophysites) are in the grand-duchy of Oldenburg, at the common to them with the Copts and Abyssinians; but in other respects they deviate less than the other Monophysites part of the purform the discipline and liturgy of the orthodox Greek Church.

downfall in 1794. In that year the Convention forbade the affiliation of societies; the Jacobin Club was suspended and its hall was closed. The term Jacobin center and south of Europe and found in the temperate parts of Asia and North and Market and South of Europe and found in the temperate parts of Asia and North and Market and South Stem shout one holding extreme views in politics.

Jacobites

In the temperate parts of Asia and North America. It has a smooth stem about 2 feet high, and a terminal panicle of Britain (so styled from Lat. Jacobus, James), who after the revolution in 1688 continued to be the advented of the Jathanead King Lange II.

parents were silk weavers, and he learned the same trade. After a long period of hardship, during which he shared in some of the campaigns of the revolution, he made his name famous by the invention of his new loom, which was publicly exhibited in 1801. He endeavored to introduce it into general use in Lyons, but was mobbed, and all but lost his life. Ulti-mately, however, his invention was bought by the French government, and he was able to spend the latter part of his life The subin comfortable independence. supported by a more insignificant rising in the north of England. The failure of both these movements damped the enthusiasm of the English Jacobites, but to him on the very spot where his loom to Scotland the party maintained its inhad been destroyed by the mob. He died sequent prosperity of Lyons is largely attributable to his invention, and a more

Jacquard Loom, a form of loom, the characteristic of which is a contrivance appended to it

in many beautiful songs, which form an peasantry against their lords in the middle of the fourteenth century after the battle of Poitiers. They committed great devastations and outrages, particularly Jacobites, Monophysite Christians devastations and Jacages, They were in the northeast of France. They were united by a Syrian monk, Jacobus Barat length quelled by Capital de Buch and dai (578), during the reign of Justinian, Gaston Phébus, count of Fois. The term into a distinct religious sect. The Jacquerie is derived from Jacques Boninto a distinct religious from their founder, homme, a familiar epithet for a peasant.

Jade, or JAHDE (ya'de), a small strip of coast territory belonging to the

Jade (jād), an ornamental stone, also called nephrite, a native silicate of calcium and magnesium, usually of a color more or less green, of a resinous or oily aspect when polished, hard and very tenacious. It has been used by rude nations for their weapons and implements, and has been and is highly prized for making carved ornaments in China, New Zealand, and among the native races of Zealand, and among the native races of Mexico and Peru. Jade celts or axes are common among uncivilized races, and pre-historic specimens have been found in Europe, though the stone itself is not found there. A similar stone, more properly called *jadeite*, is frequently confounded with jade proper. It is a sili-

cate of aluminum and sodium.

Jaen (hā-ān'), a picturesque town of Andalusia, Spain, capital of the province of Jaen, on the Jaen, a tributary of the Guadalquivir, 122 miles E. N. E. of Seville. It is the seat of a hisher and has two catheday.

tary of the Guadalquivir, 122 miles E. N. E. of Seville. It is the seat of a bishop, and has two cathedrals. Pop. 26,434.

Jaffa (jaf'fa; anciently Joppa), a maritime town in Palestine, 31 miles northwest of Jerusalem, picturesquely situated upon an eminence, the port of Nablus and Jerusalem, with which latter it is connected by railway. It exports oranges (an excellent variety), soap, grain, sesame, olive oil, etc. Pop. above 20,000.

Jaffna (jäf'na), or JAFNAPATAM, a town in Ceylon, at the northern extremity of the island, originally a Dutch settlement, and still thoroughly Dutch in its architecture and aspect. Most of the inhabitants are Tamils and Moors. Pop. (1911) 40,539.

Jagannâtha (jag-an-niit' ha: Skr. Lord of the World'), often written Juggernaut, the name given to the Indian god Krishna, the eighth incarnation of Vishnu, and to a very calcharated idel of this delive in a eighth incarnation of Vishnu, and to a very celebrated idol of this deity in a temple specially dedicated to Jagannatha at Puri, a town in Orissa, on the Bay of Bengal. It is a very rudely-cut wooden image, having the body red, the face black, and the arms gilt; the mouth is onen and blocked; the eves are formed open and blood-red; the eyes are formed a dark spot in the center of each. It is covered with magnificent vestments and seated upon a throne between two others—his brother Bala-Rama and his sister Subhadra, colored respectively white and black. Great numbers of pilgrims, sometimes a hundred thousand, at the time of the fee dreat numbers of pigrims, sometimes a hundred thousand, at the time of the festivals of Jagannatha, assemble from all quarters of India to pay their devotions 1813; died in 1869. He studied at Kiel. at his shrine. On these occasions the Leipzig and Berlin, traveled in France and idol is mounted on a huge car resting Italy, on his return qualified himself for on sixteen wheels, which is drawn by the university teaching, became professor expallgrims; and it has been stated and

credited that formerly great numbers of the congregated people were wont to throw themselves under the wheels, and were thus crushed to death, the victims believing that by suffering this sort of death they would be immediately conveyed to heaven. This statement, however, is no longer accepted, it being now claimed that 'the rare deaths at the car festival were almost always accidental.'

Jägerndorf (yā'gern-dorf), a town of Austria, in Silesia, on the Oppa, 13 miles northwest of Troppau. the Oppa, 13 miles northwest of Troppau. It is walled, has a handsome church, a ducal palace, and manufactures of woolens, etc. Pop. 14,675.

the same as cane-sugar.

Jaghire (jag'her), in Hindustan, a term closely corresponding to the field of mediæval Europe. It is an an analysment of the government shape and the same and the the ner or mediæval Europe. It is an assignment of the government share of the produce of a portion of land to an individual, either personal or for the support of a public e ablishment.

Jago, St., several cities, islands, etc.

See Santiago.

Taggarante (is. swär). Felix onca the

Jaguar (ja-gwir), Felis onca, the American tiger, a carnivorous animal of South and Central America, sometimes equalling a tiger in size, of a



Jaguar (Felis onca).

yellowish or fawn color, marked with large dark spots and rings, the latter with

Greifswald in 1842, and full professor in tendence of the Central India Agency; 1845. In 1847 he was called to a similar a sandy desert with sparsely scattered a sandy desert with sparsely scattered villages. Water is scarce, the wells going he was called to Bonn as professor of antiquities and director of the art museum. His writings on classical art Pop. 73,370.—Jaisalles, the capital, is and antiquities were very numerous; he also edited works of Greek and Latin authors, and published valuable contributions to the history of German literature, as also on various musical subjects. Jail, or GAOL (jāl), a prison or place.

Jail Fever, a dangerous disease once and which is now considered to be merely a severe form of typhus fever (which see).

Jainas (jī'nas), or Jains, a Hindu religious sect, which, from the

(ji'nas), or JAINS, a Hindu religious sect, which, from the wealth and influence of its members, forms an important division of the Indian population. The sect was very numerous and important in the eighth and ninth centuries of the Christian era, and they have left many monuments of their skill and power in the fine temples built in and power in the nine temples built in different parts of the country. Jainism was an offshoot of Buddhism, with which it has many leading doctrines in common, but is distinguished from it by its recognition of a divine personal ruler of all, and by its political leanings towards Brahmanism. The Jains reverence certain help more than the parts are the second of th tain holy mortals, who have acquired by self-denial and mortification a station superior to that o. the gods; and they manifest extreme tenderness for animal life.

Jaintia Hills (jin'ti-a), a collection giving name to a district of about 2000 square miles, with 56,000 inhabitants.

square miles, with 56,000 inhabitants.

Jaipur (ji-pör'), or Jeypore, a state in Rajputána, Hindustan, governed by a maharajah, under the political superintendence of the Eastern States Agency; area, 15,579 sq. miles. The soil, except in the southeast, is mostly sandy; the surface of the country is diversified by hill ranges. Corn, cotton, tobacco, opium and sugar-cane are extensively raised. There are manufactures of enamel work on gold, of woolen cloth, etc. Pop. 2,658,666.—The capital, Jaipur, one of the finest of modern Hinducities, has regular streets, with large,

Jalalpur (ja-läl'pör), a town of Hindustan, in Gujrat district, Punjab, with a government school and a shawl manufacture. Pop. 12,839.

Jalandhar (jal-an-dhar'), or Jullun-num, a town of Hindustan, headquarters of district of same name, in the Punjab; with a good trade, military cantonment, excellent American Presbyterian mission school, etc. Pop. 67,735.—The district, a fertile tract between the Sutlej and the Beas, has an area of 1,332 sq. miles, a pop. of 917,587. A division or commissionership has also this name: area 19,400 sq. miles; pop. this name; area 19,400 sq. miles; pop. 4,306,662.

Jalap (jal'ap; so called from Jalapa, in Mexico, whence it is imported), the name given to the tuberous roots of several plants of the nat. order Convolvulaceæ, that of *Ipomæa purga* being the most important. This is a



Jalap Plant (Ipomosa purga).

cities, has regular streets, with large, handsome houses. There is a college, a school of arts, an industrial museum, a acuminate, sharply auricled leaves, and hospital, fine gardens and several beautiful temples. Pop. (1910) 137,098.

Jaisalmer (ji-sal-mār'), or JEYSUL-MEER, a state of India in Rajputāna, under the political superin
Jaisp Piant (jomas purja).

Jaisp Piant (jomas purja).

the size of an egg to that of a hazel-nut, but occasionally as large as a man's fist. The drug jalap is one of the most com-

Jalapa, or Xalapa (ha-lä'pa), a city of Mexico in the department of and 52 miles northwest of Vera Cruz.

as a whole is very beautiful, and much of it is fertile. The coast is indented with a number of good harbors, of which

lar ovoid dark-brown roots, varying from the whole unhealthy; on the high lands the air is temperate and pure, while even on the low grounds the heat is greatly moderated by the cool sea-breezes which set in every morning. There are two The drug jalap is one of the most common purgatives, but is apt to gripe and nauseate. It has little smell or taste, rainy and two dry seasons. Native trees but produces a slight degree of pungency include the ballata, rosewood, satinwood, mahogany, lignum vitæ, lancewood, ebony, lamaion cedar silk cotton tree, bamboo, Jamaica cedar, silk cotton tree, bamboo, coffee, cocoa, and several species of palm. The common vegetables grow in the hills of and 52 miles northwest of Vera Cruz. The common vegetables grow in the hills It is the residence of the wealthiest merchants of Vera Cruz, and enjoys a fine climate. The jalap root is found abundantly here. Pop. (1910) 34,816.

Jalaun (ja-loun'), a town in a district of the same name, in the N. W. Provinces of India, 110 miles s. E. of Agra, in a swampy and unhealthy and of ferns 450 species. The largeness of locality. Pop. 8573.—The district consists of a plain west of the Jumna; area, 1469 sq. miles; pop. 399,726.

Jalesar (jal-à-sur'), a town of Hindustan, in Etah district, N. Provinces. Pop. 15,600. Jalisco (hà-lis'kō), or GUADALAJARA, coffee, dye-woods, and pimento form the a State of Mexico, bounded on chief exports, more than half of which go the west by the Pacific. It is chiefly to the United States; foodstuffs, coal, mountainous, but well watered and clothing and other manufactured goods the wooded, and the climate is healthy. The chief imports. The government is vested in soil is fartile, and wheat and harles are the governor essisted by a prive council. mountainous, but well watered and wooded, and the climate is healthy. The chief imports. The government is vested in soil is fertile, and wheat and barley are the governor, assisted by a privy council, abundantly produced. The capital is and a legislative council composed of fif-fundalajara. Pop. 1,153,891.

Jalpaiguri (jal-pi-gu/re), a town of Hindustan, headquarters Church is presided over by a bishop, assisted by a regular staff of parochial the Teesta; pop. 9708.—The district lies south of Bhutan and north of Kuch of Bhutan and north of Kuch behar; area 2962 sq. miles; pop. 787,380.

Jamaica (ja-ma'ka), one of the West siderable number of Roman Catholics India Islands, 80 or 90 miles and Jews. Education is not compulsory, s. of Cuba, the third in extent of the islands, and the most valuable of those belonging to the British; 146 miles in than 16,000 are white. Kingston, the length east to west, and 49 miles broad at the widest part; area, 4256 square towns are Spanish Town (pop. 7200), miles. It is divided politically into three counties—Cornwall, Middlesex and Surrey; its capital is Kingston. The island as a whole is very beautiful, and much is fartile. The coast is indented

of it is fertile. The coast is indented with a number of good harbors, of which Port Royal or the harbor of Kingston is the most considerable. The interior is Cromwell in 1655, and ceded to England traversed by lofty mountains in all directions; the principal chain, called the Blue Mountains, reaching the height of 7270 Jamaica has greatly decreased. Of late feet. The declivities are steep, and covered with stately forests. Jamaica is ployed in agriculture. In 1865 a serious well watered, having numerous rivers and springs. Earthquakes of a violent character have been frequent. The climate in siderable severity by Governor Eyre, the districts along the coast is, in most places, exceedingly hot, but is not on disappeared, and a greater state of com-

fort is said to prevail among the inhabitants generally. Politically dependent on Jamaica are the Cayman Islands, and the Turks and Caicos Islands.

Jamaica, a former village of the State of New York, now included in the borough of Queens, New York City.

Jamalpur (ja-mäl-pör'), a town of Hindustan, in Monghyr district, Bengal, with large workshops belonging to the East India Railway Co. Pop. about 15,000.—Also a town in Maimeningh district. Bengal, on the Maimansingh district, Bengal, on the Brahmaputra. Pop. 14,727.

James, St., called the Greater, the son of Zebedee and the brother of

John the Evangelist. Christ gave the brothers the name of Boanerges, or sons of thunder. They witnessed the transfiguration, the restoration to life of Jairus' daughter, the agony in the garden of Gethsemane, and the ascension. St. James martyrdom, having been slain by Herod Agrippa A.D. 44. There is a tradition that he went to Spain, of which country

appeared to him in particular after His scribed as the son of Alphæus. He was the first bishop of Jerusalem, and in the

his name.

in Spain, instituted in 1170 by Ferdinand 1453. The kingdom during his minority

vessel in which he was being conveyed deteated at Sauchie, near Stirling, in was taken by an English squadron, and 1488, the king's son being on the side of the prince was carried prisoner to Lonthe victorious nobles. James escaped don. Here he received an excellent from the field, but was murdered during education from Henry IV and, to relieve his flight.

Tames IV, King of Scotland, born in to those poetical and literary pursuits in the effective of the strength was in his sixteenth was rubben he of the strength of the strength was in his sixteenth was rubben he afterwards so highly distinguished. which he afterwards so highly distin- was in his sixteenth year when he suc-

guished himself. Robert III died in 1406, but James was not allowed to return to his kingdom till 1424. Previous to his departure he married Joanna Beaufort, daughter of the Earl of Somerset, a lady of the blood royal of England. On his return to Scotland he caused the Duke of Albany and his son Murdoch to be executed as traitors, and proceeded to carry on vigorous reforms, and, above all, to improve his revenue and curb the ambition and lawlessness of the nobles. The nobility, exasperated by the decline of their authority, formed a plot against his life, and assassinated him at Perth in 1437. Besides his poem, The King's Quhair (or Book), by which he ranks high among romantic poets, two humorous poems, excellent, though coarse, are often ascribed to him-Christ's Kirk on the Green and Peblis to the Play.

King of Scotland, son of James II, Gethsemane, and the ascension. St. James James II, James I, was only seven was the first of the apostles who suffered years of age when his father was asmartyrdom, having been slain by Herod sassinated in 1437. During his minority Agrippa A.D. 44. There is a tradition the kingdom was distracted by struggles James, Sr., called the Less, the brother Douglas. In 1449 he married Mary of appeared to him in particular after the control of the control o for power between his tutors, Livingston resurrection. He is called in Scripture all real power, he resolved to free him-the Just, and is probably the apostle do self from the galling yoke. This he did ir 1452 by inducing the Earl of Douglas the first bishop of Jerusalem, and in the to come to Stirling Castle, where he first apostolic council spoke against those stabbed him with his own hand. He wishing to make the law of Moses binding then quelled a powerful insurrection upon Christians. The progress of Chrisheaded by the next earl, whose lands the lawred the Lawred to Lower ware configurated. In 1460 he included tianity under him alarmed the Jews were confiscated. In 1460 he infringed a greatly, and he was put to death by Arraus, the high priest about A.D. 62. He castle of Roxburgh, and was killed by was the author of the epistle which bears the bursting of a cannon in the 29th year

of his age.

James, St. of the Sword (San Jago James III, King of Scotland, son of James III, was born in II. King of Castile and Leon, to stop was governed in turn by Bishop Kennedy the incursions of the Moors. The knights and the Boyd family. During his life had to prove their noble descent for four James was controlled by favorites. Prom-generations. James I, of Scotland, one of the Stuart through whom one brother of James was the son of Robert III by Annabella was put to death. The nobles seized Drummond. In 1405 his father wished Cochran and five others and hanged them. him to be conveyed to France in order A plot was subsequently formed to dethat he might escape the intrigues of throne the king, and though many peers his uncle, the Duke of Albany, but the remained loyal to him the royal army was vessel in which he was being conveyed defeated at Sauchie, near Stirling, in

eighteen months old. His mother, Margain bringing Raleigh to the block. In his ret of England, governed during his childhood but the period of his long minority was one of lawlessness and gross misgovernment. James assumed the reins of government in his 17th year. He married Maria of France, was born in 1633, and Magdalen, daughter of Francis I of immediately declared Duke of York. Durfrance, and on her death Mary of Lorraine, daughter of the Duke of Guise. land and served with distinction in the Henry VIII, having broken with Rome, French army under Turenne, and in the and eager to gain over his nephew to his Spanish army under Condé. At the views, proposed an interview at York: Restoration, in 1660, he got the commagnaien, daughter of Francis I of immediately declared Duke of York. Durfrance, and on her death Mary of Lorraine, daughter of the Duke of Guise. land and served with distinction in the Henry VIII, having broken with Rome, and and served with distinction in the Henry VIII, having broken with Rome, French army under Turenne, and in the and eager to gain over his nephew to his Spanish army under Condé. At the views, proposed an interview at York; Restoration, in 1660, he got the combut James never came, and this neglect mand of the fleet as lord high-admiral. enraged Henry. A rupture took place He had previously married Anne, daughbetween the two kingdoms, but James ter of Chancellor Hyde, afterwards Lord was ill supported by his people, and the Clarendon. In 1671 she died, leaving diegraceful rout of his troops at Solway two daughters, who became successively disgraceful rout of his troops at Solway two daughters, who became successively Moss broke his heart. He lied in 1542, queens of England. Having openly seven days after the birth of his unfortu-avowed the Roman Catholic faith, on the

(1587); but her execution took place, and the revolution of 1688 (see *England*), and he did not venture upon war. In 1589 the arrival of William, Prince of Orange, he married Princess Anne of Denmark. Soon James found himself completely de-In 1603 he succeeded to the crown of serted, and having quitted the country he

ceeded to the throne, having been voluntarily or by compulsion on the side of proceeded to London. One of the early the nobles who rebelled against his father. During his reign the ancient enmity between the king and the nobility seems to have ceased. His frankness, bravery, got into trouble with Parliament, and skill in manly exercises and handsome afterwards endeavored to rule as an absoperson won the people's hearts, and he ruled with vigor, administered justice myth impartiality, and passed excellent land. In 1613 his daughter Elizabeth tried to obtain a union with Scotland by politic measures, and in 1503 James married to obtain a union with Scotland by politic measures, and in 1503 James married to the elector Palatine, an alliance which ultimately brought the present royal family to the throne. He of peace and prosperity followed. French influence, however, and the discourtesy of Henry VIII in retaining the jewels of henry VIII in retaining the jewels of his cister and in encouraging the border chieftains hostile to Scotland, led to sangry negotiations, which ended in war. James invaded England with a large and himself and many of his nobles mong them being subservience to unparticular of the sardy and an apparature of the carry for the death of Elizabeth, and proceeded to London. One of the early revents of his reign was the Gunpowder between the lander, or the death of Elizabeth, and proceeded to London. One of the early the soon allowed his lofty vertex events of his reign was the Gunpowder being was the Gunpowder to London. One of the early text the soon allowed his lofty vertex to followed to London. One of the sardy was the Gunpowder to London. One of the sardy was the Gunpowder to London. One of the sardy was the Gunpowder to London. One of the sardy was the Gunpowder to London. One of the sardy was the Gunpowder to London. One of the sardy was the Gunpowder to London. One of the seat by option of divine right to become known, pot into trouble with Parliament, and stewards endeavored to rule as an angry negotiations, which ended in war. sessed of good abilities and a good heart, James invaded England with a large had many defects as a ruler, prominent force, and himself and many of his nobles among them being subservience to unperished at Flodden Field in 1513.

James V of Scotland, born in 1512, worthy favorites and disregard for the kingly dignity. He was also vain, pedantic, and gross in his taste and habits. death of his father, James IV, though only eighteen months old. His mother, Margain bringing Raleigh to the block. In his rest of Fragland, coverned during his child.

nate daughter, Mary.

James I, of England and VI of Scot-Catholics from holding public employments he was obliged to resign his comqueen of Scotland, by her cousin Henry, mand. He was afterwards sent to Scotland as lord high commissioner, where he Queen of Scotland, by her cousin Henry, mand. He was obliged to resign his comLord Darnley, was born at Edinburgh land as lord high commissioner, where he
Castle in 1566. In 1567 (his mother persecuted the Covenanters. He sucbeing forced to resign the crown) he was ceeded his brother as king in 1685, and at
crowned at Stirling, and his childhood once set himself to attain absolute power.
was passed under the direction of the A rebellion headed by the Duke of MonEarl of Mar, and the tuition of the famous Buchanan. He had much trouble and this encouraged the king in his arbiwith his nobles, a party of whom made
trary measures. He even accepted a penhim captive at Ruthven Castle in 1582; sion from Louis XIV that he might more
but a counter party soon set him at readily effect his purposes, especially that but a counter party soon set him at readily effect his purposes, especially that liberty. When his mother's life was in of restoring the Roman Catholic religion. danger he exerted himself in her behalf The result of this course of action was

repaired to France, where he was received dence, Diary of a Man of Fifty, Washwith great kindness and hospitality by ington Square, The Portrait of a Lady, Louis XIV. Assisted by Louis, he was Terminations, What Maisie Knew, The enabled in 1689 to attempt the recovery of Outcry, The Small Boy and Others. His with great kindness and hospitality by Louis XIV. Assisted by Louis, he was enabled in 1689 to attempt the recovery of Ireland; but the battle of the Boyne, fought in 1690, compelled him to return to France. He died in 1701.

James III, THE PRETENDER. See Stuart (James Edward Francis).

James, George Payne Rainsford, an English novelist, born in London in 1801. While still very young he manifested a considerable turn for litmannested a considerable turn for fit-erary composition, and produced, in 1822, a Life of Edward the Black Prince. Some years afterwards he composed his first novel, Richelieu, which was shown in manuscript to Sir Walter Scott, and published in 1829. Its success deter-mined him towards fiction, and a series of novels, above sixty in number folof novels, above sixty in number, followed from his pen in rapid succession, besides several historical and other works. Among them may be mentioned Darnley, De L'Orme, Lord Montague's Page, Philip Augustus, Henry Masterton, Mary of Burgundy, The Gipsy, History of Chivalry, Life of Charlemagne, etc. He accepted the office of British consul, first at

Richmond, Virginia, and afterwards at Venice, where he died in 1860.

James, Henry (1843-1916), an American novelist, born in New York, educated chiefly in France and Switzerland, and at Harvard Law School. He began literary work as a contributor to magazines and soon commanded an ever-growing audience by his keen psychological analysis of human nature, his wealth of vocabulary and his fine literary finish. He traveled extensively, and spent a great deal of his time in Europe. When the great European war broke out, in 1914, he was unable to understand why the United States did not instantly side with the Allies against Germany; sympathies were so strongly with Great Britain that he renounced allegiance to America and in 1915 became a British America and in 1915 became a British subject. His first novel, Watch and Watch and Watch was published in 1871. This was followed by two other books that were widely acclaimed. In 1875 he published his Transatlantic Sketches; and two years later he wrote The American, which has taken rank as a public favorite with The Bostonians, published in 1886, The Racred Fount (1901), The Ambassador (1903), and The Golden Bowl (1905). His publications include A Passionate His publications include A Passionate Pilgrim, Roderick Hudson, French Poets and Novelists, The Europeans, Daisy Miller, An International Episode, Life of Hawthorne, A Bundle of Letters, Confi-Hawthorne, A Bundle of Letters, Confi- the most important ingredient,

novels and tales depended for their interest on the portrayal of character rather than on incident. In his later years his style became involved and intricate, losing much of its early charm through ultrarefinement.

WILLIAM, psychologist, brother James, WILLIAM, psychologist, bloom of the above, was born in New York in 1842. After 1872 he was connected with Harvard in professorships of psychology and philosophy, and won emi-nence in his special field. His *Principles* of Psychology is highly esteemed, and he wrote various other works of value, one of the latest being Pragmatism—A New Name for Some Old Ways of Thinking. In his later years he became a convert to spiritualism. He died in 1910.

(jā'me-son), SIR LEANDER Jameson STARR, British physician and colonial administrator, popularly known as 'Dr. Jim,' was born in Edin-burgh in 1853 and was educated for the medical profession at University College Hospital, London. In 1878 he went to South Africa, where he practiced medi-cine, numbering Oom Paul Kruger and other distinguished South Africans among his patients. He became boon companion of Cecil Rhodes and schemed for the enlargement of British influence. One of his schemes took the form of a military raid in the Transvaal in 1895 in support of a projected uprising in Johannesburg connived at by Rhodes. He was captured, but instead of executing him President Kruger handed him over to England for punishment. He was imprisoned, but returned to South Africa and became premier of Cape Colony. Died Nov. 26, 1917.

James River, a river of Virginia, which passes the towns of Lynchburg and Richmond, and communicates, through Hampton Roads and the mouth of the Chesapeake Bay,

Jamestown (jame'town), the site of furniture, pens, etc. Here is the State the first British settle. School for the Blind. Pop. 18,293.

ment in the United States. Its locality Janin (zhâ-nan), Jules Gabriel, was on the James River, Virginia, about 32 miles above its mouth. It was burned in the Bacon rebellion of 1676 and only born in 1804, and died in 1874. He dea few ruins remain, including the old voted himself to journalism at an early church tower. It gave the name to an exposition held near Norfolk in 1907, was connected with the Journal des Déthe three-hundredth suniversery of its hots. In 1870 he was made a member of

worden and metal furniture. Other prod- of his are Voyage en Italie; Histoire de ucts are textiles, metal goods, knitted and la Littérature Dramatique; Béranger et worsted fabrics, pianos, automobile parts, son Temps; etc. Pop. (1910) 31,297; (1920) 38,917. Janina (yà'nėna), a town of northetc. Pop. (1910) 31,297; (1920) 38,917. Janina (yà'nė-na), a town of north-Jamestown, a city, county sent of Stutsman Co., North Dakota, on James River, 96 miles E. of merly a villayet in the Turkish empire, Rismarch in a rich forming region. Dakota, on James River, 96 miles E. of merly a villayet in the Turkish empire, Bismarck, in a rich farming region. Seat it was ceded to Greece in 1913 at the of Jamestown College, St. John's Acad-close of the Balkan war (q. v.). It was emy, and State Hospital for insane. It the stronghold of Ali Pasha (q. v.), 'the has flouring mills, etc. Pop. (1920) 6627. Lion of Janina,' 1788-1822. The fortress Jamieson (jā'mē-son), John, a Scotand splendid seraglio, built on a promontish philologist and theologist and government of the proposition (1780-1828) home of Cleague. The invariance of 2000. tish philologist and theologist and Language.

Jammu (jum-mö'), Jamu, or Jum-moo, a portion of Cashmere

the chief being the lower section of the Brahmaputra, and that which connects it directly with the Ganges.

Janauschek (ian'ō-shek), Francesca R. M., an eminent ac-tress, born at Prague, Bohemia, in 1830; died in 1904. She gained a high stand-

ing as a tragedienne, playing in Germany, England and the United States, and dwelling in the latter country in her later

emposition held near Norfolk in 1907, was connected with the Journal des Déthe three-hundredth anniversary of its bats. In 1870 he was made a member of settlement.

Jamestown, a city and summer resort L'Ane Mort et la Femme Guillotinée, of Chautauqua county, appeared in 1829, and was quickly fol-New York, on the outlet of Chautauqua lowed by the Confession; Barnave, a Lake, which supplies water power. It is political novel; Contes Fantastiques; one of the leaders in the manufacture of Contes Nouveaux. Among other works wooden and metal furniture. Other prod- of his are Voyage en Italie: Histoire de

Janizaries (jan'i-za-rēz; Turkish, Jeni-tcheri, new sol-diers), an Ottoman infantry force, somewhat analogous to the Roman pratorians. Jammu (Jum-no'), Jame, of James what analogous to the Roman practorians, Moo, a portion of Cashmere (which see).

Jamna. See Jumna.

Jamnotri (jum-no'trē), or JumnouTRI, a celebrated place of pilgrimage in Hindustan, in the province pilgrimage in Hindustan, in the province of Garhwal. 185 miles N. N. To Delhi of Garhwal. 185 miles N. To Delh at the source of the Jumna, with hot springs 10,849 feet above sea-level.

Jamuna (ja-my-nä'), the name of several rivers of Northern India, the chief being the lower section of the chief being the chief being the chief being the lower section of the chief being the chief being the chief being the lower section of the chief being tempts were made to reform or disband them. At various times sultans had been deposed, insulted, and murdered by the insurgent janizaries. At last, in June. 1826, they rebelled on account of a proposal to form a new militia, when the sultan, Mahmoud II. having displayed the flag of the Prophet, and being supported by their aga or commander-in-chief, defeated the rebels and burned their berand and the United States, and defeated the rebels and burned their bar-ing in the latter country in her later She rendered acceptably in Eng-flames. The corps was abolished, and nsh the most exacting roles in Shakes a curse laid upon the name. As many as 15,000 were executed, and fully 20,000 were banished. The Nizam, a corps of troops under modern organization, took active trade and manufactures.

active trade and manufactures, including Jan-Mayen (yan-mi'en), a small large cotton factories, woolen and flour volcanic island in the miles, agricultural implements, carriages, Arctic Ocean, 150 miles from the coast

extinct volcano, it rises to the height of 6870 feet. The island was discovered in 1611 by the Dutch navigator Jan Mayen, and was used as an Austrian polar station for scientific observations in 1882-83.

Jansen (yan'sen), Cornelisz, usually known as Jansenius. See Jan-

Jansenists (jan'sen-istz), Jan'sen-18M, the sect or party and its doctrines, which owed their origin to the teaching of Jansenius (which see). In his great work Augustinus, published in 1640, Jansenius maintained the Augustinian doctrine of free grace, and recommended it as the true orthodox belief, in opposition to the semi-Pelagian-ism of the Molinists. The book was condemned by Urban VIII in 1642, in the bull In Eminenti; but its doctrines were supported by many distinguished French and other theologians, and the scholars of the Port Royal, namely, Nicole, Pas-cal, and Antoine Arnauld, undertook the defense of Jansenism. Another bull, in which the pope (1653) particularly condemned five propositions from the Augustinus, also met with a strong opposition. In 1656 Alexander VII issued a special bull by which the Jansenists were re-quired either to recant or secede from the Roman Catholic Church. It was found impossible to force them to an unconditional subscription of this bull; and in 1668 an agreement with Clement IX, by which a conditional subscription was permitted, obtained for them a temporary repose. The party stood its ground under the protection of Innocent XI (died in 1689), who tolerated them as much as Louis XIV and the Jesuits opposed Louis XIV and the Jesuits opposed them. Father Quesnel's Moral Reflections on the New Testament—the most universally read book of this period—gave the Jansenists were rigorously censured unless they accepted the bull unconditionunless they accepted the bull unconditionvals each year, notably September 19, the
anniversary of the martyrdom. On these
grated to the Netherlands, and their occasions, if the blood becomes of a clear
power as a party rapidly declined. This red color and moves briskly in the vial,
was hastened from 1731 by the fanatical
the parton saint is said to be propitious,
excesses of many Jansenists, especially
but by remaining congealed it betokens
of the Convulsionists (which see) and
disaster. or the Convisionists (which see) and others, which encouraged ridicule, favored repressive measures, and ultimately extinguished the Jansenists as a party in rrance. As a sect, they still survive sacred to Janus, from whom the name in the Netherlands. They call them was derived. The Roman year originally selves, by preference, the disciples of began with March, and consisted of only

of East Greenland. In Beerenberg, an St. Augustine. Each bishop on his appointment notifies his election to the pope, and craves confirmation. The non-acceptance of the bull Unigenitus, however, has caused all their advances to be rejected, and as they have rejected the doctrine of the immaculate conception and the decrees of the Vatican Council, they stand further apart than ever from the orthodox Catholic Church, though between them and the Old Catholics there are friendly relations.

Jansenius (yan-sa'ne-us), Cornelius, (properly Cornelisz Jan-SEN), a Dutch theologian. He studied at Utrecht, Louvain and Paris; secured a professorship at Bayonne; returned to Louvain in 1617, where he obtained the degree of doctor, and took a prominent part in the affairs of the university. He was appointed professor of Scripture in 1630, and was promoted to the bishopric of Ypres in 1636. In this city he died of the plague in 1638, leaving an unblemished reputation for piety and purity of morals. He had just completed his great work, the Augustinus, a book which gave rise to a great religious controversy. See Jansenists.

(jans'sens), ABRAHAM, a Janssens born about 1569; died about 1632. He was the contemporary and rival of Rubens, though the place which he occupies beside him is very subordinate. He is chiefly admired for his coloring and accuracy of design, his most important works being Scriptural scenes. Many of his pic-tures are in the Flemish churches, while others are in the galleries of Munich, Vienna, Berlin and Dresden.

Januarius (jan-u-ā'ri-us), St., Bishop of Benevento, was beheaded at Puzzuoli in the beginning of on the New Testament—the most universally read book of this period—gave Christian faith, and is honored as the
it new support, but also led to the bull patron saint of the people of Naples,
Unigenitus (in 1713), which condemned where his body lies buried in the crypt
101 propositions from the Reflections. of the cathedral. His head and two
This bull excited much indignation in vials of his blood are preserved in a
France, and was strongly resisted; but separate chapel. These vials are brought
the Jansenists were rigorously censured near the head of the saint on three festi-

forward, the other backward. All doors, passages and beginnings were under his care. His principal festival was New York Day when people gave each other Year's Day, when people gave each other presents. The temple of Janus, which was open in time of war and closed in time of peace, was shut only three times time of peace, was shut only three times in the long space of 700 years—once in the reign of Numa, again after the first Punic war, and the third time under the reign of Augustus A.U.C. 744. Vespasian also closed it in A.D. 71.

Janvier (jan'vēr), Thomas A., author, born at Philadelphia, 1849. He did editorial work on several Philadelphian newspapers, resided for a number of years in Mexico, and made it the scene

phian newspapers, resided for a number of years in Mexico, and made it the scene of several works, as The Aztec Treasure storms; while in Yokohama, again, the House, Stories of Old New Spain, Legewinter is genial, with a bright sky, and ends of the City of Mexico, etc. He wrote also The Uncle of an Angel, In July to September the thermometer often Old New York, The Passing of Thomas, ranges as high as 95° in the shade. The Dutch Founding of New York, and various other works. He died in 1913. His sister ('Margaret Vandegrift') range of temperature. Rice of excellent wrote a number of juvenile stories and millet are largely grown; while ginverses, etc.

Japan the North Pacine Ocean, lying off the east coast of Asia. It comprises four large mountainous and volcanic islands, viz., Hondo, Kiushiu or Kiusiu, Shikoku or Sikok and Yesso, besides many other islands and islets, and in particular the Loo-Choo or Riu-kiu and the Kurile groups. The largest island, Hondo or Niphon, is 800 miles long, and from 50 to 100 miles broad. By the Japanese Niphon or Nipon is employed to describe

January and February. See Calendar.

Janus (ja'nus), an ancient Latin divinity, after whom the first month of the year was named. He was held in agreat reverence by the Romans, and was represented with two faces, one looking mony and sulphur: sold and silver and sulphur. the highest peak being Fusi-yama (12,230 feet), a dormant volcano covered with perpetual snow. The volcanic vents are numerous in Yesso, Hondo and Kiusiu, and earthquakes are frequent. The minerals comprise copper, lead, iron, antimony and sulphur; gold and silver are found, though not to a great extent. Coal is mined in various parts. The rivers are of no great length: Tonegawa, the longest, is only about 172 miles. Biwa, in the south of Hondo, is the principal lake, being some 50 miles in length, with an extreme breadth of 20 miles. The harbors most frequented by foreigners are the treaty ports of Yokohama, Hiogo (or Kobé), Nagasaki, Hakodate, Niigata and Osaka. Osaka.

Climate.—The climate ranges from an almost Arctic cold in the north to a nearly tropical heat in the south. In the island of Yesso winter begins about October and continues to April, its course

(jā-pan'). an island empire in ger, pepper, cotton and tobacco are culti-the North Pacific Ocean, lying vated in considerable quantities vated in considerable quantities. Tea and raw silk are largely produced. The Japanese are skilful gardeners, and the fruits raised include strawberries, melons. plums, persimmons, figs, loquats and oranges. Of flowers and flowering shrubs many other islands and islets, and in par-oranges. Of flowers and flowering shrubs ticular the Loo-Choo or Riu-kiu and the the camellia, azalea, hydrangea, lilies, Kurile groups. The largest island, Hondo peonies, the chrysanthemum, daphne and or Niphon, is 800 miles long, and from wistaria are indigenous. The forests are 50 to 100 miles broad. By the Japanese extensive; in the south the palm, banana Niphon or Nipon is employed to describe and bamboo flourish; while in the north, the whole empire. The name 'Jipun,' cedar, pine, maple, and the kadsi or paper-altered to Japan, is the Chinese designation, and it first became familiar to Europeans. The official return gives Japan hardy: the ox. which is used as a baset tion, and it first became familiar to Europeans. The official return gives Japan an area of 147,655 square miles and a of burden; the dog, which is used as a beast of burden; the dog, which is held sacred; pop. (1910), of 59,751,919.

Physical Features.—The Japanese isleads form part of the line of volcanic action commencing with the Aleutian ducks and pigeons are reared for food. Isles and terminating in the islands of Of the wild animals, deer are numerous in Southeastern Asia. The coasts of the larger islands are extremely irregular. while boar, wolves, badgers, forces mon-Isles and terminating in the islands of Of the wild animals, deer are numerous in Southeastern Asia. The coasts of the larger islands are extremely irregular, while boar, wolves, badgers, foxes, monbeing deeply indented with gulfs, bays and hares are not uncommon. Birds and inlets, which form magnificent harbors. The surface also is generally ungeese, teal, storks, pigeons, ravens, larks, even, and in many instances rises into mountains of great elevation. The island of the chief foods, the principal varieties of Hondo is traversed throughout its being salmon, cod, herring, sole and mulwhole length by a chain of mountains, let. There are also tortoises, lizards,

insect tribes there are white-ants, winged grasshoppers, and several beautiful varieties of moths.

People.—The Japanese may be regarded as belonging to the great Mon-golian family, though ethnologists recog-nize more than one element in the population. They are generally distinguished by broad skulls and high cheek-bones; small, black eyes, obliquely set; long, black



Japanese Work-people.

hair, and a yellow, or light-olive complexion; some are good looking, and many are well made, active and nimble. They are a frugal, skilful, persevering, courageous race, who combine these characteristics with much frankness, good humor and courtesy. A Japanese gentleman's dress is a loose garment made of silk, gathered in at the waist by a girdle, and extending from neck to ankle; while over this is thrown a wide-sleeved jacket. In the thrown a wide-sleeved jacket. In the country a short cotton gown is worn, while the lower classes generally wear claimed in February, 1889, providing for scant clothing. The hair is shaved off the establishment of a house of peers, the front part of the head, while on the back and sides it is gathered up into a nominated by the emperor or mikado (as knot and fastened with long pins. As the ruler is called), and of a house of regards both clothing and hair-dressing commons of 300 members, elected by all regards both clothing and hair-dressing men 25 years of age, and paying taxes to is a loose garment made of silk, gathered the women very much resemble the men. They also paint and powder themselves to excess. Polygamy is not practised, is also a cabinet, which includes the but a husband can have as many concubines as he can afford. The Japanese head respectively of the foreign office, the are a holiday-loving people, and delight in the theater. Their two principal religions are Buddhism and Shintoism. The chief observances of Shintoism are annotestral worship and sacrifice to departed heroes. Buddhism is the popular religions a cabinet, which includes the prime minister and the statesmen at the prime minister and the statesmen at the prime minister and the statesmen at the statesmen

scorpions and centipedes; and of the ion. A considerable number of Christian missionaries are now actively engaged in the country. The Japanese language is dual in its nature. Originally a polysyllabic Mongolian tongue, it has been greatly enriched by the addition of many Chinese words, the latter being much used by the literary and governmental classes. The literature of Japan is extensive, and includes all departments—historical, scientific, biographical, but is especially copious in poetry and romance. Contact with Europe has affected literary production; European and not native writ-

ings are now mostly read.

Industries and Trade.—In native and imitative manufactures the Japanese are exceedingly ingenious. Their artistic treatment of copper, iron, bronze, silver and gold is of the finest, while in stone carvings, mosaics, wicker, tortoise-shell, crystal, leather, and especially in wood lacquer-work, they are skilful in the high-est degree. Of textile fabrics they excel in cotton-goods, crapes, brocades, and especially in figured silk goods. Paper is largely made, and its uses-from a house to a handkerchief—are manifold. Japanese decorative art is remarkable for patient but facile treatment of bird, beast, and flower; the absence of perspective and chiaroscuro seems even to add to its effect. The modern art productions, however, have been debased by imitations of bad European work. The chief export is silk, tea coming next, while the imports are mostly textile fabrics, sugar machinery, etc. The standard money unit is the gold yen or dollar, divided into 100 sens. The coinage consists of gold, of 20 yens to 1/10 sen. There is also a paper currency. The principal weight is the picul, equal to 133 lbs. avoirdu-

men 25 years of age, and paying taxes to the amount of 25 dollars annually. There Polygamy is not practised, is also a cabinet, which includes the and can have as many concu- prime minister and the statesmen at the

Christ. A long line of emperors or mikalargely massacred. The Dutch East India Company established a trading settlement nounced in favor of Japan, all her rights in 1600, which for more than two cenin the Shantung province (see Shantung), turies formed Japan's sole channel of Corea, which had been annexed by Japan, intereourse with the external world. In attempted to regain independence in 1919, 1854 a United States fleet, under Commodore Perry, succeeded in inducing the Japanese to abandon their policy of isolation and since then their country has been rapidly modernized. A treaty was papier-maché, in imitation of the lacmade with the United States, and others quered work of Japan and China. The soon after with several European nations. article to be japanned, being made thorthee treaties made by the Shogun led oughly dry, is first brushed over with to a revolution in the island empire, two or three coats of seed-lac varnish to which ended in victory for the mikado and his restoration to his ancient supremvarnish is mixed with the ground tint acy, the Shogunate being abolished. A desired, and where a design is intended, complete change now took place. The it is now painted with colors. The whole Japanese rapidly became converted to is then covered with additional coats of western ideas, both political and social. In July, 1894, war was declared with China on the question of their respective claims to Corea. The Japaneses successes brought it to a triumphant end in April, descendants, according to Gen., x, 5, peolesses. By the treaty of Shimonoseki the decendants, according to Gen., x, 5, peolesses.

with about 18,000 miles of telegraph line, while the postal system throughout the Japan of Formosa and some smaller islempire is excellent. Education is comands, with the peninsula of Liao-Tung, pulsory, the school age being from the 6th to the 14th year. There is a university at Tokyo, with affiliated colleges. Conscription is the rule, and the army numbers 450,000 men in peace, with a war bers 450,000 men in peace, with a war stablishment of 1,500,000. The navy Russia, France and Germany, which numbers about 150 vessels. The wars countries, by threats of war, forced her with China and Russia, demonstrated Japanese strategy in war, and gave a great impetus to the navy, which now has increase in the indemnity. The subsequent action of Russia in extending the sattleships and of cruisers.

History.—The Japanese profess to have an accurate chronology from 660 B.C., led the Japanese government to insist on but little confidence can be placed in their annals previous to the tenth century after Christ. A long line of emperors or mikabrought on the Russo-Japanese war (which see). The success of Japan in Christ. A long line of emperors or mikathought of the sended the island empire hundred years all real power was in the to the level of the leading powers of the hands of the shogun or chief minister. world, a position which Japan is making Japan was first made known to Europe by Marco Polo, under the title of Zipangu. In 1542 it was visited by Mendez ance with Great Britain, and a remarkPinto, representing the Portuguese, and in 1549 the Jesuit missionary, St. Francis facture. Mutsuhito, the ruling mikado Xavier, arrived and converted many of from 1867 to 1912, was succeeded by his the natives to the Church of Rome. From the overbearing character of the Portuguese traders on the one hand and the European war in 1914, the Mikado 'adguese traders on the one hand and the vised' Germany to close the port of jealousy of the Japanese priests, fomented by sectarian troubles, an edict was issued This was not done and Japan declared excluding missionaries from the country, war on Germany, and, after a three and in 1640 the Portuguese were finally months' siege, captured Kiao-chau, Nov. expelled and the Christian converts 7, 1914. By the treaty of Versailles (see largely massacred. The Dutch East India Treaty), June 28, 1919, Germany reCompany established a trading settlement in ounced in favor of Japan, all her rights in 1600, which for more than two cen-

Japura (ha-po'rh), or CAQUETA (ka-by the Volga and other rivers. The soil ka'ta'), a large river of South is by no means fertile, and the grain America, an affluent of the Amazon. It produced falls short of the home conhast its sources in the mountains of surption. Colombia and its whole length is upwards Jarrah ((jar'a), a timber tree of of 1000 miles, the last 350 being in Brazilian territory. The navigation is lyptus marginata, (or rostra), yielding a Brazilian territory. The navigation is lyptus margināta, (or rostrā), yielding a interrupted by a great cataract, which very durable wood, useful for railway occurs in lat. 1° 10′ s.; lon. 72° 20′ w. sleepers, jetties, etc., not being liable to Jardine (jar'din), Sir William, a the attack of the white ant and the shipparatical zoölogist of high worm.

and varied attainments, was born in Edinburgh in 1890, and died in 1874.

Ile is best known as the editor of the celebrated Naturalists' Library. His from a village to a large town is due to chief works comprise a history of the the development of its shipbuilding and British Salmonidæ, the Ichnology of An-British Salmonida, the Ichnology of Annandale, etc.

plants, used in decoration of an apart-

greenish-white color, in small irregular grains, or crystallized in quadrangular the Bible (Josh., x, 13, and II Sam., i, rangular prisms.

the mineral jargon.

Jarl (yarl), a word of Scandinavian origin, the same as earl, and applied in the early history of the Northern European kingdoms to the lieutenants or modern Provençal poet of France, inhergovernors appointed by the kings over itor of the language as well as the spirit

(1906) 4493.

Jarool. See Bloodwood.

miles northeast of Moscow. It is the see genus Jasminum. They are elegant, of an archbishop, and has a theological branched, erect or climbing shrubs, with reminary and a college. Pop. 70,610.— imparipinate, trifoliate, or simple leaves. The government has an area of 13,000 and (usually cymose) white or yellow square miles and a pop. of 1.072,478. flowers, from some of which delicious per-The surface is generally flat and in sev-fumes are extracted. There are about eral places very marshy. It is watered 100 species, most of them Asiatic; some

iron-smelting industries. The town contains a mechanics' institute, an infirm-Jardinière (zhar-dēn-yār), an orna- ary, and the church of St. Paul's, where mental stand for growing the venerable Bede was buried, and where some of his relics are still preserved. It Jargon (jár'gun), Jar'goon, a min- of Durham. Pop. 33,732.

prisms surmounted with pyramids, or in 18), and about which various conjectures extahedrons consisting of double quad-have been made. Some authorities suppose that it was a series of annals; others that Jargonelle (jar-gu-nel'), a variety of it was a Hebrew minstrelsy celebrating early pear, of fine quality, so called from resembling in color ever its contents may have been, it seems from the specimens preserved to have been metrical in form.

Jasmin (zhas-man), JACQUES, or JAQUOU JAUSMIN, the chief Jarnac (zhar-nak), a town of France, and died in 1864. Himself of humble the river Charente, where a battle was all his poems and songs are written in fought March 13, 1569, between the Cath-the peasants' patois of the Garone. His olics under the Duke of Anjou, and the Huguenots under the Prince of Condé. a local celebrity, and was warmly welling the peasants forces were defeated Poncomed not only in Southern France but The Protestant forces were defeated. Pop. comed not only in Southern France, but throughout the whole of Europe. His principal works are Lou Chalibari ('The Charivari'), a mock-heroic poem; L'Abu-Jaroslau (ya'ro-slou), a town of Ga-alo de Castel Cuillé ('The Blind Girl of licia, Austria, on an affluent Castel Cuillé'), his masterpiece in poetry, of the Vistula, 62 miles w. N. w. of Lem-which has been translated by Longfellow; or tne vistula, UZ miles W. N. W. of Lemberg, with a castle and a handsome cathedral, manufactures of woolens and linens, etc. Pop. (1910) 23,965.

Jaroslav (ya'ro-slaf), a town of Russia, capital of the government of same name, on the Volga, 162 miles northeast of Moscow. It is the see genus Jasminum. They are elegant



Common White Jasmine.

Gelsemium nitidum. Also written Jes-

On his return to Iolcos with Medea as his wife, he avenged the murder of his parents and his brother by putting Pelias to death. Unable to retain possession of his throne, however, he fled to Corinth, where, after some time, he married Glauce lumba belongs. (or Creusa), daughter of the king, and put away Medea and her children. (See Medea.) Different accounts, of legendary s. s. w. Valencia, near the confluence of character, are given of his death. See the Guardamar and Albayda. Pop. Argonauts.

Jasper (jas'per), an impure opaque colored quartz, less hard than flint or even than common quartz, but which gives fire with steel. It is entirely opaque, or sometimes feebly translucent tat the edges, and presents almost every variety of color. It is found in metamorphic rocks, and often occurs in very elastic with alternate of America. The roots of J. Manihot yield manioc or cassava. J. elastica yields an elegant polish, and is used for vases, seals, snuffboxes, etc. There are several varieties, as red, brown, blackish, bluish. Egyptian. Agate jasper is jasper in layers with chalcedony.—Porcelain jasper is only baked clay. baked clay.

Jassy (yash'shi), a town of Roumania, manism, the Sikh tenets and Mohammedin Moldavia, on the Bachlui, several miles from the Pruth. It is built on two hills, and covers a large space, the houses being generally provided with garbonses being generally provided with garbonses of Liegnitz, on the Neisse, with manufactures of Liegnitz, on the Neisse, with

accur in south and a few in tropical pitals, fine hotels and shops. There are Africa, while one is a native of Southfew manufactures, but the trade is of some importance, and a great deal_of business is done at the fairs. Pop. 75,882.

Jastrow (yas'trov), Marcus (Morbecal), a Hebrew scholar, was born at Rogasen, Russian Poland, in 1829; died in 1903. He removed to the 1829; died in 1903. He removed to the United States and in 1866 became a rabbi in Philadelphia. He made many contributions to Jewish literature, including a Dictionary of the Targumim, the Talmud Babli and Yerushalmi, and the Midrashic Literature. Two of his sons became prominent:—Joseph, born in 1863, professor since 1888 in the University of Wisconsin, and author of The Subconscious and other works on psychology.—Morris, born in 1861, professor of Semittelanguages in the University of Pennsylvania, and a recognized authority on vania, and a recognized authority on Semitic religions, languages and litera tures.

The Carolina jasmine is 38 miles E. N. E. of Buda-Pest, on both itidum. Also written Jessides of the Zagyva. Pop. 26,791.

Tataka (já'ta-ka), a celebrated Pali work of about the third cendence in Thessaly, celebrated tury A.B. containing legonds relatives to

Jason (ja'sun), in Greek legend, a king Jataka work of about the third cenof Iolcos in Thessaly, celebrated tury A.D., containing legends relating to
for his share in the Argonautic expedition. the birth of Buddha, and much prized by the Buddhists.

Jatamansi (ja-tä-man'si), an East Indian name for spikenard. Jateorhiza (jā-ti-o-rī'za), the genus of plants to which ca-

12,600.

varies with locality, and embraces Brah-

dens. It has a university, a museum with manufactures of cigars, cloth, worsted. A public library, a theater, several hos-leather, etc. Pop. 13,024.

Jaundice indication of bile-coloring matter in the tracts the climate is as salubrious as that blood, shown by a greenish-yellow color of any other intertropical country; and of the skin. This is caused either by the more elevated regions are even disease of the liver, which prevents that healthy. The vegetation is varied. Rice organ from separating bile pigments from is the chief cereal, but coffee and sugar

31, 1914, at the outbreak of the European war, probably because of his anti-military views.

Java Archipelago, the chief of the Dutch colonial possessions; capital Batavia. It is separated by the Strait of Sunda from Sumatra, and by that of Bali from Bali, and extends about 630 canic mountain chains running from east to west, and rising to such points as Smeru (12,250 feet) and Slamat (11,-320 feet); low-lying marshy tracts in the north, with such safe and land-locked in the north, with such safe and land-locked in ancient warfare used by both horse that rocky unbroken coast washed by the heavy surf of the Indian Ocean,—these are its chief characteristics. The mountains, covered with large forests, Taxartes (jaks-år'tēz). See Sir-Daria.

(jan'dis), is not specifically are separated by exceedingly fertile val-a disease, but is rather the leys. With the exception of marshy organ from separating bile pigments from is the chief cereal, but coffee and sugar the blood, or is due to some obstruction are the staple products; spices are also in the bile ducts leading to the intestines. grown, and some cotton is raised. Other Jaunpur (joun-pōr'), a town and disproducts are cochineal, pepper, tobacco trict of the United Provand tea. The famed poison tree, or upas inces, British India, on the river Gumti, (Antiaris toxicaria), is a noted Javanese over which there is a fine bridge. It is an plant. The forests consist mainly of old town, and has some beautiful specimens of architecture. Pop. of town 30,473. malia inhabiting Java. These include the Jaunting-car (jánt'ing), a light car used in Ireland in tiger-cat, wild hog, several kinds of deer, which the passengers ride back to back on folding-down seats placed at right orang-outang, which occurs in the neighboring island of Borneo), and enormous their feet near the ground. There is generally a 'well' for receiving luggage, among the domestic animals. Birds are numerous. Serpents of a venomous kind Tonrabs (zhō-res'). Jean Leon, a are frequent, as also are crocodiles, liz-Jaurès (zhō-res'), Jean Leon, a are frequent, as also are crocodiles, liz-French Socialist and author, and the land tortoise. The native born at Castres, dep. Tarn, September 3, population belong to the Malay race, and 1859. At twenty-six he was returned to Parliament: lost his seat a few years long, thick, black hair. They are sober, later; taught philosophy at the Toulouse patient and industrious, but quick to University: and returned to the Chamber avence affront. In religion they are nom-University; and returned to the Chamber avenge affront. In religion they are nomin 1902, where his eloquent speeches made inally Mohammedan. The great mass are him a political force as the acknowledged devoted to agriculture, living in villages champion of socialism. In 1904 he founded the socialist paper, L'Humanité, and he of the land belongs to the Dutch governewas also the author of Les Preuves; ment, which obtains a large revenue from Affaire Dreyfus (1900), Action socialistic the island. Till lately it was the custom (1899), Etudes socialistes (1902), and, to utilize the forced labor of the natives with other collaborators, Histoire socialistic (1902). He was assassinated July The principal exports are coffee, sugar, 31, 1914, at the outbreak of the Eugeneen tea (the production of which is constantly tea (the production of which is constantly hably because of his anti-military increasing), tin, rice, cinchona, indigo, spices, tobacco, hides and india-rubber.

(jä'va), an island in the Indian Archipelago, the chief of the graphic communication is developing rapidly. A governor-general rules Java and It is separated by the Strait of history of Java is unknown previous to the clearnthy when the Hindus. Sunda from Sundary Bali, and extends about Dov Bali from Bali, and extends about Dov Bali from Bali, and extends about Dov Bali from East to West; greatest breadth, founded a dynasty miles from east to West; greatest breadth, founded a dynasty miles; area, 48,830 square miles, natives to Brahmanism. This was overlapped and the smaller adjacent island of thrown by an invasion of the Mohammedans in 1478. They were succeeded by the Portuguese, who arrived in 1511, and these were followed by the Dutch in them the surface of the s inces or residences, of which the pop. by the Portuguese, who arrived in 1911, in 1917 amounted to 34,157,383. Volume and these were followed by the Dutch in canic mountain chains running from east 1595, who wrested from them the supremacy.

the top of the head are erectile, and can be elevated at will, to form a kind of crest. These birds are readily domesticated, possess a harsh grating note, and are admirable mimics. They feed on fruits, seeds, worms, insects and the eggs and young of other birds, etc. The common or European jay (Garrülus glan-



Common Jay (Garrulus glandarius). darius) is the size of an ordinary pigeon,

the general color is a light brown inclining to red, while the larger or primary wing-feathers are of a brilliant blue, marked out by bands of black. The blue color reaches its highest brilliancy in the North American blue jay (Garrulus Cyanūrus cristātus), which otherwise closely imitates its European representative both in size and habits. The blue tive both in size and habits. jay is exceedingly well known in the United States. Another American jay is the Canada jay or 'whiskey jack' (Perisoreus canadensis), a bird of rather somber coloring, but of the bold, noisy and active habits of others of the jays. Jay, John, an American jurist and statesman, born in 1745; died in 1829. In 1766 he was admitted to the bar, and in 1774 was chosen a delegate to the first American Congress, which met at Philadelphia. He was a member of the second Congress, and in 1778 he was appointed minister plenipotentiary to Spain. In 1782 he was appointed one of the commissioners to negotiate a peace with Britain, and, along with Adams and Branklin concluded a treaty with the British. Returning to the United States he was appointed head of foreign affairs, and afterwards chief justice. In 1794 he was sent as envoy extraordinary to Great Britain, and concluded a treaty which has

Jay (jā), a genus and subfamily of of illegal captures by British vessels, birds belonging to the family of the E. boundary of Maine was fixed, etc. the crows (Corvidæ). The jays have the The treaty excited bitter opposition on upper mandible or bill notched or in-the part of the party that favored France, but was finally accepted. While absent of illegal captures by British vessels, the E. boundary of Maine was fixed, etc. The treaty excited bitter opposition on the part of the party that favored k'rance, but was finally accepted. While absent in England he was elected Governor of New York, and after filling two terms was nominated and confirmed in his former office of Chief Justice of the Supreme Court. This honor he declined and spent the remainder of his life in privacy. spent the remainder of his life in privacy. Jazyges (ja-zi'gez), a Sarmatian tribe, composed of bold, savage horsemen, dwelling in wagons and tents, its home being to the north of the Sea of Azov. In the first Christian century they moved westward to Hungary, whence they kept up a fierce warfare with the surrounding peoples. Their power was finally broken by the Huns and Goths. Hungary has a district named Jazygia, but its Magyar inhabitants have no connection with the ancient Jazyges.

Icannette (jen-net'), a borough of Jeannette Westmoreland Co., Pennsylvania, 26 miles E. of Pittsburgh. It has immense glass plants and rubber tire works. Also has foundry, planing mill, etc. Pop. (1910) 8077; (1920) 10,627.

Jeannette Expedition. See North Polar Expeditions. Jebb (jeb), RICHARD CLAVERHOUSE, Greek scholar, was born at Dundee, Scotland, in 1841. Educated at St. Columba's College, Dublin, the Charterhouse, London and Cambridge Univerhouse, London and Cambridge University, he was graduated as senior classic at Trinity College in 1862. In 1869 he became public orator of that university, and in 1875 he was called to fill the Greek chair in Glasgow University, which he resigned in 1889, on being appointed Greek professor at Cambridge. His best-known works are The Attic Orators: Modern Greece: Life of Richard Bentley; Homer; Introduction to the Itied and Odyssey; and his admirable edition of Sophocles. He died in 1905. See Tokio. Jeddo.

Jefferson (jef-er-sun), Joseph, actor, born in Philadelphia, Pennsylvania, in 1829. After the usual career of a strolling actor, in 1858 he came for a strolling actor, in 1858 he came for the came for the strong actor, in 1858 he came for the strong actor. ward prominently as Asa Trenchard in 'Our American Cousin,' which ran for more than 150 nights. His great part, however, was that of 'Rip Van Winkle,' in which his aucocan was had on the came of the country of the country of the came in which his success was phenomenal, and which he continued to play almost interruptedly for many years to admiring audiences. He died April 23, 1905. been called after his name, and \$1,000,- Jefferson, Thomas, the third President of the United States,

was born April 13, 1743, at Shadwell, Albemarle county. Virginia. He studied for two years at the college of William and Mary, Williamsburg, and then commenced the study of law. In 1769 he was elected a member of the provincial legislature, and in 1775 he took his seat for the first time in Congress. It was he that drew up the draft of the Declaration of Independence, which (in a slightly modified form) was signed on July 4, 1776. In 1779-81 he was governor of Virginia. In May, 1784, Congress elected him minister gow and Queen's College, Oxford, and May, 1784, Congress elected him minister plenipotentiary to France, in addition to Adams and Franklin; next year he was appointed sole minister, and his residence in Europe lasted about five years. On his return he was appointed Secretary of State by Washington, an office which he continued to fill until the end of 1793, when he resigned in consequence of dissensions with Hamilton. In 1796 he was elected Vice-President of the United States; but he was seldom consulted by the President, and he was out of harmony in political views with the government. In 1800 he was elected President, defeating John Adams, the former President. The most important former President. public act of his administration was the purchase of Louisiana from France, an act which enormously extended the area of the United States. In 1809 he retired to private life at his residence of Monticello, in Virginia; but in 1819 he took the foremost part in the founding of the University of Virginia, at Charlottesville, Va. He was rector of this institution until his death, which occurred at Monticello, July 4, 1826. Jefferson was the acknowledged head of the Republican party, as then called (the present Democratic party), from the period of its organization. He published Notes on Virginia, with many and various essays on political and philosophical subjects and philosophical subjects. and philosophical subjects, and a Manual of Parliamentary Practice, for the use of the Senate of the United States.

negie Library, Lincoln Institute, a normal school (colored), and other public institutions. It contains the new state capitol, costing \$3,500,000. There are various abolish the use of idols. Jehoshaphat demotes "Jehovah" judgment."

Jeffersonville, a city of Indiana, of the sacred name of God among the county, on the Ohio River, opposite Old Testament by the four consonants Louisville, Kentucky, 108 miles s. of In- J (or Y). H, V, H. The Hebrews cher-

burgh high school, the University of Glasgow and Queen's College, Oxford, and passed advocate in 1794. He took part in establishing the Edinburgh Review in 1802 (with Sydney Smith Lord 1802 (with Sydney Smith, Lord Brougham and others), and after two numbers had been issued was installed as its editor, a position he held for twenty-six years. In 1831 he was made lord-advocate, and he sat for several years as member of parliament for Edinburgh. He was made a lord of Session in 1834, and continued during a period of sixteen years to be one of the ablest and most popular judges of the supreme court in Scotland.

Jeffrey of Monmouth. See Geof-

Jeffreys (jef'rēz), George, Baron, infamous English judge, commonly known as Judge Jeffreys, was born in 1648, and died in the Tower in 1689. Soon after commencing his professional career he was chosen recorder of London; and he was appointed successively, a Welsh judge and chief justice of Chester, created a baronet in 1680, and later appointed chief justice of the King's Bench. He was one of the advisers and promoters of the arbitrary measures of James II, and for his sanguinary and inhuman proceedings against the adherents of Monmouth on the 'bloody western circuit,' was rewarded with the post of lord high-chancellor (1685). On the arrival of the Prince of of Parliamentary Practice, for the use of the Senate of the United States.

Jefferson City, capital of the state and of Cole county, on the Missouri River, 125 miles w. of St. Louis, on the Missouri Pacific Railroad. It has a Carnegie Library, Lincoln Institute, a normal school (colored), and other public institutes of Judah. 915-890 B.C. He was note-

ished the most profound awe for this mal jelly is less nourishing than ordinary name, and this sentiment led them to animal food.

avoid pronouncing it, and to substitute the word Adonai, which signifies the lord, which custom still prevails among the Jews. In some portions of the Pentasea, and often familiarly called Sea-blubteuch Jehovah is the name regularly applied to God, in others Elohim: this has ance and Sea-nettles, from their appearabled to God, in others Elohim: this has ance and stinging property. When in led to a theory of there heing two authors fed to a theory of there being two authors respectively for these portions. Elohim.

Jehu (je'hö), the founder of the fifth dynasty of the kingdom of Israel. He was a commander in the army of Jehoram, when Elisha sent one of the 'children of the prophets' to consecrate him king of Israel at Ramoth-Gilead (B.C. 895). He immediately attacked Jehoram, whom he slew in battle, and then entered upon a work of extermination in which were slain seventy of Ahab's children and forty-two brothers of Ahaziah, king of Judah. He died after a reign of twenty-eight years. His name occurs more than once on the monuments discovered at Nineveh. Jeissk. See Ieisk.

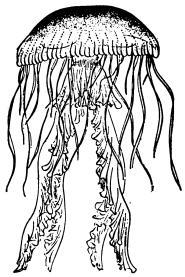
Jejunum (je-jö'num; Lat. jejunus, empty), the second portion of the small intestine, succeeding the duodenum, and so named from its generally being found empty after death. See Intestine.

Jeletz. See Ieletz.

SIR JOHN RUSHWORTH, Jellicoe, British admiral, born December 5, 1859. He entered the navy when thirteen; served in the Egyptian war in 1882; served in China, 1898-1901, tiful appearance, one of the most common and was in command of the naval brigade during the attempted relief of the l'eking swins gracefully through the water by Legations. He served as rear-admiral in alternately expanding and contracting its the Atlantic Fleet, 1907-08, and from 1914 body. They are very voracious, and move to 1916 was in command of the Grand Fleet during the European war.

from the soft parts of animals, and even Jelum. See Jhelum. from bones when sufficiently crushed. It from bones when sufficiently crushed. It is a colorless, elastic, transparent substance without taste or smell, and it soluble in warm water. Analysis shows that its constituents are carbon, place of the first great battle in the hydrogen, nitrogen, with a possibility of sulphur. Vegetable jelly is prepared from the juice of unripe fruit heated in a solution of water to 40° C. This extract when boiled with sugar forms a nleasant and wholesome substance. Doc-

bers and Sea-nettles, from their appearance and stinging property. When in the water they present a singularly beau-



resembling a clear crystalline bell, which stances as are liquid when warm, of the sea is to some extent explained but which coagulate into a gelatinous by the pale light which they diffuse in mass when cold. Animal jelly is prepared the darkness. See Medusidæ.

pleasant and wholesome substance. Doc- 12 miles east of Weimar, on the Saale, tors now incline to the opinion that ani- a place of little importance except for

an anatomical theater, botanical garden, made a government reservation in 1806. zoölogical museum and other scientific in grandeur, magnitude and variety of collections, observatory, library of 200, cave scenery they approach the Mammoth 000 volumes, and about 600 students. On Cave of Kentucky.

October 14, 1806, the Prussians (70, 19phtha), one of the He1900 men) under Prince Hohenlohe were defeated here by the French under Na1900 poleon (90,000 men). Pop. 26,355.

The Ammonites, but having rashly made a vow that if he was victorious he would exprise to God as a huntreffering whatdefeated here by the French under Na-poleon (90,000 men). Pop. 26,355. Jenikale. See Yenikale.

Jenisei, a river of Siberia. See Yenisei.

Jenner (jen'er), EDWARD, an English physician, celebrated for having introduced the practice of vaccination as a preventive of the smallpox. He was born at Berkeley in Gloucestershire in 1749; studied at London under the celebrated anatomist John Hunter, and afterwards settled in Gloucestershire as a medical practitioner. About 1776 the be-lief common among the peasants that casual cowpox acquired in milking cows was a preventive of smallpox caused him to direct his inquiries to the subject, and led to the introduction of the process of vaccination in 1796. His method at first met with great opposition from the medical profession, but was ultimately universally accepted both by his own and for-eign nations. Parliamentary grants to the extent of over £30,000 were made to him, and congratulatory addresses were sent to him by continental monarchs. He died at Berkeley in 1823. He published an Inquiry into the Causes and Effects of Cowpox (1798), Further Observations on Variolæ Vaccinæ or Cowpox (1799), and a celebrated paper on the cuckoo in the Philosophical Transactions. See Vaccination.

Jenner (jen'er), SIR WILLIAM, born at Chatham in 1815, was educated at University College, London, where he was graduated M.D. in 1844. He became in 1848 professor of pathological anatomy, and in 1857 of clinical medicine in the University College; in 1861 physician to the queen; in 1862 professor of the principles and practice of medicine in University College; in 1868 he was made a baronet, and in 1881 was elected president of the College of Physicians. Dr. dent of the College of Physicians. J. Jenner wrote a number of papers on specific diseases, and was the first to establish the difference in kind between typhois and typhoid fevers. Died in typhus and typhoid fevers.

its university, which was opened in 1558. New South Wales, 100 miles w. of It has in all 94 professors and lecturers, Sydney. Discovered in 1841, they were an anatomical theater, botanical garden, made a government reservation in 1866.

sacrifice to God as a burnt-offering whatever should first come to meet him from his house, he was met on his return by his daughter, his only child, whom he sacrificed, in consequence, to the Lord (Judges, xi, 29, 40). Some commentators have maintained that this meant devoting her to perpetual virginity in the tabernacle. Jephthah ruled six years as a judge and general (Judges, xi, xii). The sacrifice of Jephthah's daughter is the subject of Handel's last oratorio, and of a Latin drama by George Buchanan. Jerboa (jer-bo'a; Dipus), a genus of small animals belonging to the order Rodentia or Gnawers, having extremely long hind limbs, which gives them an extraordinary power of leaping, so

that their movement seems more like flying than running. The running. forelimbs are armed with short, powerful claws, with which they excavate their burrows and extract the roots on which they



Egyptian Jerboa (Dipus

they are gregarious and nocturnal in their habits, and hibernate during the colder seasons. The jerboas are found chiefly in Asia and Northern Africa. The typical species is the Egyptian form (Dipus Ægyptius).

Jereed (je-red'), a wooden javelin about 5 feet long, used in Perabout 5 feet long, used in Persia and Turkey, especially in mock fights.

Jeremiah (jer-e-mi'a), the second of the great prophets of the Old Testament, flourished during the darkest period of the Kingdom of Judah, under Josiah, Jehoahaz, Jehoiakim, Jeropiah and Zedekinh. He was called termine the darkest period to the second production of the second production of the second production of the second production. coniah and Zedekiah. He was called to the prophetic office about 629 B.C., in the reign of Josiah, and lived to see the capture of Jerusalem by Nebuchadnezzar in Jennings, Sarall. See Marlborough, 586 B.C., who offered him a home at Babylon, but he preferred to stay among the wretched remnant of the people left in Judah. He is said to have been stoned stone strata of the blue Mountains of to death in Egypt by some of his country-

men, who were irritated by his rebukes. He wrote two Old Testament books, the Prophecies of Jeremiah and the Lamentations. The text of the prophecies is in a somewhat confused state, there being no chronological order. Jeremiah wants the dignity and splendor of Isaiah, but exhibits great tenderness and elegiac beauty of sentiment. Some critics also attribute to him the book of Deuteronomy and several of the Psalms. See also Jews.

Jerez, or Xerez (he-reth'), de la Frontera, a town of S. w. Spain, in Andalusia, province of Cadiz, 16 miles N. N. E. of Cadiz. It is a well-built and flourishing town, with some handsome edifices, chiefly churches and the Alcazar, an old Moorish castle in ruins. It is noted for its wine, well known under the name of sherry, which is exported in large quantities. Pop. 63,473.

Jerez de los Caballeros (or Xerez; ros). a town of Spain, province Badajoz, hibits great tenderness and elegiac beauty

ros), a town of Spain, province Badajoz, partly surrounded by a wall, which dates from the time of the Moors. Pop. 10,271. Jer-falcon. See Falcon.

Jericho (jer'i-kō), a considerable town of ancient Judea, on a plain about 18 miles N. E. of Jerusalem, noted, especially in Solomon's time, for its balsam gardens and its thickets of palm-trees and roses, and carrying on a flour-ishing trade in balsam and spices. It one of the most learned fathers of the

Chile and other parts of South America,

Jerkin-head, in architecture, the end formed into a shape intermediate between

Judah and Benjamin. He made Shechem his capital, forbade his subjects to resort to the temple at Jerusalem, and set up golden calves at the shrines of Dan and Bethel. He died in the 22d year of his

reign. - JEROBOAM II, the most prosperous of the kings of Israel, reigned 823-782 B.C. He repelled the Syrians, took their cities of Damascus and Hamath, and reconquered Ammon and Moab. But licentiousness and idolatry were, prevalent during his reign. The authorities for the history of his time are II Kings, I Chron., Amos, and Новеа.



Jerkin-head Roof, Boscombe, Hants.

Jerome (jer'om), JEROME K., author, born at Walsall, England, in 1861. His humorous writings include Three Men in a Boat, Idle Thoughts of an Idle Fellow, Second Thoughts of an Idle Fellow, etc. As a dramatist he achieved remarkable success with The Passing of the Third Floor Back.

ishing trade in balsam and spices. It one of the most learned fathers of the was the key of Palestine, and was therefore invested and taken by the Israelites, tween 331 and 345 in Dalmatia, of who had passed the Jordan under Joshua to conquer this country. Its site at the present is occupied by the village of Riha. Present is occupied by the village of Riha. Taken by British Feb. 22, 1918.

Jericho, Rose of (Anastatica hierothurica). See Rose of his solitude to be ordained presbyter at Jericho.

Jericho.

Jerked Beef, from the Chilian word strips of about an inch thick, and dried in the sun to preserve it. It is used in Chile and other nexts of South America. Chile and other parts of South America, among the rich and noble ladies, two and has been tried in Australia. When of whom, St. Marcella and St. Paula, well prepared it will keep for a great became celebrated for their piety. St. Paula accompanied him in 386 to Bethlehem, where she founded four convents. in one of which Jerome remained till formed into a shape intermediate between his death about 420. His Latin version a gable and a hip, the gable rising about of the Old Testament from the original halfway to the ridge, so as to have a language was the foundation of the Vultruncated shape, and the roof being gate. He took an active part in many hipped or inclined backwards from this controversies, notably those regarding the level.

(jer-o-bo'am), the name of Jerome of Prague, a Bohemian distwo kings of Israel. born Jeroboam (jer-o-bō'am), the name of two kings of Israel.—

JEROBOAM I, the son of Nebat, on Soloabout 1360-70, in faith and sufferings mon's death (973 B.C.) was made king the companion of the famous John Huss. of the ten tribes who separated from Together they made a vigorous crusade against the dissoluteness of the clergy, ture, known as the 'States.' Appeals the worship of relies, etc. When Huss lie to the king in council. The island was imprisoned in Constance, Jerome is attached to the diocese of Winchester. hastened to his defence, but was seized Principal town, St. Helier. Pop. 52,796, and carried thither in chains (1415). See Channel Islands. After much suffering he consented to recant his heresics, but on being subjected

thrown into the Rhine.

Jerrold (jer'old), Douglas, an English humorist and play-writer, born in 1803, the son of the manager of the Sheerness Theater. After being for a the Sheerness Theater. After being for a short time a midshipman, he was bound apprentice to a printer in London. His first play, More Frightened than Hurt atlantic steamers have their docks here. (1818), was not at first successful, but his Black-eyed Susan (1822) ran for 300 successive nights at the Surrey The-300 successive nights at the Surrey The-300 successive nights at the Surrey The-400 subsequent dramas were the Rent-day, Nell Gwynne, The House-keeper, The Prisoner of War, Bubbles of a Day, Time Works Wonders, St. Cupid, a Day, Time Works, Car Shops, and perfumery, tobacco, graphite products, socapital perfumery, tobacco, graphite products, locomotives, etc. Several lines of translocomotives, etc. Several lines of master of satire and repartee, his sayings had no personal malevolence. He died in

Jersey (jer-zi), the largest and most valuable of the Channel Islands the famous Jersey or Alderney breed are Zion). The second wall took in a colfred and exported in great numbers, siderable area on the east and northead siderable area on the east and northead while a new town or suburb. Bezetha, while a new town or suburb. Bezetha, while a new town or suburb Bezetha, while a new town or suburb Bezetha, while a new town or suburb Bezetha, while a new town or suburb. Bezetha, while a new town or suburb Bezetha, and the upper classes and the enclosed by a third wall, built by Agrippa the upper classes and the upper classes and the present limits are much the same law courts.

Jersey City, a city, capital of Hud-son county, New Jerto a new examination solemnly retracted sey, opposite New York, from which it his recantation, and made a vigorous is divided by the Hudson (North) River vindication of the principles of Huss and with which it is connected by ferries Wickliffe. On May 30, 1416, he was burned at the stake, and his ashes were thrown into the Rhine.

Jerrold (jer'old), Douglas, an Engmanufacturing cities of the United States, and has a large export trade. The principal manufactures are sugar, soaps and

and conducting successively the Illumi-most ancient and interesting cities in the and conducting successively the lauminost ancient and interesting cities in the nated Magazine and Douglas Jerrold's world, in Palestine, in the maritime secsibiling Magazine, and subsequently tion of Syria. It stands on an elevated editing Lloyd's Weekly Newspaper. To site (about 2500 feet above the sea) Punch he contributed his inimitable Mrs. within the fork of two ravines, the Valley Caudle's Curtain Lectures, Punch's Let- of Jehoshaphat on the east, and the Val-Caudle's Curtain Lectures, Funcus Peters to his Son, etc. Though a vigorous ley of Hinnom on the south and west, master of satire and repartee, his sayings while a third ravine or valley—the Ty-bad no personal malevolence. He died in rop@on—partially traverses it from the cost side of this south to north. On the east side of this valley is Mount Moriah, now the Mohammedan quarter of the city, where anciently stood the palace and temple of Solomon. Immediately south of this stood of England, about 15 miles off the northwest coast of France; greatest length, seast and west, about 12 miles; greatest the mountain fortress of Zion, known as the City of David, and later as the Akra, or Lower City. This part of the city is accept indented all round, and has a number of good bays and harbors, the chief of which are St. Aubin and St. Helier. The island is fertile, abundantly the wooded and well cultivated. The climate is peculiarly mild and agreeable. Wheat is peculiarly mild and agreeable, where the principal cereal raised, and large quantities of grapes, peaches, melons, uantities of grapes, peaches, melons, walls which Jerusalem eventually pospears and other fruits are exported, as sessed, the first wall, that of David, walso vegetables, and especially early potates for the London market. Cows of traditional, but probably not the anciert the famous Jersey or Alderney breed are kiderally areas on the east and northess traditional to the second wall took in a continuous description.

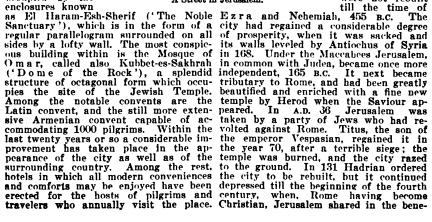
that the old Lower City and the south- of whom about two-thirds are Jews. Of ern part of the old Upper City are the remainder about two-thirds are Chrisunpopulated places outside the modern tians and one-third Mohammedans. The walls. Of the seven gates only five are first railway to Jerusalem was opened in now used. The interior of the city is 1893. much occupied by mosques, churches and Jerusalem is not mentioned by name convents. The houses are substantially till about B.C. 1500, when it was in the built of stone, and present in most cases hands of the Jebusites. The lower part

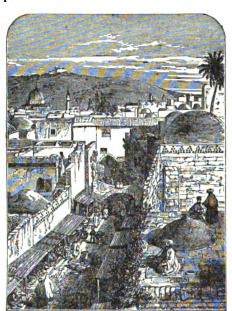
no windows to streets, which ac-cordingly—generally narrow, ill-paved and sloping to the center are merely long lanes with dead walls on each side of them. In the northwest quarter is the Church of the Holy Sepulcher, so called because alleged to contain under its roof the very grave in which the Sav-iour lay. This church, which was built by Helena, the mother of Constantine the Great, is remarkable for the richness of its decorations and the number of pilgrims by whom it is visited. large area in the cast of the city is occupied by the enclosures known

as El Haram-Esh-Sherif ('The Noble Ezra and Nehemiah, 455 B.C.

as those indicated by the third wall, only The population is given as about 60,000

was wrested from them by Joshua, but the upper part continued in their possession till the time of David, who took up his residence in the stronghold of Zion, and made Jerusalem the capital of his kingdom. Ιt reached the height of its glory under Solomon, after whose time it declined. 586 Nebuchadnezzar took and destroyed the city after a long siege, and carried off those of the inhabitants whom the sword had spared as captives to Babylon. On the return from the captivity the temple was rebuilt, B.C. 515. The walls were not rebuilt





A Street in Jerusalem.



@ Underwood and Underwood, N. Y.

British Official Photograph

On December 9, 1917, the Holy City was surrendered to the British forces. Carrying out the customs of the Crusaders, the Commander-in-chief, General Allenby, is making his triumphal entry through the Jaffa Gate on foot and accompanied by his staff and the commanders of the French and Italian forces who cooperated in the drive through Palestine, the heads of the political missions and the military attaches of France, Italy and the United States.

antine the Great. This period of pros-erity, prolonged by a succession of hristian emperors, was suddenly ter-tinated in 636, by the conquest of the Iohammedans, under the Arabian Caliph mar. In 1099 the Crusaders took Jerualem by storm, and made it the capital f a Christian monarchy, which with ifficulty maintained its existence till 187, when it was overthrown by Saladin. In 1817 Jerusalem fell into the hands of the Trusk bet in 1917 depring the Europe

of the genus Solanum (potato genus) ultivated as ornamental plants.

Jervis, Sir John. See Vincent, Earl of St. Jesi (yā'sē), a town in Italy.

Jessamine. See Jasmine.

Jesso, an island of Japan. See Yesso.

Jessulmeer, or JEYSULMEER. Jaisalmer.

Jester (jes'ter), Fool, a buffoon or person maintained by the noble and wealthy to make sport by jests and merry conceits for them and their friends. The profriends. The pro-fessional jesters usually wore a motley or parti-colored dress, and a cap or cowl of gay colors furnished with bells and asses' ears, or crowned with a cock's comb. In Britain the last jester regularly attached to the royal household seems to have been Archie Armstrong, the jes-



Jester .--Antiquarian Club.

t, and assumed the appearance of a Jesuits (jes'ū-itz), or Society of jestinguished Christian city, under the stering care of Helena, mother of Conal III the Roman Catholic religious orders, founded in the sixteenth century by Ignatius Loyola, and established by a papal bull in 1540, the founder being the first general of the order. The members, in addition to the usual vows of poverty, cnastity and implicit obedience to their superiors, were bound by a fourth, viz., to go whithersoever the pope should send to go whithersoever the pope should send them, as missionaries for the conversion of infidels and heretics, or for the service of the church in any other way. The hear war, it was taken by the British army and once more became a Christian city.

Jerusalem Cherry, a name given to two shrubs of the genus Solānum (potato genus) of the genus Solānum (potato genus) and the service of the church in any other way. The popes Paul III and Julius III, seeing what a support they might have in the Jesuits against the Reformation, granted to them privileges such as no body of men in the church or state had ever before obtained. They were permitted to enjoy all the rights of the mendicant and secular orders; to be exempt from all secular orders; to be exempt from all episcopal and civil jurisdiction and taxes, so that they acknowledged no authority but that of the pope and the superiors of their order; to exercise every priestly function, parochial rights notwithstanding, among all classes of men, even during an interdict; and they could absolve from all sins and ecclesiastical penalties, dispense themselves from the observance of fasts and probation of meats, and even from the use of the breviary. Their general was invested with unlimited power over the members, the dispersion of whom throughout society, with the most entire union and subordination, was made the basis of the order. The constitution of the body was drawn up in great part by Loyola himself, but the second general, Laynez, had much to do in directing its early movements.

The order soon approved itself to the

pope by its zealous activity, and its success as the most effectual barrier against the growing power of Protestantism. The Jesuits carefully avoided all appearance of spiritual pride, often wore the ordinary garb of the country, and generally dealt with all matters in a spirit of worldly policy and accommoda-tion to circumstances. Their grand object was the establishment of the papal power. not only against Protestantism, but against all the claims of kings and na-tional churches. In 1541 their foreign missions were begun by Francis Xavier in the Portuguese East Indies, and were ter of James 1 and Chib.

The Charles I.

Jesuit Porcelain, a name given to Jesuit Porcelain, Japanese porcelain of the sixteenth century, which the Jesuits had caused to be decorated with Jesuits had caused to be decorated with Madonnas, images of the saints, and Christian emblems. It is now rare.

In the Portuguese East Indies, and were attended with great success. Other Jesuits went to South America, and labored successfully in Brazil and Paraguay. In Europe they became the teachers of the higher classes, and introduced on a grand scale improvements in the current system of instruction. The young

nobility were almost exclusively sent to them, and even from Protestant countries. It was in Catholic countries, however, that their strength lay; in England and the Protestant states of the north they were not so successful, their repeated attempts to establish themselves there

proving fruitless.

Yet notwithstanding the great favor which they enjoyed at courts and among the people, the non-Jesuit clergy, the older orders of monks, the universities, and the learned men of the age soon began to dread the powerful influence which the society was rapidly acquiring, while their pro-papal spirit made them the objects of suspicion and jealousy to statesmen, on account of their opposition to Gallican principles. For this reason the parliament and higher clergy of France for twenty years resolutely resisted the at-tempts of the Jesuits to gain a footing tempts of the Jesuits to gain a footing in that country. It was owing chiefly their confiscated estates, except in Portuto the favor of the Guises that they at last, in 1562, were legally recognized in their confiscated estates, except in Portutals, in 1562, were legally recognized in their confiscated estates, except in Portutals, in 1562, were legally recognized in their confiscated estates, except in Portutals, in which country they were prohibilities from residing, as also in Spain; France under the name of Fathers of the Church, in Upper Italy and in Germany, Hungary. Poland and even in France they were privileges. They appeared in Germany suffered to remain as private persons, about 1549, and soon secured chairs in An attempt in 1787 to revive the society under the name of Vincentines was uncolonge, Munich, Treves, Augsburg, and other places. They showed remarkable political talent in the thirty years' which reëstablished it in almost the same war, in which the league of the Catholics form from which it had fallen. In 1815 could do nothing without them. But a college was given them at Modena, and lands the Jansenist controversy injured their position, and the character of the Jesuits received a fatal wound from the pen of Pascal, whose famous Provincial Letters, written with admirable wit and argument, unduly exaggerated the dangerous element of their doctrines and practices, and the accommodating morality which allowed interest and external circumstances to determine the rule of conduct, which, according to his false as-sertion, counseled evasiveness and mental

French merchants led to an inquiry, all the opposition to them the Jesuits which involved them financially. Louis have now in the world more than 200

XV tried to save the society by demanding a reform of its constitution, a demand Ing a reform of its constitution, a demand refused by the general of the order, Lorenzo Ricci, in the famous terms, Sint ut sunt, aut non sint ('Let them be as they are, or cease to be'). The result was a decree issued in 1764 for the abolition of the order in all the French possessions. Three years later they were expelled from Spain and soon after from Naples, Parma and Malta; and finally in 1773 Pope Clement XIV was induced to publish his famous bull Dominium ac Res to publish his famous bull Dominus ac Redemptor Noster, by which the Society of Jesus was temporarily suppressed in most countries. They were then obliged to quit their houses, lay aside the garb of the order, renounce all intercourse with one another, and either enter some of the other orders or put themselves under the superintendence of the bishops. They received annuities from the revenues of war, in which the league of the Catholics form from which it had all the could do nothing without them. But a college was given them at Modena, and while they were thus successful in this they did not defay to accept the invitapart of Europe, in France and the Nethertions of the kings of Sardinia, Naples lands the Jansenist controversy injured and Spain. Subsequently they found entrance into all European countries. In Italy, since the establishment of the new ntally, since the establishment of the new kingdom, in 1861, the Jesuits have had no legal existence, but continue, never-theless, an influential and well-known body. In Britain they have been per-mitted to open several educational insti-tutions. In Ireland also they have a cumstances to determine the rule of conduct, which, according to his false assertion, counseled evasiveness and mental reservation.

Towards the middle of the eighteenth century a general hostile movement against the Jesuits, alleging incompatibility of their privileges with the rights fluence in shaping the recent policy of of others, prompted a powerful movement against them in various countries. In 1759 the efforts of the minister Pombal their expulsion from Portugal, and the confiscation of their provided their expulsion from Portugal, and the confiscation of their tion of 1910. In 1880 they were expossessions in that country. In France the commercial complications of a Jesuit ments in France, and a considerable trading-house at Martinique with some number of them went to Britain. Pespite French merchants led to an inquiry, all the opposition to them the Jesuits number of important institutions, and,

species of Cinchona, so called because it was first introduced into Europe by the Jesuits. See Cinchona.

by Matthew, chap, i; the other by Luke, chap. iv. Our information concerning him is derived almost entirely from the accounts of his life written by the four evangelists, Matthew, Mark, Luke and John, and incidental notices in other parts of the New Testament. Before the birth of the Holy Child, Joseph and Mary, then residing in Nazareth, went to Bethlehem to be tayed, and it was there Bethlehem to be taxed, and it was there, in a manger, the inn being full, that Jesus was born. On the night of his birth an angel announced the coming of a Saviour to shepherds tending their flocks by night in the field. On the eighth day he was circumcised according to the law of Moses. Soon after his birth he was hailed by the adoration of the Magi or wise men of the East, who were miracularly directed to the house where the lously directed to the house where the young child was, and presented royal gifts. Herod, alarmed at hearing of the birth of one who was to be King of the Jews determined to destroy all the male children of Bethlehem and its vicinity of the age of less than two years, for the purpose of effecting the death of Jesus. But Joseph, being miraculously warned of the danger, fled to Egypt with the Virgin and her child, and on his return, after the death of Herod, went to reside at Nazareth in Galilee, whence Jesus was often called a Nazarene. We have no further accounts of Jesus till his twelfth year, when his parents took him with them to Jerusalem. Here after be-ing lost for three days he was found in

colleges and 50,000 students, while their the temple sitting among the doctors, priests number nearly 7000.

Jesuits' Bark, or Peruvian Bark, Regarding the following eighteen years the bark of a certain of his life the evangelists are silent. He species of Cinchona, so called because it is supposed during this period to have followed his father's occupation, that of Jesuits. See Cinchona.

Jesuits' Nut, a name sometimes given baptized in the Jordan by John, who recognized him as the Messiah. He then retired to the wilderness, where he passed forty days in fasting, meditation and prayer previous to being tempted of the prayer previous to being tempted of the described by the evangelists. He carpenter. At the age of about thirty he called Ecclesiasticus (which see).

Jesus Christ (Iesous, the Greek form of Joshua or Jeshua, then began to select his disciples, to teach then began to select his disciples, to teach publicly, and perform miracles. Among contracted from Jehoshua, meaning, help of Jehovah, or Saviour; Christos, the Greek translation of the Hebrew Messiah, anointed), the founder of the Christos as narrated by the evangelists, are, the siah, anointed), the founder of the Christos, the changing of the water into wine at the marriage in Cana of Galilee (his first according to the received chronology in miracle); the driving of the traders out of the temple during the feast of the passfer according to the received chronology in the type of the temple during the feast of the passfer according to the received chronology in the type of the temple during the feast of the passfer according to the received chronology in the type of the temple during the feast of the passfer according to the received chronology in the temple during the feast of the passfer according to the received chronology in the temple during the feast of the passfer according to the received chronology in the received chronolo four years earlier, that is, in 4 B.C. He over; the curing by a word of a noblewas born of the Virgin Mary, of the tribe man's son lying ill at Capernaum; his of Judah, who was betrothed to Joseph, scornful reception as a preacher in the by occupation a carpenter. Two genecity of Nazareth on account of his humble alogies of Joseph, differing very much parentage; the calling of the twelve after the time of David, are given, one apostles; the sermon on the mount; the Natthew chen is the other by Luke healing of the centurion's servant and the restoration of the widow's son at Nain to life; the healing of the man at the pool of Bethesda; the miraculous feeding of 5000 persons with five loaves and two fishes; the calming of the tempest on the lake of Gennesaret; his healing the Syrophenician woman's daughter of an unclean spirit; the transfiguration on the mountain; the raising of Lazarus at Bethany; the cure of blind Bartimeus at Jericho; the entry with triumph into Jerusalem; the fourth feast of the passover with his disciples, known as the Last Support; the agony in the garden of Supper; the agony in the garden of Gethsemane; the betrayal and the condemnation before the sanhedrim; the trial before Pilate, and the crucifixion on Golgotha or Mount Calvary. The body of Jesus was taken down from the cross by Joseph of Arimathea, and placed in a tomb about which the Jewish priests set a guard. But on the third day, i. c. on the day thence called the Lord's day and made the first day of the week, he rose from the dead, appeared to his disciples and others, and on the fortieth day after and others, and on the fortieth day after his resurrection, while with his disciples on the Mount of Olives, was visibly taken up into heaven. These events of his public life are generally considered to have occupied three years.

Jesus College, Cambridge, an institucock, bishop of Ely, in 1496.

Jesus College, Oxford, was founded by Alexandrian College, Oxford, was founded by Queen Elizabeth in

Spain also supplies fine jet, and much is obtained in France. It is the altered fossilized wood of coniferous trees, being a peculiar form of lignite. It is wrought into buttons and personal ornaments of various kinds.

(jet'sam), or JETTISON, goods thrown overboard from a ship Jetsam in danger. See Flotsam.

or JETEE (jet-te'), the fiber of Jette. Marsdenia tenacissima, a small climbing plant of the nat. order Asclepiadaceæ, growing in some elevated regions of North India. The fiber is fine and

reight and cargo by the doctrine of general average, though there are exceptions to this rule when the cargo is carried on the deck. When the cargo jettisoned is indeed, and is used in decoction as an insured the insurer receives the average.

Jetty (jet'i), a kind of pier or artificial projection of stone, brick, plant. wood, or other material, affording a convenient place for landing from and discharging vessels or boats. or serving as 1571. He was educated at Oxford, emaves; or a jetty may be built out from and contributed greatly both by his work the bank of a stream obliquely to its as a college tutor and by his sermons and course and employed either to direct a writing to the progress of Particular.

1571. Many of the fellowships and sch-light ships are confined to persons born or educated in Wales. The college is the first college founded on Protestant principles.

Jet, a solid, dry, black, inflammable fossil substance, harder than asphalt, susceptible of a good polish, and gleasy in its fracture, which is conchoidal or undulating. The finest quality and chief supply of it is found at Whitby, England, in beds of the Upper Lias shale.

The jetties at Galveston harbor, Texas, extend about 6½ miles from the island to the outer bar, and are the longest in the world. The Mississippi jetties are the first college founded on Protestant composed of brush, woven into wooden frames. Flimsy as they seem, they have been very durable and successful in deep-ening the channel. Many harbors, such as Calais, Ostend, etc., depend on jetties for their existence.

Jeux Floraux (zheu flō-rō; Floral Games), a poetic content of the college is the world. The Mississippi jetties are the world. The

test and festival annually celebrated in Toulouse, and having its origin in a poetical college, College du gai Savoir, founded in 1323 by seven troubadours. Its annual fête is still celebrated, and a volume of the competition pieces is published warshy. lished yearly.

Jevons (jev'ons), WILLIAM STANLEY, an English writer on logic and political economy, born at Liverpool in 1835. He was educated at University College, London; held an appointment in the royal mint in Australia from 1854 to 1859; was graduated at London University in 1862; was appointed professor of logic mental and moral philosophy, and of North India. The fiber is fine and silky and of great strength.

Jettison. In maritime law, the act of throwing overboard all or part of a ship's cargo as a matter of necessity, either in a storm to lighten the vessel, to prevent capture by an enemy or for other justifiable cause. A ship's Elementary Treatise on Logic (1870), master upon the high seas has the right Principles of Science (1874), and many of danger. The loss in such case does not fall upon the master of the ship or the ship's owners, but on the owners of the Value of Gold, Money and the Mechanism of Exchange, may be specially mentitled to a pro rata contribution from the several persons interested in the ship in 1882.

Jew-hnsh a plant of the nat. order

writings to the progress of Protestantism. On the accession of Mary he at first as a bed of sand or gravel, or to deflect temporized to avoid persecution, but it from the bank which it tends to under-finally in 1554 escaped to Frankfort. On mine or otherwise injure. In this last the accession of Elizabeth in 1558 he sense jetties have been successfully used to deepen river mouths or retard the call. vance of a bar, as at the mouths of the ment of Protestantism, and became Mississippi, the Columbia, the Maas, the Bishon of Salisbury in 1560. He is Danube, the Vistula, and other rivers. famous for his many controversial writngs, among which his Defence of the hurch of England, or Apologia Ecclesia written in elegant Latin, is 1562), otable.

ew-fish, the name given to two species of large fishes well nown in American waters. The one nown also as the guasa or black grouper Promicrops itaira) sometimes reaches ne weight of seven hundred pounds; the ther (Stereolepis gigas) inhabits par-cularly the Californian coast, often eighs five hundred pounds, and has flesh f excellent quality.

ewish Era. See Epoch and Calen-

ews (jös), a Semitic race of people also known as Hebrews and Isestament. But the chronology is ob-cure and difficult to harmonize. Jewish arts flou ishing when they were led to It was only long after, and by a gradual process of absorption, that the Canaanite to Goshen, in Egypt. The inprocess of absorption, that the Canaanite territories and their inhabitants became acob (which see). Joseph, a son of acob, had become viceroy of Egypt, and is father and brothers were received B.C., a succession of judges or military with high favor by the Pharaph who then leaders arose. Among the more remarkhem in an unreasonable degree. Accordhem in an unreasonable degree. According to some authorities the Pharaoh who egan to oppress the Israelites was Rameses 1! and their deliverance took lace under is son. (See Egypt.) It was perhaps about 1320 B.C., others say 491 B.C., that a deliverer in the person of Moses led the Israelites out of the land of bonders, where they had resided for of bondage, where they had resided for some 400 years. By this time they formed a large community, divided into twelve of Moses they went into the wilderness, he whole policy by which they were to David, a native of Bethlehem, a warrior be governed as a people. A ceremonial of whom Saul's jealousy had driven into macrifice was instituted, and Aaron, the exile and alliance with the Philistines.

elder brother of Moses, and his sons consecrated as a hereditary priesthood, the priestly functions thus falling to the tribe of Levi. The nation was established as a theocracy, and this principle, however, often forgotten in times of repose, continued henceforward to be the inspiring idea of national unity throughout the frequent crises of Jewish history. The emigrants first settled at Kadesh on the southern borders of Palestine, where they remained for many years, this being the period spoken of in the Scriptures as the forty years' wandering in the wilderness. They now marched northward to find new set-tlements in Palestine, which they had to wrest by force from the Canaanites. Moses died before entering the promised land, and was succeeded as leader by aelites, and whose early history is land, and was succeeded as leader lentified with that of Palestine or the Joshua, under whom the Israelites adloly Land. The main authority for the vanced to the conquest of the territories of this people is the Old of the Canaanites west of Jordan. The cure and difficult to harmonize. Jewish tirely subjugated, but retained possession istory may be considered as beginning of a number of cities, and the twelve ith the emigration of the patriarch braham, ancestor of the race, from or less cut off from one another, and to the Chaldees, probably about 2000 which formed an exceedingly loose union c. Abraham removed to the southeast of small states under the tribal chiefs, at f Palestine, where we find his descentimes hard pressed by neighboring peoples.

with high favor by the Pharaoh who then leaders arose. Among the more remark-uled in this country. But in course of able of these judges were Barak, Deborah time the condition of the Israelites, under the prophetess, Gideon, Jephthah, Samson he rule of the Pharaohs, changed for and Samuel. About 1070 the Philistines, he worse. They were treated as bond-who inhabited the coast and the low-nen, and forced labor was exacted of lying plains west of the mountains of lying plains west of the mountains of Judah, had defeated the Israelites and subjugated part of the country when Samuel, the 'last judge in Israel,' was inspired to declare to Saul, a Benjamite, his destiny to become king, and anointed him as such. Saul soon proved his fitness for the post by his successful leadership of the Israelites, and he continued to organize the forces of Israel, and to fight with varying success against their enemies till his disastrous defeat and death at Mount Gilboa, after which the power ribes, named respectively after Reuben, simeon, Judah. Issachar. Zebulun, Benomin, Dan. Naphtali, Gad and Asher, the west side of Jordan. On the other side of Jacob, and Manasseh and Ephside of the river the military skill of aim, sons of Joseph. Under the leadership Abner still preserved a kingdom for Moses thay went into the wilderness. Saul's son. Ishbosheth, and gradually respectively. Saul's son, Ishbosheth, and gradually reand through him received the law of the asserted with some success his authority ren Commandments on Mount Sinai and in Ephraim and Benjamin. But in Judah

and who had previously been anointed king in place of Saul, established a sep-arate principality, the capital of which was at Hebron. For seven years a hot war was waged between the two Hebrew states, and ended only with the murder of Abner and Ishbosheth, when all the tribes acknowledged David as King. David now transferred his residence from Hebron to Jebus, a fortified city which he wrested of David, afterwards Jerusalem. He assailed and subdued the Philistines, He Moabites, Edomites, Ammonites, and other surrounding nations, till all the country from the N. E. end of the Red Sen to Learness N. E. end of the Red Sea to Damascus acknowledged his authority. To this prosperous kingdom succeeded his son Solomon (B.C. 993, or by the long chronology 1015). His reign, owing to the warlike reputation which owing to the warine reputation which the nation had acquired under David, was entirely peaceful. He had no military tendencies, but he took great pains to arrange the administration of the kingdom in an orderly way, and his wisdom as a ruler and judge became proverbial. His alliances with Tyre and Egypt enabled him to carry on an extensive and lucrative commerce. He huilt the celelucrative commerce. He built the celebrated temple in Jerusalem, and extended and improved the city. His harem contained 700 wives, spoken of as princesses, besides 300 concubines. But with these, and with the extended commerce of the kingdom, it was inevitable that foreign elements should be introduced into the Jewish national life. Thus Solomon erected altars for the deities and the worship of the Moabites, the Ammonites, the Sidonians and other nations; and the severe simplicity of old Hebrew manners gave place to luxury and craft.

The splendor of Solomon's reign had entailed heavy exactions upon his people. When Rehoboam, Solomon's son, succeeded, they came with Jeroboam at their head and demanded that he should make their yoke lighter. Rehoboam answered scornfully, whereupon ten tribes revolted and set up Jeroboam as king of a separate kingdom of Israel, with its capital first at Sichem, later at Samaria. give up the hope of uniting the two kingdoms. In the next generation things had changed so much that Asa, king of Judah, was obliged to seek the help of Benhadad the kingdom of Israel, now in extreme of Syria against King Baasha of Israel. decline. He was miraculously delivered Baasha was succeeded by Elah, Elah by from an invasion of Sennacherib, king of

Zimri and Zimri by Omri, under whom the kingdom of Israel seems to have grown powerful. Omri established the grown powerful. Omri established the capital of the kingdom at Samaria (about 906 B.C.), and subjugated the Moabites. The son of Omri, Ahab, married Jezebel, princess of Tyre, an event which led to the extension of Phonician idolatry in Israel. As Solomon had done before, Ahab built a temple for the Syrian Baa! from the Canaanites, and called the city in his capital. In his reign and subsequently the great prophets Elijah and Elisha played an important part. Ahat was slain at Ramoth-Gilead in battle was stain at Ramon-Charles in Dattic against the Syrians. He was succeeded by Ahaziah (853-851), and Joram (851-843). The latter was slain by Jehu, a captain of the army, who had been anointed king by command of Elisha, Jehu (843-815) now made a clearance in Samaria of Syrian idolatries, destroying samaria of Syrian nonarries, destroying the temple of Baal and putting the priests to death. Under Jeroboam II, fourth in the line of Jehu, the kingdom reached a high point of prosperity (790-749). After Jeroboam's death there was a quick succession of kings, Zachariah, Shallum, Menahem, Pekahiah, Pekah. a quick succession of kings, Zachariah, Shallum, Menahem, Pekahiah, Pekahinone of any significance. Under Pekalithe kingdom of Israel became tributary to the Assyrians. (See Assyria.) Hosea, Pekah's successor, made an ineffectual attempt to free the country from the Assyrian yoke; but finally, in 722, Samaria was captured by the Assyrian king, Sargon, the kingdom of Israel virtually Sargon, the kingdom of Israel virtually destroyed, and the chief inhabitants carried away and settled in Assyria and Media.

Generally, while the kingdom of Israel had been flourishing, that of Judah had stood in the background. Rehoboam was succeeded by Abijam. Asa, Jehoshaphat, the last a powerful and fortunate king. In the hope of putting an end to the war with the kingdom of Israel, Jehoshaphat married his son Jehoram (848-844) to Athaliah, the daughter of Ahab of Israel. After the murder of her son Ahaziah by Jehu, Athaliah seized the supreme power in Jerusalem, and put to death her own grandchildren in order to destroy the line arate kingdom of Israel, with its cap-grandchildren in order to destroy the line ital first at Sichem, later at Samaria, of David, Joash alone being miraculously Judah, along with a part of Benjamin rescued. Athaliah was overthrown and not the tribe of the Levites, remained put to death and the young Joash raised loyal to the dynasty of David. After an to the throne (837-797). His successors unsuccessful attempt to reconquer the were: Amaziah (797-792), Uzziah (792-kingdom of Israel, Rehoboam was forced to the throne (837-797). Uzziah (792-kingdom of Israel, Rehoboam was forced to the throne (837-797). Uzziah (792-kingdom of Israel, Rehoboam was forced to the throne (837-797). Uzziah (792-kingdom of Israel, Rehoboam was forced to the throne (837-797). Uzziah (792-kingdom of Israel, Rehoboam was forced to the throne (837-797). Uzziah (792-kingdom of Israel, Rehoboam was forced to the throne (837-797). Uzziah (792-kingdom of Israel, Rehoboam was forced to the throne (837-797). Uzziah (792-kingdom of Israel, Rehoboam was forced to the throne (837-797). Uzziah (792-kingdom of Israel, Rehoboam was forced to the throne (837-797). Uzziah (792-kingdom of Israel, Rehoboam was forced to the throne (837-797). Uzziah (792-kingdom of Israel, Rehoboam was forced to the throne (837-797). Uzziah (792-kingdom of Israel, Rehoboam was forced to the throne (837-797). Uzziah (792-kingdom of Israel, Rehoboam was forced to the throne (837-797). Uzziah (792-kingdom of Israel, Rehoboam was forced to the throne (837-797). Uzziah (792-kingdom of Israel, Rehoboam was forced to the throne (837-797). Uzziah (792-kingdom of Israel, Rehoboam was forced to the throne (837-797). Uzziah (792-kingdom of Israel, Rehoboam was forced to the throne (837-797). Uzziah (792-kingdom of Israel, Rehoboam was forced to the throne (837-797). Uzziah (792-kingdom of Israel, Rehoboam was forced to the throne (837-797). Uzziah (792-kingdom of Israel, Rehoboam was forced to the throne (837-797). Uzziah (792-kingdom of Israel, Rehoboam was forced to the throne (83 delivered his sublime prophecies. Heze-kiah was one of the greatest reforming kings; his influence extended widely over

possession of the Ptolemies of Egypt, safem left by Titus, and erected in their under whom it enjoyed a period of transplace a Gentile city, with the title Ælia quillity. It was under the patronage of Capitolina. Jews were then forbidden to Ptolemy Philadelphus (reigned B.C. 285-enter this city on pain of death, and the 247), according to tradition, that the name of Jerusalem was not revived for Septuagint or Greek version of the Old it till the time of Constantine. See Testament Scriptures was made. After Jerusalem.

Thenceforth the Jews became more and column the Greet of Syria became mater more a scattered people without a constantial column that Greet of Syria became mater more a scattered people without a constantial column. Maccabees or Asmonæan family, reststance arose, and after a struggle of patriarchates became points of union, and flourishing Jewish academies arose in the 125 B.C. John Hyrcanus, son of Simon, a brother of Judas Maccabeus. completed the independence of Judæa, and extended his dominion over the ancient limits of the Holy Land. During his roien the rival sects of the Pharisees completed A.D. 500, and received, under and Sadduces became established. Aris-

Assyria, by the destruction of the Assyria army. (See Assyria.) Josiah (641-the title of king, which was held by his 610 was the last of the pious kings of Judah. He was killed in battle against Necho, king of Egypt. After him there was an uninterrupted succession of weak and incapable monarchs, till under Zedekiah (559-588) the capture of Jerusalem by Nebuchadnezzar, B.C. 588, put an end to the monarchy, Jerusalem being destroyed and many of the people being carried captive to Babylon. The prophet Christ took place at Bethlehem. In 6 Jeremiah flourished from the reign of Judæa and Samaria became a Rojosiah to the captivity. Assyria, by the destruction of the Assy- tobulus I, the son of Hyrcanus, assumed Josiah to the captivity.

Josiah to the captivity.

In 538 Babylon was taken by Cyrus, king of P rsia, who restored the Jews dinate to the prefect of Syria. Pontius and appointed Zerubbabel governor of Pilate, under whom our Lord's public Judæa, as a Persian province. The great ministry and crucifixion occurred, was uajority of the Jews remained in Persia, however, only about 42,000 returning and settling chiefly in the vicinity of Jerusa-lem. About 458 a second return of exiles was led from Persia by Ezra. Along with Nehemiah, who had been appointed Persian governor of Judæa, Ezra promulsian governor of Judea, Ezra promul-gated the new law-book, practically identical with the Pentateuch. From the time of Nehemiah to the fall of the Per-sian empire the Jews continued to live in and left his son Titus to conclude it. The peace as Persian subjects, but enjoying result was the capture and destruction of peace as rersian subjects, but enjoying result was the capture and destruction of their own institutions. When Alexander Jerusalem, A.D. 70, an event that dethe Great overthrew the Persian empire prived the Jews of the center of unity to the Jews readily submitted on being which their national life had hitherto promised the free exercise of their religion clung. After an insurrection headed by (B.C. 332). After the division of Alexander's empire Palestine was long a razed to the ground the remains of Jerupossession of the Ptolemies of Egypt, salem left by Titus, and erected in their under whom it enjoyed a paried of trappolar ender of the ground the remains of Jerupolar ender in their property of the property

chus the Great of Syria became master more a scattered people, without a counof Palestine (B.C. 198). An Egyptian try they could call their own. Under the
and a Syrian party now arose among the Jews, and gave occasion to civil dissenting the Linder the Emperor Julian they ventured sions, which led Antiochus IV (Epitomake preparations for a new temple phanes) to invade Judea (B.C. 170). in Jerusalem. Although this attempt when he took Jerusalem by storm and failed, they derived great advantages from their probability of the story of when he took berushiem by storm and tailed, they derived great advantages from slaughtered the inhabitants without distinction of age or sex, and endeavored to sanhedrim), which were established—one compel the Jews to give up their religion. At length, under the leadership of the the other for the Jews beyond the Eu-Maccabees or Asnomean family, restspherically at Bagdad. These two

tered Jews made themselves masters of the commerce of the Old World, and, as money-lenders and brokers, were often of great importance to princes and nobles. Even during the dreadful persecutions which they underwent from the cruelty of the Christians they still continued prosperous in Christian countries. They lived more happily, however, among the hammedans, although they were distinguished by dishonorable badges and oppressed by heavy taxes; and during the Moorish supremacy in Spain their prosperity was great and their learning flourishing. In the cities of France, Germany and Italy, after the eleventh century, particular streets and inclosed places were assigned to them as a sort of outcasts, in consequence of which, in the popular fury. They were generally pronounced incapable of civil rights and public offices. In Spain and Portugal during the fifteenth century they yielded to force, and multitudes suffered themselves to be baptized, many were put to death by the Inquisition, and at last characters of the last century that the Jews began to be put on a level.

Jezrecl (jez'rēl), a city of Palestine, chosen by Ahab, king of Israel, as his chief residence.

Jezreclites (jez'rēltz), a religious sect founded by James Jezselites (jez'rēltz), a religious sect founded by James Jezselites (jez'rēltz), a religious chosen by Ahab, king of Israel, as his chief residence.

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Jezreclites (jez'rēl-tz), a religious chosen which the cruelaty is sect founded by James White, who died in 1885. The revelations which the presented to have revelations which the presented to have revelations which the presented in 1885. The revelations which th money-lenders and brokers, were often of Jezreel (jez'rel), a city of Palestine, It was only in the end of the last century 378,695. that the Jews began to be put on a level with other citizens, France leading the way after the Revolution, and Prussia, following (1811). After repeated unsuccessful attempts to procure their admission into the British Parliament the object was at last effected in 1858. Antiscinitic movements have resulted in the oppression of Jews in many countries, notably in Russia under the Czars. The most remarkable circumstance connected with the modern Jews is the tenacity with might be boundary between Cashmere and which they cling to their ancient religion and the purity in which on the whole they have retained their characteristics in the Its whole course is about 450 miles, and midst of alien peoples. The capture of Jews of the country from its junction with ropean war gave fresh impetus to the idea of re-founding a national Jewish state. (See Zionism.) The total number of Jews of same name on the right bank of the throughout the world is estimated at 13,000,000; of which over 6,000,000 were under the government of Czarist Russia, 1313,687 in Austria; 1,675,666 in Poward and Literature.

Jew's-Harp, a toy musical instruction of seed, which, being struck by the hand, vibrates against the breath. that the Jews began to be put on a level Jhansi (jhan'sē), a fortified town in with other citizens, France leading the Hindustan, in Gwalior state,

faith by the scattered communities of Called also Jews' Trump, or simply Jews. (See Talmud.) In time the scat-Trump.

ill the middle of the eighteenth century.

igger (jig'ger), CHIGOE or SAND-FLEA, parasitic insect native to ropical America, but now found in the outhern and southwestern sections of the United States. The jigger attacks man, and while the male does not differ from other fleas, the female buries the an-erior part of her body in the skin and ecomes enormously distended with eggs. The place of attack is usually the skin peneath the toes, so that persons who to barefoot are liable to fall victims. The reatment is the removal of the parasite, aking care to leave no eggs or young be-Jig-saw, a treadle. It is used for cutting curved or irregular lines.

Jim-crow, an implement for bending rails. Also a metal planing-machine, with a Also a metal planing-machine, with a Joan died on the spot. reversing tool adapting it to plane both Joan'nina. See Janina. ways. The term originated in an old years song, and became a typical term Joan of Arc (Jeanne d'Arc—properly negro song, and became a typical term Joan of Arc (Jeanne d'Arc—properly negro, from which the cars set aside Orleans, a heroine in French and Engine reverse in reliveed trains are called or leading the property of the property o Jim-crow cars.

Jimena de la Frontera $\begin{pmatrix} hi-m\bar{n}'n\dot{a} \end{pmatrix}$ Spain, in Andalusia, 46 miles E. of Cadiz. Pop. 7549.

to politicians who urged on Disraeli, then or taking sides with the Turks. Since that time the word has been used in both the United States and Europe to designate the control of the United States and Europe to designate the United States and Europe the Unit nate one who advocates a spirited and

They can at will become visible or in-

Jinrikisha, a light two-wheeled car-riage, resembling a gig,

elsewhere.

olgrims arrive here annually on the way Jitomir (jit'o-mir), or ZHITOMIR, a town of Russia, capital of the o Mecca. Pop. about 30,000.

18 a light quick tune or air in 3-4, government of Volhynia, on the left bank
18, 3-8, 6-4, 6-8, 9-4, 9-8 or 12-8 time, of the Teterew, 80 miles w. of Kiev.

19 be found in the sonatas or suites l'op. 65,422.

10 Corelli, Handel, and other composers Joachimsthal (yo'a - hims - täl), a

Joachimsthal (yo'a - hims - tal), town of Bohemia, a valley of the Erzgebirge, near the frontiers of Saxony, 70 miles w. N. w. of Prague. It depends chiefly on its valua-ble lead and silver mines. Thater pieces derived their name from being first coined here. Pop. 7378.

Joan (jō'an), the female pope, according to a story long believed, but

now acknowledged to be a fiction, was said to have been a native of Mainz, who, falling in love with an Englishman at Fulda, traveled with him in man's at Fulda, traveled with him in mans attire, studied at Athens, and visited Rome. Under the name of Johannes Anglicus she rose by her talents from the station of a notary till she was elected to the papal chair, under the name of John VIII (854 to 856, between Leo IV and Benedict III). She governed well, but having become pregnant she was delivered in a solemn procession, and died on the spot and died on the spot.

for negroes in railroad trains are called lish history, was born in the village of Domrémy, in Champagne, now department of the Vosges, in 1412. While she was still a young girl she began to be deeply affected by the woes of her coun-Spain, in Andalusia, 40 miles E. of deeply affected by the woes of her councradiz. Pop. 7549.

Jingo (jin'go), a word of unknown derivation, supposed to be a corrupted form of Jainko, the Basque name for the Supreme Being. It was English, leaving only a small portion to the Supreme Being. It was English, and its fall would have ruined first used as a political term in the English, and its fall would have ruined first used as a political term in the the cause of Charles. At this time Joan, was 6-Turkish war of 1877-1878, applied the cause of Charles. At this time Joan, was 6-Turkish war of 1877-1878, applied the cause of Charles. 1429 Orleans was being besieged by the English, and its fall would have ruined the cause of Charles. At this time Joan, who had been noted for her solitary are the solitary between the cause of the solitary between the cause of the solitary between here the solitary between here are the solitary between the solitary betwee meditations and pious enthusiasm, began, as she declared, to see visions and hear angelic voices, which ultimately called upon her to take up arms for Charles, to raise the siege of Orleans, and conduct Charles to Rheims to be crowned. Jinn (jin), JINNEE being the singular, eventually she found her way to the king race of genii, augels, or demons. Some are them of her sincerity, received permission good and obedient to the will of God; to hasten with Dunois to the deliverance others are disobedient and malignant. of Orleans. In male dress, fully armed, They can at will become visible or in she here the way and and the second harmen. she bore the sword and the sacred banner, as the signal of victory, at the head of the army. The first enterprise was suc-cessful. With 10,000 men she marched from Blois, and on April 29, 1429, entered Orleans with supplies. By bold drawn by one or more human runners befrom Blois, and on April 29, 1429, tween the shafts, universally used in entered Orleans with supplies. By bold Japan, and introduced into China and sallies, to which she animated the be-

intrenchments, and Suffolk abandoned the siege (May 8, 1429). Other successes the siege (May 8, 1429). Other successes followed; Charles entered Rheims in triumph; and at the anointing and coronation of the king, July 17, Joan stood

Johpur (jōd-pör'), or Marwar, a town of Hindustan, capital triumph; and at the anointing and coronation of the king, July 17, Joan stood at his side. She was wounded in the attack on Paris, where Bedford repulsed the French troops, but continued to take part in the war till May 25, 1430, when she was taken prisoner by the Burgundians, and sold to the English. She was taken to Rouen, and after a long trial, accompanied with many shameful circumstances, condemned to death by the judges as a sorceress. On submitting to the church, however, and declaring her revelations to be the work of Satan, her punishment was commuted to perpetual imprisonment. But pretexts were soon found to treat her as a relapsed criminal, and as such she was burned at Rouen, was a protracted drought and a visitation of locusts and other destructive and as such she was burned at Rouen, wermin, but it expands in a style of high May 30, 1431, and her ashes were thrown into the Seine. She died with undaunted fortitude. Twenty-five years after, a counter of the charges against the Maid of Orleans, pronounced her innocent. Voltaire, in a notorious burlesque, the monument of her fame. After 1875 there are sounded in the state of Jodhpur. The city has town of Hindustan, capital of the state of Jodhpur. The city has town of Hindustan, capital of the state of Jodhpur. The city has town of sundance buildings, and is survounded by a strong wall with seventy gates. Pop. 60,400.—The state of Jodhpur. The city has a many handsome buildings, and is survounded by a strong wall with seventy gates. Pop. 60,400.—The state of Jodhpur. The city has many handsome buildings, and is survounded by a strong wall with seventy gates. Pop. 60,400.—The state of Jodhpur. The city has many handsome buildings, and is survounded by a strong wall with seventy gates. Pop. 60,400.—The state of Jodhpur. The city has many handsome buildings, and is survounded by a strong wall with seventy gates. Pop. 60,400.—The state of Jodhpur. The city has many handsome buildings, and is survounded by a strong wall with seas. Pop. 60,400.—The state of

and three daughters, with large herds and numerous servants, is suddenly, with the permission of Jehovah and by the agency under his command. In December, 1915, all numerous servants, is suddenly, with the the French armies in Europe were put permission of Jehovah and by the agency under his command. In December, 1916, of Satan, deprived of his possessions and he was relieved from active service and in 1917 headed the French Commission in 1917 headed the French Commission participation in the war.

Jogues (zhog), Isaac, a Jesuit missionary in North America. a native of Orleans, France. After laborning in Michigan, he visited the Mohawks them, until near the close, when God his cliptered from his calamities, lives 140 years, becomes richer than he had been before, and begets seven sons and three daughters. The design of the book seems Johannesburg (yō-hān'nes-bērg), a city in Transvaal, to be to enlarge men's views of the Union of S. Africa, the central point of to be to enlarge men's views of the Union of S. Africa, the central point of providence of God. It was probably the gold-fields of the district stretching written between the seventh and the fifth southwest from Pretoria to Potchefstrom, centuries R.C., and is certainly not earlier and known as the Witwatersrand. The

sieged, the English were forced from their than the time of David. The authorship of the story is unknown.

monument of her fame. After 1875 there French army as 2nd neutenant during the arose a movement toward a canonization Franco-Prussian War (1870-71) and renof this remarkable woman. This led in dered distinguished services in the For-1909 to her being beatified by Pius X, the mosa and Tonkin-China campaigns in reigning Pope; and in 1920 she was can-1885; and in the Sudan, 1892-94; and in onized by Pope Benedict XV; a just Madagascar in 1892, rising to the rank tribute to her noble character.

of general of Division. In 1913 he was made chief of the general staff of the nonument of her fame. After 1875 there French army as 2nd lieutenant during the Job (jöb), the hero of an ancient Hebrer of the general staff of the brew poem, which forms one of the European War (q.v.) he took command books of the Old Testament. Job, an in the field and won the brilliant battle upright man, with a family of seven sons of the Marne, stopping the German adand three daughters, with large herds and vance on Paris. In 1913 ne was made of the general staff of the general staff of the general staff of the German adand three daughters, with large herds and vance on Paris. In 1913 ne was made of the general staff of the general staff of the general staff of the French army. On the outbreak of the broken was not provided in the staff of the general staff of the paris are staff of the general staff of the paris are staf

stantial.

John, Pop. (1911) 237,200. John, one of the apostles, often distinguished as St. John the Evangelist, the reputed author of the fourth Gospel, three epistles, and the Revelation, was the son of Zebedee and Salome, and the brother of James. Previous to his call by Jesus he was a fisherman on the Sea of Galilee, together with his father, his brother, and Simon Peter and Andrew, who were his partners. John, together with Peter and James, was admitted to a more confidential intercourse with Jesus than the other apostles, and he is repeatedly spoken of as 'the dis-ciple whom Jesus loved.' His Gospel was written later than any of the others -according to some critics to refute particular heresies, and contains fuller de-tails of our Lord's conversation and discourses than the other Gospels, and is also more doctrinal in character. Of the three epistles the first has much reearly fathers. As to the Revelation, see 14-25). Tradition handed down by the fathers makes him die at Ephesus, and if he wrote the Revelation he must have been banished to Patmos. The time of his death is unknown.

the higher mission of Jesus at the time of his baptism in the Jordan. To gratify a vindictive woman, Herod Antipas, tetrarch of Galilee, caused him to be be-headed in prison. But for long afterwards his disciples continued to form a separate Christians, in Persia, distinguished for their veneration of John the Baptist.

streets and squares of the town are well doric threw him into prison, where he laid out, and the buildings solid and sub- died .- JOHN XII succeeded Pope Aga-The white population is mainly petus II in 956, when only eighteen years old. He was the first pope who changed his name on his accession to the papal dignity. His life was so licentious and disorderly that the Emperor Otho had him deposed by a council in 963, and Leo VIII elected in his stead. But on Otho's departure John returned to the city with a strong body of followers and drove out Leo. He died in 964.—John XXII, a native of Cahors, was elected pope at Lyons in 1316, after the death of Clement. He resided at Avignon, and took an active part in the disputes of the emperors Louis of Bavaria and Frederick of Austria. He died in 1334.—John XXIII (Balthasar Cossa), born in Naples, was a pirate in his youth, afterwards studied at Bologna, and was elected pope in 1410, by the Council of Pisa, after the death of Alexander V, on condition that, if Gregory XII and Benedict XIII would resign, he would also retire to end the schism. He summoned the semblance to the Gospel; but the other Council of Constance, demanded by the two were considered doubtful even by the Emperor Sigismundi, in 1415, and was deposed by this council as guilty of a long Revelation. After the death of Jesus list of heinous crimes. For some years John continued at Jerusalem, and we he remained in custody, but was ultiafterwards find him at Samaria (Acts iii, mately pardoned by Pope Martin V, and

John, King of England, born in 1166, was the youngest son of Henry II, by Eleanor of Guienne. Being left without any particular provision, he got the name of Sans Terre, or Lackland; cousins), of a Levitical family in Judæa. Despite this, he tried to seize the crown lie lived an austere life, given up to during Richard's imprisonment in Aussolitary meditations, till A.D. 26, when tria. He obtained the crown on the death he began to preach in the deserts of Judæa, announcing that the kingdom of heaven was at heard John, called the Baptist, the forerun- the name of Sans Terre, or Lackland; ner of Christ, was born six but his brother, Richard I, on his accession. heaven was at hand, and proclaiming declared for his nephew, Arthur of Brithimself the harbinger of the Messiah. He tany, who was lineally the rightful heir, bantized many converts, and testified to then with the King of France. A war ensued, in which John recovered the revolted provinces and received homage from Arthur. In 1201 some disturbances again broke out in France, and the young Arthur, who had joined the malcontents. was captured and confined in the castle body, and are said to have established the of Falaise, and afterwards in that of still existing sect of Sabians or St. John Rouen, and never heard of more. John was universally suspected of his nephew's death and the States of Brittany sum-John, the name of twenty-three popes, among whom are the following: answer the charge of murder, and in the Japan I (8t. John), pope in 523-526.

Theodoric sent him to Constantinople, to induce the Emperor Justin to adopt his great quarrel with the pope began remarks. milder measures towards the Arians, and garding the election to the see of Canteron his returning without success Theo-bury, to which the pope had nominated

Stephen Langton. Innocent III laid the whole kingdom monastery was dedicated to St. John the under an interdict, and in 1211 issued a Baptist, and the monks, who were called bull deposing John. Philip of France was Brothers of St. John or Hospitallers, had commissioned to execute the decree, and the duty of caring for the poor and sick, was already preparing an expedition when and in general of assisting pilgrims. In John made abject submission to the pope, 1118 the order was regularly instituted even agreeing to hold his kingdom as a as a military order, with the duty, in addivassal of the pope (1213). John's arbitrary proceedings led to a rising of his nobles, and he was compelled to sign the Magna Charta, or Great Charter, June 15, 1215. But John did not mean to keep the agreement, and, obtaining a bull from the pope annulling the charter, he raised an army of mercenaries and commenced war. The barons, in despair, offered the crown of England to the dauphin Louis, who accordingly landed at Sandwich, May 30, 1216, and was received as lawful sovereign. The issue was still doubtful when John was taken ill and died at Newark, October, 1216, in the forty-ninth

year of his age.

John II, king of France (1319-64),
surnamed the Good, was a
monarch distinguished alike for his incapacity and his misfortunes. In 1356 he was defeated and taken prisoner by the Black Prince at the battle of Poitiers,

The result was that by some merchants from Amalfi.



Knight of St. John.

and was detained at Bordeaux and at tion to their vows of chastity, obedience London till released at a heavy expense and poverty, of defending the church to his country by the Peace of Brétigny against infidels. The brethren were diin 1360; but on learning that his son, vided into three classes, knights, chapthe Duke of Anjou, who had been left lains and serving brothers, these last havas a hostage in England, had effected his and serving brothers, these last havas a hostage in England, had effected his ing specially the duties of looking after escape, he returned to London, where he died in 1364.

Toha III (Schierki) King of Britania as a hostage in England, had effected his escape, he returned to London, where he died in 1364.

John III (Sobicski). King of Poland, son of Mark Sobieski, a feer holding Cyprus for a time they occupiling in 1624, served in the French army, returned to Poland to repel the Russians in 1624, and greatly distinguished himself in several campaigns against Cossacks, Tatars and Turks, them in 1530. Here they continued to especially by his defeat of the last in the bea bulwark of Western Europe against great battle of Choczim in 1673. The year after, on the death of Michael Corybut, he was chosen king. His most celebrated achievement was the relief of Vienna, besieged by a great army of Turks, whom he decisively defeated Sept. 12, 1683. His last years were disturbed the intrigues of his own family and the anarchy of the country, which he was unable to control, and in which he foresaw its approaching downfall. He died June 17, 1696.

John, Knights of St. John, afterwards called Knights of St. John, afterwards called Knights of Malta, were a celebrated religious order, originating in a monastery founded at Jerusalem in 1048 points enameled white; it, war they wore

Johnson

John Dory.

John of Austria, commonly called Austria, the natural son of the emperor Charles V, was born at Ratisbon in 1545. In 1570 he conducted a campaign against the recalcitent Moore of Charled with In 1570 he conducted a campaign against the recalcitrant Moors of Granada with great vigor and relentlessness, and in the following year he commanded the allied fleet which won the great naval battle of Lepanto over the Turks (Octotober 7, 1571). This was one of the greatest naval combats in history, and put an end to Mohammedan supremacy in the Mediterranean. In 1576 he was appointed governor of the Netherlands, appointed governor of the Netherlands, and had just won along with the Prince of Parma the victory of Gemblours here (that of B.A.) or elsewhere, and wish to carry their studies further, this died, not without suspicion of having the poisoned by his jealous half-brother, Philip II.

been poisoned by his jealous half-brother, Philip II.

John of Gaunt, a corruption of Warner and School of Gaunt, a corruption of Guent, where he was born in 1339, was fourth son of Edward II and his queen Philippa, daughter of the Earl of Hainaut. He was created Duke of Lancaster in 1362; served in the French wars, and became governor of Guienne. He assumed in right of his wife the title of King of Castile, invaded the kingdom to assert his claims, but subsequently relinquished them in favor of Prince Henry of Castile, who had become his son-in-law. His eldest son, Bolingbroke, became king of England as Henry IV. He died February 3, 1399.

John of Leyden. See Anabaptists. John of Leyden. See Anabaptists.

droat's House), a house formerly situated about 1½ miles west of Duncansby tives on account of his efforts to restore Head, and forming about the most norther the Confederate States to their full ern extremity of the mainland of Great former status without consultation with Britain. According to legend, it was built in octagonal form, with eight doors, and to contained an eight-sided table, to prevent disputes on precedence in the Groat family.

red jacket or tabard, charged with a white cross. In 1798 Malta was unexectedly attacked and taken by Bonabarte, and about the same time the exensive properties belonging to the order a various countries were confiscated. It till exists nominally.

John Bull, a collective name, used in a sportive manner in a sportive manner in the was first employed by Dean Swift. Its counterpart in the United States is Brother Jonathan (which see).

John Dory. See Dory.

John's, Eve of Saint, a popular celebration of remote antiquity, held on the vigil or eve of the feast of the nativity of John the Baptist, June 24 (Midsummer Day). On the eve of the feast it was the custom in former times to kindle fires (called St. John's fires) upon hills in celebration of the summer solstice, and various superstitions were long practised on this occasion. The custom still lingers in some parts of Europe.

John's, St. See Saint John's.

John's, St., Antigua. See Antigua.

John's, St., Antigua. See Antigua. John Scotus. See Erigena.

Johns Hopkins University,

president upon the assassination of Lin-John o' Groat's House (popular-coln in April, 1865. During his term of office he was in constant conflict with the Senate and House of Representaity for conviction not being obtained. A in the war. He aided greatly in Harrigeneral amnesty to the Confederates was son's victory of October, 1813, and was his last presidential act. He was subsedually wounded. He was elected to quently elected in Tennessee to the Senate by the Democratic party.

Johnson, EASTMAN, painter, was born at Lovell, Maine, in 1824; died in 1906. He devoted himself to portrait and genre subjects, two of his best-known works being The Old Kentucky Home and The Husking Bec.

Johnson, Sir Guy (1740-88), an American Tory and militia colonel, born in Ireland. He served in the French and Indian wars, and in 1774 succeeded his uncle, Sir William Johnson (q. v.), as superintendent of Indian affairs. After the Revolution he fled to Canada, and with Joseph Brant (q. v.) led

Johnson, Hiram Warren (1866), an American lawyer and senator, born at Sacramento, California; admitted to the bar in 1888. He became famous for his prosecution of graft in San Francisco, 1906-07, and secured the conviction of Abe Ruef for bribery. He was governor of California 1911-15, and was re-elected for term 1915-19, but resigned in 1917 to become United States Senator for term 1917-23. He was a nominee for vice-president on the Progressive ticket in 1912.

Johnson, Hiram Warren (1866-), Rossiter, author, born at Rochester, New York, in 1840; was graduated at Rochester University in 1863. His works comprise Phaton Rogers; Idler and Poet, poem; History of the War of 1812; History of the Old French War, etc. He edited series of books and cyclopædias and was an associate editor of the Standard Dictionary.

Johnson, Samuel, an eminent Engsished in 1917 to become United States Senator for term 1915-19, but resigned in 1917 to become United States Senator for term 1917-23. He was a nominee for vice-president on the Progressive ticket in 1912.

Johnson, Rossiter, author, born at 1840; was graduated at Rochester University in 1863. His works comprise Phaton Rogers; Idler and Poet, poem; History of the War of 1812; History of the Old French War, etc. He edited series of books and cyclopædias and was an associate editor of the Standard Dictionary.

Johnson, Samuel, author, born at London in 1897.

Johnson, Sir John (1742-1830), an American Tory leader, son of Sir William Johnson (q. v.). He orof sir winam Johnson (q. v.). He organized the loyalist corps known as the Royal Greens, and in July, 1777, joined St. Leger at Oswego, taking part in the siege of Fort Stanwix (q. v.) and at the battle of Oriskany (q. v.). He directed a series of Indian raids in northern and central New York which horrified the country. He was decipiedly besten at country. He was decisively beaten at Newtown (now Elmira) in 1779, and his property confiscated by the U. S. govern-

ment.

Johnson, Reverdy, statesman, born at Annapolis, Maryland, in 1796; died in 1876. Admitted to the bar in 1815, he practiced law in Baltimore. He was elected by the Whig party to the United States Senate in 1845, and resigned in 1849, to become attorney-general in President Taylor's cabinet. He was senator again 1863-68, and Minister to England, 1868-69.

England, 1868-69.

Johnson, RICHARD MENTOR, vice-president, was born near Louisville, Kentucky, in 1780; died in 1850.

He studied law, was elected to Congress

the Senate in 1819, returned to the House in 1829, chosen vice-president, under President Van Buren, in 1836. He was again the Democratic candidate for vice-president in 1840, but was defeated.

Johnson, RICHARD W., soldier, was bern in Livingston county, Kentucky, in 1827, and was graduated at West Point in 1849. In 1862 he was made a major in the regular army, and as general of volunteers commanded a division at the battles of Stone River and Chickamauga. He served under Sherman in Georgia in 1864, took part in the battle of Nashville and commanded a division of cavalry in the pursuit of the Confederates. He died in 1897.

at London in 1784. He received his early education partly at the free school of Lichfield, and partly at Stourbridge, in Worcestershire. In 1728 he entered Pembroke College, Oxford, but was obliged by poverty to retire after three years without taking a degree. He became successively an usher in Leicestershire, a bookseller's drudge in Birmingham, and the head of a school established with some the head of a school established with some money he acquired by marrying, in 1736, Mrs. Porter, the widow of a mercer, considerably older than himself, but to whom he was sincerely attached. The school speedily failed; and in 1737, removing specifiy failed; and in 101, removing to London, Johnson entered on his long course of literary toil. His reputation rose very slowly; the greater part of his time was wasted for many years on desultory and occasional efforts. A large proportion of his writings appeared in the Gentleman's Magazine, or as pamblets, and must of these are quite for phlets; and most of these are quite forgotten. His two poetical satires, London (1738) and The Vanity of Human Wishes (1749), are striking specimens of reflection and diction, but neither they Johnson, RICHARD MENTOR, vice-pressor reflection and diction, but neither they ident, was born near Louis-nor his tragedy of *Irene* entitle him to ville, Kentucky, in 1780; died in 1850. be considered as a great poet. Rasselas He studied law, was elected to Congress (1759), written in a week to pay for in 1807, and continued a member until his mother's funeral, is one of the most 1812, when he raised a company of interesting and characteristic of his mounted riflemen and took an active part works. His two sets of periodical essays,

The Rambler (1750-52) and The Idler Mohawk valley, where he built the village (1758-60), were at first coldly received, of Johnstown. but on being collected and reprinted they thenceforth in easy circumstances, and could enjoy without restraint the society of Burke, Reynolds, Gibbon, Garrick, Goldsmith, and others in the famous club which became a formidable power in the other mills. Pop. (1920) 6855.
world of letters. In 1763 the first interview with his now equally famous biogthe same year appeared his long-promised edition of Shakespere. In 1773 Johnson made a tour to the Hebrides in company with his friend Boswell, of which he gives a highly instructive account in his Journey to the Western Isles of Scotland. In 1775 he received the diploma of D.C.L. after visited France in company with Johnston, ALEXANDER KEITH, a Scotthe Thrales. His last literary undertaking was his Lives of the Posts which taking was his Lives of the Poets, which National Atlas, Atlas of Physical Geogra-was completed in 1781. He was buried in phy, Dictionary of Geography, etc.

Westminster Abbey. Boswell's Life Johnston JOSEPH EGGLESTON (1809may be said to convey a more favorable

way devices, became the owner of sev-tral railways, and was an iron manufacturer in Cleveland, Ohio, of which city Johnston City, a city of Williamson he was reform mayor, 1901-10. He was southern next of the Co., Illinois, in the a prominent advocate of the 'single tax' theory and vigorously sought to establish the Chicago and Eastern and the Illinois three cent railway fares. In this he Central railroads. Pop. (1920) 7137.

succeeded in Cleveland. He died April

1, 1911.

Johnstown (jonz'toun), a town in Cambria Co., Pennsylva-

1, 1911.

Johnson, Sir William, a British offinia, on Stonycreek and Conemaugh rivers, died in 1774. Migrating to America, he of a rich mining and manufacturing dissettled near the Mohawk River, New trict. There are here great steel mills York, became a friend of the Indians, and was adopted as a sachem by the Mohawks. In 1755 he won an important victory over the French army at Fort victing over the French army at Fort entered him 100,000 acres of land in the

Johnson City, a city of Broome Co., New York, on Susquebecame very popular. For eight years solling to ty, New York, on Susque-from 1747 Johnson's attention was chiefly hanna River, adjoining Binghamton. There engaged upon his Dictionary of the Engare are manufactures of boots and shoes, furlish Language, a work which appeared in 1755, and is highly honorable to the author in the circumstances in which it was produced, but is of little real philological value. The dictionary, though it raised his fame, added little to his worldly essue manufacture for the control of the circumstances in which it washington Co., Tennessee, in a pictural of the circumstance of boots and shoes, furlied to the circumstance of boots and shoes of bo raised his fame, added little to his worldly means; and Johnson lived in poverty till feet; on the Memphis to Washington 1762, when he obtained, through Lord Bute, a pension of £300 a year. He was Home, State Normal School, and 3 rail-thenceforth in easy circumstances, and roads. Pop. (1910) 8502; (1920) 12,442. (jonz'ton), a town of Prov-Johnston adjoining Providence. It has worsted and

rapher, James Boswell, took place. In at Washington, Kentucky. His services 1765 began his intimacy with the family in the Black Hawk and Mexican wars of Mr. Thrale, the great brewer, and in were distinguished. On the outbreak of the Civil war he resigned command of the Department of the Pacific to take part with his native South. In the battle of Shiloh (q.v.), in which he commanded (April 6, 1862), he received a mortal wound. He was one of the ablest of the Confederate leaders.

Johnston, Joseph Eggleston (1809-91), an American soldier impression of Johnson's real strength, and Confederate general in the Civil war, both in thought and language, than anyborn in Virginia. He served in the Semithing in the works which he wrote and nole Indian and Mexican wars. In the Johnson, Tom Loftin, reformer, was due to his reinforcement of Beauregard's army. He was opposed to Sherman in North tucky, in 1854. He invented street rail-Carolina in 1865 when the surrender of

ing and fruit and farm region. It is on

40 miles w. n. w. of Albany, on Cayadutta Creek, and on the Fonda, Johnstown & Gloversville R. R. It was settled in 1760 and was named for Sir William Johnson (q. v.), who held many councils with the Indians here. The Americans defeated the British at Johnstown in 1781. It has manufactures of gloves, underwear, leather, etc. Pop. (1920) 10,908.

Joint-stock Companies, a species part-

nerships in which a number of persons contribute funds or stock for the purpose of carrying on a trade or other profitable object. The management is vested in certain members called directors; and the general body of shareholders take no active part in the concerns of the company beyond exercising a control over the acts of the directors on special occasions. The capital is generally divided into equal shares, each member holding one or more, and in proportion to the number partici-pates in the profits. After the stock of a company of this sort has been fully subscribed no one can enter it without subscribed no one can enter it without previously purchasing one or more shares from some of the existing members. No member can demand payment of his share one title, without partition. In a jointfrom the company, but he may, without consent of his fellow members, transfer his share to another person. In nearly all the States of this country joint-stock companies are now, by statute, invested with some of the privileges of corporations. Five or more persons associated on her husband's death. for any lawful purpose may, by subscribing their names to a memorandum of assofellow-members turn out unable to bear their proportions, to pay the whole of these debts to the extent of his fortune, whereas if the company is limited, each member can in no event be called upon to pay more than he expressly guaranteed. A company may be registered in one of A company may be registered in one of of the reprinted. three forms: 1, as a company limited by shares, where the liability of each member is limited to the amount unpaid on the shares; 2, as a company limited by are nailed, and which rest on the walls guarantee, where the liability of each or girders, and sometimes or both. They member is limited to such amount as he are laid horizontally, and in parallel and or the state of the memorandum of associations. andertakes in the memorandum of asso- equidistant rows.

waste May 31, 1889, by the bursting of a ciation to contribute to the assets of the dam near South Fork, 10 miles distant, company if it should be wound up; and Johnstown has the commission form of 3, an unlimited company, where there is government. Pop. (1910) 55,482; (1920) no limit to the liability of the members. 67,327. Johnstown, a city, county seat of must be added to the name of the com-fulton Co., New York, pany, and the amount of capital, object, pany, and the amount of capital, object, place of business, and declaration of the limit or the amount of guarantee must be entered in the memorandum of association, which must be accompanied by articles of association providing for the management of the company. In Britain an annual list of members must be forwarded to the registrar of jointthe Board of Trade; and there must be at least one office for registration in each of the three kingdoms. A general meeting of the company must be held at least once a year. A company may be wound up whenever it passes a special resolution to that effect; also whenever it does not commence business within a twelvemonth after incorporation, or if it suspends its business for a whole year; also whenever its members are reduced to less than seven; whenever it is unable to pay its debts; and lastly, whenever the court thinks it just and equitable that it should be wound up. Joint-stock companies are now common in all countries.

tenancy the last survivor takes the whole, as if the estate had been given to him only, unless any of his companions have

Jointure (join tur), in law, a provision for a wife to take effect

Joinville (zhwan-vel), Jean, Sieur DE, a French historian, born ing their names to a memorandum of association, form an incorporated company, in Champagne about 1224; died about with or without limited liability. The 1317. He early entered the service of distinction between limited and unlimited Thibaut, king of Navarre, and in 1248 liability companies is, that if an unlimited raised a troop of nine knights and 700 company contract any debts, no matter armed soldiers, and accompanied Louis how large, every member is liable, if his IX in his first crusade to the Holy Land. He rose high in favor with Louis, shared his captivity, returned with him to France in 1254, and spent much of his time at court. His Histoire de St. Louis, which is one of the most valuable literary productions of the middle ages, has been often reprinted.

ecame a prolific and popular author, pro-ucing in all about 200 volumes of ro-nances and novels, dramatic poems, hu-norous essays, etc. He died in 1904.

Okai (yō'kà-i), Mor, a Hungarian rather than prophetical, and the miracunovelist, was born at Komorn in lous event of Jonah remaining three days and three nights in the belly of the fish has been regarded by some as an allegard results and three mights in the belly of the fish has been regarded by some as an allegard results and the miracunous events of the second results and the miracunous events of Jonah remaining three days and three mights in the belly of the fish has been regarded by some as an allegard results and the miracunous events of Jonah remaining three days and three mights in the belly of the fish has been regarded by some as an allegard results and the miracunous events of Jonah remaining three days are published in 1845, after which he was published which which was published with the was published which was published which which was publ gory. Orthodox theologians, however, are generally of opinion that the mention of it by Christ (Mat. xii. 39) obliges us to regard the event as really historical. Jonah's grave is shown at Mosul, the an-

Jonah's grave is shown at Mosul, the ancient Nineveh, and also at Gath.

Jones (jō'li-et), a city, county seat of Will Co., Illinois, on Des Plaines River and Illinois & Michigan Canal, on several railroads. It is noted for extensive manufactures of steel, wire, and many other industries, including the argest art-calendar factory in the world. There is excellent water power. Pop. (1910) 34,670; (1920) 38,406.

Joliette, capital of Joliette Co., Queband many industries. Pop. 9000.

Joliette, bec, on Assomption River, 36 miles N. E. of Montreal. Water power and many industries. Pop. 9000.

Joliet (jō'li-et), Louis, a French-Canadian explorer, born at Quebac in 1645; died in 1700. In 1672, at the instance of Frontenac, governor of New France, he with six companions set out to explore the Mississippi. After much travel and adventure, descending the Wisconsin and Illinois rivers, they reached the Mississippi and finally made recrtain that it emptied into the Mexican that it emptied into the Mexican in the beginning of the seventeenth century. He was born at London in 1572, and attracted the notice of the entury. He was born at London in 572, and attracted the notice of the vertice, where the works of Palladio inspired him with a taste for architecture. Having returned to England, he became court architect under James I and Charles I. Among his best-known works are the Banqueting House at Whitehall, Asburn-ham House, Covent Garden Piazza, Heriot's Hospital, Edinburgh and snaftesbury losses during the civil war, and died in poverty in 1652.

Jones, Jacob, naval officer, born near Smyrna, Delaware, in 1768; method in the beginning of the seventeenth century. He was born at London in 572, and attracted the notice of the works of Palladio inspired him with a taste for architecture. Having returned to England, he became court architect under James I and Charles I. Among his best-known works are the partisan of royalty, he suffered heavy losses during the civil war, and died in poverty in 1652.

Jones (jozz), IN'160, the a

reached the Mississippi and finally made certain that it emptied into the Mexican Gulf. On his return journey, his maps and papers were lost in the Lachine rapids. He tried in vain to persuade the French government to colonize the Mississippi valley. Labrador was explored by him, and he was given the office of royal hydrographer. It is disputed that he was hydrographer. It is disputed that he was the first to explore the Mississippi.

Jomeli (yo-mel'lē), Niccolo, an Italian musical composer, born in 1714; died in 1774.

Jomeli (zho-mi-nē), Henri. Baron. a the outbreak of war between the calculation of the outbreak of war between the calculation. Jomini (zho-mi-nē), Henri, Baron, a the outbreak of war between the colonies distinguished soldier and military historian, born at Payerne, canton of Vaud, Switzerland, in 1779. He first coast, in which he showed valor and abiliserved with the troops of his own country, but in 1804 joined the French army as colonel and aid to Marshal Ney, but after and made a descent on Whitehaven, set 1813 entered the Russian service. Some of his most important works are Traités Scotland in constant alarm. In 1779, in des Grandes Opérations Militaires; Principes de la Stratégie; Vie Politique et Hilitaire de Napoléon; Précis de l'Art de Guerre, etc. de Guerre, etc.

Jonah (Hebrev, signifying dove), one of the minor prophets, son of as one of the greatest of naval combats and according to II Kings, xiv, and Jones has been regarded as chief 25, a contemporary of Jeroboam II, was among American naval heroes. On his born at Gath-Hepher, in Galilee. The return to America, Congress voted him a book which bears his name is historical solendid gold medal, with a resolution trepidity. At the conclusion of peace ing and other industries. Pop. 9384.

Jones went to Paris as American agent for prize-money. In 1787 he entered the Jongleurs (zhon-leur), a class of French minstrels in the remains were discovered in that city in tumbling, etc.

1905 and brought to the United States, Jönköping (yeun-cheup'ing), a town to be interred in the Naval Academy

to be interred in the Naval Academy grounds at Annapolis.

Jones, OWEN, a British artist and decorrator, born in 1809. He studied art under Lewis Vulliamy, and traveled in Italy, Turkey, Egypt and Spain. In the last-mentioned country he collected the materials for his great work on the Alhambra—Plans, Sections and Details quille), allied to the daffodil. It has of the Alhambra, completed in 1845. In long lily-like leaves, and spikes of yellow 1842 Jones published his Designs for or white fragrant flowers. The sweet-Mosaic and Tesselated Pavements, and in scented jonquil (N. odörus), a native of 1846 the Polychromatic Ornament of 1849. Perfumed waters are obtained of the works for the Great Exhibition of from jonquil flowers. of the works for the Great Exhibition of from jonquil flowers. 1851, and afterwards director of decorations at the Sydenham Crystal Palace, a celebrated English poet, the Ornament was published, and it still remains a text-book of examples, if not of principles. His last important work was his Examples of Chinese Ornament (1867). He died in 1874.

Jones, Sir William, an English lawyer and oriental scholar, born in

1746. He was educated at Harrow and Oxford, and early acquired a reputation as a linguist, Hebrew, Persian, Arabic and even Chinese, besides German, Italian, French, Spanish and Portuguese, being among his acquisitions. In 1770 his translation (in French) of the life of Nadir Shah from the Persian appeared; in 1771 his grammar of the Persian lan-guage; in 1771 his Poeseos Asiatica Commentariorum, Libri Sex; and in 1781 his translation of the seven Arabic poems known as the Moallakat. He had been called to the bar in 1774, and in 1783 was nominated judge in the supreme court of judicature, Bengal, and knighted. Here he did much for the furtherance of oriental studies, being one of the first early age, where he laid the foundation Europeans to study Sanskrit, founding of his learning, but was ultimately withthe Royal Asiatic Society, translating drawn, it is said, by his stepfather, a the Sakuntala, the Ordinances of Manu, master bricklayer, who wanted his asbesides tales, poems, extracts from the sistance in the business. He soon tired Vedas, etc. He also undertook a digest of this occupation, entered the army as a first the first poems.

commending his zeal, prudence and in- a lumber center and has large wood-work-

Russian navy as rear-admiral, and per- middle ages who used to wander about formed valuable service against the entertaining people by song, music, story, Turks. He died at Paris in 1792. His etc., and sometimes by juggling feats,

tions at the sydenham Crystal Latace, and the special superintendence of contemporary and friend of Shakespere. the Egyptian, Greek, Roman and Alhamber Courts. In 1856 his Grammar of man, and was born in 1574, at Westmin-Ornament was published, and it still rester. He was placed at the Westminster grammar school, under Camden, at an



Ben Jonson

of the Hindu and Mohammedan laws, private soldier, and showed much personal which he did not, however, live to comcourage during a campaign in Holland, plete. He died in Calcutta in 1794.

Returning to England he began his career Jonesboro, a city, capital of Craighead as an actor, and in 1598 his drams, county, Arkansas, 67 miles Every Man in His Humor was printed.

5. N. w. of Memphis, Tennessee. It is About this time Jonson was in some

ing slain an actor in a duel, and was foundries, machine shops, machinery supactually imprisoned for some time. In ply houses, etc. Pop. (1920) 29,855.

1599 he brought out his comedy of Joppa. See Jaffa. followed by Cynthia's Revels (1600); the Poetaster (1602); and Sejanus, a tragedy (1603). The festivities which tragedy (1603). The festivities which welcomed the new king, James I, gave a new impulse to the representation of masques, in the composition of which the ready talent of Jonson was employed by the court itself, the celebrated Inigo Jones doing the decorations. In 1604 he had some share with Chapman and Marston in writing Eastward Ho, certain passages of which, reflecting satirically on the Scotch nation, drew down the auger of the king, and nearly cost the authors their nose and ears. In 1605 his worder of Volume or the East appeared: comedy of Volpone, or the Fox, appeared; in 1609 Epicone, or The Silent Woman; in 1610 the Alchemist; in 1611 Catiline, a tragedy; and in 1614 Bartholometo. Fair, a complete picture of Elizabethan low life. In 1613 Jonson made a tour in France as governor of Sir Walter Raleigh's eldest son. In 1618 he visited Scotland, staying for some time with Drummond of Hawthornden, whose notes of his guest's conversation are among the best accounts we have of Jonson's personality. In 1619 he returned to England, received the honorary degree of A.M. from Oxford University, and on the death of the poet laureate was appointed his successor, and the salary raised to the sum of £100 by Charles I. Much of his time was spent at the Apollo, Mermaid, and other taverns, feasting, and other taverns, best by likely and organization in these by the drinking and engaging in those brilliant contests of wit in which in earlier days Shakespere also took part. His later days were spent, not perhaps in later days were spent, not pernaps in much pecuniary prosperity, but certainly in fame and honor, as the acknowledged chief of English literature. He died in 1637, of an attack of palsy, leaving behind him an unfinished pastoral drama of great beauty, The Sad Shepherd. He was buried in Westminster Abbey, where a monument was erected to his memory with the inscription, 'O rare Ben Jon-son.' Jonson's best dramas are excellent in plot and development, have strongly conceived characters and excellent traits of humor, but he is sometimes forced and unnatural, and deals perhaps too much with passing manners and eccentricities. He had a genuine lyrical power, seen in his short poems and the songs interspersed 1891, and has written numerous works, inin his masques.

Joplin (jop'lin), a city of Jasper of the Fishes of North America, and many county, Missouri. It is the com-other works and papers on scientific and mercial center of the southwest Missouri general subjects.

danger of the gallows on account of hav- lead and zinc region. Has numerous

Jordaens (yor'dans), Jakob, historical and portrait painter, born at Antwerp in 1594. He studied under his father-in-law, Van Oort, and then under Rubens, and has the reputation of being, after Rubens, Antwerp's greatest painter. His pictures, the subjects of which are mostly mythological scenes, and scenes from Flemish popular life, banquets, etc., are to be found in the chief European collections. His style is less elevated and powerful than that of Rubens, but preserves more of the national Flemish humor

Jordan (jordan), the largest river in Palestine, and one of the most celebrated rivers in the world. It rises from several sources, uniting in Bahr el-Hûleh, or the Waters of Merom. From this point it flows with a rapid current in a narrow rocky bed, and falls after a southerly course of about 10 miles into Lake Tiberias. Shortly after leaving the south end of this lake it enters a broad valley or ghor, called in the Bible 'the plain'; and continuing a southerly but singularly crooked course of about 70 miles direct distance, or 200 including windings, falls into the north end of the Dead Sea, having received the Zerka or Jabbok, also on the left, and numerous smaller affluents. The upper part of the valley of the Jordan is hilly, arid, and barren, but it becomes more level and ferbarren, but it becomes more level and let-tile as it approaches the Zerka. The river is muddy and full of small fish. In the dry season it is shallow, with an average width of from 30 to 50 yards. At its mouth it is about 180 yards broad and about 3 feet deep. It is subject to great inundations during the winter season. The valley of the Jordan forms one of the most resolution. of the most remarkable depressions in the world, the Dead Sea being 1312 feet be-Jordan, DAVID STARR, naturalist, born at Gainesville, New York, in

1851. He became professor of biology at Butler University. Indianapolis, and subsequently in the University of Indiana. He investigated for the Census Bureau the marine industries of the Pacific coast, 1879-81. He has been president of Leland Stanford, Jr., University since a city of Jasper of the Fishes of North America, and many

Jordan, William George, editor, born Joseph of Arimathæa, i.e., of Ranathæ at New York in 1864; educated at the College of City, of New Benjamin, a member of the Jewish York; was successively editor of Book Sanhedrim, who, though a believer in Chat, Current Literature, Saturday Even-Jesus, had not the courage to make open 1908, to the call by President Roosevelt, of a convention of governors at Washington, at which arrangements were made March 17th. for annual meetings. An organization Joseph I, Emperor of Germany, eldest was formed of which Mr. Jordan was appointed secretary. He is the author of 1678; became emperor in 1705. He was Mental Training, The Power of Truth, a zealous member of the alliance against The Crown of Individuality, The House of Governors, etc.

The Crown of Individuality of the House of Governors, etc.

The Crown of Individuality of the House of House of the Spanish succession, in which the victories of Mariborous and Eugene were glosy for the borough and Eugene were glosy.

Jornandes (jor-nan'dez; properly borough and Eugene won glory for the Jordanes), the historian of the Goths, and himself a Goth, was born about 500 A.D., was at first a yows, and is said to have been appointed bishop of some Italian city, probably elected king of the Romans in 1764, and Ravenna or Croton. Of his two works the chronicle De Regnorum et Temporum emperor, succeeding his mother, however.

is invaluable.

Jorullo, XORULLO (hō-rul'yō), a volcano of Mexico, in the department of Michoacan, 160 miles southwest

Is a solution of the string of the service of the selder brothers, who sold him to some Ishmaelitish slave-dealers, by whom he was sold to Potiphar, a distinguished officer in Egypt. The story of his elevation to the position of vice-regent of Egypt and the settlement of his father and brothers there is well known (Gen. xxxvii.—1). Authorities still differ as to the period in Egyptian history to which Joseph's life belongs, some placing it berore, others under, and others after the time of the Hyksos or shepherd kings of Egypt.

Joseph, the husband of Mary the mother of Jesus, was a descendant of the house of David, though resident at Nazareth, where he followed the trade of a carpenter. Early tradition represents him as an old man at the time of his marriage, and he seems to have died before the commencement of the public ministry of Jesus. His day in the Ro-man Catholic calendar is March 19.

cated at the College of City, of New Benjamin, a member of the Jewish York; was successively editor of Book Sanhedrim, who, though a believer in Chat, Current Literature, Saturday Evening Post and Search Light. In 1907, profession of his faith. Nevertheless, he proposed the organization of a House after the crucifixion he went to Pilate, of Governors, to work for uniform legislation between the States. This led, in Nicodemus buried it in his own garden. According to tradition he went as apostle to England. His day of celebration is

Nuccessione is of value only when it approaches his own time. The other work, Austria only in 1780. He at once comproaches his own time. The other work, Austria only in 1780. He at once comple Rebus Geticis, treating of the Goths, menced an extensive scheme of reforms, based on the lost history of Cassiodorus, but the country was not prepared for but the country was not prepared for such sudden changes, and he was compelled to give up most of his plans. In 1788 he visited Catharine II at Cherson, and in league with her made war against Turkey. He died in 1790.

of Mexico, thrown up in 1759; height, about 4150 feet. There are at present Joséphine (zhō-sā-fēn), Empress of scarcely any signs of activity about the mountain.

Joseph (jō'zef), one of the two sons of the patriarch Jacob by his favorite wife Rachel. His father's pref-them developed and the patrial of th 1794 her husband, who had been commander of the army of the Rhine, was executed by order of the Convention. She herself had a narrow escape, having been included in the list of proscription. After the fall of Robespierre she paid a visit to Napoleon to thank him for restoring the sword of her husband, and so pleased him that he soon after married her (1796). She became a beneficial element in his She became a beneficial element in his life, and her amiable manners won the hearts of everybody and helped to secure her husband's position. When Napoleon ascended the throne in 1804 she was crowned along with him. But the fact that the union was childless stood in the way of Napoleon's ambition to become the founder of a dynasty, and in 1809 Josephine was divorced, retiring to her beautiful seat of Malmaison, with the title of empress-queen-dowager and an annual grant of two million francs. She died in May, 1814.

Josephus (jó-se'fus), Flavius, the historian of the Jews, was born at Jerusalem in 37 a.d., and was carefully educated. In 64 a.d. he made a journey to Rome, and was introduced to Poppæa, the wife of Nero. On his return he found his countrymen preparing to throw off the Roman yoke, and having tried in vain to persuade them of the hopelessness of such a struggle, he accepted the post of defending the province of Galilee, and actually held the fortified town of Jotapata against the whole Roman army for forty-seven large. He was captured at the fall of the city, was afterwards present in the days. He was captured at the fall of the city, was afterwards present in the kloman army at the destruction of Jerusalem (A.D. 70), and went with Titus a supporter of Kossuth, and during to Rome, where, assuming the family have of his patron, Flavius, he lived in learned leisure. Here he wrote (in Greek) The History of the Jewish War; The Antiquities of the Jewish War; The Antiquities of the Jews, giving a history of the Jews from the earliest times to the reign of Nero; an Autobiography, mostly relating, however, to the time of his military activity; and a work on the Antiquity of the Jewish Peoble, directed against Apion, an Alexandrian grammarian. The date of his death is uncertain. He certainly saw the end of the century.

Toshua (josh'ū-a), the successor of Jotuns (yō'tunz), in northern mythol-

the Israelites, was the son of Nun, of the ribe of Ephraim. His name was at first floshea (help), but was changed by Moses into Joshua (Jehovah's help), of which Jesus is the Greek form. He was the only one, with the exception of Caleb, the only one, with the exception of Jotunheim, from who had command of Jotunheim, from which they waged perpetual war against the Esir, the bright condition of Jotunheim, from which they waged perpetual war against the Esir, the bright condition of Jotunheim, from which they waged perpetual war against the Esir, the bright condition of Jotunheim, from which they waged perpetual war against and the Esir, the bright condition of Jo name, and of which he has been usually Paul Raynal.

regarded as the author; but modern ritics have shown that it is a composite

Joubert (jö'bert), Petrus Jacobus, Boer president, born at Con-

Joseph's-coat, a popular American name for Amaranthus characterized in the Scriptures as doing that which was right in the sight of the Lord.' He took an active part in the preferred two goat's-beard. See Goat's-beard. the restoration of the temple, during

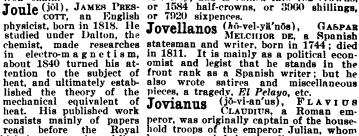
Joshua (Josh'u-a), the successor of Jotuns (yō'tunz), in northern mythology, immense giants and mathe Israelites, was the son of Nun, of the gicians who had command over the

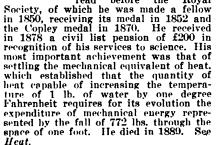
ratics have shown that it is a composite parrative, and contains references to go, Cape Colony, in 1834. He migrated from Cape Colony with the Boers, settled in the Transvaal, was elected to the Volkaraad in 1863, and made president in 1874. War having begun against the

British in 1880, he won a decided victory against them in 1881, a treaty of peace following. He was elected vice-president in 1883, contested the Presidency in 1888, distinguished himself under Dumouriez, in 1883, contested the Presidency in 1888, and in 1899 commanded the army in Natal, defeating the British in several engagements, and besieging Ladysmith for several months. He died in 1900.

and normal schools; taught for some years in the College of France, and became a member of the Academy. He died at Paris in 1842. In philosophy he was mainly a follower of the Scottish whose works he translated into French. llis own principal works are Mélanges Philosophiques and Cours d'Esthétique. As an original thinker Jouffroy has no claim either to profundity or intellectual brilliancy, but he had a talent for popular exposition, and followed prudent lines of speculation.

consisting of an iron collar which sur-rounded the neck of the criminal, and was fastened





Jougs.

ws made a general of division in 1793, de-Joudpore. See Johhpur.

Jouffroy (zhö-frwä), Théodore Simon in 1796. He studied philosophy under Cousin, held the position of more fesser of philosophy in the studied philoso the army on the Danube, he crossed the Rhine at Basel, but was encountered by the Archduke Charles, who completely defeated him at Stockach. In 1803 he became a member of the senate, and in 1804, on the establishment of the empire, obtained the rank of marshal, the title of count, and a seat in the council of state. After the restoration he was school of Reid and Steward, some of raised to the peerage. He entered with spirit into the revolution of 1830. He wrote two works—Mémoires pour servir à l'Histoire de la Campagne de 1796, and Opérations de l'Armée du Danube.

Journalism (jur'nal-izm). See News-

Journey-weight, a term applied at the English mint Jougs (jugz), an instrument of punish-ment formerly used in Scotland, which were probably considered formerly which were probably considered formerly as a day's work. The journey-weight of gold is 15 troy lbs., which is coined into 701 sovereigns, or 1402 half-sovereigns. to a wall or tree by an A journey-weight of silver weighs GO iron chain.

Joule (jöl), James Pressor 1584 half-crowns, or 3960 shillings, or 7920 sixpences.

physicist, born in 1818. He studied under Dalton, the chemist, made researches statesma and writer, born in 1744; died in electro-magnetism, in 1811. It is mainly as a political econ-about 1840 turned his atomist and legist that he stands in the tention to the subject of front rank as a Spanish writer; but he

> peror, was originally captain of the household troops of the emperor Julian, whom he accompanied in the disastrous campaign against the Persians in which Julian lost his life (A.D. 363). After Julian's death he was proclaimed emperor by the troops, but could only extricate his army by ceding to the Persian monarch the five provinces beyond the Tigris. He was found dead in his bed when on his way to Constantinople, 364.

Jowett (joweth, Benjamin, an English scholar, master of Balliol College, Oxford, was born in 1817; died expenditure of mechanical energy represented by the fall of 772 lbs. through the in 1893. He studied at Oxford, was space of one foot. He died in 1889. See elected to a fellowship in 1838, and became regius professor of Greek in 1855.

In 1855 he published a commentary on the *Epistles of St. Paul*. He was one of the leaders of the Broad Church movement. In 1870 he became master of Relliol. He translated Plate.

Balliol. He translated Plato.

Jowett, John Henry (1864-), a
British clergyman, paster of St. James' Congregational Church, New-castle-on-Tyne, 1889-95; Carr's Lane, Birmingham, 1895-1911. In 1911 he became pastor of Fifth Avenue Presby-terian Church, New York, and retained the pastorate till 1919, when he returned to England.

Juan (hu-an'), the Spanish form of John. See Don Juan.

Juan de Fuca (jö'an), STRAIT OF, the strait between Vancouver Island and the State of Washington on the west coast of the United States.

Juan Fernandez, so called from the name of its discoverer, also sometimes Mas-a-Tierra, an island in the South Pacific Ocean, about 400 miles off the coast of Chile, to which it belongs. It is 18 miles long and 6 miles broad at the broadest part, mountainous, and of rugged aspect. Parts of it are fertile, producing various kinds of timber, peaches, figs, grapes, cherries, etc. There are excellent fish. The island is occupied by some hundreds of settlers, whose chief occupation is the furnishing of fresh vegetables, water, and wood to the whaling or other vessels that call here. De Foe is said to have founded his Robinson Crusoe on the history of island meant by De Foe is now denied.

peans, a step which occasioned the inter-ference of Britain, Spain and France. Troops were landed in Mexico in 1862, but Britain and Spain soon retired, leaving Napoleon III to carry out his views alone. Maximilian of Austria came on Napoleon's invitation to assume the Sea, north by Samaria, west by the Medithrone, but Juarez, in spite of defeats terranean, and south by Arabia Petræa, and losses, continued to head a resistance, See Palestine. all before them. Maximilian was cap-Juarez was reflected to the presidency (1867), which position he held till he Kerioth, a village of Judga, was one of died (1872).

(jö'ba), king of Numidia, North Africa, in the first cen-Juba I tury B.C. On the breaking out of the civil war Juba fought against Cæsar; but being conquered in a battle at Thapsus, and abandoned by his subjects, he slew himself, in B.C. 46.—His son, Juba II, was led in Cæsar's triumph at Rome, was carefully educated, and, having gained the favor of Augustus, received in marriage the daughter of Antony and Cleopatra, and was restored to the kingdom of his father, in B.C. 30, which some years after he exchanged for Mauritania. He wrote a history of Rome in Greek, a history of Arabia, treatises on the drama, painting, grammar, etc., of which only fragments are extant. He probably survived till 18 or 19 A.D.

Jubæa (jö-bē'a), a genus of palms. See Jabalpur. Jubbulpore.

Jubilee (jö'bi-lē), a festival of the Jews, held every aftieth year, During this year all slaves or captives were to be released; all estates which had been sold reverted to their original proprietors or their descendants; and the ground was to lie fallow. It has been doubted whether the law of jubilee was ever actually observed until after the return from the Babylonian exile, when, for a time at least, it came into opera-tion. In 1300 a jubilee was instituted by Boniface VIII, who issued a bull granting plenary indulgence to all pilgrims who should visit Rome that year and perthe solitary residence here for over four form certain ceremonies. The result was years (1704-09) of a Scotch sailor, Alexander Selkirk, though his location of the the church drew so much profit that in 1350 Clement VI declared a jubilee every Juarez (hu-a-reth'), Benito Pablo, fiftieth year, and in 1389 Urban VI every President of the Mexican Rethirty-third year, and in 1470 Paul II public, was born of pure Indian parentevery twenty-fifth year. The Reformapublic, was born of pure Indian parent-age in 1806, and was elected president in 1861. He declared the suspension of indulgences, sensibly diminished both the public payments for two years to Euro-enthusiasm and the profits. The last jubilee, the twenty-third, was held in 1900.

(jö-dē'a), a term applied Judæa after the return of the Jews from exile to that part of Palestine bounded east by the Jordan and the Dead

and when Napoleon under pressure from the American government withdrew his troops in 1866, the republicans carried Leah, the progenitor of one of the twelve tribes. See Jews.

the twelve apostles of Jesus, and betrayed

7-0

his Master into the hands of the Jewish priests for thirty pieces of silver. Remorse for his crime led him to suicide. The Cainites, Cerinthians, and some other heretics held him in great veneration, believing that he alone saw the necessity for bringing about the fulfilment of prophecy and the atonement for humanity. Others have thought that his object was the blige him Master to use his was to oblige his Master to use his miraculous power to defeat his enemies and establish the new earthly kingdom of the Messiah, in which Judas expected to have a high place.

Judas, or Jude, brother of James, one of the twelve apostles. Matthew and Mark call him Thaddaus surnamed Lebbaus. Nothing is known of his life. By many he is considered the author of the epistle of Jude. See Jude, Epistle of.

Judas Maccabæus. See Maccabees.

Judas-tree (Cercis Siliquastrum), nat. order Leguminosæ, is a native of the Levant, Spain, south of France, Italy, etc. It grows to the height of about 20 feet, with pale green leaves and beautiful purple flowers, which are eaten mixed with salad or made into are eaten mixed with salad or made into fritters. C. canadensis, or red-bud, another species, growing in Canada and the United States, is smaller.

the United States, is smaller.

Jude (jöd), EPISTLE OF, one of the books of the New Testament.

Its canonicity was questioned by the restrictive church, and often since. The Its canonicity was questioned by the primitive church, and often since. The Asiatic churches did not make use of it till the fourth century, nor was it known in the West till towards the close of the second. Its quotation from the apocryphal book of Enoch raised a prejudicity production of the second of the s dice against it, but it was eventually allowed to take its place as a portion of the sacred canon. It is a passionate denunciation of heretics and false teachers and has been supposed by some to be written by Judas, the brother of the Saviour, and not by Judas, the brother

of James (see above).

Judge (juj), a person duly invested it be appealed against, suspended, or recauses or questions between parties according to law. The term is quite a Judgment-debt, in law, a debt seconding to law. in law, a debt secured to the creditor by a judge's order, and in respect of which he can at any time attach the debtor's goods and chattels. Such debts for the judge at common law decides full, as compared with simple contract points of law, and enables the jury rightly to decide questions of fact, while in equity he decides both classes of questions. A judge cannot be prosecuted for the consequences of the consequences of cisions, except causes or questions between parties according to law. The term is quite a judgment-debt, in law, a debt seconding to law. The term is quite a general one, being applicable to any one itor by a judge's order, and in respect of

may have acted without jurisdiction, nor can he officiate in a case where he has a personal interest, unless it be merely his common interest as a citizen, taxpayer, etc.

Judge Advocate, an officer appoint-ed to preside at the proceedings of courts-martial, his duties being to summon witnesses, administer oaths, take a minute of the proceedings, advise the court on points of law, etc.

Judges, in Hebrew history. See Jews.

Judges, Book of, a canonical book of the Old Testament, so called because the greater part of the narrative is occupied with the history of the judges who were raised up to deliver their countrymen from the oppressions of their neighbors. The first chapter, although formally connected with the book of Lechus with the service of the control Joshua by the opening sentence, evidently contains a separate portion of the history of the Israelitish invasion of Canaan, the first settlement, indeed, west of the Ine first settlement, indeed, west of the Jordan, in which the tribes of Judah and Simeon play a distinct part in the conquest. The 6th verse of the 2d chapter again connects the work with the concluding part of the book of Joshua, and in the chapters which follow the history of the nation is written from an ideal and poetic point of view, which gives it unity, the judges being represented as successive rulers, although in most cases their bistory and influence most cases their history and influence were merely local. The third part of the book begins at chap, xvii, and has no formal or chronological connection with what has gone before, and has sometimes been called an appendix.

Judgment (juj'ment), in law, the judicial determination and decision of a court in an action. It is either interlocutory or final. In the former case it is given only on some particular point or proceeding, and does not complete the action in the same way

of questions. A judge cannot be prostory is given in the apocryphal book ecuted for the consequences of his decisions, except in the case where he sented as going out to the tent of Holo

See Jagannâtha. uggernaut.

dom in the northwest of the Balkan peninsula, also mown as the Serb-Croat-Slovene State. It was formed in 1918 by the union of Servia, Croatia and Slavonia, following the defeat of Austria-Hungary in the European war (q. v.), and was one of the signatories of the treaties of 1919 (see Treaty). The former kingdom of Servia and an area of less than 34,000 square miles and a population of 3,000,000. The mew state of Jugo-Slavia has an area of less than 34,000 square miles and a population of 9,000,000. Roughly, Jugo-Slavia comprises the former Austro-Hungarian territories of Carniola, Croatia and Slavonia, Bosnia and Herzegovina, and part of Dalmatia, as well as the kingdom of Servia as it existed prior to 1918.

Jugular Vein (jugū-lar), one of the mame jujube is also given to a confection made of gum-arabic or gelatine, sweetened and flavored so as to resemble the jujube fruit.

Jujuy (hu-hö'), a town of the Argenticulated on the Rio Grande, and carries on an active trade with Chile and Bolivia. Pop. 4159.

—The province has an area of 19,000 square miles, and a sopo. of 55,450.

Julep (jö'lep; from Persian, gulāb, rose-water), a sweet drink; specifically, in medicine, a solution of sugar in aromatic water, but not so concentrated as syrup. In the United States the name is given to a drink composed of spirituous liquor, as brandy or whiskey, sugar, pounded ice, and a seasoning of the name is given to a drink composed of spirituous liquor, as brandy or whiskey, sugar, pounded ice, and a seasoning of the name is given to a drink composed of spirituous liquor, as brandy or whiskey, sugar, pounded ice, and a seasoning of the name is given to a drink composed of spirituous liquor, as brandy or whiskey, sugar, pounded ice, and a seasoning of the large trunks by the mother of the blood that has circulated in the head, face and neck

Hiempsal. Micipsa did his best to conceining Bethulia, the city in which she country, and aking advantage of the admission to his int, thus afforded to her, cut off his head ith his own sword while he slept.

In 1849, gradated from Williams College in 1870. The growth of history in the inversity of Minnesota. In 1892 he in 1885-92, professor of history in the inversity of Minnesota. In 1892 he inve

See Jagannâtha. is blood-red or saffron-colored with a sweet granular pulp, is wholesome and (jug-lan-dā'se-ē), the pleasant to eat. The common jujube (Z. uglandaceæ (Jug-lan-da'se-ē), the walnut tribe, a nat. wulgāris) is a native of Syria, from which rder of exogenous plants, chiefly found it was introduced into Europe. The fruit is dried and forms an article of commerce. Iternate pinnate stipulate leaves and liternate pinnate stipulate leaves and liternate pinnate in terminal clusters or loose accmes. Besides the walnut the order necludes the butternut and hickory.

Inco-Slevie (vö'gō-släv'i-a) a king-furnished the brunches of Syria, from which it was introduced into Europe. The fruit is dried and forms an article of commerce. Z. Lotus, which some believe to have given name to the ancient Lotophagi, a shrub 2 or 3 feet high, is a native of Syria, from which it was introduced into Europe. The fruit is dried and forms an article of commerce. Shrub 2 or 3 feet high, is a native of Syria, from which it was introduced into Europe. The fruit is dried and forms an article of commerce. Shrub 2 or 3 feet high, is a native of Syria, from which it was introduced into Europe. The fruit is dried and forms an article of commerce. Shrub 2 or 3 feet high, is a native of Syria, from which it was introduced into Europe. The fruit is dried and forms an article of commerce. C. Lotus, which some believe to have given name to the ancient Lotophagi, a shrub 2 or 3 feet high, is a native of Syria, from which it was introduced into Europe. The fruit is dried and forms an article of commerce. C. Lotus, which some believe to have given name to the ancient Lotophagi, a shrub 2 or 3 feet high, is a native of Syria, from which was introduced into Europe. The fruit is dried and forms an article of commerce. The fruit is dried and forms an article of commerce. The fruit is dried and forms an article of commerce. The function of the function of the fruit is dried and forms an article of commerce. ncludes the butternut and hickory.

Tugo-Slavia

(yö'gō-släv'i-a), a kingdom in the northwest

Saviour's crown of thorns was made.—

The pollow of the pol

Jugular Vein (jugui-lar), one of the large trunks by which the greater part of the blood that has circulated in the head, face and neck is returned to the heart. There are two on each side, an external or superficial, and an internal or deeper.

Jugurtha (juguitha), a king of yumidia, a natural son of Masinissa. Micipsa, his father's brother, and king of Numidia after Masinissa (R. c. 149), adopted him, and brought his own sons, Adherhal and him up with his own sons, Adherhal and

father and several members of his family were murdered by the soldiers of his cousin, the emperor Constantius. He was cousin, the emperor Constantius. He was indued philosophy and letters, and resided in Athens, where he was indued to embrace paganism. Having received command of an army against the Germans, he defeated them at Strasburg, and drove them beyond the Rhine. He also displayed great talent as an administrator in Gaul. The emperor now became jealing and recalled his best troops ous of Julian, and recalled his best troops under pretense that he wanted to employ them against the Persians. This order caused rebellion among the soldiers, who proclaimed their leader Julian emperor in March, 360, in spite of his own resistance. Constantius prepared to proceed against him, but soon after died, and Julian was him, but soon after died, and Julian was diately on his elevation to the pontificate generally recognized as emperor. He bepan by putting a stop to many abuses, of the papal sovereignty in its ancient and limiting the splendor of his court, territory, and the extinction of foreign and was thus able to remit to the people domination and influence in Italy. Rethe fifth part of all their taxes. He sought to restore the heathen worship in all its splendor, and on that account opposed Christianity as much as was in his power, without, however, persecuting the Christians themselves. He even against Louis XII. The French defeated sought to falsify the words of Christ by the papal army near Ravenna, but were rebuilding the Jewish temple. In 363 soon after driven out of Italy. He is he headed an expedition against the Perconsidered one of the most worldly of sians, and took several cities, but was the paper of the most worldly of the paper o he headed an expedition against the rersians, and took several cities, but was
mortally wounded. He was an able
ruler, and had also a reputation as an
author. Some of his works have come
down to us, including speeches, letters,
and satirical pieces; the latter are distinguished for wit and humor. He wrote also a work against the Christian religion, of which we have yet some ex-

Julian Calendar. See Calendar and Epoch.

Jülich (yü'lih), a town of Rhenish Prussia, 17 miles northeast of Aix-la-Chapelle. It was long the capital of an independent duchy. Pop. 5459.

Julien (z h û-lê-a n), STANISLAS-AIGNAN, the leading Chinese

island on the coast of Campania, ultimately allowing her to live in Rhegium. After the death of the emperor, Tiberius sessed of an extraordinary linguistic factreated her with great severity. She died in A.D. 14, in poverty and distress. Italian, Spanish, Portuguese and Ger-Her son Agrippa had been put to death by Tiberius shortly before.

Julian (jö'li-an), FLAVIUS CLAUDIUS of twelve months he published a Latin translation of the philosopher Mencius. Thenceforth ancient and modern Chinese, and stantius (brother of Constantine the Great), was born at Constantine the Great), was born at Constantine the Great), was born at Constantine the Great), when hardly six years old his family france; librarian at the Bibliothèque were murdered by the soldiers of his family sationale, 1839; president of the cellege, Thenceforth ancient and modern Chinese, Manchu, the Mongolian tongues, and later Sanskrit, were the subjects of exact and profound study. In 1832 he became professor of Chinese at the Collège de France; librarian at the Bibliothèque Nationale, 1839; president of the cellege, 1855; commander of the Legion of Honor, 1863. His most important work was entitled Voyages des Pélerins Boudhistes (Paris, 1853-58).

Tulians See Jülich.

I'e summoned a council which approved his conduct in sustaining Athanasius in his contest against the Arians in 342.—
JULIUS II (Giuliano della Rovere), was elevated by his uncle Sixtus IV to the rank of a bishop and cardinal, was appointed papal legate to France, in 1503 was elected pope, and died 1513. Immediately on his elevation to the pontificate he planned the complete reëstablishment soon after driven out of Italy. He is considered one of the most worldly of the popes, but was a far-sighted and patriotic sovereign, and a liberal and judicious patron of art and literature. To get means for building St. Peter's he ordered preaching of indulgences, which was one of the immediate causes of the Reformation.—JULIUS III (Giovanni was one of the immediate causes of the Reformation.—Julius III (Giovanni Maria Giocchi), a Roman of low birth, was made cardinal by Paul III in 1536, took an active part in the Council of Trent as papal legate, was elected pope in 1550, and in the following year recepened the Council of Trent, which had been suspended for upwards of two years. He attempted a union with Nestorians He died in 1555. See Casar. Julius Cæsar.

See Jalandhar. Jullundur.

Julus. See Iulus.

July (jö-li'), the seventh month in our calendar, having 31 days. In the Roman year it bore the name of Quintilis, as originally the fifth month. Its change of name to Julius was in honor of Julius Cæsar, who was born on the 12th of the month.

Jumilla (hô-mel'ya), a town of Spain, in the province of and 35 miles N. N. W. of Murcia. Pop. 16,446. (jum-mö'), or Jamu, a portion of the state of Cash-Jummoo See Cashmere. mere.

Jumna (jum'na), a river of Hindu-stan, which rises in the Himalayas, in the native state of Garhwal, near Jamnotri, at the height of 10,849 feet. It flows in its upper course in a the southeastward, and passing the cities of Delhi and Agra falls into the Ganges at Allahabad, after a course of 860 miles. Some trade is carried on by meaning the cities an agricultural center, and has manufactural center, and has manufactural center, and has manufactural center. Some trade is carried on by means of tories of military boots, tents, gloves, etc. clumsy barks. Two important irrigation Fort Riley, a large military post, is four works—the Jumna Eastern and the miles away. Pop. (1920) 7533.

Jumna Western Canals, derive their supply of water from this river. The former is 180 miles large and Rush. is 160 miles long, and irrigates about 250,000 acres annually. The latter has a length of 433 miles, and irrigates on an average about 360,000 acres. Jumnoutri. See Jamnotri.

Jumping-deer, the black-tailed deer (Cervus Lewisii), found in the United States to the west of the Mississippi.

Jumping-hare (Pedētes capensis), a species of jerboa found in Southern Africa, and so named from its general resemblance to a hare, while its jumping mode of progression, necessitated by the elongated nature of the hind legs, have procured for it its specific and popular distinction.

Jumping-mouse (Meriones hudsonicus), is found in Labrador and North America generally, but is especially an inhabitant of the fur territories. Like the jumping-hare,

Junagarh (jö-nä-gur), a n a t i v e ceeded in studying medicine at Strasburg, state of India, in Gujawhere he lived in intimacy with Goethe, and afterwards became a physician at miles. The surface is generally level, but rises on the Girnar Hills to 3666 feet. Sor at Heidelberg, then for a number of The soil is generally good, but irrigation years at Marburg, and later at Heidelberg

is extensively required. The nawab or ruler pays tribute both to the British government and to the Gaekwar of Baroda. Pop. 395,428. The capital, Juna-GARH, situated under the Girnar and Datar Hills, is one of the most picturesque cities in India, and has recently been greatly improved by the erection of a number of public and other buildings. Pop. 34,251.

(jun'se-ē), or Junca'ceæ, Junceæ the rush order, a small nat. order of endogenous plants, so named from the typical genus Juncus. principally composed of obscure herbaceous plants with brown or green gluma-ceous hexandrous flowers, the perianth being in two series, as in Liliaceæ, but calycine instead of petaloid. Some of them, as the common rush, are employed for making mats, chair-bottoms and

June (jön; Lat. Junius), the sixth month in our calendar. It consisted originally of twenty-six days, to which it is said Romulus added four, and Numa took away one. Julius Cæsar again lengthened the month to thirty days, and it has ever since remained unaltered.

(jū'nō), a city, the capital Juneau of Alaska, situated on the coast 100 miles N. E. of Sitka. It is a wholesale supply point for Alaska, with mining and fishing interests. It succeeded Sitka as the seat of government in 1908. Pop. 1644.

June-berry, a North Amelanchier canaa North American wild densis) common in Canada and the States, and allied to the medlar. The fruit is pear-shaped, about the size of a large pea, purplish in color, and a good article of food. Service-berry and Shadbush are other names.

it is classified by some along with the jerboas, and is one of the smallest of these forms.

Jumping-rabbit, the alactaga (which see).

Jumping-rabbit, the alactaga died in 1817. Poor in his youth, and apprenticed to a tailor, he at length suc-

again. He has himself described the greater part of his life in Heinrich Stilling's Leben (1806), and Heinrich Stilling's Leben (1817). His works dealing severe variety of remittent fever. It is with pietistic mysticism are numerous, including Theobald oder die Schwärmer, ysms and of cold and hot stages. The Das Heinrich, etc. Much opposition was excited by his strange works on spirits—
Theorie der Geisterkunde ('Theory of Spirit-knowledge'), and the Apology for Spirit-knowledge'), and the Apology for the same, which is connected with his Jungle-fowl, a name given to two Scenen aus dem Geisterreiche ('Scenes from the Spirit-world').

Jung-Bahadur, of Nepal, was born ful in its form; the colors are rich and in 1816; died in 1877. His uncle held a high position under the queen, who appointed the nephew commander-in-chief of the army. When the premier was joining Altoona. Pop. (1920) 7660. assassinated in 1846 Jung-Bahadur revenged him on his murderers and succeeded as premier. A conspirator against the center of the State by the junction of venged nim on his murderers and succeeded as premier. A conspiracy against him was quenched in blood, the king and queen were banished and the heir-apparent was raised to the throne. He aided the British in the mutiny of 1857, and in reward was knighted and given the Grand Cross of the Star of India. Jung-Breslau. See Inowraclaw.

Jungermanniaceæ a'se-ē), a group (jun-ger-man-iof cryptogams closely resembling mosses, usually regarded as a suborder of llepatice, but sometimes classed as a separate natural order. Most of them have distinct leaves. They inhabit the trunks of trees or damp earth, in cool moist climates.

Jungfrau (yung'frou; 'Maiden'), a mountain of Switzerland, in the Bernese or Helvetic Alps, on the frontiers between the cantons of Bern and Valais, 12 miles s. s. E. Interlaken. It is one of the most magnificent mountains in Switzerland and the loftiest cal-careous mountain in Europe; height 13,670 feet. It was first ascended in 1804.

Jungle (jung'gl), properly an Indian term applied to a desert and uncultivated region whether covered with wood and dense vegetation or not, but in English it is applied to land covered with forest trees, thick impenetrable brushwood, or any coarse, rank vegetation.

Spirit-knowledge'), and the Apology for night. the same, which is connected with his Necenen aus dem Geisterreiche ('Scenes from the Spirit-world').

Jung, Sir Salar, Dewan or Prime Java, etc. The jungle-fowl of Australia is Megapodius tumūlus. See Megapodius is Megapodius tumūlus. See Megapodius tumūlus. See Megapodius is Megapodius tumūlus. See Megapodius tumūlus. See Megapodius is Megapodius tumūlus. See Megapodius is Megapodius tumūlus. See Megapodius tumūlus. See Megapodius tumūlus. See Megapodius is Megapodius is Megapodius tumūlus.

the center of the State by the junction of the Little Juniata and Frankstown branch, flowing in a generally E. course and emptying into the Susquehanna 14 miles above Harrisburg. It is about 150 miles long, and though not navigable is noted for its picturesque scenery. Begind it are the Panneylvenia canal series. side it are the Pennsylvania canal and railroad, the latter frequently crossing the stream.

Junin (hb-nen'), a department of Peru.
embracing the wildest parts of
the Cordilleras; area about 28,000 sq.
miles; pop. 394,393.



Juniper (Juniperus commūnis).

Juniper

(jö'ni-per), the name of hardy exogenous evergreen trees and shrubs of the genus Juniperus, chiefly natives of the northern parts of the world. They belong to the nat. order Coniferæ, group Gymnospermeæ.

About twenty species are known, the most important of which are the J. communis. J. sabina. or savin, J. Virginiana, and J. Bermudiana. J. communis, or common juniper.

is a common bush growing wild in all the northern parts of Europe. The berries require two years to come to maturity, when they assume a bluish-black c lor. They are used extensively in Holc lor. They are used extensively in Holland in the preparation of gin, which owes its characteristic flavor to them. They yield an essential oil, which is a powerful diuretic. J. sabina or savin also yields a powerful diuretic, and an oil which is a local irritant. J. Vir-gintana and J. Bermudiana are trees. The former is the common red cedar of North America; the latter is known as Bermudas cedar. Both yield a wood used by cabinet-makers, etc., and in the manufacture of pencils.

Junius (jö'ni-us), a signature attached to certain letters on public affairs which first appeared in The Public Advertiser, a London paper published by Woodfall, from which they are copied into most of the other journals of the time. The earliest bears date January 21, 1769; the last, January 21, 1772. After they were completed they were collected and published by Woodfall, with a dedication to the English nation and a preface by the author. Other letters bearing the same characteristics, but having different and improved edition was published in of them are known to be erroneous sup-Bohn's Standard Library, edited by John positions. Wade, with an essay by the editor in favor of the claims of Sir Philip Francis

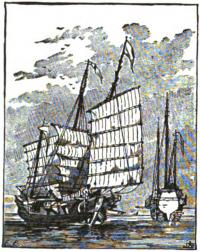
Junius, Franciscus, a Dutch scholar, to the gutborship, Allbourgh fulls a conthese papers, their authorship seems as far from being settled as ever. In seeking for a probable author of these letters the chief difficulty has been to find any one who combined the knowledge, circum-stances, distinctive opini as, and literary skill displayed by Junius. He supported evidently well acquainted with court and city politics, the management of public offices, the private intrigues of the time, and if not a lawyer he had considerable knowledge of law. Besides this he seems large rudder. to have been a man of rank and fortune, for we find him writing to Woodfall; 'I am far above all pecuniary views'; and he expressly asserted that, 'My rank and determine also fortune place me above a common bribe. She was the queen of heaven, and under With these characteristics and this wide the name of Regina (queen) was wor-

information he united a boldness, hemence, and rancor which, combined with his epigrammatic and unsparing invective, rendered him an object of terror to those whom he attacked. Public suspicion at the time was fixed most strongly on Burke and Viscount Sackville. But Burke denied the authorship spontane-ously to Dr. Johnson, and apart from considerations drawn from his temper, style, and turn of thinking, on several points Burke and Junius were in direct opposition to each other. That Viscount Sackville was the author received considerable belief at the time. His rank, fortune, temper, and talents concur to make it probable, while the friends and enemies of Sackville and Junius coincide. Yet the proof is far from complete in favor of this hypothesis. An attempt was also made to show that I are Temperature of the same and the show that I are Temperature. was also made to show that Lord Temple was the author, on the ground that the political and personal connections of Junius and Lord Temple were the same, and that his talents, age, circumstances, style of writing and thinking, rendered the hypothesis probable. The opinion that Sir Philip Francis (died 1818) was Jurius has been probably the most common. But the internal argument is against the signatures, appeared between April 28, supposition: Francis was but twenty1767 and May 12, 1772, and are given in the younger Woodfall's edition as the and he never displayed before or after Miscellaneous Letters. This edition was any proofs of a capacity or knowledge published in 1812 in three vols., and included Junius' private letters to Mr. This opinion was supported by Macault. S. Woodfall, and a preliminary essay lay; but of his five grounds for ascribing by Dr. J. Mason Good. An enlargement the authorship to Sir Philip Francis, two H. S. Woodfall, and a preliminary essay lay; but of his five grounds for ascribing by Dr. J. Mason Good. An enlargement the authorship to Sir Philip Francis, two

Junius, Franciscus, a Duten sential, born in 1589, lived for about thirty years in England, then in Holland, to the authorship. Although fully a century has elapsed since the publication of and died at Windsor in 1677. Of Anglo-Saxon and the ancient Germanic literatures he had an extensive knowledge; he published a glossary of Gothic, and a work on English etymology (Etymologicum Anglicanum), and left a valuable collection of MSS.

skill displayed by Junius. He supported the court party against America, favored triennial parliaments, and opposed the sometimes reaching 1000 tons. It has a abolition of rotten boroughs. He was high forecastle and poop, and ordinarily three masts of considerable height, each mast being in one piece, with a lug-sail, generally of bamboo splits. The bow is bluff, the stern full, and there is a very large rudder.

Juno (jö'nō), the most exalted divinity of the Latin races in Italy next to Jupiter, of whom she was the sister and wife; the equivalent of the Greek Herathe special protectress of whatever was connected with marriage, and females



Chinese Junks.

from birth to death had her as a tutelary genius. She was also the guardian of the national finances, and a temple, which contained the mint, was erected to her under the name of Juno Monēta on the Capitoline. See also Hera.

Junot (zhû-nō), Andoche, Duke of Abrantes, a French marshai, was born in 1771, and died in 1813. He was intended for the bar, but on the outbreak of the revolution joined a volume of the revolution in the died in 1813. unteer battalion, and soon attracted notice. At the siege of Toulon, in 1793, he became secretary to Napoleon, who afterwards took him with him into Italy and Egypt in the capacity of aide-decamp. In Egypt he was advanced to the capacity of side-decamp. In Egypt he was advanced to the capacity of side-decamp. rank of general of brigade. In 1800 he was made commandant of Paris, and he particularly distinguished himself at the battle of Austerlitz in 1805. In 1807 he was sent with an army into Portugal, and made his entry without opposition into Lisbon, his success being rewarded with the title of Duke of Abrantes. On the arrival of the British he first allowed himself to be defeated at Vimeira, and was then obliged to submit to the humil-

shipped in Italy at an early period. She Spain, and (1812) against Russia, he bore the same relation to women that failed to retrieve his reputation. In Jupiter did to men. She was regarded as 1813 he became insane, and lost his life

by leaping from a window.

Junta (jun'ta; Spanish, an assembly),
in Spain, a high council of state.

It was originally applied to an irregularly summoned assembly of the states, as distinguished from the Cortes or Parliament regularly called together by the authority of the king.

Jupati Palm (ju-pa-tě'; Raphia tædigěra), a palm which grows on the rich alluvial tidewashed soil on the banks of the Lower Amazon and Pará rivers in Brazil. The trunk is only 6 or 8 feet high and 1 foot in diameter. The leaves rise nearly vertically from the trunk, bending out on every side in graceful curves, forming a magnificent plume 70 feet in height and 40 in diameter. Leaves have been measured 48 and 50 feet long, and even these are not the largest. The leaf-stalks, which measure from 12 to 15 feet in length, are used by the natives for a variety of purposes as for the wells of houses. ety of purposes, as for the walls of houses, baskets, boxes, etc. Their rind yields fibrous filaments (raphi fiber), which are imported into Europe for agricultural tiebands, etc.

Jupiter (jö'pi-ter), or JUPPITER, the supreme deity of the Latin races in ancient Italy, the same as the Greek Zeus, and the Sanskrit dyaus



Jupiter.

(which means the sky); the second part was then obliged to stoling to the same as the Latin pater, father, subsequently took part in the campaigns As the supreme deity Jupiter received (1809) against Austria, (1810) against from the Romans the title of optimus

changes that took place in the sky. From shadows may be seen passing over the him accordingly proceeded rain, hail, and planet's surface. From observation of the thunderbolt, and he it was that the propagation of the eclipses of Jupiter's satellites Römer restored serenity to the sky after it had discovered that the propagation of light been obscured by clouds. Hence the epithets of Pluvius (rainy), Tonans (thundering), etc., were applied to him. The most celebrated of his temples was that on the Capitoline Hill dedicated to him as Jupiter Optimus Maximus, jointly with Juno and Minerva. He was represented with a scepter as symbolical of his and descending just below the hips. It sented with a scepter as symbolical of his and descending just below the hips. It supreme authority. He maintained the was frequently richly emblazoned and sanctity of oaths; he was the guardian highly ornamented. of all property; and every Roman was believed to be under his protection, and that of his consort Juno, the queen of heaven. White animals were offered up heaven. White animals were offered up breadth 7. Its general aspect is exceed to him in sacrifice, his priests wore white ingly wild and rugged, and it is chiefly caps, and his chariot was represented as devoted to the rearing of cattle.

its atmosphere it seems reasonable to from Belley in France, department of Ain, believe that its interior mass is intensely to the banks of the Rhine; and the greatheated similarly to that of the sun, hence est breadth about 63 miles, between the the intense light proceeding from this Lake of Geneva and the banks of the planet. Jupiter has eight moons, four of large size discovered by Galileo in 1610, tion is the Jura limestone, with greenand four small ones recently discovered sand, belonging to the lower cretaceous by aid of photography. They appear, series. Stalactite caves are numerous, like our moon, to make one revolution The two chief rivers which have their on their axis while passing once round source in the chain are both French—the the planet, the time of one revolution Ain and the Doubs—and descending from of the 4 large ones being from 1 day 18 its western slopes, belong to the basin of hours 27 minutes to 16 days 16 hours 32 the Rhone. Its highest points are Cret minutes. Europa, the smallest of these, de la Neige, Reculet, Mont Tendre and has a diameter of 2045 miles; Ganymede, Dole, the heights of which are respectively the largest, has a diameter of 3558 miles. 561, 5645, 5517 and 5514 feet.

Those recently discovered are very much smaller. The moons appear from the tarth to move in nearly straight lines geologists to what is termed in England from one side of the planet to the other, the Oölitic system of strata, it being very to that the planes of their orbits are characteristic of the Jura Mountaine

maximus (best greatest), and as the nearly the same as the ecliptic and the deity presiding over the sky he was considered as the originator of all the shadow of the planet, and their own changes that took place in the sky. From shadows may be seen passing over the him accordingly proceeded rain, hail, and planet's surface. From observation of

Jura (jö'ra), an island of Scotland, one of the inner Hebrides, in the county of Argyle; length 36 miles, mean

caps, and his chariot was represented as drawn by four white horses.

Jupiter, is the largest planet of the solar system, and the fifth (excluding the asteroids) in order of distance from the sun. Its mean diameter is about 85,000 miles; its polar diameter about 84,570; its mean distance from the sun 483,000,000 miles; its period of reared on them, together with their dairy revolution round the sun 11 years 10 1/3 produce (including Gruyère cheese), form months: its orbit is inclined to the ecliptic the chief source of wealth. Iron is revolution round the sun 11 years 10 1/3 produce (including Gruyère cheese), form months; its orbit is inclined to the ecliptic the chief source of wealth. Iron is at the angle 1° 18′ 40.3″. The inclination worked, marble and alabaster abound, of its axis is very mall (3° 5′), so and there are salt springs in different that changes in the seasons must be alguarters, from which salt is made. Lonsmost unknown; its volume is over 1390 le-Saulnier is the capital. Pop. 261,288 times that of the earth, but its mass is Jura a chain of mountains in Central only 300.857 times. Its surface shows belts of dark and light shade, which are France, partly to Switzerland, between usually but not always parallel to each which they form a sort of natural barrier, other, undergo quick changes, and seem as extending from southwest to northeast, though they merged into one another. and exhibiting a number of parallel ridges. To account for these rapid changes in The greatest length is some 200 miles, its atmosphere it seems reasonable to from Belley in France, department of Ain, believe that its interior mass is intensely to the banks of the Rhine; and the great-

The name is used in a wider sense to infact in civil cases at the common law. clude both the Oblite and Lias.

The jury is selected by ballot from those



Jurassic Sea-lizard (Ichthyosaurus communis).

Jurisprudence (jö-ris-prö'denz), the science of law.—
MEDICAL JURISPRUDENCE, another name for forensic medicine (which see).

Jurua (zhu-ru-a'), a little-known river of Northwestern Brazil, which rises on the borders of Peru and enters the Amazon on the right. Length 700 or 800 miles.

The origin of trial by Jury (jö'ri). The origin of trial by jury is not traceable to any single

In criminal trials two juries act, the grand jury and the petit jury. The grand jury may consist of any number more elly instructed by the presiding judge in statement or indictment which is brought france the verdict of a majority of the against the accused by the prosecution. Jury is sufficient.

Another kind of jury is the coroner's twelve, that the accusation has a basis jury, summoned to inquire into cases of of truth, they bring into court what is sudden or violent death. The inquiry is called 'a true bill.' If, on the contrary, made in presence of the body, and at the they find that there is no sufficient foundation for the accusation, they ignore the jury may consist of any number above bill, and require the dismissal of the eleven, and usually numbers twenty-accused. When a true bill is found by three; twelve must concur in the finding. of the subsequent prosecution. The grand of the subsequent prosecution. The grand are reserved for trial by a petty jury.

juryman is qualified by being a freeholder

Tury-mast, a temporary mast erected of his county, to what amount is not

of his county, to what amount is not clearly defined.

Of one that has been carried away by Petty or petit juries consist of twelve tempest, battle, etc.

persons, and no more, for the trial of all Jussieu (zhūs-yeu), a French family eriminal offenses, and of all issues of belonging to Lyons, which has

summoned. If all the jurists do not appear, or any of them are justly objected to and set aside, in virtue of the right of challenge exercised by the parties to a suit (see Challenge), the deficiency is usually supplied by making a new panel. The jury being then sworn is placed in the jury-box, and the evidence given. No juror is at liberty to leave the box without permission of the Court. Unless the case be a criminal one, in which the prisoner is charged with a misdemeanor, the jury are allowed to go home on engaging not to allow themselves to be spoken to on any subject connected with the trial. When the prisoner is charged with treason or felony the jury are usually allowed to retire only in cus-tody of the sheriff and his officers, who legislator or any particular period. It are sworn to keep them together, and not seems to have had its beginning in certain to speak to them with reference to the primitive customs of the northern European races, and received special developments from different nations. By the Anglo-Saxons a person who was accused of crime was permitted to summon twelve of his neighbors, called compurgators, the facts, and the judge with the law of who swore to his innocence. This was the origin of an institution which took settled and vigorous form after the Norman Conquest, gradually developing into its present form.

In criminal trials two juries act, the with other persons is permitted, and with other persons is permitted, and where, when the session is protracted, food and other necessaries are supplied. than eleven and less than twenty-four Upon returning into court they publicly men, who have been summoned by a man-assent to such verdict as they have agreed date from the sheriff of the county. Their upon. In the United States if they fail names are returned on a piece of parchment which is called a panel. The oath are discharged by the judge, and the cause
having been administered, they are usuwhether civil or criminal can be tried anew, at the pleasure of the court. The the nature and number of the offenses jury is an Anglo-Saxon institution and about to be brought before them. They has only recently been adopted by any then proceed to consider in private the of the continental nations of Europe. In statement or indictment which is brought France the verdict of a majority of the

produced a number of distinguished botanists, of whom the following are the principal:—ANTOINE DE, born in 1680; died in 1758.—Bernard DE, brother of the above, born in 1699; died in 1877.—ANTOINE LANGUAGE OF THE CONTROL OF THE PRINCIPAL OF THE PRINCIPAL OF T TOINE LAURENT DE, nephew of the above, born in 1748; died in 1836. His work entitled Genera Plantarum formed the first complete exposition of the natural system of classifying plants, which has now taken the place of the artificial Linnæan system. His other chief work was Principes de la Méthode Naturelle des Végétaux.—Adrien de, son of the preceding, born in 1797; died in 1853. By his researches and publications he placed him-self in the front rank of botanists. His best-known work was Traité Elémentaire de Botanique, for use in higher-class schools, which far excelled all previous works of the kind.

Juste-milieu (zhust-mē-lycu), a expression signifying 'the true mean'; specifically applied to that method of administering government which consists in maintaining itself by moderation and conciliation between the extreme parties on either side. Justice (jus'tis), a common term for a judge or legal official appointed to hold courts and administer justice, especially given to judges of superior courts. Thus in England the judges in the common law and chancery divisions of the High Court of Justice are so called, the head of the common law division being the ford chief justice of England. The term is similarly used in the Supreme Courts of the United in the Supreme Courts of the United States and the several States. So Chief Justice, and articles below.

Justice, High Court of. So preme Court. See Supreme Court. LORD CHIEF. See Chief Jus-

Justice, tice. ceedings are held before him in regard county annually.

to arresting persons accused of grave of fenses; and his jurisdiction extends to fenses; and his jurisdiction extends to trial and adjudication for small offenses. In case of the commission of a crime or large of the commission of a crime or large of the peace a complaint is death). The peace as complaint is death), the lord justice-clerk, and five commission of some offense, he issues a warnission of some offense, he issues a warnission of some offense, he issues a warnistion of some offense be within his jurisant directed to a constable, tries the party if the offense be within his jurisant directed to a constable, tries the party if the offense be within his jurisant directed to a constable, tries the party if the offense be within his jurisant directed to a constable, tries the party if the offense be within his jurisant directed. The justices meet in petty or a circuit court, and there is no appeal in the suprement. The justices of a trivial quarter session, where offenses of a trivial quarter session, where offenses of a trivial from his judgment.

Justifiable Homicide. See Homicide.

These duties are all performed gratuitously, and not always efficiently, and in recent years there has been an occasional outcry against 'the great unpaid.' Be-sides qualifications of rank, any person having an estate of £100 per annum free of charge is eligible for the office. In Scotland the duties of a justice of the peace are more limited than in England, at least in practice. A rank or property qualification is not necessary. In Canada there are everywhere justices of the peace, holding their commissions from the crown, as in Britain, and having similar duties within their respective jurisdiction. The same is the case in other British colonies. In the United States the office is held only by special appointment, and the tenure is different in different states; but the commission is usually for three or four years, or some other specific limited period. Their position is similar to that of the justices in Britain. In some of the states they have a right to celebrate marriages.

Justices, persons formerly appointed by the sovereign to act for a time as his substitute in the supreme government, either of the whole kingdom or of a part of it. Thus when George I went abroad in May, 1719, he entrusted the government during his absence to thirteen lordsjustices; and nineteen lords-justices and guardians were also appointed when George IV went to Hanover in 1821. The lord-lieutenant of Ireland is a familiar example of a lord-justice.—The title Lords-justices of Appeal is in Engitted. land given to a certain number of judges belonging to the appeal division of the Supreme Court of Judicature.

Justices in Eyre, or ITINEBANT Justices, in Eng-

land, justices who travel about over fixed Justice of the Peace, a judicial circuits dispensing justice, the judges of trusted with the conservation of the were first appointed in 1176; in Magna lin Britain the first judicial processing are held before him in record

Justification (jus-ti-fi-kā'shun), a achieved victories in Africa, and when theological term em- Narses, another of his generals, put an ployed to designate the act by which a person is accounted just or righteous in the sight of God, or placed in a state of salvation. This conception of God as a judge who absolves the sinner on account of Christ's merit and imputed righteousness is based upon the Pauline writings, and which received its most pronounced expression during the time of the Reformation.

Justin (jus'tin), Justi'nus, the name of two emperors of the East.—
JUSTIN I, born in 450; died in 523 A.D., a peasant of Dacia, rose from a common soldier to be commander of the imperial guard, and on the death of Anastasius in 518 became emperor. He relegated the civil administration to the quæstor Proclus, and between them the empire was governed with a fair amount of success.—
JUSTIN II ascended the throne on the death of his uncle, Justinian I, in 565.
Beset with enemies outside the empire and harassed with internal discord, he in 574 solved his difficulties by abdicating in favor of Tiberius, captain of the guard. He died in 578.

Justin, MARCUS JUSTINIANUS JUS third century after Christ, although some assign him a later date. He made an by Trogus Pompeius, a native of Gaul, who lived in the time of Augustus, and whose work is no longer extant. This epitome, although incorrect in detail, is valuable for its compressed reproduction of the old histories.

Justinian I, FLAVIUS ANICIUS JUS-TINIANUS, SUR named the Great, nephew of Justin I, Emperor of the East, celebrated as a lawgiver, was born of an obscure family in 483 A.D., and died in 565. Patronized by his uncle, who, from a Thracian peasant, had become emperor, he so flattered the senate and dazzled the people that he was made consul, and took the title of Nobilissimus. On the death of his uncle, with whom he had latterly shared the imperial power. he was proclaimed emperor, and married an actress named Theodora. During his reign the party disputes of the Greens and the Blues became so violent that in his attempt to quell the tumults the emperor's own life was in jeopardy, and a great part of Constantinople was destroyed by fire. Aided by his generals, he was able subsequently to restore to pepper, and other articles of East Indiau the Roman empire a part of its former commerce are almost wholly carried in possessions, as when Belisarius in 523 gunny bags (as the jute bags are called), and 529 defeated the Persians, and made and exported from Bengal.

end to the Ostrogoth rule in Italy. Turning his attention to the laws, Justinian commissioned ten learned civilians to draw up a new code, and the result was the Corpus Juris Civilis, or body of civil law. This was a work which still remains of great value to the legal world. He took great interest in building cities. He took great interest in building cities, fortifications, and churches; among the latter he rebuilt the church of St. Sophia at Constantinople. To maintain his public munificence he oppressed the people with taxes, and suffered his servants to commit the most flagrant crimes. His reign of thirty-eight years was a great period in the empire's history, but the emperor himself was by no means great. emperor himself was by no means great. Justin Martyr, an early Christian writer, born in Palestine about 100 a.d., suffered for his faith about 165. Born a heathen but converted to Christianity, he went to Rome, where he wrote an Apology for Christianity, with a supplementary or second Apology, a Dialogue with Trypho the Jew, all still extant, besides other works. He is of importance in the history of Christian dogmer. tory of Christian dogma.

Jute (jöt), a textile fabric obtained from Corchorus capsularis, a plant belonging to the nat. order Tilineese (lime or linden). The jute plant is a native of the warmer parts of India, where its cultivation is carried on, espewhere its cultivation is carried on, especially in Bengal, on an extensive scale. It is an annual plant, growing to a height of 12 or 14 feet. The fiber forms the inner bark of the plant, and possesses in an eminent degree the tenacity common to the bark of the plants of this order. The fiber is fine, and has a shining surface; it is injured by exposure to water, and hence is not well adapted for cordage and canyas, but is in extensive water, and hence is not well adapted for cordage and canvas, but is in extensive use for making bags, and in the United States and Great Britain serves many useful purposes, being mixed with hemp for cordage, and with silk in the manufacture of cheap satins; its principal use is in the manufacture of coarse cloth for bagging, and in making the foundation of inferior carpets, mats, etc. In Bengal, jute has been cultivated and its fibers woven into various fabrics from a remote control of the carbon and the carbon an period, but it is only since about 1830 that its manufacture has risen to importance in Europe. The headquarters of this branch of industry are at Dundee. Scotland. The rice, cotton, sugar, coffee, pepper, and other articles of East Indian

Rack, the Kattegat, and the North Sea, on the south by Schleswig; area, 9755 sq. miles. A remarkable feature is the series of inland water-basins known as the Limfiord, extending from the North Sea is sometimes sanded up altogether. The highest point of Jutland is the Himmeljberg, 550 feet above seatevel. There are many lakes and small rivers. The climate on the whole is temperate, but variable. Pop. 1.061,904.

Intland Rattle of One of the such satires have also been translated by Gifford, and some of them translated by Gifford, and some of them by Dryden, while Johnson's imitations of the third and tenth (under the titles London, and the Vanity of Human Wishes) are well known.

Juvenile Courts (jö'ven-il), tribunds to industrial schools or houses of detention, where they receive moral and industrial training. Courts for this purpose began their existence in Chicago in 1899, and have since been established in society of that the corrupt Roman society of that the corrupt Roman society of the target and some of them the vanity of Human was proved to the third and tenth (under the titles London, and the Vanity of Human of the Wishes) are well known.

Juvenile Courts (jö'ven-il), tribunds to industrial schools or houses of detention, where they receive moral and industrial training.

Jüterbogk (yü'ter-bok), a town of have died in Egypt as an exile in charge Prussia, province of Brandenburg, 30 miles s. s. w. of Berlin, with is authentic; we only know certainly manufactures of woolens, and a church in that he resided in Aquinum and flourished which is preserved Tetzel's indulgence about the end of the first century after box. Pop. 7407.

Christ. His extant works are sixteen Jutland (jutland; Danish, Jylland), satires, composed in hexameters, and givthe peninsular and most iming in powerful language, inspired by a portant portion of Denmark, surrounded bitter and heartfelt indignation, a somber on three sides by the sea—the Skager picture of the corrupt Roman society of Rack, the Kattegat, and the North Sea, that era. His satires have also been

Jutland, Battle of, One of the and have since been established in some greatest na-form in many cities of the United States yal battles of the world was fought on and elsewhere. They owe their origin to May 31, 1916, off the Jutland coast. For the growing conception that the methods nearly two years the British Grand Fleet formerly used of sending youthful delinhad been watching for a chance to engage quents to jail had the tendency to conche German High Seas Fleet, which had vert them into a class of criminals, ain secure in the Baltic behind the mine while they might be made useful citizens ain secure in the Baltic behind the mine fields and coast defenses of Helgoland and the Kiel Canal. On the afternoon of Wednesday, May 31, a British battle gruiser squadron scouting about 75 miles of the Danish coast and the entrance to the Skager Rack, sighted a part of the German High Seas Fleet. Soon the German fleet appeared and the British Grand Fleet was summoned by wireless. In the battle that ensued the German admitted losing a battle cruiser, a battleship, four cruisers and five detroyers, with a loss in total tonnage of 13,015, an estimated money loss of 13,015, an estimated money loss of 13,000.000. The British admitted losing three battle cruisers, three armored several hundred sent only five broke their chree battle cruisers, three armored several hundred sent only five broke their reusers, and eight destroyers; total tonge lost, 114,100; estimated money loss, 115,000,000. There were between 4000 ond botton each side. The battle was indecisive; and after the great conflict, the fleets returned to their bases. A British squadron of older battleships nurried up from the south, but did not arrive till after the conclusion of the battlerive till after the concl n the fighting.

Tresults the work at Chicago may be alluvenal (jö've-nal)—Decimus Juni-luded to. In that city, in ten years, us Juvenalis—a Latin sa-31,257 children passed through the court. irical poet, was born probably about the charged with truancy or delinquency of year 42 A.D. at Aquinum, a Volscian various kinds. The great majority of year 42 A.D. at Aquinum, a Volscian various kinds. The great majority of the common terms of the property of the common terms of the common terms

court again. The same can be said for ber of 12 strokes. only 55 per cent. of the girls, showing the power to send the offender, at the that the treatment of the latter is the end of his imprisonment, to a reformamore serious problem of the two. The tory for a term of from two to five years, purpose of the houses of detention is the If able, the parents or guardians of such accountable of the parents of guardians of such spinners, and the parents of the parents of the parents. separation of youthful from adult criminals, but only a few cities have so far
adopted them. Juvenile Courts have been opened in Canada and Australia and in

Juxon

(juks'on), WILLIAM, an Engish prelate, born in 1582; died several English cities, while the subject in 1663. is under earnest consideration in a num-College, Oher of European countries. It is several English cities, while the subject in 1663. After studying at St. John's is under earnest consideration in a number of European countries. Houses of De-Gray's Inn, with the view of qualifying tention differ from Houses of Refuge, long for the bar, but took orders and obtained in existence in certain communities in livings for the bar, but took orders and obtained

The magistrate has

in existence in certain communities, in livings, first in 1609 at Oxford, and then being temporary in their purpose, while in 1614 at Somerton. In 1621 he sucin the latter unruly and vicious children ceeded Laud as president of St. John's are brought up under supervision and College; in 1627 was appointed vice-taught some useful trade. Juvenile Offenders, is a term lethe same time chaplain in ordinary to the same time chaplain in ordinary to Charles I, who gave him the deanery of Worcester and then the bishopric of Lonfrom adult offenders. When the crime is don (1633). He had the melanchely theft, the criminal, if under 16, can be privilege of soothing the king's last mosent to a house of correction for three ments, and ministering to him on the months or fined in a sum not over £3. scaffold. His fidelity cost him his bishalso the law permits a boy under 14 to opric, but at the Restoration he was made be whipped with a birch rod to the num* the eleventh letter of the English alphabet, representing a guttural rticulation, the surd consonant corre-conding to the sonant g. In Anglo-axon this letter was used only occasionaxon this letter was used only occasion-lly, c being regularly used instead. So iso in Latin, k, borrowed from the reeks, was little used, its place being upplied by c. The Italians, Spaniards and Portuguese have banished the letter nirely from their alphabet. The French seattent in the converse desired from se it only in a few words derived from the Greek, foreign proper names, etc. the beginning of a word or syllable k not pronounced when followed by n,

s knife, knee, know.

(kä'a-bà), or CAABA, the sacred shrine at Mecca to which Mosms make their pilgrimages. It is a at-roofed, quadrangular structure about 0 feet high, 55 feet long and 45 broad, nd stands in the center of the mosque r sacred area, which is enclosed by walls and colonnades. At the southeast corner if the Kaaba, built into the wall, is the mous 'black-stone' or Keblah, the pint to which every pious Moslem directs is face in prayer, and which is devoutly issed by the pilgrim. According to Mus-lman tradition, this was originally of dazzling white, and was brought from eaven by Gabriel to Abraham when he as erecting the Kaaba. Round the aaba are various sacred buildings, and ear it the Zem-Zem or holy well.

aaden (kä'den), a town in Bohemia, on the Eger. Pop. 7459. (aalund (ka'lun), HANS WILHELM, a Danish poet, born at Copen-gen, 1818, died, 1885.

aap Gold-fields, a district in the Transvaal, intercted by the Kaap River, a tributary of e Crocodile, containing the mining wn of Barberton and other settlements. See Cabala. abbala.

See Cabinda. abinda.

See Cabul. abul.

Kabyles.

Same as Cuddapah. Kadapa.

Kadi. See Cadi.

Kadiak (käd'yak), Kodiak, an isa ad south of Alaska, and like it belonging to the United States. The inhabitants, less than 3000 in number, resemble the Eskimos, and live by hunting and fishing, a considerable fur trade being

Kadom (ka-dom'), an ancient town of Russia, government of Tamboff, on the river Moksha. Pop. 6361.

Kaempfer (kāmp'fèr), ENGELBRECHT, traveler and physician, born in 1651; died in 1716. As secretary to a Swedish embassy, and afterwards as surgeon in the service of the Dutch East India Company, he traveled extensively in the East. His comprehensive work on Japan, translated from his manuscripts into English in 1727, was, for a very long period, the only reliable source of information about that country.

Kaf. See Caf.

Kaffa (kaf'fa), a mountainous territory to the south of Abyssinia, inhabited by one of the Galla tribes. It is supposed to be the home of the coffeeplant, which grows wild on the slopes of the Kaffa hills. The chief town is Bonga.

Kaffa. See Feodosia.

Kaffir-bread, a kind of sago obtained from the stems of one or two plants of the Cycas family, natives of S. Africa.

Kaffir Corn (Sorghum vulgāre), a variety of millet culti-

vated in some parts of Africa.

Kaffir 0x, The Cape buffalo. See

Kaffirs (kåf'fers), KAFFRES, or CAFFRES (from Arabic Kaffr, in-•Where the reader may fail to find articles under he is referred to C.

fidel or unbeliever), the principal race inhabiting Southeastern Africa, a branch of the great Bantu family. The name

differ from the negroes in the shape of nearly two years, with much suffering to the head, it being more like that of Euro-both colonists and Kaffirs. Its result was peans; in the high nose, frizzled hair and an extension of British territory in the in shade in the tribes of the more southern districts. They are a tall, muscular race, the average height being from 5 ft. 9 in. to 5 ft. 11 in., and frugal and simple in their habits. Their chief occupation is raising and tending cattle and hunting; garden and field work is mainly performed by women. They are of a peaceful disposition, but in times of war they display considerable bravery, tactical skill and



tinct branches or families of Kafirs; but the waist with a girdle, and having long the tribes which recent events have specially brought to the front are the Pondos, the Fingoes, the Zulus and the Kagoshima (kä-gö-shē'mä), a town in Japan, at the south-ribe, are distributed in large numbers over Natal and Cape Colony, and have a British squadron in 1863, and set on become to some extent civilized. Frequent hostilities have taken place between the British and one or other of the Kaffir tribes, beginning almost with the first acquisition by Britain of the Kahan. See Probagic Monkey the first acquisition by Britain of the Kahau. See Proboscis Monkey.

In 1811-12, the next in 1818-19. In 1834Sa serious Kaffir war was carried on, resulting in the expulsion of the Kaffirs, Potaro River, 822 feet high.

is now chiefly restricted to the tribes beyond the Great Kei, but they were occupying the coast districts between soon allowed to return. Another war Cape Colony and Delagoa Bay. They (the fourth) broke out in 1846, and lasted brown complexion, which becomes lighter north and east, a portion between the Cape Colony and the Kei being reserved for the natives, and called British Kaf-fraria. In 1850 a Kaffir outbreak took place, and a bloody war followed, ending in 1853, soon after which British Kaffraria was made a crown colony. A sixth war occurred in 1877-78, owing its origin to disputes between the two tribes of the Fingoes and Gcalekas. For a subsequent war see Zululand.

dexterity in the handling of their assegais Kaffraria (kaf-fra'ri-a), literally the country of the Kaffirs, a name once applied to a large part of Southeastern Africa, but now limited to the coast district stretching from the Cape the coast district stretching from the Cape Colony to Natal, recently brought under British control. A tract of land southwest of the Kei used to be known as British Kaffraria, but since 1865 it has formed two districts of Cape Colony, namely, King William's Town and East London. See Kaffirs.

Kafiristan (kä-fi-ris-tän'), or the country of Kafirs (infidels), a tract northeast of Afghanistan, between India and the Hindu-Kush. It is very mountainous, especially the inte-

is very mountainous, especially the interior, and inhabited by a nation (the Siaposh) formed of different tribes, varying considerably in complexion. They live chiefly by cattle-raising and agriculture of the chiefly by cattle-raising and agriculture of the chiefly by cattle-raising and agriculture. ture. Although hemmed in by Moslems, they have, excepting a few border tribes, resisted the spread of Islamism. Polygamy is practised, and they dress themselves in goatskins, or fabrics woven from goats' hair, black being the almost universal color.

Kaffir Chief of the Zulu Tribe.

or spears, shields and clubs, as has been shown in their engagements with the British forces. There are several distinct branches or families of Kaffirs, but the value which tribes which recent events have spears and the tribes which recent events have spears.

ail. See Cabbage.

See Cainozoic. Cainozoic.

Caira (ki'ra), a town and district of India, Bombay Presidency. the town is an ancient place with a

Tanis, 80 miles s. s. e. of the capital, in a barren sandy plain, and surrounded by a wall. It ranks econd only to Tunis in trade and poputation, and is one of the holy Mohammer towns, being formerly almost inaccessible to Christians. Under French alle it has been connected with Tunis by good road and partly by tramway, and new water-supply has been introduced. (airwan was the first seat of Saracenic at the surrounded by a wall. It ranks economic the surrounded by a wall. It ranks economic to Tunis and polisonous vapor. Its vapor when mixed with air explodes if heated above 50° C. The oxide of kakodyle is alkarsin, which see.

Kakapo. See Owl Parrot.

Kakapo. See Owl Parrot.

Kakapo. The component of the surrounded arsenic, a clear liquid heavier than an insupportably offensive smell and poisonous vapor. Its vapor when mixed with air explodes if heated above 50° C. The oxide of kakodyle is alkarsin, which see.

Kalabagh (kä-la-bäg'), a town of India, in the Punjab, on the Indus, close to hills and cliffs of solid mpire in Barbary, and relics of its the Indus, close to hills and cliffs of solid rock salt, which is extensively quarried.

or of Asia Minor, vilayet of Angora, idency. Pop. 7024.

buth of the Kizil-Irmak, anciently called Kalafat (kal-a-fat'), a town in Rougares. Pop. est. at 70,000. See also

tle conferred on Queen Victoria in 1876 dom it has made rapid progress.

y an act of Parliament and proclamation 7113. y an act of Parliament and proclamation Delhi.

a hole in the center in which the boatman sits, propelling the boat with a paddle. Kailas (ki-läs'), a sacred mountain of the Hindus in the Himalayas, ear the sources of the Indus and Sutlej; eight, 20,226 ft.

Kaimacam (ki-må-kåm'), a Turkish title derived from the rabic, signifying 'substitute,' and given the officials who are at the head of the districts called livas, being substituted and substitute of the officials who are at the head of the districts called livas, being substituted by the Kerr Canal, is 61 miles long and expense of the vilayets. The lieutenants the Kerr Canal is 61 miles long and expense of the vilayets.

the grand-vizier are also thus called. tends from Brunsbüttel on the Elbe to Cainite (kān'īt), a hydrous sulphate tends from Brunsbüttel on the Elbe to Holtenau on Kiel Bay. The passage occupies from eight to ten hours, and the bound along with beds of rock salt, espesaving is 200 miles. It was begun in ally in Germany and Austria. It is June, 1887, and opened in June, 1895. aluable for the production of double liphate of potash and magnesia, and is sed as a manure.

See Cainograic. ship, it was reopened in 1914. By the peace of 1919 (see Treaty) it was opened to free passage of all ships.

Kaiser Wilhelm Land. See N. Guinea. (kīt-hal'), an ancient town of andsome courthouse, government schools, ic. Pop. 10,392. The district has trict, with manufactures of lac ornamera of 1561 sq. miles and a pop. ments and toys and saltpeter refineries. 716,332. Kaithal

(ki'sar-ē'ya), or Kaisar-Kaladgi (ka-läd'gi), a town of India

Reserved. Pop. est. at 70,000. See also the Danube, about 1 mile east of Wid-din, on the opposite bank. Since Roupers of India, the mania has become an independent king-dependent wings.

(kä-la-hä'rē), or KALI-Delhi.

(ki'zer), the German word for emperor, from L. Casar. This Central South Africa, north of the Orange tile was revived in 1871, when William River, a large tract of which is included in the Control of Rechange to the Control of the C II of Prussia became Emperor of Ger- in the British protectorate of Bechuana-Laiak (kā'yak), or Kajak, an Eskimo boat, used in fishing. It is river beds; nevertheless, it is not devoid
bout 18 feet long and 18 inches wide
center, tapering to the ends, is covered
technique of vegetation, patches of grass and shrubs
center, tapering to the ends, is covered
occurring here and there. An abundant
ith skins and closed at the top except supply of watermelons and some remarklarge herds of antelopes and other game, beads lying loosely between them. When provide ample subsistence to the bush- the eye is applied to the aperture the men and Bakalahari inhabiting this bar- mirrors produce a beautiful symmetrical ren region.

Siva, which Pop. 9935.

Rop. 9935.

Kalakaua I, David, King of Hawaii, Kalendar. See Calendar.

1891. He became king in 1874, and in the forms of the consort of Siva, some respects corresponding to grant a new constitution of the consort of Siva,

a city, Kalamazoo Co., Michigan, on the Kulamazoo River destruction, and goats and other animals and on 7 railroads, 49 miles s. of Grand are sacrificed on her altars. Rapids. Here are Kalamazoo College Hindu books even enjoined human sacri-(Baptist), Western State Normal School, fices to this bloodthirsty goddess. Her and State insane asylum. It has the larg- worship is said to be characterized by and State insane asylum. It has the largwest paper mill in the world. Other products are springs, corsets, automobiles,
trucks, auto accessories, vegetable parchmoted for its celery and peppermint. Pop.
(1910) 39,437; (1920) 48,8%.

Kalb, Johann, Baron de, born in Batrucks, automobiles, tec. The region is which may be used in making glass.

Kâlidâsa (kâ-li-dâ'sa), one of the
greatest Indian poets and
dramatic writers, who lived, according to
tradition in 1721; entered the French tradition, in the first century B.C., but
army as lieutenant in 1743; became capsome authorities assert that he flourished
tradition 1747 and brigadier-general 1761, several centuries after the Christian era.

tain 1747, and brigadier-general 1761. He was sent on a secret mission to America in 1768, and came again with Lafayette in 1777. He was appointed majorgeneral, and served in New Jersey and Maryland. In April, 1780, he was sent to join the Southern army as second in command to Gates, and on August 16 was mortally wounded at Camden, S. Carolina, dying three days later.

Kale. See Cabbage.

Kaleidoscope (ka-li'dō-skōp), a well-known optical toy invented by Sir David Brewster, by which Kalihari. an infinite variety of symmetrical, and often beautiful, colored designs is obtained. The ordinary kaleidoscope con-

able varieties of tubers, together with a number of pieces of colored glass or figure, and when the tube is turned about Kalahasti (kii-lä-häs'ti), a town of or shaken new images, always symmetriIndia, Madras Presidency, cal, are formed. This arrangement may
North Arcot district, with a temple of be modified in various ways. The instruSiva, which is a place of pilgrimage. ment has been used by designers of patterns for printed calicoes, etc.

tution which much restricted his authority. and therefore in some respects corre-Kalamata (ka-la-ma'ta), a seaport of sponding to Durga and other deities. She Greece, in the Morea, capital of the government of Messenia, at wearing a necklace of skulls, and the head of the Gulf of Koron. It is hands of slaughtered giants round her the seat of an archbishop, and has an waist as a girdle. Her eyebrows and export trade in wool, oil, silk and figs. breast appear streaming with the blood of monsters she has slain and devoured. (kal-a-ma-zö'), a city, One hand holds a sword, another a human county seat of Kalamazoo head. She is the goddess of death and

several centuries after the Christian era. His best production is the drama Sakuntala, which was first translated into English by Sir W. Jones (Calcutta, 1789), and at once aroused in Europe attention to Sanskrit literature. He was also the author of two other plays—Vikramorrace ('The Hero and the Nymph'), and Malarika and Agnimitra, while two epics and other works are ascribed to him. some of which have also been made accessible to the general public by translations. Kalif. See Caliph.

See Kalahari.

(kä'lish; Polish, Kalisz), tained. The ordinary kaleidoscope consists of a tube containing two glass plates acting as mirrors, which extend along its s. w. of Warsaw. Area of province, 4377 whole length and make an angle of 60° sq. miles; pop. 1,245,200. The town was with one another. One end of the tube founded in 655, and was the residence of is closed by a metal plate with a small the grand dukes of Poland. It is an imhole at its center, to which the eve is portant trade center and her meanufactures. solution by a interest plate with a small state grant duces of rolling. The small inhole at its center, to which the eye is portant trade center and has manufactures applied; at the other end there are two of cloth, leather, flour, tallow, etc. It was plates, one of ground the other of clear incorporated with reconstructed Poland glass (the latter being next the eye), with in 1918. Pop. 52,565.

_ 1 4922

Kalispell (kal'is-pel), a city, county shouldered, with small round heads, and seat of Flathead Co., Months and 138 miles N. of Missoula on Flathead the Mongolian race. They number alto-Lake, and on the Great Northern R. R. gether perhaps 700,000, of whom more it is a gateway city to the west entrance It is a gateway city to the west entrance to Glacier National Park and has a large courist business. The principal industries of the region are agriculture, horticulture, has flour and planing mills. Pop. 5147.

Kalm (kälm), Peter (1716-79), a Swedish botanist, born at Ostro
Bothnia, Sweden, educated at Upsala and Aba univarsitian. He traveled extensively Bothnia, Sweden, educated at Upsala and Abo universities. He traveled extensively in Russia, and at the suggestion of Linnæus (See Linné), whose friend he was, the Swedish government sent him across the Atlantic to study the botany and natural history of North America after spending three years in Pennsylvania, New York and Canada he resturned to Abo, becoming a professor at the university. The evergreen plant kalmia was named in his honor. In addition to a number of scientific works he wrote 'A Voyage to North America.' which was translated into English by J. S. W. of Moscow, has rope and canvas R. Foster and first appeared in 1770.

Kaluga (ka-lö'ga), a town and government is bounded by those of Moscow, Smolensk, Tula and Orel, has an area, mostly flat and sandy, of 11,942 square miles and a pop. of 1,287,300. The central parts are covered with immense pine and fir forests, the rest is poorly cultivated, producing chiefly grain, hemp and flax. Iron ore and a poor kind of coal are also raised. The town stands on an elevation on the right bank of the Oka, a navigable river, 114 miles which was translated into English by J. S. W. of Moscow, has rope and canvas R. Foster and first appeared in 1770. R. Foster and first appeared in 1770.

Kalmar. See Calmar.

Kalmar. Kalmia (kal'mi-a), a beautiful North American genus of shrubs, with cup-shaped rose or purple flowers disposed in corymbs, and belonging to the natural order Ericaceæ, or heaths. The K. latifolia, commonly called mountain laurel or calico bush, much valued in European gardens for its flowers and foliage, has its home in the Alleghany Mountains. Its trunk sometimes attains a diameter of 3 inches; the woods very hard, closely resembling that of s very hard, closely resembling that of he boxtree.

Kalmucks (kal'mukz), a nomadic and warlike Mongol race, originally natives of the territory of Central Asia between the Koko-Nor and Tibet, but now inhabiting not only parts of the Chings managers. of the Chinese empire, but also occupying districts of Siberia and European Russia, where they settled under Russian dominon on the Ural, Don and Volga, and not the government of Simbirsk. They have fought many bloody battles with the Chinese, and among themselves, and made predatory expeditions as far west as Asia Minor, and as early as the eleventh century. Many of the Russian Kalmucks have been converted to Christianity. They are increpid soldiers, splendid horsemen, and troops of them are attached to almost exery Cossack regiment. Physically the kalmucks are small of stature, broadof the Chinese empire, but also occupying

Kalocza (ka-lot'sha), a town of Hungary, 67 miles south of Budapest, near the Danube; a Roman Catholic archbishopric with fine cathedral and episcopal palace. Pop. 11,380.

Kalong. See Fox-bat.

See Calpee.

factories, and trades largely with Germany in leather, oil and candles. Pop. (1911) 49,728.



influence. Dancing girls or nymphs bear Kämpfer See Kaempfer. him company, and one carries his banner,

born about 1753; died in 1819. Chief of percha and powdered cork. one of the islands, he conquered the whole group and became the first king of Hawaii in 1781. Four others of the same anese naval officer, died August 8, 1916, title succeeded, Kamehameha III introducing a constitutional form of government in 1840, and Kamehameha V propart in the Russo-Japanese war, for claiming a new constitution in 1864, which he was awarded the title of baron Three groups were made and invested with the grand cordon of

ment in 1840, and Kamehameha V proclaiming a new constitution in 1864. Which he was awarded the title of baron These governmental changes were made under missionary influences.

Kamala (kām'a-la), a drug long of the Golden Kite. He is believed to have led in the naval assault with the British Pharmacopeia in 1864 as a vermifuge, in doses of 30 grains to a vermifuge, in doses of 30 grains to a quarter of an ounce in syrup or gruel. It occurs as a brick-red powder, adherent to the fruit of the Rottlera tinctoria, formed by minute, roundish, semitransparent granules, mixed with stellate

Martin Russo-Japanese war, for which he was awarded the title of baron invested with the Rising Sun and the first class order of the Golden Kite. He is believed to have led in the naval assault with the British Squadron against the German base at Tsing-Tao, China, in 1914.

Kamrup (kām-rop'), a district of Assam, in the Brahmaputra Valley; area, 3857 sq. miles. Pop. 589,187.

Kamsin (kam'sin), a name in Egypt for the simoom.

Kamchatka (kam-chat'ka), a large peninsula in the north-

him company, and one carries his banner, the emblem on which is a fish or marine monster on a red ground.

Kama (kä'ma), the largest tributary of the Volga, rises in the Russian government Viatka, and after a course of 1150 miles flows into the Volga, a Roman Catholic church, and a large 40 miles south of Kasan. Part of it is navigable for steamers, and ordinary barges can proceed as far as Perm.

Kamptee (käm'tě), or Kamithi, a town of India, Central Provinces, Nagpur district, with an exceptive military cantonment, a fine bridge over the Kanhán river, a Protestant and a large trade. Pop. 38,888.

Kamptulicon (kamp-tů'li-kon), a finor covering first introduced to the general public in 1862.

Kamaha'meha I, King of the Hatroduced to the general public in 1862.

Islands, The best is made of India rubber gutter.

Kamimura (kam-i-mūr'ā), Vice-Ad-

to the fruit of the Rottlera tinctoria, formed by minute, roundish, semitransparent granules, mixed with stellate hairs, and is largely collected in the forests of Madras, where it forms an important source of revenue. The active principle of the powder lies in the 80 per cent. of resin it contains, which also supplies the coloring matter, called rottlerin, used as a silk dye. Another variety, exclusively employed as a dye, comes from the Indian product in the deep purple color, the coarseness of its particles, and the large simple hairs which are found mixed with it.

Kamaon.

Kambaluc. See Kumaon.

Kambaluc. See Cambaluc.

Kamenetz (kä'me-nyets). a fortified town of Russia, capital of the government of Podolia, on the Smotritz. Pop. 39,113.

Kames, Lord. See Home, Henry.

Kames, Lord. See Home, Henry.

Kampen (kâm'pen). a town of Holland. on the Yssel, near where it enters the Zuider Zee. It has the for the simoom.

Kambaluc. See Home, Henry.

Kames, Lord. The killant in the north-heat of Asia. On the east it has the North Pacific Ocean, and on the west the Sea of Okhotsk: it is upwards of 800 miles in length and 190 in average breadth; square miles, 85,000. It is a reactive volcanoes, and eruptions are are active volcanoes, and eruptions are are active volcanoes, and eruptions are are active volcanoes, and enumber of the peninsula. Some of the mountains are active volcanoes, and enumber of the peninsula. Some of the valley of the Kamchatka Hiver, the most fertile and populous settlement, the soil is but ill adapted for cultivation. The chief wealth of the country lies in its fur-producing animals, including the sable, the Arctic fox, the beaver and the bear. Game and morally; but they are rapidly vanishing the valley of the kamchatka Liver, the most fertile and populous settlement, the soil is but ill adapted for cultivation. The chief wealth is for the peninsula. It was one of the town

like their neighbors. The Koryaks are a with manufactures of silks, porcelain, wandering tribe, living in the northern etc. Pop. (1908) 110,994. districts, and subsisting almost exclu-Kanchil, the chevrotain (which see). districts, and subsisting almost exclusively on the produce of the reindeer. The entire pop. is about 7500. The capital, Petropaulovsk, has a pop. of about 1000.

Kamyshin (ka-mi'shin), a town of European Russia, at the juncture of the Kamyshinka and the Volga, in the government and 106 miles s. s. w. of Saratov. It was founded by Peter the Great in the year 1710. Pop. 15.934.

Kanagawa (kä-na-gä'wa), a seaport of Japan, in the island of Hondo, or Niphon, on an inlet of the Bay of Yedo, forming one place of trade with the adjacent Yokohama, open to British trade since 1859. Pop. 12,000. See Yokohama.

Kanakas (ka-na'kaz), the native in-habitants of the Sandwich Islands; in New Caledonia and the New Hebrides the name is applied to all the native laborers, without distinction of

origin. See Canara. Kanara.

Kanari-oil (ka-na'ri), an oil yielded by the fruits of Canarium commune, a tree of the Indian Archipelago and Southeastern Asia, often called Java almond. The oil is used for culinary purposes and for burning, and is deemed superior to cocoanut oil. See Canarium.

Kanaris (ka'na-ris), Constantine, a Greek sailor, born in the island of Ipsara about 1790, and who became famous in Europe in 1822 for his daring exploits in firing the Turkish fleets in the Chios and Tenedos Straits. In 1825 he unsuccessfully attempted the destruction of the Turkish fleet in the port of Alexandria, ready to carry Arab troops to Morea. On his return to troops to Morea. Greece in 1828, the President, Capodistrias, gave him the command of a fortress and later on that of a squadron; a trust which he amply justified by loyal service at a most critical period. King Otho raised him successively to the rank the government of Otho.

Kanas'ter. See Canaster.

coast of the island of Hondo (Niphon), (1920) 7283.

Kandahar, or CANDAHAR (kan-da-erable commercial and strategical im-portance in the south of Afghanistan, on the direct route to India. It was held by British forces in 1839-42 and 1879-81, and the fortifications have recently been much strengthened. The town lies 3484 feet above the sea, has a large transit trade, and a pop. estimated at from 25,-000 to 50,000.

Kandavu (kän-dä-vö'), the southern-most island of the Fiji group. It has a fine natural harbor, with a port of call for steamers, and is surrounded by a number of small islands,

called the Kandavu group. Kandesh. See Khandesh.

Kandy. See Candy.

Kane (kān), Elisha Kent, a surgeon. traveler and Arctic explorer, born at Philadelphia in 1820; died at Havana in 1857. He was graduated as M.D. at the University of Pennsylvania in 1842, was attached as surgeon to the American mission to China, and afterwards visited India, Egypt and Greece. In 1846 he rendered important service as a volunteer in the United States army in Mexico, in 1850 by his survey of the Gulf of Mexico, and in the same year joined the Grinnell Expedition, as medical and scientific member, in the unsuccessful search for Sir John Franklin. His observations led him to the belief that there was a large open sea near the pole, and with a view to penetrate it he organized and commanded a second expedition, which left New York in the Advance in May, 1853. He succeeded in getting as far as 78° 43′ N. lat., where he was frozen up for twenty-one months, and being harassed by scurvy and want of provisions was obliged to abandon the vessel. A perilous journey of 1300 miles in boats and sledges brought him back to Green-Otho raised him successively to the rank land, and he again reached New York of captain of the first class, admiral and in November, 1855. Much broken in senator. He was minister of marine in health, he sailed for Cuba to recruit, but 1848, 1848-49 and 1854-55. In 1862 he died there. The accounts of his two extends are satiral roast in the countries. took an active part in the overthrow of peditions added much to our knowledge of the Arctic regions.

Kane, a borough of McKean Co., Pennsylvania, 93 miles E. of Erie. Kanauj (ka-nouj'), ancient city of In. It has delightful air and water, and is a dia, 49 miles from Cawn-health resort especially beneficial to fever Kanazawa (kä-na-zä'wa). a town of and asthma patients. It has large glass-Japan, near the northwest works, wood-working industries, etc. Pop.

Lake Tchad, now belonging to Bornu, kangaroos of New Guinea belong to the but formerly an independent state.

Kangaroo (kang-ga-ro'), the common name of a number of animame of a number of animame of an under of marsupial order of mammals, indigenous to Australia, and first made known to Europe by Captain (Sook. The most noticeable feature about and South America, with an edible fruit. the kangaroo is the disproportion between the upper and lower parts of the body.

The head is small, deer-like in shape, with large ears; the forelegs small and five-toed; the hindlegs very large and powerful, with four toes only on the feet. The tail is long, thick at the base, and helps 1671 square miles, situated at the ento support the animal when sitting erect, trance to the St. Vincent Gulf. South the usual posture when not feeding; it Australia, 103 miles from Adelaide.



Kangaroo

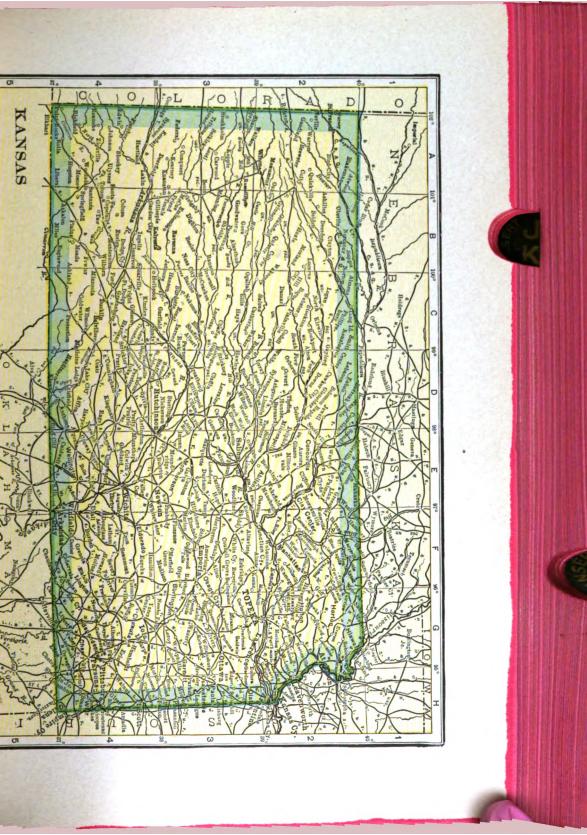
also assists the hindlegs in their long a rat which inhabits the great plains near leaps (from 10 to 15 feet). The young the Rocky Mountains and Mexico. It is are born very immature, and protected and nourished for about eight months in the marsupium, or pouch, into which the nipples of the mammary glands open. Kangaroos are herbivorous, and, where still plentiful, a serious pest to settlers, whose rifles have, however, considerably reduced their number. The hinduar-longing mainly to the Himalayan chain: also assists the hindlegs in their long leaps (from 10 to 15 feet). The young whose rifles have, however, considerably reduced their number. The hindquarters of the large species supply a tolerable area, 9069 square miles. About a ninth substitute for venison, while their tails is under cultivation, and large tracts are make excellent soup, and their skins good covered with forests. The inhabitants rugs and leather. The kangaroo includes are a good-looking, fair-complexioned race.

Kanem (kä'nem), a district of Central tous), the red kangaroo (M. rufus), the Africa, north and northeast of brush kangaroo (M. frufus). The tree Lake Tchad, now belonging to Bornu, kangaroos of New Guinea belong to the but formerly an independent state.

(kangaro (M. rufus), the common of New Horthern (kangaro) of New Problemsile tells. Kangaroo Grass (Anthistiria Australis), a tall and

Kangaroo Rat kangaroo, a diminutive species of the kangaroo family, differing from the kangaroo proper in possessing canine teeth in the upper jaw, in its nocturnal habits, and its food, which consists chiefly of roots. Their movements are unlike those of the kangaroo. The little animals can sit erect upon their hind legs, but they are unable to make the vigorous leaps which are so characteristic of the kangaroo, nor can they manipulate their food with their forcpaws and carry it to their mouth by means of these limbs. Their gait resembles a gallop rather than a series of leaps. They are very timid and harmless animals and have little of the fighting instinct, offering no resistance when captured. They seem to have a special fondness for potatoes and make havoc of the Australian kitchen gardens in their attempts to dig up and carry away the seed potatoes. In the United States the name is applied to

rugs and leather. The kangaroo includes are a good-looking, fair-complexioned race. many species, varying in size from a hare mild and peaceable, and much attached to a large sheep, and remains of still to their country. Pop. 768,124, Kangra. larger and extinct species have been found in the pleistocene deposits of Australia. The larger and most common kinds belong to the genus Macropus, and large distilleries and fairs for grain, etc. include the giant kangaroo (M. gigan-





Kankakee ments, hosiery, davenports, beds, sheet metal products, sewing machines, pianos, overalls, lime, cement, washing machines, Institution for the Blind, and other insti-cereals, etc. The State Hospital for the tutions. Pop. (1900) 51,548; (1910) Insane is here. Pop. (1910) 13,986; 82,331; (1920) 101,177. cereals, etc. The Insane is here. (1920) 16,753. (ka'nō), a town and province of

Kano Nigeria, British West Africa. It is a Mohammedan center. Pop. of province 2,570,000; of town, about 70,000. Kansas (kan'zas), one of the United States, bounded north by Nebraska, east by Missouri, south by Oklahoma, west by Colorado; area, 82,158 square miles. It consists chiefly of undulating plains well watered by the Kansas lating plains, well watered by the Kansas, Arkansas and other rivers, the Missouri forming the boundary on the northeast. largest distributing point for lumber; one The soil is generally fertile, highly suitable of the largest railroal centers in the counfor grain, vegetables and fruit, and cattle- try; and a great manufacturing city, its raising is carried on very extensively. Kansas is one of the foremost agricultural States, especially in the production of corn. The climate is mild, and the winter short, but violent winds and sudden changes of temperature often mar the spring season. Although an agricultural 248,381; (1920) 324,410. state, Kansas has important and varied Kansas-Nebraska Bill. manufactures, the rivers supplying the motive power in many places. Slaughter- of Kansas and Nebraska as territories, in ing and meat-packing is an important industry, with by-products of soap and candles. Other industries are flour and grist-milling, car and shop construction.

Bituminous coal, petroleum, building stone, lead, zinc, gypsum, salt, pumice, natural gas, etc., are among the minerals. Education is well provided for, and there ing the manufacture and importation of into the Missouri at Kansas City. intoxicating liquors. The largest cities are Kansas City, Wichita, and Topeka (the capital). Kansas originally belonged tional institution at Lawrence, Kansas, to the Louisiana Territory. Settlers had founded in 1866. Students (1919-20) 5589. to the Louisiana Territory. Settlers had entered it in considerable numbers by 1853, and in later years it became the scene of a local war between the slaveholding and antislavery settlers. In 1861

(kan'ka-kē), county seat and Kansas rivers, opposite Kansas City, of Kankakee Co., Illinois, Mo. It is a commercial center and has on Kankakee River, 54 miles s. of Chicago, on the Illinois Central, Big Four wheel shops, iron and steel works, rubberand Chicago, Indiana & Southern railroads. It has manufactures of implesoap works, serum plants, foundries, machine shops, and many other industries. Seat of Kansas City University, State Institution for the Blind, and other insti-

Kansas City, the second largest city Missouri River, at the mouth of the Kansas River (Kaw), opposite Kansas City, Kans., in the center of the continent. is the clearing house for a vast agricultural region; a rich oil and mineral territory; the second largest livestock market in the country; second largest meat-packing center; second largest horse and mule market; third largest center for grain and grain milling; largest hay market and largest distributing point for lumber; one products amounting to \$667,000,000 during the year. More than one-half million barrels of crude oil are refined daily in Kansas City's immediate territory. It has many fine buildings and 3000 acres of parks. Pop. (1900) 163,752; (1910) 248,381; (1920) 324,410.

1854, caused great discussion in Congress. The bill disregarded the Missouri Compromise, and the subject of establishing or excluding slavery was left to the decision of the people of those territories. The struggle to colonize Kansas led to a desperate conflict, in the end the party of freedom prevailing, and Kansas and Neis a State university, an agricultural col- braska came into the Union as free States. is a State university, an agricultural college, and other colleges and normal schools.

Kansas River, a river of Kansas, There are 11 500 miles of railroad. Prior There are 11,500 miles of railroad. Prior to the Federal Prohibition Amendment tion of the Republican and Smoky Hill, (1920) Kansas had a State law prohibit- flows in an easterly direction, and falls

> Kansas, University of, a State (kan'sö'), an inland province Kan-su of northwestern China. Area,

125,450 sq. miles; pop. 3,810,000. Kant. IMMANUEL, a celebrated German Kant, IMMANUEL, a celebrated German philosopher, the founder of the 'critical' or Kantian philosophy, born at Königsberg, Prussia, in 1724; died there holding and antislavery settlers. In 1861 Kant, the founder of the Union. Pop. (1900) 1.470.495; (1910) 'critical' or Kantian philosophy, born at Königsberg, Prussia, in 1724; died there Kansas City, the largest city of in 1804. He early showed great application to study, and was sent to the Collection. Wyandotte Co., at junction of Missouri gium Fredericianum, and then (in 1740)

progress at college and at the university was rapid and brilliant, his studies embracing in particular mathematics and physics, as well as philosophy. Leaving the university after three years, he engaged in tuition, and it was not till 1755 that he took his degree. Soon after this he was appointed one of the teachers in the Königsberg University, and lectured space to give anything like an exposition of the philosophy of Kant, which has pro-



Immanuel Kant.

ticism of Hume, he set himself to investi-gate the field of metaphysics for himself, and in the first place proceeded to the examination of the origin, extent and limits of human knowledge. According to him, part of our knowledge is knowledge a priori or original, transcendental and independent of experience; part of it is a posteriori, or based on experience. What he calls the 'pure reason' has to do with the former. His great work named the Kritik der reinen Vernunft, 'Critique of Pure Pescen' (forte clitter) 'Critique of Pure Reason' (first edition, of these principles, and the delimitation from all coarse ingredients, then dried in of this faculty, constitute the critique of pans and sheds, and sent into the marpure reason. In the first rank of such ket cut into blocks.

to the university of his native city. His ideas as we do not derive from experience are space and time. Kant shows that all our perceptions are submitted to these two forms, hence he concludes that they are within us, and not in the objects; they are necessary and pure intuitions of the internal sense. The three original faculties, through the medium of which we acquire knowledge, are sense, under-standing, reason. Sense, a passive and receptive faculty, has, as already stated, on logic, metaphysics, mathematics and receptive faculty, has, as already stated, natural philosophy, to which, at subsefor its forms or conditions space and quent periods, he added natural law, time. Understanding is an active or moral philosophy, natural theology and spontaneous faculty, and consists in the physical geography. In 1770 he became a power of forming conceptions according physical geography. In 1770 he became a power of forming conceptions according full professor, obtaining the chair of logic to such categories as unity, plurality, and metaphysics, a post that he occupied causality, etc., which categories are aptill 1797. It is impossible within our plied to objects of experience through the space to give anything like an exposition medium of the two forms of perception, space and time. Reason is the third or foundly influenced all subsequent philo-highest degree of mental spontaneity, and sophical speculations. Dissatisfied with consists in the power of forming ideas, the dogmatisms of Wolff and the skep- As it is the province of the understanding to form the intuitions of sense into conceptions, so it is the business of reason to form conceptions into ideas. Far from rejecting experience, Kant considers the work of all our life but the action of our innate faculties on the conceptions which come to us from without. He proceeds in a similar way with morality; the idea of good and bad is a necessary condition, an original basis of mora!, which is supposed in every one of our moral reflections, and not obtained by experience. He treats this part of his philosophy in his Kritik der praktischen Vernunft—'Critique of Practical Reason' (1788).

Kanuri (kä-nö'ri), or Kanori, a Sou-danese people, who form the principal portion of the population of Bornu.

Kaolin (kā'u-lin), a name first given by the Chinese to a pure white clay used by them in the manufacture of porcelain. Kaolin is the result of of porceiain. Machin is the result of the decomposition of granitic rock, containing felspar, mica and quartz. Similar clays, differing slightly in color and in the percentage of constituents, are found at Schneeberg in Saxony, furnishing the material of Dresden china; at Limoges, in France, employed for Limoges were; and at St. Austell, in Cornwall, the Critique of Pure Reason' (first edition, and at St. Austell, in Cornwall, the Riga, 1781), contains the foundation for source of supply for the British potteries, his whole system of philosophy. In the It is also found in enormous deposits in preface to a later work, the Kritik der many parts of the United States, and Urtheilskraft, 'Critique of the Power of is largely employed in pottery manufac-Judgment' (Berlin, 1790), he defines ture at Trenton, New Jersey, and East 'pure reason' thus: Pure reason is the Liverpool, Ohio. In its natural state faculty to understand by a priori princiscotion somewhat resembles mortar; by ples; and the discussion of the possibility sorting and repeated filtration it is freed of these principles and the delimitation from all coarse investigates then deled in Kapunda (ka-pun'da), a town in ceived a desultory education at a private South Australia, 49 miles school in Moscow, but made up the defi-N. of Adelaide, famous for its copper There are also quarries of fine mines. marble. Pop. 1805.

province Punjab, between the Beas and fresh impetus to Russian literature. His the Sutlej rivers; area 598 square miles, title to fame rests on his *History of the* pop. 314,341. The capital, Kapurthala, Russian Empire (12 vols., St. Petersburg, lies 65 miles east of Lahore and 8 miles 1816-24), a work written in fine style, from the left bank of the Beas. 18,519.

Karachi (ka-rä'chē). See Kurrachee.

Karaites (ka'rits), a Jewish sect, founded about the middle of and which was for a long time the object of persecution by the orthodox Jews. They refuse to accept as divine or authoritative the traditions and doctrines of the Talmud, or those in the rabbinical writings, and adhere closely to the text and letter of the Old Testament. The sect never became very important, although thinly spread over many eastern countries. They are still found in Poland, Galicia, Alexandria and Constanti-nople; but their chief force is in the Crimea, where some thousands are said miles, and a pop. of 156,786. to exist.

Karakorum (kä-rä-kō'rum), a name sometimes given to the a mountain range in Central Asia forming a sort of rampart between Cash-mere and Eastern Turkestan, and forming the watershed between the Indus basin and that of the Tarim. The name ing the watershed between the linds basin and that of the Tarim. The name is also given to a pass in this range, 18,000 feet above sea-level, on the direct road from India to Eastern Turkestan.

Karaman (kä-rä-män'), a town of Asiatic Turkey, in the pashalic of Karamania, in the valley of the Turung chain formerly the residence of

Karamania, or CARAMANIA (kä-rä-mä'nē-ä), a vilayet of traversed from east to west by the in rice. Taurus range, covered with oak and pine forests, and watered by the Kizil-Irmak, the Syhoon, and other lesser rivers. The climate is genial, the soil rich, producing abundant harvests, and the vine and the fig grow in profusion. The chief occupation of the inhabitants, mostly Turkish, is the rearing of live stock. The capital is Konieh.

ciency by extensive reading and continual travel. In 1792 he founded the Moscow Journal, and in subsequent years several Kapurthala (ka-pört'ha-la), a na- literary periodicals. He did much to tive state of India, purify his native language, and gave a with impartiality and penetration, and translated into several other languages, including English.

Kara-Su-Bazar (kā-rā-sö-bā-zar'), a Crimea, formerly a very important marthe eighth century by Anan Ben David, ket, but its commerce is declining. Pop. 12.961.

Karatchef (kä-rät-chef'), a town of Russia, government of Orel. Pop. 15,605.

Karauli (ka-rou'lē), a town of India, in Rajputana, capital of native state of same name, surrounded by walls and a moat, and containing a palace, handsome temples, etc. Pop. 23,482. The state, which is under the superintendence of the Bhurtpore and Karauli Agency, has an area of 1208 square

Karens (kä'renz), a pagan tribe of Burmah, formerly confined to a region beyond the Salween River, called Karen-ni, on the borders of Bur-mah and Siam, but now distributed over various parts of Burmah. They are an intelligent and industrious race, many of them having become Christianized, chiefly through the agency of American missionaries. They are estimated at about 100,-000, but the Karen dialect is stated to be spoken by six times that number.

Karikal (kä-rē-käl'), or CARICAL, a small French settlement in Taurus chain, formerly the residence of the pasha. Pop. 8000.

India, in the Carnatic, on the Coromandel coast, 150 miles s. of Madras. Area, 62 square miles; pop. 56,595.—KARIKAL, the capital, on the Cavery delta, has a pop. Asiatic Turkey, in Asia Minor. It is of 18,038, and a large export trade, chiefly

> Karli (kär'lē), a celebrated Buddhist cave-temple of India, Poonah district of Bombay Presidency. It is rich in sculpture, and is divided, like a church. into nave and aisles, with an apse.

Karma (kar'ma), a Sanskrit word signifying the Brahministic conception of the future state of mankind. It expressed the whole of the actions. Karamsin (kā-rām'zēn), NICOLAI good and bad, which determine the soul's MICHAILOVICH, imperial destiny. It was borrowed by the Bud-Russian historiographer, born in a village dhists and developed into an elaborate of the government of Orenburg in 1765; ethical speculation, the cause which indied at St. Petersburg in 1826. He re-fluences every action or event; the sum

of all merits and demerits. It arises from formed by the junction of the Hundri ignorance and may be overcome by right with the Tungabhadra, with a dismantled living and right thinking, the ultimate fort. Pop. 25,376. The district has an state being that known as Nirvana. See area of 7788 square miles; a pop. of Buddhism.



Cave at Karli.

(kår-mā'thi-anz), Karmathians hammedan sect, founded in Irak by Hamdan Karmat during the ninth century, who adopted the doctrines of the Ismailis, and introduced communism among his rapidly increasing flock. Missionaries were trained to spread his creed, and one of them, Abu Saïd, gained a strong hold on the people of the Persian Gulf. The caliph, afraid of the influence of the new sect, sent an army for its suppression, but he was defeated, and Abu Said took possession of the whole country. His son Abu Tahir, who succeeded him, made furthe end of the tenth century.

Karnak. See Thebes.

883,225.—KARNAL, the headquarters of the district, trades largely with Delhi and Umballa. Pop. 23,559.

Karnul, or Karnool (kar-nöl'), a niola, Croatia and Dalmatia.

town in India, in the presidency of Madras, situated in the fork

Kartarpur (kar'tär-pör)
India, Punja

818,000.

Karlsbad, Karlsruhe, Karl
Karr, French journalist and romance writer, born in 1808, and educated at the Collège Bourbon, Paris. In 1832 appeared his first novel, Sous les Tilleuis, originally written in verse and which extended to the content of the content o originally written in verse, and which at once brought him into notice. Numerous other works followed in rapid succession, and he also contributed largely to journais and reviews, including the Revue des Deux Mondes. In 1835 he became editor of the Figaro, and in 1839 commenced in it the fortnightly Guépes ('Wasps'), a publication which attracted much attention for a time by its witty and humorous anecdotes and character sketches, and brought him considerable profit and much ill-will. In 1855 he retired to Nice, much ill-will. In 1855 he retired to Nice, where he finally became an enthusiastic grower of fruit and flowers. Died in 1890. His daughter, Therese Karr, has published several works.

Karri (kar'i), a valuable timber largety exported from Western Australia to Europe and America, and obtaned from an enormous tree belonging to the Eucalyptus family.

Karroos (kar'rōs), the name given in South Africa to the elevated tablelands, 3000 to 4000 feet above sea-

tablelands, 3000 to 4000 feet above sealevel, lying between the mountain ranges. The soil is shallow but rich, and during the rainy season, or when artificially watered, vegetation is most profuse. The Karroos form excellent pasturage for cat-Rarroos form excellent pasturage for cattle, sheep and Angora goats; and great tracts are now occupied as farms, the uncertain rainfall being supplemented by permanent springs and large reservoirs. The 'Great Karroo,' in Cape Colony, extends from east to west for 300 miles, with a breadth of 70 miles.

Kars (kärs), a town on the Russo-Turkish frontier in Asia, formerther conquests, and became master of ally a Turkish fortress, and the scene of most all Arabia, Syria and Irak; but several gallant defenses. Captured and under his successors this power rapidly annexed by the Russians in November, declined, and was finally broken towards 1878, it has become the capital of a Russians in November, the and of the tarth carting and the several gallant defenses. sian province of the same name; area, 7308 square miles, pop. 349,100. It has since been connected with Batoum and Karnal (kar-näl'), an Indian town Tiffis by military roads, and the fortifica-and district, in the Punjab; tions have been much enlarged and area of district, 2396 square miles; pop. strengthened. Pop. (1916) 35,462.

Karst (kärst), a mountain or elevated region of Austria, northeast of the Adriatic, in the Coast Lands, Car-

(kar'tär-pör), a town of India, Punjab, heredi-

tary residence of the guru or high priest importance, but has greatly declined since of the Sikhs. Pop. 10,840. the rising of the mahdi, Pop. 20,000. of the Sikhs.

(kar-ti-ka'ya), the Hin-Kartikeya du god of war. He is represented riding on a peacock, with six heads and twelve hands, in which nu-

merous weapons are brandished.

Karun (ka-rön'), a navigable river of Southwestern Persia, falling into the Shatt-el-Arab, or joint stream of the Euphrates and Tigris. It has recently been opened to foreign trade as far

as Ahwaz. Karwar (k ä r-w ä r'), a seaport of India, Bombay Presidency, with a safe harbor and a good trade. Pop. 10,847.

See Kazvin. Kasbin.

Kaschau best-built towns in Hungary. Pop. 40,102. in 1814, and devoted his time to scientific Kasganj (käs-zanj'), a town of In-pursuits—the seconds pendulum, terresdia, N. W. Provinces; well trial gravity, etc.

built, with a good trade in grain and sugar. Pop. 19,686.

Katrine (kat'rin), Loch, a pictursugar.

Kashan

Kashgar Turkestan, on a river of the same name, Achray. The water-supply to the city of with considerable manufactures of cotton, Glasgow is drawn from Loch Katrine. linen, gold and silver cloths, carpets, etc., Katsura (kät'sö-rä), PRINCE TARO, a and an extensive trade, its position at

Kashkar habiting the lofty plateaus of Central time, but resigned within a few months.

Asia. The male has very large horns bent Kattywar, or Kathiawar (kät-hi-ä-circularly, while the female has horns recircularly, while the female has horns resembling those of a goat.

Kashmir (kash-mēr'). mere.

Congo system.

Kassala (kas-sä'la), a town in Nubia, on the Mareb, a tributary of the Nile, 250 miles east of Khartoum, and about the same distance west

Katwijk (kât'wik), a place on the
coast of Holland, near where of Massowah. It was formerly a place of the Rhine enters the sea by means of

the rising of the mahdi. Pop. 20,000.

See Cassel. Kassel.

Kassimof (kis-si-mof'), a town of Russia, in the government of and 70 miles E. N. E. of Riazan, on the Oka. It has a large trade, and carries on tanning, boot and shoe manufacture, etc. Pop. 13,545.

Kastamuni (käs-tä-mö'ně), a town of Asia Minor, capital of the Turkish vilayet of same name, 100 miles N. N. E. of Angora. Pop. estimated at 16,000.

(ka-sör), a town of India, La-Kasur hore district, Punjab.

(kā'ter). HENRY, an English writer on physics, born at Bris-Kater (kå-shou'), a town of Hun- tol in 1777; died in London 1835. He of Abaujvar.

gary, capital of the county joined the Indian army, gained the rank It is beautifully situated, of captain, and rendered great service by surrounded by vineyards, and one of the his trigonometrical surveys. He retired

(kä-shän'), a town of Persia, lake, Scotland, county of Perth, 5 miles Kashan that such (käsh-gär'), a Chinese town Through this pass a stream flows, carryof Central Asia, in Eastern ing the surplus waters of the lake to Loch

Japanese soldier and statesthe junction of several great routes mak- man, one of the leaders of the transition ing it the emporium of much of the comperiod; born in 1847; died October 10.

merce of Central Asia. Pop. estimated about 60,000.

1913. After many years of varied service ne became Minister of War (1898-1900) (käsh-kär'; Ovis Polii), a and Premier of Japan (1901-1905). In large species of sheep in-1912 he was chosen Premier for the third

dustan, Bombay Presidency, between the See Cash- Gulf of Cambay and the Runn of Cutch. Most of it is occupied by the Kattywar **Kasipur** (ka se-pör), a town of India, Agency, formed by numerous small native N. W. Provinces, a great states of Guzerat, many of which are place of Hindu pilgrimage. Pop. 14,667, tributaries to the British government, to Kassai (kasse'), a river of Southern the Gaekwar of Baroda, or to the Nawab Africa, a tributary of the of Junagarh. The surface is generally Sankulla, and thus belonging to the undulating, the soil sandy and productive only where irrigated. Cotton is the prin-

ing near Liegnitz, famous for the impor- Museum) seeking to depict the progress tant and decisive victory which the Prus- of the human race in typical scenes from sans under Blücher gained, August 26, the great historic periods, and comprising 1813, over the French under Macdonald. the Tower of Babel, Age of Homer, De Kauai island of the Sandwich group, 64 miles w. v. w. of Oahu, and 590 sq. miles in area. It is of volcanic formation, its extreme altitude being 6000 feet. Its

ks in places very productive, yielding coffee, rice and sugar. Pop. 20,734.

Kaufmann (kouf'man), Marie Angelica, a distinguished painter, born at Coire, Switzerland, in 1741; died at Rome in 1807. She received instruction in drawing and painting from her father, himself a painter. ing from her father, himself a painter, and before the age of twenty she had become famous. The study of the Italian masters perfected her style, and while at Venice she was induced to go to London (in 1765), where she had a very successful career. Sir Joshua Reynolds is said to have been in love with her, but she married a Swedish adventurer calling himself Count Horn, from whom she afterwards obtained a divorce. In 1781 struction of Jerusalem, Battle of the Huns and Romans. The Councils and The

art academy of Düsseldorf under Cor- painters.

sluices, now much frequented for seabathing.

Katydid (kā'ti-did; Platyphyllum lery at Munich, and subsequently succoncavum), a species of ceeded in the Munich Academy. The Katydid (kā'ti-did; roncavum), a species of ceeuca ...
grasshopper of a pale green color, body about an inch long, found in many parts Munich the center of German art afforded of the United States, and so named from free scope for his genius, and he was the sound of its note. This is produced long engaged in the decoration of the Hofby the friction of the taborets in the trigarten, the Odeon, the palaces of Maxangular overlapping portion of each wing imilian and Ludwig, and the new Pinacother, and is strength-cothek, for which he did the series of designs of contemporary groups of artists, ened by the escape of air from the sacs designs of contemporary groups of artists, of the body, so as to be heard on a quiet architects, etc., executed in fresco on the night at a quarter of a mile distance. Exterior. His most ambitious pictures. The females are noiseless. With the exception of the Madhouse Katzbach (kats'bah), a small river (1828), are to be found in a series of Prussia, in Silesia, pass
(utilized in the decoration of the Berlin Museum) scaling to depict the progress.



afterwards obtained a divorce. In 1781 struction of Jerusalem, Battle of the Huns she married a Venetian landscape painter and Romans, The Crusades and The named Zucchi, returned the following Reformation (1834-63). Besides these, year to Italy, and finally settled in Rome. however, he left a large number of por-She is at her best in ideal figures, her traits, designs and illustrations of books, faces are tender and elevating, her grouping and draping excellent, but her design pels, and the works of Shakespere, often lacks energy and firmness, while Goethe and Schiller. As a colorist he her coloring is rather too brilliant. She was of inferior rank, his main strength was one of the original members of the Royal Academy.

Tonkourse (ka-ka'na). a city of width of range of a mind of yerv high Royal Academy.

Kaukauna

(ka-ka'na), a city of width of range of a mind of very high Outagamie County, Wisconsin, on the Fox kiver, 7 miles N. E. all styles of his art from Michael Angelo of Appleton. There are paper and pulp mills, machine shops, etc. Pop. 5951.

Kaulbach

(koul'bah), Wilhelm von. symbolism and allegory, and a too obvious one of the greatest of straining after an idea. He belongs in modern German painters, born at Arolthele control of cholera in 1874. He studied at the realistic schools of modern historical art academy of Disseldorf under Corpainters. Kauri Pine (kou'ri), (Dammăra lez of the river Qunja, near by, is a vast Austrālis), a tree pecular to New Zealand, and found there only at the northern extremity of the North Island. It reaches the height of northwest of Teheran. It has been greatly level for huilding nurrosse for making furnilar a considerable trade. Pop. about 50 000 is not likely to hold out long. The resin of this tree, the kauri gum, forms a valu-Kava. See Ava-ava.

Kavanagh (kav'a-nå), Julia, a British novelist, born at Thurles (Tipperary) in 1824; died at Nice, in 1877. She was educated and lived much in Paris. Madeleine, Natalie and Paris Rugge et a come of her best novels. Daisy Burns are some of her best novels, while Women in France of the Eighteenth Century is an excellent biographical work. Kaveri. See Cavery.

Kaye (ka), Sir John William, an English writer, born in 1814; died in 1876. He was educated at Eton and Addiscombe Military College, served as an officer in India until 1841, entered the civil service of the East India Com-pany in London 1856, and became a secretary at the India office in the following year. He was a shrewd observer, and made good use of his Indian, military

same name, situated on the Kasanka, staging.

about 4 miles above its junction with the Volga. It is an extensive city, strongly fortified, with large wool-combing, weaving and dyeing establishments, tanneries and soapworks, and a government dockyard in its vicinity. The timber, flour and hemp fairs of Kazan are of the largest in the Russian Empire.

Staging.

Kean, Edmund, the most brilliant Kean, tragic actor of his age, born at London in 1787 or 1789; died at Richmond, in 1833. His parents were poor and connected in a low capacity with the theatrical profession. At two years of age he was placed in a pantomime, at seven he went to school, but ran away, and for a short time he was a cabin how same name, situated on the Kasanka, staging.

for building purposes, for making furni- a considerable trade. Pop. about 50,000. Kea (ke'a), a genus of parrots (Nas-tor) of New Zealand, of which only three species are known. N. notaor this tree, the kauri gum, forms a valuation of the kauri gum, forms a valuation of sections and is used in making fine bills, formerly a vegetable and insect varnish, etc. Most of it is obtained in a eater, began to feed on offal after the fossil state, by digging. the habit of attacking live sheep, worrying weak ones to death, after which they

Eton, but being thrown on his own resources in 1827 he took to the stage, and made his début at Drury Lane as Young Norval. In 1830 he visited America, established his reputation, and reappeared as a leading actor in London in 1838, among his parts being Hamlet and Richard III. He married the accomplished actress Ellen Tree in 1842, revisited the United States in 1845, and in 1851 became sole lessee of the Princess Theater, London, where he put some of Shakespere's plays on the stage with a splendor never before attempted. In 1863 he made a tour of Australia, Caliand official experience in the production fornia, Jamaica, the United States, Canof many historical and biographical ada, etc., which proved a great financial works, chief among which are his Historical success. On his return he continued to tories of Alghanistan, of the East India a short time before his death. He inher-Company and of the Sepoy War. a short time before his death. He inherited little of his father's genius, and his
Russia, capital of the gov. of success was largely due to effective

The university is a great seat for oriental and for a short time he was a cabin boy learning, with nearly 1000 students. Pop. in a vessel. Returning to the boards, he 188,100.—The government is surrounded by the governments of Viatka, Orenburg, by the governments of Viatka, Orenburg, Vijni-Novgorod and Simbirsk; area, 24. by the Volga, the Kama, the Sura, the Viatka, the Kama, the Sura, the Viatka, the Kamanka; the climate is temperate: agriculture, cattle-raising and fishing are the chief occupations.

**Toront-left* (ka-san-lik'). a town of the went to school, but ran away, seven he went to school, but ran away, and for a short time he was a cabin boy in a vessel. Returning to the boards, he ultimately obtained an engagement at one of the minor London theaters. When not please his country audiences as **Hamlet*. Cato, etc., and in Windsor he gained the Viatka, the Kasanka; the climate is temperate; agriculture, cattle-raising and for a short time he was a cabin boy in a vessel. Returning to the boards, he ultimately obtained an engagement at one of the minor London theaters. When not please his country audiences as **Hamlet*. Cato, etc., and in Windsor he gained the Viatka, the Kasanka; the climate is temperate; agriculture, cattle-raising and for a short time he was a cabin boy in a vessel. Returning to the boards, he with the visual substitution of the minor London theaters. When not please his country audiences as **Hamlet*. The provided his provided his please are provided and for a short time he was a cabin boy in a vessel. Returning to the boards, he was a cabin boy in a vessel. Returning to the boards, he was a cabin boy in a vessel. Returning to the boards, he was a cabin boy in a vessel. Returning to the boards, he was a cabin boy in a vessel. Returning to the boards, he was a cabin boy in a vessel. Returning to the boards, he was a cabin boy in a vessel. Returning to the boards, he was a cabin boy in a vessel. Returning to the boards, he was a cabin boy in a vessel. Returning to the boards, he was a restance to the focupations.

Kazanlik (ka-san-lik'), a town of cess was sudden and unexampled, and foot of the Balkans. It is noted for its ing Othello, Hamlet, Macbeth, Iaga, manufacture of attar of roses. The val-

Kearny, Philip, soldier, was born at sensuous perception, and his sweet har-New York City in 1815. In mony; but his beautiful thoughts are 1839 he served in the French army with often hidden by wild fancies, while errors distinguished gallantry, as also through the Mexican war; afterward partici-pating in the war in Italy in 1859. In

California.

California.

Kearsarge (kēr'sārj) the name of two mountains, of New man and Pusey in getting up the famous tracts for the Times (1833). His reputation is chiefly due to his well-known volume of hymns, The Christian Year and ended the largest market towns of hursery. So miles southeast of Budapest.

Kecskemét (kech'ke-met), one of the largest market towns of Hunsary. 50 miles southeast of Budapest. in the sinking of the Alabama, its officers It has an extensive trade in horses and and crew being rescued. The Kearsarge cattle, and much-frequented fairs. Pop. was wrecked on a reef in the Caribbean (1910) 66,834. Sea in 1894, and its name was transferred

Keats (ketz). John, an English poet, was the son of a livery-stable 1795; died at Rome in 1821. In 1803-09 fabric. It is generally composed of sevbe was at a school at Enfield, after which eral thick pieces of timber placed lengthe was apprenticed to a surgeon. This ways, scarfed and bolted together. A profession was not congenial, and he got piece bolted to the bottom of the keel is his indentures canceled, but continued called the false keel, and an internal his medical training at Guy's Hospital piece, also bolted to the keel, is called till about 1817. He now devoted himself the keelson. In iron vessels the arrange-entirely to literature, having as friends ment of parts is altogether different. or acquaintances Leigh Hunt. Shelley, **Keelhauling**, a mode of punishment and other distinguished authors. His

Kearney (kär'ni), a city, county seat of Buffalo Co., Nebraska, in 1818; his last volume of poetry, con196 miles w. of Omaha. It has water power and various manufactures; also Agnes, Hyperion, and other poems in grain, sugar-beet and stock-raising inter1820. By this time he had become so ill csts. Home of Kearney State Normal of consumption (which had also afflicted School (1200 students). Pop. 7702.

Kearny, Co.. New Jersey, on Passaic and though he reached Rome he only River, a suburb of Newark, with manufactures of chemicals, linoleum, metal goods, his memory by his elegy Adonais. Keats ctc. Pop. (1910) 18,659; (1920) 26,724.

Kearny Phillip, soldier, was born at sensuous perception, and his sweet harof taste and faults of diction abound in his poetry. But his later works are free of many of the faults of the earlier pro-

pating in the war in Italy in 1859. In the Civil war his daring courage manifested itself. He was killed in the engagement at Chantilly, September 1, 1862.

Kearny, an uncle of the preceding, was born at Newark, New Jersey, in 1794; died in 1848. Entering the army 1866. He gained his bachelor's degree at as lieutenant in 1812, he distinguished himself at Queenstown. In 1846, during afterwards public examiner and professor the Mexican war, he led an army to New Mexico and conquered that province. In 1847 he was for a time governor of California. churchman he was associated with New-

bourg, France, June 10, 1864, and ended Hungary, 50 miles southeast of Budapest.

Kedge (kedj), a small anchor used to keep a ship steady and clear to a steel-clad battleship or the Chiteship States navy, launched in 1898. This from her bower anchor, while successive the only American battleship which in a harbor or river, also in removing the name of one of the her from one part of a harbor to another.

Keel (kel), the bottom timber in a wooden vessel which forms the proprietor, and was born at London in main support and connection of the whole 1795; died at Rome in 1821. In 1803-09 fabric. It is generally composed of sev-

aret volume of poems came out in 1817. the seventeenth and eighteenth centuries.

The culprit was suspended from a yardarm, then dropped into the water and last efforts of defense. hauled under the keel up to the yard-arm on the other side. On small fore-and-aft yessels he was let down at the bows and drawn aft by a hauling line under the keel to the stern.

Keeling Islands (kēl'ing), or Cosmall group of coral islands in the Indian Ocean, south of Sumatra, discovered by William Keeling in 1609, belonging to Britain, and since 1885 a dependency of the Straits Settlements; area about 9 square miles, pop. about 500, partly constitution of the straits of the strain sisting of members of a family of the name of Ross, who manage all the affairs of the islands, but chiefly of Malays born on the islands, and a smaller number of imported Java coolies. The islands form a sort of horseshoe, enclosing a lagoon. They are all thickly planted with cocounts, which form the principal product. Rice is the chief import. The sea teems with fish, which are largely caught. Poultry sheep and rephits have been into-

assistant surgeon to a Massachusetts regiinto the Indian Ocean.
ment in 1861, and afterwards acting assistant surgeon in the U.S. army. His Keiskama (kēs-ka'ma), a river in South Africa, formerly studies were devoted to the surgery of the the boundary between Cape Colony and nervous system and he was a pioneer in British Kaffraria.

cerebral surgery. In 1891 he proposed relieving spasmodic wryneck by the excision of the nerves concerned. He also shire, on the Isla, 15 miles S. E. of Elgin-experimented in the injection of filtered It has flour-mills, some spinning and in the distance where the proposed relieving the surgery of the boundary in the street Cape Coton and the content of the boundary in the street Cape Coton and the boundary in the boundary in the street Cape Coton and the boundary in the boundar

Experimented in the injection of filtered it has flour-mills, some spinning and air to determine rupture of the bladder.

Keene, Laura, actress, born in England in 1820, came to the United States in 1852, and made this country her home until her death in 1873. She became popular as an actress and manager, being manager of the Varieties Theater in New York and afterwards of the Olympic, known also as Laura Keene's Theater.' Here Our American Cousin was first produced. It military duty in Spain and Russia and was during the production of this play at Ford's Theater, Washington, that sia, where he became field marshal and President Lincoln was assassinated, Mrs. Keene, one of the actors, being among the first to reach his side.

Keene, county seat of Cheshire Co., New Hampshire, 43 miles s.w. of Concord, on 3 branches of the Boston & Maine R. R. It has railroad shops and 35 other industries of a greatly diversified a kind of strong tower, to which filthy. The manufactures consist chiefly

the besieged retreated and made their

Keeper of the Great Seal, in Engso called because the sovereign's great seal is delivered into his custody. See Chancellor. The Keeper of the Privy Seal is an official through whose hands pass all charters signed by the king, before they come to the great seal.

Keewat'in. See Kewatin.

Kehl (kal), a town of Baden, at the confluence of the Kinzig and Schulter with the Rhine, opposite Strasburg, once an important fortress, but its fortifications have been dismantled. Pop. 4000.

Keighley (ke'la), or KEITHLEY (keth'la), a municipal borough of England, West Riding of York; the headquarters of the worsted spinning trade. There are also several paper and corn mills, machine and tool factories. Pop. 43.487.

try, sheep and rabbits have been introduced.

Kei River (kil), Great, in Southeast Africa, formerly the
boundary between British Kaffraria and
geon, born at Philadelphia, Kaffraria Proper, rises with its branches,
Pennsylvania, in 1837. He was graduated at Jefferson Medical College, was
assistant surgeon to a Massachusetts reviinto the Indian Ocean

air to determine rupture of the bladder. weaving of wool, and other industries.

of the novel, Der grüne Heinrich. His collected works appeared in eleven volumes, 1889-1904.

Keller, Helen Adams, an American author, born at Tuscumbia, Alabama in 1880. After an attack of scarlet fever at the age of two she lost the senses of sight, hearing and smell. She was instructed by Miss Anne M. Sullivan; studied at the Perkins Institution, Boston, at the Horace Mann School, New York, and under Miss Sarah Fuller at the Wright Humason School. She was graduated from Radcliffe College in 1904 and is the most remarkable success ever attained in the education of a deaf mute. Her published works include The Story of My Life (1902), and The World I Live In (1908).

Kellermann (kā-ler-mon), Francois (Kaller-mann (kā-ler-mon), Francois in 1735; died in 1820. In 1702 he received the command of the army of the Moselle, and sustained the 'cannonade of Valmy,' which caused the allies to retreat. In the following wars Kellermann received various commands, and Napoleon loaded him with honors. After

mann received various commands, and Napoleon loaded him with honors. After the restoration of the Bourbons he was appointed a member of the chamber of peers.

Kellogg (kel'og), CLARA LOUISE, born Sumterville, South Carolina, in 1842, appeared in opera in New York in 1861, and afterwards sang with great success in the principal cities of Europe and America. For years she conducted an English opera company of her own. In 1887 she married Carl Strakosch and retired. Died, May 12, 1916.

of muskets and sword cutlery; and there weed is gathered during the summer, is a small trade with Sind, Bombay and dried on the shore, then stacked under Candahar. Kelat was stormed by the shelter for some weeks until it becomes Candahar. Kelat was stormed by the shelter for some weeks until the percentage of the shelter for some weeks until the percentage of the shelter for some weeks until the percentage of the shelter for some weeks until the percentage of the shelter for some weeks until the percentage of the shelter for some weeks until the percentage of the shelter for some weeks until the percentage of the shelter for some weeks until the percentage of some weeks until the percentage of some weeks until the percentage of shelter for some weeks until the percentage of some weeks until the Keller, GOTTFRIED, a Swiss novelist, well stirred with a heated iron until it born in 1819; died in 1890, becomes a semifluid mass; it is then followed in 1854 with the publication the market. When salt was dear, the of the novel, Der grüne Heinrich. His bulk of soda used in soapmaking was collected works appeared in eleven volucities with a heated iron until it well stirred with a heated iron until it

fields are worked by the Chinese in the neighborhood, and large quantities of coal are exported. There is also an extensive export trade in rice, sugar and camphor. Pop. about 5000. Kelvin, Lord. Silliam.

See Thompson, Sir

Kemble (kim'bl), CHARLES, an English actor, born in 1775; died in 1854, a younger brother of John Phillip Kemble. He was educated at Dousy (France), returned to England 1792, obtained a situation in the post-office, but relinquished it in favor of the stage in 1794, when he made his first stage in 1794, when he made his first appearance at Drury Lane. His success was largely due to his representations of such characters as Edgar, Romeo, Charles Kells (kels; originally Kenlis), a was largely due to his representations of town of Ireland, County Meath, such characters as Edgar, Romeo, Charles picturesquely situated on a small hill Surface, Antony, etc.; and to his fine near the Blackwater, 36 miles northwest voice, handsome face and figure. He was of Dublin. It is a very ancient town, and contains many interesting antiques.

Kelp, in commerce, the crude alkaline occasional Shakesperean readings. He substance obtained by burning had married the favorite actress Miss de sea-weeds, chiefly of the species Fucus Camp in 1806, by whom he was the serratus, F. vesiculosus, F. nodosus, Laminaria bulbosa, L. digitata. The sea-

Kendal

father being in financial difficulties, she 1801 to 1803 he made a most successful was induced to appear on the stage, tour in France and Spain, and on his which she did in 1829 at Covent Garden return to London purchased a share in as Juliet, and her success was so great the Covent Garden Theater, and made that in the course of three years she managed to relieve the fallen fortunes of the family. Her trip to America in company Coriolanus, etc. His theater having been with her father was also a splendid burned down, he opened the new edifice in triumph, and while there she contracted an unfortunate marriage (1834), which together with certain other obnoxious arwas annulled by divorce 15 years after-rangements, created for a series of nights She retired for many years to Lenox (Mass.), where she was busy with name of the O. P. (old price) riots. He her pen. She returned to London in abandoned the stage in 1817, and re-1847, and from that time she resided alceived many tokens of esteem from his ternately in America, England and the numerous admirers on that occasion. His Continent, appearing at intervals as a statue was placed in Westminster Abbey public reader. Of her most successful writings are the tragedy Francis I (in which she herself acted the part of Louis of Savoy); Journal of a Residence in the United States; Journal of a Resi-dence on a Georgia Plantation; Records of a Girlhood; Records of Later Life; and her Notes on some of Shakespere's plays. As an actress she excelled in the characters of Portia, Beatrice, Lady Macbeth, Lady Teazle and of Julia in the Hunchback. She died in 1893.—Her sister ADELAIDE, born in 1820, greatly distinguished herself on the operatic stage, but retired on her marriage in 1843.

but retired on her marriage in 1843.

Kemble, John Mitchell, an eminent Anglo-Saxon scholar, son of Charles Kemble, born in 1807; died in 1857. He was graduated at Cambridge, and, having taken up the study of Anglo-Saxon, spent a considerable time in studying the ancient MSS. in the libraries ing the additional distribution of the Iller, warian town on the Iller, which is here navigable, 65 miles s. w. of Munich. It has large cotton mills, woolen and linen factories, and much frequented fairs. Pop. 20,663.

Ken, Thomas, an English prelate of great learning and moral worth, born in 1637; died in 1711. After studythare He edited Beowulf and other Anjugat Oxford he became successively chapglo-Saxon works, including an incomplete

the British stage, eldest son of Roger morning and evening hymns are still Kemble (manager of a provincial theat-cherished in many a household. rical company), was born at Preston in 1757; died at Lausanne in 1823. Being intended for the church, he was sent to ing town. County Westmoreland, agreeathe Roman Catholic college of Douay bly situated on the Kent. The Flemings (France), where he distinguished himself settled here in 1337 and the town became by his fine elecution; but, in spite of his famous for its woolens and 'Kendal-

Kemble, Frances Anne, popularly parents' opposition, he selected the stage writer and actress, eldest daughter of at Drury Lane in 1783, and became at Charles Kemble, and niece of Mrs. Sidonce popular. He was afterwards mandons, was born at London in 1811. Her ager of this theater in 1788-1802. From himself a splendid reputation in the characters of Julius Casar, Hamlet, Macbeth, 1809 with an increase of prices, which, rangements, created for a series of nights the notable disturbances known by the in 1833. His acting was distinguished for dignity, precision and studious preparation, but was wanting in fire and pathos. His sister, SARAH, was the celebrated Mrs. Siddons.

Kempen (kem'pen), a manufacturing town in Rhenish Prussia, 20 miles N. W. of Düsseldorf, celebrated as the birth place of Thomas a Kempis (1980). Pan 6219 (Thomas is another (1380). Pop. 6319. There is about town of the same name in the Prussian province of Posen. Pop. 5787.

Kempis, Thomas a. See Thomas a Kempis, Kempis.

Kempten (kemp'ten), a fortified Ba-

ing at Oxford he became successively chapedition of the Anglo-Saxon Gospels, and lain to the Princess of Orange, to the Earl a collection of all the known charters of of Dartmouth, and in 1684 to Charles II, the Anglo-Saxon period, under the title who made him Bishop of Bath and Wells. of Codex Diplomaticus Evi Saxonici. In 1688 he was sent to the tower for Perhaps his most valuable work is the Saxons in England (London, 1849, 2 James II, and yet some months later he vols.). For a number of years he edited refused to take the oath of allegiance to the British and Foreign Review, and William of Orange, and was dispossessed later he acted as censor of plays.

William of Orange, and was dispossessed of his see; but Queen Anne granted him of his see; but Queen Anne granted him Kemble, John Philip, one of the a pension. His sermons and moral treamost eminent tragedians of tises have long been forgotten, but his

Kendal (ken'dal), or Kirkby-Ken-bal, an English manufactur-

tery manufacture

(ken'i-kot), BENJAMIN, an English divine, profes-Kennicott sor of theology at Oxford, born in 1718; died at Oxford in 1783. He is best known Kent, a maritime county of England, by his edition of the Hebrew text of the Bible, the finest edition extant.

green' buckram. Among its manufactures are serges, carpets, tweeds, knitted Pop. (1910) 21,371; (1920) 40,472. goods, fish hooks, etc. Pop. (1911) 14, Kenrick (ken'rik), Francis Patrick, Catholic archishop, was Kendallville, a city of Noble Co., born in Dublin, Ireland, in 1797. In Indiana, 27 miles N. 1830 he was nominated coadjutor Bishop of Fort Wayne. It has iron works, lumber of Philadelphia. In 1851 he was transflour mills, etc. Pop. (1920) 5273.

Kenilworth (ken'il-worth), a town in Warwickshire, England. Kenilworth Castle, the scene of United States. His theological works Scott's Kenilworth, now an ivy-covered have been largely used. He died in ruin, was founded in the reign of Henry I. 1863.—His brother, Peter Richard, born in Summit Co. Pop. (1910)

Kennore, a suburb of Akron, Ohio, in Summit Co. Pop. (1910)

Kennore, in Summit Co. Pop. (1910)

Kensington (ken'sing-tun), a west-Kennebec (ken-e-bek'), a river of Kennebec (ken-e-bek'), a river of Maine, rises in Moosehead I.ake, and after a course of 150 miles, mostly E. S. E., empties itself into the Atlantic 12 miles below Bath. It is navigable for ships as far as Bath and for steamers to Hallowell, 40 miles.

Kennedy, John Pendleton, statesman and author, was born at Baltimore, Maryland, in 1795; died in 1870. He served in the war of 1812, was elected in 1820 to the Maryland legislature, and was subsequently three times Kensington Museum, Park (kensington (ken'sing-tun), a west-kensington Palace, around which are the beautiful Kensington Gardens. Also the South Kensington Museum, Nat-ural History Museum, etc. Pop. 176,623.

—Also the name of a great carpet manufacturing section of Philadelphia, Pennsylvania, in the northeastern part of the city, of note as the site of Penn Treaty Park, the place where William Pennsylvania, in the Indians in 1682. was elected in 1820 to the Maryland legislature, and was subsequently three times elected to the United States House of Representatives, where he actively supported the Whig policies. In 1852 he mated by Prince Albert in 1852. It is a was made Secretary of the Navy. He published several popular novels, the best known being Swallow Barn and Horse-known being Swallow Barn and Horse-known dother works.

Mirt and other works. Kensett, John Frederick, landscape dustrial art, both ancient and modern, painter, born in Cheshire, products and materials used in manu-Connecticut, in 1818; died in 1872. He factures, building, engineering, etc.; restudied in London and Rome, among his productions of ancient sculpture and best works being Sunset in the Adiron-architecture, modern paintings in oil and dacks, Franconia Mountains and Hudson water-color, and sculpture by British ar-Kenneh (ken'e), or Keneh, a town of Upper Egypt, on the right hank of the Nile, well known for its pottery manufacture.

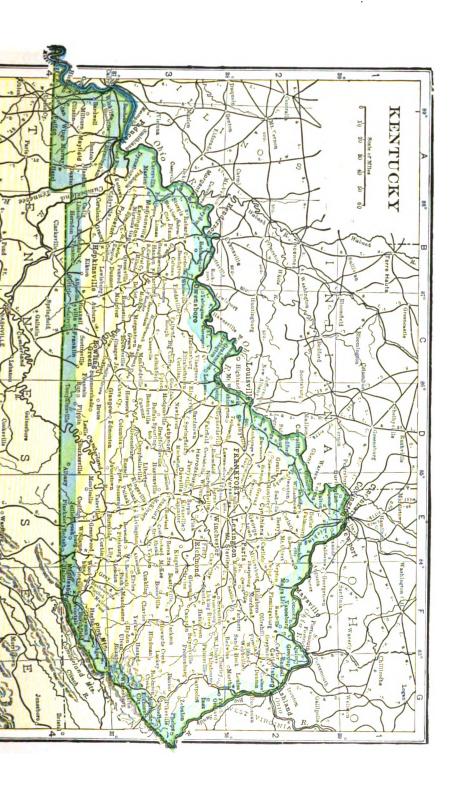
The root Putnam.

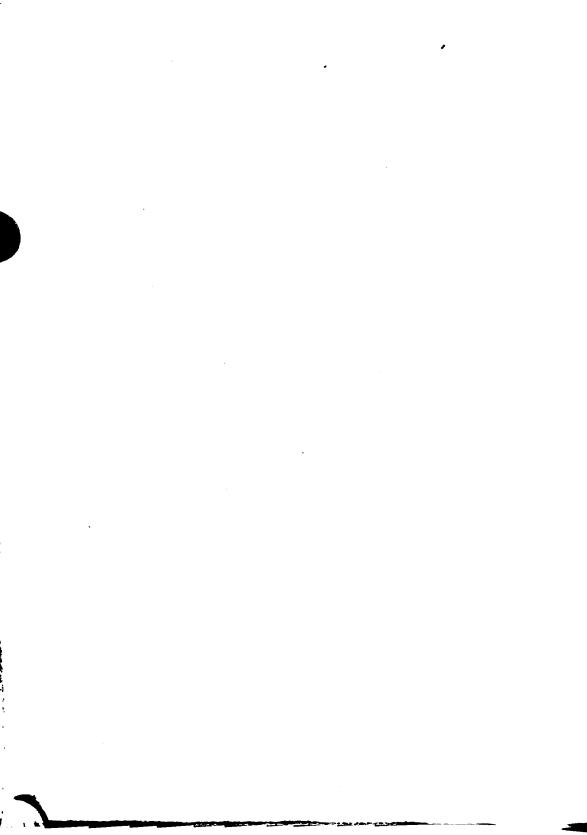
Tists, besides occasional loan collections. South Kensington Museum is under the direction of the Council of Education and receives large government. receives large government grants. It forms the center of industrial art education in Great Britain, and a school of science and cookery is also connected

of the kingdom; area, 1170 square miles, Kenora (ke-no'ra), a town, province nearly all arable, meadow, or pasture, of Ontario, Canada. Pop. Off the east coast lie the well-known (1911) 6158.

Goodwin Sands, between which and the Kenosha (ke-no'sha), county seat of mainland is the roadstead called the mainland is the roadstead called the nor Lake Michigan, 51 miles north of Chieast to west by the North Downs, a range cago, on the Chicago and Northwestern of chalk hills rising to 650 feet, and tershipping business, extensive fisheries, and manufactures of brass goods, automobiles, south of this range, or between it and

with it.





Kent Keokuk

Sussex, is called the Weald, and was anciently an immense forest. Its southeastciently an immense forest. Its southeast-ern portion comprises Romney Marsh. The chief river is the Medway, which en-ters the estuary of the Thames. The soil is generally fertile, and agriculture is in a most advanced state. Kent is the prin-cipal hop county, but large crops of wheat, barley, beans and peas are also raised, and the cultivation of fruit, flow-ers and vegetables is carried on exteners, and vegetables is carried on extensively, London offering a near and ready market for this kind of produce. Kent has justly been termed the 'Garden of England.' Its chief manufactures are paper, chemicals, and gunpowder, and there are also some calico-printing and bleaching works. The county town is Maidstone. Pop. (1911) 1,019,870.

ney in 1830. After practicing at rough keepsie he settled in New York, and be-came professor of law at Columbia Col-lege (1794-98). He was successively ap-pointed master in chancery, recorder, judge of the Supreme Court, chief justice (1804-14), and chancellor of New York (1814-23). He a second time accepted quoted in the courts as of the highest

armory. Its manufactures include elecrical cranes, machine tools, hardware, tion founded at Gambier, Ohio, in 1824, Kentucky (ken-tuk'i), a South-by Philander Chase, a bishop of the Protestant Union, in the Mississippi Valley, bounded N. by Ohio and Indiana, N. w. by Illinois, w. by Missouri, s. by

Kenyon College (ken yun), an eduction of the Capital Charles, and the stant at Gambier, Ohio, in 1824, by Philander Chase, a bishop of the Protestant Episcopal Church. It has an endown downwent of about \$600,000.

Keokuk (kē'ō-kuk), a city and one of the capitals of Lee Coundations of the Coundation

Tennessee, and E. by Virginia and West Virginia; area, 40,598 square miles. The surface of the State is gently undulating, excepting the southeast, which is some-what mountainous. Few States are better provided with water communication. The Ohio forms the boundary on the north, and receives from within the State numerous tributaries, of which the most important are the Cumberland, Kentucky and Tennessee; the Mississippi, after reand Tennessee; the Mississippi, after receiving the Ohio, forms the boundary on the west. The climate is salubrious, the soil fertile, the principal crops being wheat, Indian corn and tobacco; but oats, barley, hemp and fruit are extensively raised, and stock breeding is another important feature, the Kentucky cattle and horses especially being cele-Maidstone. Pop. (1911) 1,019,870. cattle and horses especially being celeKent, James, an eminent American jurist, born in 1763; died in ing of mules, of which many thousands 1847. He was educated at Yale College, studied law, and was admitted an attorney in 1785. After practicing at Poughfine quality. The blue-grass' region furside and horses especially being celebrated. Not less important is the breedare yearly exported, and of swine and of sure and of swine and studied law, and was admitted an attornew 1785. After practicing at Poughfine quality. The blue-grass' region furside and horses especially being celebrated. Not less important is the Kentucky
cattle and horses especially being celebrated. Not less important is the breeding of mules, of which many thousands are yearly exported, and of swine and studied law, and was admitted an attornew 1785. After practicing at Poughnishes admirable pasture. Coal and iron ores of various descriptions abound in many parts of the State, Kentucky having iron ores of great richness and extensive coal beds, though this mineral wealth has not been largely exploited. Limestone occupies a large area, and in this formation is the famous Mammoth Caye, one (1814-23). He a second time accepted occupies a large area, and in this formathe law professorship at Columbia Coltion is the famous Mammoth Cave, one lege in 1824-25. His Commentaries on of the world's wonders. The chief manufacturing industries comprise tobacco and a standard work, while his decisions were cigars, cotton and woolen factories, ironworks and tanneries. The central position authority.

Of the State, and the abdular secured it a of the State, and the abundant water and Kent, founder of modern landscape rapid commercial development. Kentucky gardening; born in Yorkshire, England. He was also a painter.

Kent, a village of Portage Co., Ohio, a village of Portage Co., Ohio, state Normal College is here. It has manufactures of locks, rubber, flour, etc., also railroad machine shops. There is water power. Pop. (1920) 7070.

Kenton, ican pioneer and soldier, born in Virginia. With Boone and Clark he served in the frontier wars and was caprised in the Cumberland Mountains, and the state of Kentucky, and Kentucky, and Kentucky. The college of the commercial development. Kentucky originally formed part of Virginia, but was separated from it in 1790, and admitted into the Union in 1792. The collegiate institutions include the State University of Louisville, Georgetown College, etc. Frankfort is the capital; Louisville the largest city. Pop. (1900) 2,147,174; (1910) 2,289,905.

served in the frontier wars and was caprises in the Cumberland Mountains, tured and tortured by the Indians. He traverses the State of Kentucky, and escaped and served in Wayne's campaign after a course of 260 miles flows into the and in the War of 1812.

Ohio at Carrollton. By a series of im-Kenton, a city, county seat of Hardin provements the lower portion has been Co., Ohio, 59 miles N.W. of rendered continuously navigable for Columbus. It has a fine court house and steamers.

Kenyon College (ken'yun), an educational institu-

ty, Iowa, at the junction of the Des Mories and Mississippi rivers. The Mississippi prover dam located here is 11/4 as professor of mathematics. He wrote miles long, raises the water 40 feet and sets it back 67 miles. The Mississippi munch, but the work that has rendered him sets it back 67 miles. The Mississippi munch, but the work that has rendered him sets it back 67 miles. The Mississippi munch, but the work that has rendered him sets it back 67 miles. The Mississippi munch, but the work that has rendered him sets it back 67 miles. The Mississippi munch at the work that has rendered him sets it back 67 miles. The Mississippi mortal is his Astronomia Nova, seu River Power Company has its plant at the Motibus Stellæ Martis ('New Astronoms, or Celestial Physics delivered in Commentaries on the Motions of Mars'; Prague, 1609, folio).

Kepler's Laws, in astronomy, three manufactures shoes, starch, canned goods, cement machines, cereals, hardware specialties, pickles, buttons and barrels. Pop. (1910) 14,008; (1920) 14,423.

Keokuk, a North American Indian, Keokuk, a North American Indian, (1780-1848), chief of the Sacs and Foxes, born on Rock River, Ill. He was by birth a Sac, and by his bravery and ability became chief of the united ability became chief of the united of each planet sweeps over equal areas in nations of the Sacs and Foxes. Black equal times. 3. The squares of the Hawk (q, v,) whom he succeeded as chief, periodic times (the periods of complete revolution round the sun) of two planets are proportional to the cubes of their manufactures the Mississippi. In 1823 Keokuk, who had supplanted Black Hawk as chief of the Sacs and Foxes, moved with his tribe across the Mississippi and a new treaty was signed in 1832, Keokuk being of the Black Hawks, which tribe had a feud with his own hand.

Kepler (kep'ler), Johann, a great feet was manufactured to the world (1740-45).

Kepler (kep'er), Johann, a great feet was manufactured to the was minister of justice in the astronome here. 1571 very Weil (Wits.

kepler (kep'ler), Johann, a great German mathematician and 1880. He was minister of justice in the temberg); died at Ratisbon in 1630. He cabinet of Prince Lvoff, formed after the temberg); died at Ratisbon in 1630. He cabinet of Prince Lvoff, formed after the temberg); died at Ratisbon in 1630. He cabinet of Prince Lvoff, formed after the studied at the University of Tübingen, Minister of War and succeeded Lvoff as and in 1593 he was appointed a teacher Prime Minister. He proclaimed Russia of mathematics at Gratz (Styria). Here a republic and set about the reorganizahe devoted himself with much ardor to the study of astronomy; but in 1599 the of the moderate type. His policies were religious persecutions commenced in Stynot radical enough to suit the Maximalria, and Kepler, being a Protestant, sits (see Bolsheviki), who took forcible gladly accepted Tycho Brahe's invitation control of the government, and Kerensky to Prague, to assist in the preparation was compelled to fiee from the capital in of the new astronomical tables, called the disguise.

Rodolphine Tables. Tycho died in 1601, Keratin (ker'a-tin; Gr. keras, a Rodolphine Tables. Tycho died in 1601, and Kepler continued the work alone, being appointed imperial mathematician and astronomer. After twenty-five years' wool, and other enidermal appendages. Incessant labor the tables were published in 1627 at Ulm. Kepler had become the happy possessor of a!' Tycho's papers, and the mass of observations made by miles S. S. w. from Bagdad and 20 miles that astronomer during twenty years, with wo of the Euphrates. It is a very ancient a precision till then unsurpassed, enabled city and holy to Mohammedans, especially a precision till then unsurpassed, enabled city and holy to Kepler to establish his three laws (see to the Shittee next article). Kepler enjoyed the patronage of the Emperors Rodolph and Ferdinand, the Dukes of Würtemberg and Wallenstein, but his life was a continued struggle, and his domestic relations est. at 65,000.

city and holy to Mohammedans, especially to the Shiites, who make pilgrimages there in thousands, creating a brisk trade. Some of these pilgrims carry the bones of relatives for burial there, and the fees exacted form an important revenue. Pop.

KERGUELEN Kerguelen's Land, ISLAND (kerg'len), an uninhabited mountainous island lying in the Indian Ocean about midway between the Cape of Good Hope and Australia, discovered by the French navigator Kerguelen in 1772. Its outline is very irregular, the island being much cut up by fjords and inlets; greatest length about 85 miles, greatest breadth 79; highest summit over 6000 feet. The scenery is pictures us and often meanifications. scenery is picturesque and often magnifiscenery is picturesque and often magnin-cent; glaciers and snow fields occupy a considerable area. The climate is wet and stormy, the temperature never very high nor very low. The fauna and flora are somewhat limited. The former in-cludes the fur seal, sea elephant and numerous penguins, petrels, the albatross, etc.; the latter is most abundant in mosses and lichens, but the most peculiar form is the Kerguelen cabbage (Pringles antiscorbutica), a perennial cruciferous plant. Trees are wanting. The island is only occasionally visited by whalers and sealers. Cook visited it in 1777. Ross in 1840, the Challenger expedition in 1874, and in 1874-75 parties from Britain, Germany, and the United States were stationed here to observe the transit of Venus.

(ker-kök'), officially called SHAHE-ZUL, a town of Kerkuk Asiatic Turkey, vilayet of Bagdad, about 140 miles N. of Bagdad, and the resi-dence of the pasha. There are a number of petroleum and naphtha springs in its neighborhood, and it has considerable trade. Pop. chiefly Kurds and Jews, about 15,000.

(ker-mad'ek), Kermadec Islands since 1840 a British dependency under the jurisdiction of a New Zealand magistrate, but formally annexed in August, 1887. They consist of four principal islands, surrounded by a number of small islets and rocks. The most northerly and the largest is Sunday Island, 674 miles northeast of Auckland, area 7200 acres. They are of volcanic origin, and earthquakes and other disturbances have taken place in recent years. The surface is mostly rugged, but tracts occur not too steep for cultivation, with a rich soil. The highest peak is 1723 feet above sea-level. Vegetation is luxurious, the flora being similar to that of Northern New Zealand; fish and birds are plentiful. There is no good harbor. The first settlers were two Englishmen married to Samoan girls, who landed on Sunday Island in 1837, but 3414 feet above sea-level; other parts are left in 1848. Others have been there for very fertile, producing excellent pasture and good crops of oats. barley and potarugged, but tracts occur not too steep for shorter periods, and a family from Samoa took possession in 1878.

Kermân (ker-män'), KIBMÂN, or SIRGAN, a town in Persia, capital of a province of the same name. It has numerous mosques, baths, caravanserais, and a well-furnished bazaar. Its manufactures consist of silks, shawls, woolens, etc. Pop. estimated at 45,000 to 70,000. The province of Kerman, in the southeast of Persia, has an area of 50,-000 square miles and a pop. estimated at 600,000. In the east and south the soil is very fertile, the date, the grape, and the silkworm being largely cultivated.

Kermanshah (ker-män-shä'), or KIRMANSHAHÂN', a town in Persia, province of Ardilan. The manufactures consist chiefly of car-pets or rugs; the trade, chiefly transit by the routes from Bagdad, Shuster and Ispahan, is very considerable. Pop. about 30,000.

Kermes (ker'mēz), the dried female insects of the species Coccus ilicis, found in many parts of Asia and South Europe on the leaves of a species of oak shrub (Quercus coccifera), and supplying a durable red and scarlet dye. They have been utilized for dyeing purposes in the East from very ancient times, and in Germany and Spain since the middle ages; but since the introduction of cochineal their use has been confined to the Eastern countries and Spain, where the collection of these insects still gives employment to a large number of peo-

Kermes Mineral, amorphous antimony trisulphide, a brown-red powder used in the preparation of artists' colors.

(ker'o-sēn), an illuminatnerosene ing oil obtained by refining crude petroleum. The bulk of kerosene is supplied by the United States and Rus-Kerosene sia. America controlled the kerosene market for many years, but Baku, on the Caspian, has now become a formidable rival, not only driving American kerosene out of the Russian market, but also supplanting it in some other countries. See Petroleum.

Kerowlee. See Karauli.

very fertile, producing excellent pasture and good crops of oats, barley and potatoes, but agriculture is much neglected.

The climate is mild and moist. The coast buildings, and often utilizes an old crow's is much indented by bays and inlets nest. In winter it migrates to North (Dingle Bay, Kenmare River, etc.); the interior presents much fine scenery, including the picturesque lakes of Killarney. Iron ore, copper and lead exist, and, 22 miles southwest of Carlisle, finely and a superior kind of slate and flagstone situated on the Greta, near Lake Derivative of the country of the careful of the country of the careful of the ney. Iron ore, copper and lead and a superior kind of slate and flagstone is obtained in great quantities in the wentwater. Coarse island of Valentia. The chief exports factured, but the inhabitants are oats and dairy produce. Principal towns, Tralee and Killarney. Pop. 165, 726. It has fallen off greatly during the last half century.

(ker'zi), a strong coarse (ker'zi), a strong coarse of the galliot type, usually from 100 to 250 tons burden. Ketches were formerly often used as yachts, also

land, for making riding and hunting suits, but now chiefly used in liveries for the parts exposed to extra strain and

ladies' jackets and gentlemen's gaiters.

Kertch, or KERCH (ancient Pantica-pæum), a fortified seaport town of Russia, in the Crimean peninsula, on the Strait of Yenikale, connecting the Sea of Azof with the Black Sea. The modern town is of quite recent existence; it is well built, advantageously situated for commerce, and has a rapidly growing trade. Pop. 29,000.

Kesho. See Hanoi.

Kestrel (kes'trel), or WINDHOVER (Falco tinnunculus), a species of the falcon tribe, widely distributed several smelting furnaces in the neighborin Europe. It is remarkable for its habit hood. Pop. (1911) 29,976. of remaining suspended in the air by Kettle-drum. See Drum.



kestrel (Falco tinnunculus).

means of rapid wing motion, being at this time on the lookout for mice, which are its chief food. At times it will also eat small birds, and insects frequently. It mests in trees, also in old towers and open to the public on Sundays as well as week days. Connected with the gardens sweek flays. Connected with the gardens is a museum and a herbarium, including some fine collections of preserved plants.

Kewanee (kē-wä'nā), a city of Henry Co., Illinois, 50 miles n. w. of Peoria, on C., B. & Q. R. R. It has manufactures of boilers, radiators, corton gloves, valves, pumps, etc. Pop. (1910) 16,026.

Ketcho. See Hanoi.

Ketchup (kech'up), or CATSUP, said to be derived from the Kerseymere (ker'zi-mēr), or CASSIMERE (from the introduced from the East, and employed town Cashmere), the name given to a as a seasoning for gravies, meat and light fabric woven from the finest wools, fish. It was formerly prepared from principally in the west of England, and mushrooms only, but numerous other at Elbeuf, France. It is chiefly used for products are now used for the same purproducts are now used for the same purpose. The best ketchup is obtained from mushrooms, walnuts and tomatoes; instructions for its preparation may be found in almost every cookery book.

Kettering (ket'er-ing), a market town of England, in the county of Northampton. Boot and shoe making is the staple trade, besides which tanning, currying, and the manufacture of agricultural implements are carried on. Kettering is the center of the ironstone district of the county, and daily sends thousands of tons of ore into Wales, Derbyshire and Yorkshire, besides having

Kew (ku), a small village in the county of Surrey, England, situated on the right bank of the Thames. 1½ miles from Richmond. The royal botanic gardens and the connected pleaspotanic gardens and the connected pleasure-grounds (belonging to the nation), the former covering about 75 acres, the latter 250, are the chief attraction of visitors to Kew. They contain the finest collection of plants in the world, and are open to the public on Sundays as well as week days. Connected with the gardene

Kharkoff

Kewatin (kë-wat'in), or Kewatin, sort. Cigars are very largely manufactured a large Canadian territory tured. There are sponge factories, and an stretching from Manitoba and Ontario to Hudson Bay, and northward to the Arctic Seas. The country is not much opened as yet; it is mostly densely wooded, and in many parts swampy, but rich in minerals and game. Area about 470,000 Kew-Kiang, or Kiu-Kiaig (kë-ë'. Khairpur (khir-por'). See Khyer-kiang, or Kiu-Kiaig (kë-ë'. Khairpur (khir-por'). Kew-Kiang, or Kiu-Kiaig (kë-ë'. khosen for its inconspicuousness. Its seaport of China, province Kiangsi, on the south bank of the Yang-tse-kiang. Its situation is not favorable for an extensive Khampaon (khäm-ga'on), a tow n

situation is not favorable for an extensive commercial port, but derives importance from its connection with the green-tea districts. Pop. over 60,000.

The south bank of the lang-use-land, its window of India, in Akola districts. Pop. over 60,000.

and opium. Pop. 18,341.

and the Guil of Mexico. The city is a Lopan, has a considerable trade in eartis, port of entry and military station of the grain, etc., and manufactures beet-sugar. United States and has a safe and accessisoap, candles and leather. A bed of coal ble harbor defended by a fort. It has of immense extent in its vicinity is doing extensive docks, repair yards, marine much to foster industries. The Universaliway, etc., and its mild climate has sity of Kharkoff is an important educational center. Pop. (1911) 249,000.

commercial port, but derives importance from its connection with the green-tea districts. Pop. over 60,000.

Key (kė), ELIEN, prominent Swedish educator and author, born in 1850. She is known to the American public chiefly through her Education of the Child, in which she proclaimed anew the dignity of woman's work and the inadequacy of present methods of education. Other books of hers published in English translations are Love and Marriage and The Woman Movement.

Key, Francis Scott, poet, was born in 1843. He studied law and practised at Frederick, Maryland, and in the District of Columbia for several terms. Detained against his will, he was on a British man-of-war when the attack was made on Fort McHenry, September 13, 1814. From this came the inspiration to the favorite American national song, The Star Spangled Banner.

Key, or Keynote, in music, the prince the whole of a movement has a certain relation. See Music.

Keys, the name given to islets and the same name, and an important station for grail Co. W. Va., on Potomac Course, and an acropolis of great interest. Pop. 5000 to 6000.

Keyser (ki'ser), county seat of Min
Keyser (kan), a title given by Tartars,

Kean), a title given by Tartars,

Khan (kan), a title given b

Keyser (kl'sėr). county seat of Min-our ruins, and an acropolis of great ineral Co.. W. Va., on Potomac terest. Pop. 5000 to 6000.

River. It is a summer resort and has karkoff (har-kof'), or Charkov, a some manufactures. Pop. 6003.

Key West, a city, county seat of Russia: area, 21,035 square miles; pop. Key West Island, or Bone Reef, a small, mate mild, the soil usually fertile, and low-lying coral island south of Florida, 60 miles s. w. of Cape Sable, and commanding the entrance to the Florida Passage at the confluence of the Kharkoff, situated and the Gulf of Mexico. The city is a Lopan, has a considerable trade in cattle, port of entry and military station of the grain. etc.. and manufactures beet-sugar.

Khat.

Kharput (har'put), a town of Turkits estuary, was formerly a very imporish Armenia, 60 miles N. tant town; but its trade is rapidly declinated. of Diarbekir, on the route to Siwas, picturesquely situated on a rocky eminence in a plain watered by the Euphrates. It is noted for its castle and other ruins. Pop. 20.000 to 30,000.

Khartoum

(Aar-töm'), a town in the Eastern Soudan, on the left bank of the Blue Nile, near its junction with the White Nile. It has sprung up since 1830, and is the capital of and

up since 1830, and is the capital of and largest town in the Egyntian Soudan, and the emporium of a large trade, ivory, gums, ostrich feathers, senna, etc., being exchanged for European goods, and slaves also formerly dealt in. It was the scene of Gordon's heroic defense against the insurgent Soudanese, and of his death in January, 1885. (See Gordon.) It was reduced to ruins by the Dervishes, who built the town of Omdurman on the other side of the Nile, but was retaken and restored in 1898. Pop. 69,349.

Khasi and Jaintia Hills, an administrative district of Assam; area, 6157 square miles. In these hills occurs the heaviest rainfall in the world. The Khasis are a peculiar race, speaking a monosyllabic agglutinative language that has no analogy elsewhere in India. Khat. See Catha.

Khatmandu (khāt-mān-dö'), capital of the Kingdom of Nepāl, in Northern India, on the left bank of the Baghmati, on an elevated plateau, 150 miles north by west of Patna, with which it is connected by an important trade route. It is well built, and nas many picturesque temples and pagodas. Pop. about 50,000.

Khayyam, OMAR. See Omar.

surface is one uninterrupted steppe, covered with long grass, and in many parts strongly impregnated with saltpeter. It is watered by the Dnieper, the Dniester and the Bug. Agriculture is in a defec-tive state, but considerable attention is paid to the cultivation of vegetables and fruit. The bulk of the trade is carried on by its port of Odessa.—KHERSON, the capital, an extensive town on the right bank of the Dnieper, about 15 miles above khanate of Central Asia, but since 1876

ing, being absorbed by Odessa, and Nicolaieff, with its growing dockyards, 40 miles distant. Tallow melting, ropemaking, and wool washing are still extensively conviced on When are in the control of th sively carried on. Kherson is the resting place of Howard, the philanthropist, and has a monument in its vicinity erected to

has a monument in its vicinity erected to his memory by the late Emperor Alexander. Pop. (1912) 91,858.

Khiva (hē'vā), or CHIVA, a semi-independent khanate of Central Asia, forming part of Turkestan. It formerly occupied a large extent of surface on both sides of the Amu-Darya or Oxus, but since the cession to Russia, in 1873, of its territory on the east of the Amu, it is now confined to the west side of this river. It is of a triangular shape, this river. It is of a triangular shape, each of its three sides—of which the Amu forms one—being about 300 miles in length. One of its angles rests on the Sea of Aral. A great part of the surface consists of deserts, thinly inhabited or uninhabitable; but along the Amu the land is rich alluvial loam of the greatest natural fertility. Assisted by irrigation it yields luxuriant crops of grain, cotton, madder, fruit, including the vine and veg-etables. The winter is neither severe nor prolonged, but the summer is very hot. Manufactures are lacking in importance. Trade is now being rapidly developed by Russian influence, especially by their Transcaspian Railway from the Caspian to Samarkand. The total population is about 800,000. The capital, KHIVA, lies on an alluvial flat at the junction of two canals, 50 miles west of the left bank of the Amu. It forms an irregular circuit of about 4 miles, and is enclosed by a dry ditch and an earthern wall about 20 feet in height and thickness, and entered by twelve gates, the masonry of which is of brick. Among the principal buildings are Khedive (ke-dev'), a word signifying brick. Among the principal buildings are lord, the title of the rulers of two palaces of the khan, a number of Egypt, originally granted by a firman from the sultan in 1866 to Ismail Pasha, then Vali or viceroy of Egypt.

Kherson (her'son), or Cherson, a maritime government of Southern Russia: area, 27,523 square miles; pop. 3,257,600. Almost the whole surface is one uninterrunted steppe covernment of the formerly in the Khengta of Khokend.

but formerly in the Khanate of Khokand. on the Bokhara frontier. It stands on elevated ground, and has been fortified by the Russians. It was formerly of much commercial importance, but trade has declined in recent years; a considerable trade in Russian goods is still carried on. Pop. (1912) 39,977.

Khokand, or KOKAND (kō-kand'), formerly an independent

forming the province of FERGHÂNA in Russian Turkestan. Its present area is flicts in the recent Afghan war. Its posi29.650 square miles, generally mountainous. It is traversed from east to west to British India, and it is now fortified by the Sir-Daria, which receives all its diainage. The summer is excessively hot, the winter cold, but dry. Cattle raising long, and enclosed by cliffs from 600 to is the chief source of wealth, but heavy crops of grain and fruit are also produced. The manufactures consist chiefly of silk and cotton goods. The capital, KHOKAND, is situated on both sides of the Indus and 150 miles N. of Hyderabad. Pop. (1901) 14,014.

No. 15 MIOKAND, is situated on both sides of the Indus and 150 miles N. of Hyderabad. Pop. (1901) 14,014. Sir. It manufactures silk and cotton fabrics, and is the center of a large trade, Khyrabad

aromatic and medicinal herbs. The most valuable mineral is the turquoise from Kiakhta and Troitskosavsk) about 20,000. the ancient mines of Nishapur. The principal manufactures are silk and woolen stuffs, carpets, muskets and sword-blades. About two-thirds of the inhabitants are Persians proper; the remainder are chiefly Turcomans and Kurds.

Khosru I. See Chosroes I.

Khosru I.

Khotin (hō'tin), or Choczim, a fortified town of Russia, province Bessarabia, on the Dniester, near the Austrian frontier. It figured much in the wars of the Foles, Austrian, Turks and Russians. Pop. 18,126. Turks and Russians. Pop. 18,126. (khōr'ja), a town of India, a flourishing trade, especially in cotton. Pop. 29,277.

Khusháb

river Jhelum. Pop. 10,000.

Khuzistan (huzis-tin'), or Arabis-tan, a province of Persia, bounded on the south by the Persian Gulf, and on the west by Asiatic Turkey; area, 38,600 square miles, watered by the Karun and other streams; pop. estimated at half a million. In the south there are some extremely fertile plains, producing crops of rice, cotton, tobacco, indigo, silk and grain. The interior and north are mountainous, and flocks and herds maintain their inhabitants. Trade is chiefly carried on with Bagdad and Bussorah.

Khyrabad (khi-rā-bād'), a town of India, in Oudh, with numerous mosques and Hindu temples, and

ranking next in importance and size to Tashkent and Bokhara. Pop. 113,764.

Khorasan (ho-rā-sān'), a province of Persia, bordering on Afghanistan; area, 140,000 square miles; pop. 860,000. Much of the surface consists of deserts, but there are also fertile districts producing crops of cotton hemm. districts producing crops of cotton, hemp, and the importation of tea still forms its aromatic and medicinal herbs. The most chief commerce. Pop. (including Ust-

a flourishing trade, especially in cotton. cities contain the finest specimens of Chinese architecture and decoration; the (kösh-äb'), a town of In-rice, wheat, cotton, silk and green teadia, in the Punjab, on the produced are of the best, and the satins, cotton cloths, ink and paper manufac-tured are unsurpassed. The capital is

Nanking; chief port, Shang-hai.

Kiao-chau (ky-ä'ō-chou), a German protectorate in Shantung, China. In January, 1898, the bay and surrounding coast (193 square miles) were leased for ninety-nine years to Germany, as compensation for the murder of two missionaries. It was surrendered to Japan Nov. 7, 1914, by the German garrison after a defense of four months. By the peace of 1919 (see Treaty) the Gercarried on with Bagdad and Bussorah.
Dizful and Shuster are the chief towns.

Khyber (khi'ber), or Khadbar, a famous pass in the northeast corner of Afghanistan, the chief gate to

that country from Peshawur, by means Tartars. The frame consists of collap-of which India has been invaded from sible of folding lattice work, set up in a

but free at the other, so that the stakes radiate like spokes. The whole is covered with thick cloth made of sheep's wool, with the exception of an aperture in the center for the escape of smoke. The door two glands, the function of which is to is formed by the removal of a stake.

guns by William III, for the suppression of piracy. In America he collected some 150 recruits, sailed for the East Indies; 150 recruits, sailed for the East Indies; took to pirating in the Indian Ocean, and returned with his booty to New York in 1698. He was arrested and arraigned in England for piracy; but the charge could not be brought home to him; he was then tried for the murder of one of his crew, sentenced and hanged. The myth that he buried immense treasure on the shores of Long Island Sound, or the banks of the Hudson River, gave rise to one of Edgar Allan Poe's tales.

Kidderminster (kid'er-min-ster), a municipal borough and market town of of tubes (tubuli uriEngland, County Worcester, on the banks niferi), which run at the kidney. b, Corof the Stour. Kidderminster is famed very tortuo s course tex or cortical portion for the manufacture of carpets, rugs, and in the cortex, but contained tubes the kidney. c, Medulary portion, consist tapestry. Various other woolen fabrics tinue as straight tubes ing of cones. d d, are also made; and there are worsted in the medulla. The mills and dye-works, iron-foundries, tinlatter is formed into a mids, projecting into the works. flour mills, tanneries and series of conical fleshy their corresponding callyces see. f, Pelvis.

milis and uye-works, fron-foundries, tin-plate works, flour mills, tanneries and series of conical fleshy their corresponding breweries. Pop. (1911) 24,333.

Kidnapping (kidnap-ing), the act in number, called pyr-of getting forcible and illegal possession of any person, an of-fense of varied degree, but always pun-ishable by fine or imprisonment. In its called the pelvis of the kidney. Pro-more modern and limited sense, it is longations of the expanded uneffect ishable by fine or imprisonment. In its called the pelvis of the kidney. Promore modern and limited sense, it is longations of the expanded ureter, applied to the obtaining of slaves or nacalled the calyces, invest the apices of tive labor by force, as practised by the pyramids and dip in between them Arabs in Africa. This barbarous traffic like funnel-shaped tubes. Now in the existed in very recent years in the South cortex the end of a tubule is dilated Seas, carried on by Europeans, but now into a sac or capsule; into this a small happily suppressed by the appointment branch of the renal artery enters, and of government labor agents. In Great then breaks up into a tuft of capillary Britain this term was formerly also apbloed-vessels. This tuft is called the plied to the illegitimate recruiting for glomerulus, and it and its capsules form

wheel-shaped roof-frame, consisting also ping of children, for the purpose of enof twelve stakes, united at one extremity forced reward, in the United States. Kidney Beans. See French Boans.

should be interpreted in terms of biology. The right kidney lies at a slightly lower It was followed by The Control of the Tropics (1898), The Principles of Western Civilization (1902), and Individualism and After (1908).

Kidd, William, a celebrated pirate, about the middle of the seventeenth cen tury, and originally a shipmaster of New York. In 1696 he was appointed on the situation on the ship Adventure. or ureter proceeds, whilst the blood-vessels of the kidney enter and leave the gland at this point. The weight of each kidney of a male is about 5 oz., those of

the female weigh each somewhat less. Each somewhat less. gland is covered by a thin sheath of fibrous tissue, which has no extension into the substance of the organ. The internal substance is divided into an outer deeper-colored cortical portion or cortex, and an inner lighter-colored or (kid'er-min-ster), a medullary portion. parliamentary and Both portions consist



SECTION OF HUMAN KIDNEY.

plied to the illegitimate recruiting for glomerulus, and it and its capsules form the army and navy. There have been a Malpighian corpuscle, about 127th of various notable instances of the kidnap- an inch in diameter. So that a tubule,

beginning at its dilated end, runs a tortu- university library. Prior to the European ous course in the cortex, reaching the war, Kiel rose rapidly in importance, medulla becomes straight, and finally owing to the fact that it was the principal opens into the pelvis on the apex of a station of the greater part of the imperial pyramid. The blood-vessels of the kidney fleet. It is the eastern terminus of the consist of the renal artery, derived from the aorta, and the renal vein. The branches of the artery enter the gland at the hilum, and pass into the substance of the gland between the papillæ. Finally they reach the cortical portion, and therein subdivide into the minute vessels, which form the glomeruli of the Mal-pighian bodies. The renal veins leave the kidney also at the hilum, and pour their contents into the great main vein of the lower parts of the body (vena cava in-ferior). The nervous supply of the kid-ney is derived from the renal plexus, and trom the solar plexus or large sympathetic mass of the abdomen. The separation from the blood of the constituents of the urine is accomplished in the glomeruli, and by the uriniferous tubules, the former straining off the watery parts of the blood, whilst the latter remove the more solid matters. Gradually, the secreted urine passes through the tubules, into the selvice passes the kidney thouse, into the pelvis of the kidney, thence into the ureters, which in turn open into the bladder behind its orifice or neck. The urine is constantly entering the bladder drop by drop.

Inflammation of the kidneys is known as nephritis. Occasionally concretions of mineral substances accumulate in the kidney, and cause, in their passage from the gland and through the ureter, most excruciating pain. The most dangerous disease of the kidneys is that known as Bright's

disease (which see). Kidney Vetch, Anthyllis, a genus of plants, nat. order There are many species and herbaceous. The vari-Leguminosæ. both shrubby and herbaceous.

Kidonia. See Aivali. Kieft (keft), WILLIAM (?-1647), Dutch colonial administrator; director-general of New Netherland (9. v.), 1637-47 (see Dutch West Indies). He was incompetent tyrannical. He was incompetent, tyrannical, and brutal in his treatment of the Indians. Peter Stuyvesant (q. v.) succeeded him.

Kiel (kēl), a town of Prussia, in Schleswig-Holstein, beautifully in the New York 1985. wig-Holstein, beautifully situated constructed in a deep bay of the Baltic, 54 miles north by east from Hamburg. The most Kieserite



famous Kaiser Wilhelm, or Kiel Canal, which connects the Baltic with the North Sea. It has shipyards, iron foundries, engineering works, oil mills, tan yards, etc. Pop. 211,044.

Kiel Canal, connecting the Baltic and North Seas. The original Baltic and North Sea Canal was completed in 1895. It was 61.3 miles long and 190 feet wide. Improvements completed in 1914 increased the width to 140 feet and the depth to 36 feet, enabling the ety found in Great Britain, chiefly on very dry soils, is the Anthyllis vulner-saria, commonly called Lady's Fingers, was opened to free passage of war and with pinnate, unequal leaves, and heads of flowers generally yellow, sometimes graduating towards scarlet.

Kielce (kyel'tse), a city of Poland about 100 miles south of War-say Lt is an expectation.

saw. It is an ancient town and contains a Bishop's palace, with a notable series of portraits of the bishops of Kielce dating back to 1292. Its industries include the manufacture of paint, cement, sugar, etc. Prior to the European war (1914-18) it was the capital of a department in Russian Poland and was the scene of many battles during the war. By the peace of Versailles (1919) it became part of reconstructed Poland. Pop. 32,381.

Kieserite (kē'zēr-īt), MgSO₁H₂O, a sulphate of magnesia ob-

notable buildings are the university and tained at Stassfurt and elsewhere, and

with quicklime and water it nardens into a mass which, after heating, pulverizing, and again mixing with water, becomes of a marble-like consistency, and may be made into ornamental articles, etc.

Kiev (ki-ev') or Kieff (ki-et'), a government of s. w. Russia; area, 19,691 sq. miles; pop. 4,206,100. The surface is in general flat, intersected occasionally by hills of moderate elevation along the course of the Unioner and other along the course of the Dnieper and other streams. The Dnieper is the only stream navigable to any extent. The climate is mild, the summer very hot and dry. The manufacture of beet-sugar has made rapid strides in recent years, and the province is now the largest producer of that article in the empire.—KIEV, the capital, is picturesquely situated on the right bank of the Dnieper, which is here right bank of the Dnieper, which is here navigable, and crossed by a suspension bridge. It is an ancient place, and has been called 'the mother of Russian cities.' It was the capital of the kingdom in the ninth century. Kiev really consists of three towns, all more or less strongly fortified, and is the seat of the governor-general of the provinces Kiev Podelsk.

Rilkee (kil-kē'), a bathing place on Iroland. general of the provinces Kiev, Podolsk and Volhynia. Its university is one of the most important of the empire. The connection by rail with Odesse and Warth connection by rail with Odessa and Kursk has done much to stimulate the trade of the town. Pop. (1911) 505,060.

Kiev Case, a famous Russian 'rit-in the acquittal of Mendel Beiliss, Novem-ber 10, 1913. The beginning was the murder on March 25, 1911, of the boy

wich Islands.

employed as a source of Epsom salt and in the manufacture of manures. Mixed with quicklime and water it hardens into a mass which, after heating, pulverizing, and again mixing with water, becomes of a marble-like consistency, and may be made into ornamental articles, etc.

The chief occupations are agricultural. Principal rivers—Barrow, Liffery and Boyne. Chief towns—Naas (the county town), Athy and Newbridge. Pop. 63,566.—The town of KILDARE stands on an eminence 30 miles 8 w from Dubling. an eminence 30 miles s. w. from Dublin. Near it is the common known as the 'Curragh_of Kildare,' 4858 acres, owned by the British government. Pop. 1576.

Kilderkin (kil'der-kin), a liquid measure of 18 gallons, a term now almost exclusively used by brewers to denote a half-barrel.

(kē'lē-ya), a seaport of Rou-mania on the Kilia arm of the Kilia Danube. It is fortified, and has a good trade. Pop. 11,703.

(kil-ē-mān-jā'rā, tl Great Mountain), Kilimanjaro

(kil-ken'ni), a city of Ire-land, in Kilkenny County, of which it is the capital, 73 miles s. w. from Dublin, delightfully situated on both sides of the Nore. The city contains several interesting ancient edifices, which give it a venerable and picturesque appearance. The manufacture of coarse pearance. The manufacture of coarse woolens, brewing, and the working of Kilkenny black and foreign marbles into murder on March 25, 1911, of the boy Andrew Yushchinski, by a gang of criminals. The body was carried to a cave in the suburbs of the city, and the mother notified that it was a case of Jewish ritual murder. The Jew-haters and pogrom inciters immediately raised the cry of vengeance. Mendel Beiliss was fixed upon as the criminal, irrespective of evidence, and a case worked up. The soil is for the most part light of evidence, and a case worked up. The soil is for the most part light of evidence, and a case worked up. The soil is for the most part light eral offenders, however, were found, and justice, though tardy, rendered.

Kilauea (kē-lō-ā'ā), an active volcano oats, barley, potatoes and turnips. Beds with Islands. It has an oval crater, 9 town of Kilkenny, and anthracite coal is It has an oval crater, 9 town of Kilkenny, and anthracite coal is miles in circumference, with a lake of raised chiefly for local consumption. Pop. red and boiling lava at the bottom. 79.159.

Kilda (kil'da), Sr., a small and rocky killarney (kil-lär'ni), a market town island in the Atlantic Ocean, belonging to Scotland, 40 miles northwest of Kerry, in the midst of beautiful scenfrom the northwest extremity of the island of N. Uist.

Kildare (kil-dār'). an inland county are three in number. the largest being of Ireland, in the province of about 5 miles long. They are interspersed Leinster; length, 40 miles; breadth, 27 with wooded islands, and the lofty bank, miles; area, 654 sq. miles. The surface are also richly wooded. In summer Kil-

larney is thronged with visitors. 5656.

used for drying, baking, burning, almost all the books of the Old Testaannealing and calcining various substances and articles, such as corn, hops,
Hebrew literature by the composition of
malt, cement, limestone, iron ore, glass,
bricks, pottery, etc. The construction of Roots. His father Joseph and his brother
kilns naturally varies with the special
object for which they are designed, but
the same principle is involved in all, that
is, the generation of ample and regular
heat with the least expenditure of fuel,
clay containing some carbonates and sub-

heat with the least expenditure of fuel. clay, containing some carbonate and sulKilogramme (kil'ō-gram), a French phate of lime, found in thick deposits in
grammes = 2.2 lbs. Similarly kilometer Dorsetshire) and the north of France. It
= 1000 meters or 0.621 mile. See is a member of the Upper Oolite.

Decimal System. A kilogrammeter, a
unit employed in the measurement of

Kin. See Descent.

hour, and a kilowatt-minute is the meas- 40.923.

Pop. lingshire, 12 miles N. E. from Glasgow. The inhabitants are employed in iron and Killdee (kil'de), a North American coal mining and cotton weaving. Pop. plover (Ægialites vocifera), 7292.

so called from its plaintive cry.

Killiecrankie (kil-li-kran'ki), a pass in Perthshire, Scotland, in the valley of the Garry. Here Claverhouse, Viscount Dundee, defeated the forces of Mackay, in 1689.

Killwinning (kil-win'ing), a town of Scotland, in Ayrshire, 21 miles s. w. of Glasgow. Pop. 4440.

Kimberley (kim'ber-li), the capital of Griqualand West, Cape Colony, and the center of the South Clayerhouse, Viscount Dunder, the forces of Mackay, in 1689.

Killingly (kil'ing-li), a town of Quinebaug and Five Mile rivers, 25 miles N. of Norwich. Textiles, shoes, harness, etc., are produced. Pop. (1920) 8178.

Kilmainham, a suburb of Dublin, noted for its jail, and hospital for invalided soldiers. Here Parnell was imprisoned and, with Gladstone, signed the 'treaty of Kilmainham.'

Kilmarnock (kil-mär'nok), a town of Ayrshire, Scotland, 12 miles N. E. of Ayr. It has carpet, and other factories. Among its notable features are the Burns monument and the Dick Institute. Pop. 34,729.

Kilmar (kil'mer), Joyce, an Ameri-

notable features are the Burns monument suitable for the cultivation of wheat, and the Dick Institute. Pop. 34,729.

Kilmer (kil'mer), Joyce, an Amerithe district is Derby, on the Fitzroy can poet, born at New Brunswick, N. J., in 1886; author of Trees and Other Poems, Main Street, etc. He was killed in battle in France, August 1, of the middle ages, born towards the end 1918, during the European war.

Kiln (kil), a structure of brick or stone in 1240. He wrote commentaries on almost all the books of the Old Testannealing and calcining various subment, and rendered essential service to

unit employed in the measurement of mechanical work, is the mechanical work expended in raising a body whose weight expended in raising a body whose weight is 1 kilogramme (2.2046 lbs.) through ty on the east coast of Scotland; area, the vertical height of 1 meter (3.2809 383 sq. miles. The Grampian Mountains, feet), and is equal to 7.233 foot-pounds. by which it is traversed northeast to Kilowatt (kil'ō-wät), in electricity, southwest, occupy a large portion of its one thousand watts, a watt surface, their highest summit within the being the unit of power. A kilowatt county being Battock, 2555 feet above equals 1.3406 horsepower, a kilowatt-sea-level. The principal crops are oats, hour is the energy resulting from an ac-barley, wheat, turnips and potatoes. tivity of one kilowatt continued for one Stonehaven is the county town. Pop. hour. and a kilowatt-minute is the meas-40.923.

ure of work accomplished in one minute Kindergarten (kin'der-gar-tn), a by a machine of kilowatt power.

Killsyth (kil'sith), a town and police fying 'children's garden,' and the name burgh of Scotland, in Stir-given to a system of infant education introduced by Friedrich Froebel, who was largely assisted in its propagation by the Baroness Marenholz-Bülow. The system is intended to bring out the moral and intellectual capabilities of very young children chiefly by observation; pictures, elected to Congress in 1810, and was children chiefly by observation; pictures, elected to Congress in 1810, and was cover, tools, etc., suitable for the purpose, senator from Alabama, 1819-40. Presbeing introduced, so as to convert schooling into play, which according to Froebel ident Tyler appointed him minister to France in 1844, he was elected president is the child's most serious business. The of the Senate in 1850, and vice-president first kindergarten was opened in 1840 at of the United States in 1852.

Blankenburg (Prussia). The system has Blankenburg (Prussia). The system has King-bird. See Tyrannus. spread widely and is now very common,

treats of the motions of bodies independently of the forces which produce sheld, with two pairs of

Kinematograph. See Kinetoscope.

Kinesthesia (kin-es-thē'si-a), the sixth or muscular sense, by which man is conscious of the surface, and around it are motions of the body and its parts. De- six pairs of limbs with ficient kinesthesia, carried to an extreme, spinous joints attached. A may result in feebleness of mind, lack of second shield somewhat control, and inability to live a sane and hexagonal in shape covers

Kinetograph (kin-et'o-graf), an ap- The average length is about 2 feet. These by crabs are destitute of swimming powers, and it released on their backs they appear.

especially in the United States.

Kinemacolor

(ki-ne-ma-kul'er), the name applied to moving pictures in colors based upon the the class Crustacea. They are found on the class Crustacea.

eyes upon the upper sur-face, the second pair being the larger and forming the true visual organs. The true visual organs. mouth opens on the lower spinous joints attached. A second shield somewhat Kinetics (kin-et'ikz), that branch of the abdominal part, and the science of dynamics branchiæ, borne upon five which treats of forces causing motion in pairs of appendices. See Dynamics. pairs of appendages which Polyphemus). represent the abdominal feet of the crab. The average length is about 2 feet. These



Edison for taking pictures of moving oband if placed on their backs they appear, jects. See Vitascope.

Kinetophone (ki-net'ō-fōn), a manusition. The commonest species is the synchronizing Limilus polyphēmus, found chiefly on the motion pictures and the phonograph per-North American coasts. The upper surmotion pictures and the phonograph, per- North American coasts. The upper surfected by Thomas A. Edison in 1913. In face of the tail, as in other species, bears taking the picture, the phonographic re-numerous spines. The Limilus Moluccorder is attached to the picture machine, cānus, of the Moluccas, possesses a and it is only left for the actors to per-strongly serrated tail. This latter species

and it is only left for the actors to perform in the usual way.

Kinetoscope (kinet'ō-skōp), an elaboration of a well-known toy by which a succession of snapshot portraits of objects in motion are enstoutly formed, tetragonal bill, broad at closed in a cylinder with vertical slits the base, and terminating in a finely and rapidly revolved. The retina of the acute point; tarsi short, feet strong, toes eye retains each view a sufficient time to sapear as one picture of objects in motion as viewed in the apparatus. The KINE-play of moving pictures, in which the play of moving pictures, in which the pictures are thrown on a screen and are visible to an audience.

King (Anglo-Saxon, cyning, cyning, cyning, cyning, cyning, a person invested with supreme power over a state, action, or celebrated in ancient poetic and legen-

dary lore, and is the subject of many superstitions. The American kingfisher (Alcedo or Ceryle alcyon) is of a bluish-slate color, with an iron-colored band on the breast, while the head bears a crest



Spotted Kingfisher (Ceryle guttāta).

of feathers. The spotted kingfisher (Cerile guttāta) is a native of the Hima-layas, where it is called the fish-tiger. A large Australian species is known as

the laughing jackass (which see).

Kinglake (king'lak), ALEXANDER (WILLIAM, an English his-ALEXANDER torian, born in 1811, and educated at Eton and Cambridge. He was called to the bar in 1837, but abandoned law in 1856. He first made his mark in 1844 by the publication of Eothen, a narrative of malis; called also the Common or Yellow eastern travel. In 1857 he entered the House of Commons as member for King's College, original name of Bridgewater, and took an active part in Bridgewater, and took an active part in opposing several important bills of that period. The first volume of his *Invasion* of the Crimea appeared in 1863, and at once actablished his reputation as a bail once established his reputation as a brilliant historian; seven volumes followed at intervals, the eighth and completing volume in 1887, and they form together a magnificent record of this war. in 1891. Died

King of (or at) Arms, in Eng-officer whose business is to direct the heralds, preside at their chapters, and have the jurisdiction of arms. There are three kings of arms in England—Garter, Clarencieux, Norroy, and an officer styled Bath King of Arms, attached to the order of the Bath. There are also Lion King at Arms for Scotland and Ulster King of Arms for Ireland.

King of the Herrings, the popuname of the Chimara monstrosa, or Arctic chimæra, a fish also known in certain localities by the name of 'Sea-cat.' See Chimæra.

Kings, Books or, form two books in the English and one book in

the Hebrew canon of the Old Testament. Besides their own unity the books of Kings are closely connected with first and second of Samuel, and, following these, form the third and fourth in what is known as the four books of the kingdom. From internal evidence it would seem that these were written by a series of contemporary authorities, with additions and glosses made by a later writer. history, as related in the books of Kings, begins with the close of David's reign, and carries the events onward to the capture of Jerusalem and the destruction of the temple. This embraces, according to the received chronology, a period of upwards of 400 years (B.C. 1015-588), and includes the history of both the kingdoms of Judah and Israel. This chronology however in the state of the chronology however in the chronology however in the chronology according to the chronology and the chronology according to the chronology nology, however, is unsatisfactory, and has been much disputed. In comparing these books with the Chronicles it is found that while the former describes the divided kingdom of Israel and Judah, the latter is occupied almost exclusively with Judah; and further, that the books of Kings seem to have been compiled under prophetic and the Chronicles under priestly influence.

King's Advocate. See Advocate.

King's-clover, an English name of the Melilotus offici-

sity (which see).

King's College, Canada, an instituthe Anglican Church, situated at Windsor, Nova Scotia. It confers degrees in

sor, Nova Scotia. It confers degrees in arts, science, engineering, law and theology. The Engineering School is situated in Sydney and Glace Bay, and the Law School in St. John, N. B.

King's College, London, a propriecuporated in 1829, and reincorporated in 1829. It was established for the purpose of providing education in accordance with the principles of the Church of with the principles of the Church of England, and gives instruction in the-ology, general literature, science, engi-neering and medicine

King's County, an inland county of Ireland, province of Leinster; area, 772 sq. miles. A large portion of the N. and N. E. part is covered with the Bog of Allen, and of the S. with the Slieve Bloom Mountains. Limestone occurs in the N. W., and has been quarried. The principal produce is oats, wheat and potatoes, with no manufactures. The county town is Tullamore. Pop. 60,187.

King's Evidence. See Approver.

bridge, where he took his degree in 1942. Icocomotive works, shipbuilding yards, dry He was subsequently appointed curate of docks, etc. It is an important educational Eversley, in Hampshire, and published a center and military station. Here are volume of twenty-five Village Sermons, Queen's University, Royal Military Colwhich became popular. In 1848 he publege, Ontario Penitentiary and Rockwood lished a poem, The Saints' Tragedy. This Asylum. It was the capital of Canada was followed in 1849 by the novel Alton 1841-44. Pop. 23,737. Locke, in which his opinions of the social lines, but dealing with the subject from Wilkes-Barre. It is in a coal-mining the agricultural side, followed his novel region, and has manufactures of hosiery, of Yeast in 1851. In 1853 was published machinery, etc. Pop. 8952.

Hypatia, and in 1855 Westward Ho, both Kingston, being the former dealing with the early Christian church, the latter with the South American advork City; a railroad and shipping centers of the Elizabethan era. Among ter sud the getoway to the Carteville. Its the latter with the South American and Tork City; a rainfold and shipping cenventurers of the Elizabethan era. Among ter, and the gateway to the Catskills. Its his other well-known works are Two manufactured products include cigars, Years Ago; Hereward, the Last of the shirts, metal wares, lace curtains, hard-English; Glaucus and The Water Babies. ware, road machinery, boats, automobiles, He was appointed professor of modern cement. It came into the possession of the English

history at Cambridge in 1859, and canon of and canon Chester in 1869. His Letters and Memories of his Life, edited by his wife, was published in 1877.

Kingsley

(kingz'li), HENRY, novelist and brother of Charles Kingsley, was born in 1830, and died in 1876. Eduin 1876. Educated at King's College, London, and Worcester College, Oxford, he left England

Kingsley, Charles, an English 1783 on former site of Fort Frontenac, poet, born in 1819; died in 1875. He was educated at King's College, London, and afterwards at Magdalen College, Cambridge, where he took his degree in 1842. Incomotive works and Eversley, in Hampshire, and college of the complete of

Kingston, a borough of Luzerne Co., Pennsylvania, on the north and economic questions of the time are powerfully expressed. Upon the same branch of the Susquehanna, opposite lines, but dealing with the subject from Wilkes-Barre. It is in a coal-mining

of the English in 1664, a d in was the first capital of New York State. It became a city in 1872. It is served by six railroads has abundant and excellent facilities for water transportation. 26.688. Pop.

Kingston,

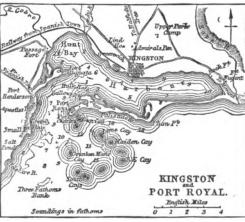
the capital of island the of Jamaica, on the south coast, with straight and regular streets and

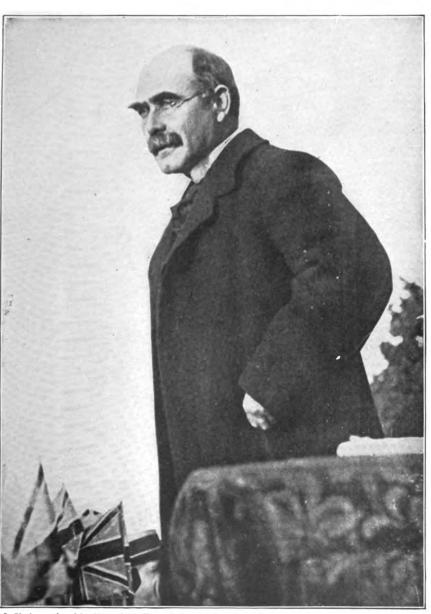
to become an houses, gener-Australian colonist in 1858. On his really of brick. The principal public turn he published Geoffrey Hamlyn, buildings are the English and Scotch Ravenshoe and Austin Elliott. King's Lynn. See Lynn.

Kingsport, a city of Sullivan Co., Tennessee, 8 miles s. of the Virginia line. It has chemical and cement plants, tanneries, pulp works, hosiery mills, glass plant, etc.

Courches, nospitals, court house, theater, penitentiary, barracks and jail. The harbor, which is 6 miles long by 2 miles wide, is separated from the sea by a narrow slip of low land, on which is situated Port Royal, and which forms an excellent anchorage for vessels of any hosiery mills, glass plant, etc.

Pop. size. It was ruined by an earthquake in 1907. Pop. 57,379.

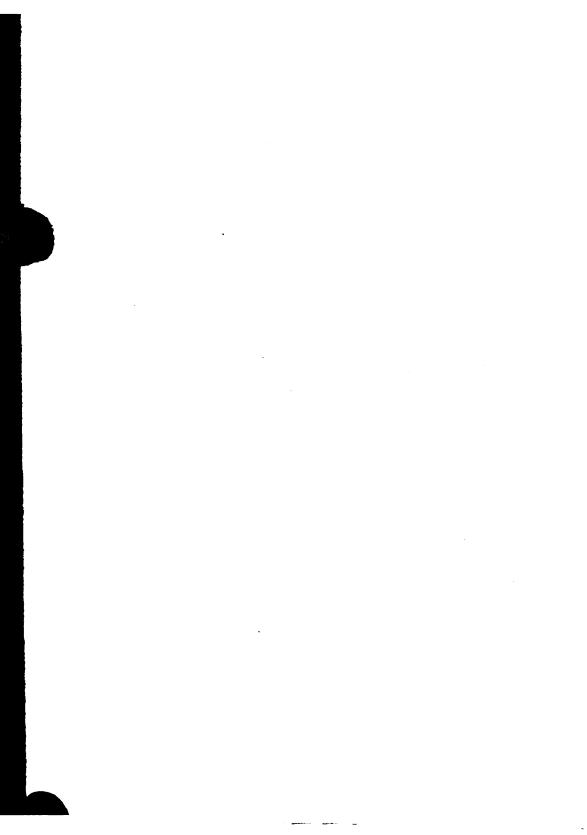




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RUDYARD KIPLING

From a recent photograph taken while he was on a speaking tour.



Kingston-on-Hull. See Hull.

Kingston-upon-Thames, a town of England, county of Surrey, on the right bank of the Thames, 12 miles from Hyde Park Its antiquity is proved by numerous Roman remains found in its vicinity, and the Saxon kings were crowned here from Edward the Elder to Ethelred II. The stone on which the kings were crowned is preserved within an iron enclosure near the marketplace. In the neighborhood are Bushy and Richmond parks, and Hampton Court Palace. It

magnificent harbor, commenced in 1816 and finished in 1859 at a cost of \$4,125,-

dried without artificial heat. African or Gambia kino is obtained from another species (P. erinaceus), a native of tropical Western Africa. Dhak-tree or Bengal kino is the product of Butea frondōsa; while Botany Bay kino is got from various species of Eucalyptus. Kino consists of taming sum and extractive, and is a of tannin, gum and extractive, and is a powerful astringent.

Kinsale (kin-sāl'), a seaport town of Ireland, in the county and 14 miles south of Cork, near the mouth of the Bandon, which here forms a magnificent harbor. The exports consist chiefly of farm produce, and its fishery is good. Pop. 4020.

resort for Londoners. Pop. 37,977.

Kingstown (kingz'town), a seaport Kinston, a city, county seat of Lenoir Co., North Carolina, on shore of Dublin Bay, 6 miles s. E. of three railroads, in a cotton and tobacco Dublin. Its most interesting object is its region. It has six immense tobacco wareregion. It has six immense tobacco warehouses, also cotton and lumber mills, etc. Pop. (1920) 9771.

and finished in 1859 at a cost of \$4,125.

OOO. There are two piers, enclosing an area of 250 acres, with a depth varying from 15 to 27 feet. Kingstown has regular steam communication with Holyhead, in North Wales, and is visited annually by 1600 to 1800 vessels. It is much frequented for sea-bathing. Pop. 17,377. and supported by pillars. It has been king's-yellow, of which is orpiment or tersulphide of arsenic.

King-vulture, the Sarcorhampus the basis introduced into other countries. King-vulture, the Sarcorhampus tropical regions of America. It is about with its port, Osaka, and some 6 miles 2½ feet in length, and upwards of 5 feet from Lake Biwa. It was formerly the across the expanded wings. The other special residence of the mikado, and the vultures are said to stand quietly by until this, their monarch, has finished in repast. Ecclesiastical capital of the empire. It is Kingwood, a Brazilian wood be-about 4 miles long and 3 miles broad, and alteriary tropical regions and number mills, etc.

Pop. (1920) 9771.

Kintyre. See Cantyre.

Kiosk (ki-osk'), a Turkish word signifying a kind of open pavilion or summer house, generally constructed of wood, straw or other light materials, for wood, straw or other light materials, and supported by pillars. It has been introduced into other countries.

Kioto (ki-osk'), a Turkish word signifying a kind of open pavilion or summer house, generally constructed of wood, straw or other light materials, for wood, straw or other light mater Kingwood, a Brazilian wood beabout 4 miles long and 3 miles broad, and lieved to be derived from abounds in exquisitely laid-out gardens, a leguminous tree, a species of Triptolemaca, but by some referred to Brya university, founded in 1897, and the centeriolet tints or West Indian ebony, and tures, such as carved ivory ornaments, is used in turning and small cabinet-work. lacquered ware, bronze ornaments, brocalled also Violet-wood.

Carcalentes 539 153

Called also Violet-wood.

Kinkajou (kink'a-jou; Cercoleptes 539,153.

grade, carnivorous mammal of northern South America, allied to the bear family. In habits it is omnivorous, nocturnal England, returning to India in 1880, and docile when captured. In shape it resembles the lemur, the legs are short, the legs are short, the legs are short, the stories to local periodicals. Soon his fur close and woolly, tail long and pre-thensile. Being fond of honey, they make frequent forays upon the nests of bees.

Kino (kĕ'nō, ki'nō), an astringent extract, resembling catechu, obtained from various trees. The original is procured from Pterocarpus Marsupium, a handsome East Indian tree, nat. order Leguminosæ, which yields a valuable of the Gadsbys, In Black and White, timber. Kino is the juice of the tree Under the Deodars, The Phantom Rick-10-16.

chaw, and Wee Willie Winkle. Life's water Treatises (which see), and he ac-Handicap and The Light That Failed cordingly produced his Habits and In-were written in 1890. The publishers of stincts of Animals with reference to England and America were at first loath Natural Theology. He wrote a descrip-to undertake the publication of these tion of the Arctic insects for Captain stories, which struck a new vein in litera-tories, which struck a new vein in litera-ture, but when at length he found a pub-lisher his fame was established instantly. Kircher (kirh'er), Athanasius, a He visited America, married the daughter of H. Wolcott Balestier of New York, and of H. Wolcott Balestier of New York, and resided in 1680. He was professor resided in Vermont from 1892 to 1896. of mathematics, philosophy and the oriof H. Wolcott Bluester of New York, and in 1002; they in the was professor resided in Vermont from 1892 to 1896. of mathematics, philosophy and the ori-His impressions of the country are conental languages at Würzburg, but the tained in his American Notes. In 1907 pope called him to Rome, where he at he received the Nobel prize for literature. first taught mathematics in the Collegium he received the Nobel prize for literature. It is taught mathematics in the Conegium Among his many books are Many Inventous, The Day's Work, Stalky and Co., Kirn, Just So Stories, Puck of Pook's Hill and Rewards and Fairies. His verses, born in 1824. He was appointed prowhich have gained as wide popularity as fection, include 'The Recessional,' Heidelberg in 1854. He gave his attention 'The White Man's Burden,' 'The Vampire,' 'McAndrew's Hymn,' 'If,' and 'For magnetism. Conjointly with Bunsen he All We Have and Are,' the latter written discovered the spectroscope. He died in in 1914 at the beginning of the European 1887. in 1914 at the beginning of the European 1887. war. He contributed many articles on Kirghiz, Kirghis (kir'gez), a nomadthe war to the magazines. His later

Kiratpur (kë-rat-për'), a town of India, Bijnor district, N. W. Provinces. Pop. 12,728.

Kirby (kir'bi), WILLIAM, a distinct of the control o

Kirby (kirbi), WILLIAM, a distinguished English entomologist, born in Suffolk in 1759; died in 1850. He oped, and on the establishment of the Linnæan Society in 1788 he was one of Linnean Society in 1788 he was one of its first members. In 1802 appeared his work on English bees, entitled Monographia Apum Anglia, which established garl River. Boats and junks are built here and it has a mint. The town, also here and it has a mint. The town, also here and it has a mint. The town, also here and it has a mint. for him a European reputation. A few years afterwards he formed a literary copartnery with Mr. Spence, and the result was the publication, in 1815, of result was the publication, in 1815, of Kirkcaldy (kir-ka'di), known as the the first volume of Kirby and Spence's Kirkcaldy 'Lang Toun,' a seaport Introduction to Entomology, of which the second volume appeared in 1817, and the shore of the Firth of Forth. It consists third and fourth in 1826. It gives in principally of one long, irregular street,

war. He contributed many arranges of the war to the magazines. His later books are France at War, Fringes of the bering in its various branches about Flect, Sea Warfare, and (in 1917) A 3,000,000, and inhabiting the steppes that biversity of Creatures.

Wind Later (kip-chakz'), or KAPT-Caspian Sea in the west to the Altai and Chical Shap Mountains in the east, and Kiptchaks (kip-chakz'), or Kapt-Caspian Sea in the west to the Altai and to a Tartar or Mongolian race. They from the Sea of Aral and the Sir-Daria were known as the Golden Horde, and founded a khanate about the thirteenth north. The Kirghiz are a slow, sullen century, and their territory comprised the watered by the Dnieper, Don, watered by the Dnieper, Don, and horseflesh, and their drink the nourishing fermented mare's milk called kou-miss. They dwell in a yurt or semi-circular tent, the wooden framework of which is covered with cloth or felt. Agriculture is almost unknown; their possessions are in sheep, horses and camels, was educated at Ipswich, and at Caius and their manufactures consist of cloth, College, Cambridge, and was appointed felt, carpets, leather, etc. They profess rector of Barham in 1796. Here his Mohammedanism. Most of the varied early love of natural history was devel-Kirghiz tribes are, at least nominally,

under Russian government.

Kirin (kir'in), a division or province
and town of the Chinese terricalled Kirinoola or Girin, has a pop. of 120,000. See Manchuria.

the form of letters a familiar description which, including suburbs, extends for of insects in all their phases as regards about 3 miles west to east. It has nuspecies, food, habits and qualities, benemerous flax-spinning mills, linen and ticial or destructive. In 1830 Mr. Kirby damask factories, sailcloth and net factories. was appointed to write one of the Bridge- ries, roperies, machine factories, etc., and

the largest linoleum and floor-cloth works in the world. The harbor is obstructed by a sandbank at its mouth, and is dry at ebb tide. The foreign trade is with the Baltic and the north of Russia. Adam Smith. author of the Wealth of Nations,

was born here. Pop. (1911) 39 601.

Kirk, Ellen Warner, author, born in Southington, Connecticut, in 1842, married John Foster Kirk in 1879. Her books include Love in Idleness, Through Winding Ways, A Lesson in

Love, etc.

Kirk, JOHN FOSTER, historian, born at Fredericton, New Brunswick, in 1824. He was secretary to the historian Prescott 1847-59, and wrote History of Charles the Bold. He edited a supplement to Allibone's Dictionary of Authors, edited Lippincott's Magazine 1871-86, and was lecturer in history at the University of Pannsulvania. He died in University of Pennsylvania. He died in the historical dramas John Hunniades and Ladislaus the Cumanian. His brother Kirkeudbright (kir-kö'bri), a Charles, who almost equaled him in litmaritime county in erature, died in 1830.

the south of Scotland; area, 898 square Kishinev districts; the rivers include the Dee and the Urr; and there are numerous lakes, annexed to Russia, became the capital of the largest of which is Loch Ken. Granite is quarried in several districts, while lead, copper and iron have been found. The soil and climate are most suitable for here in 1903-05. It was annexed to Roumania in 1919. Pop. 128,700. green crops, and great attention is given to the rearing of cattle for the English markets. Pop. 39,383. The county town of the same name is a port on the Dee, 25 miles southwest of Dumfries. Pop. 2386.

Kirkintilloch (kirk-in-tilloh), a burgh of Scotland, county of Dumbarton, on the Forth and Clyde canal, 6 miles by rail north by east of Glasgow. It has iron foundries, cotton factories, chemical works and coal mines. Pop. 10,680.

Kirksville (kirks'vil), a city, county

seat of Adair Co., Mis-N. W. of Quincy. Ill. It is souri, 70 miles N. W. of Quincy, Ill. the seat of the American School of Osteopathy and the North Missouri State Nor-

mal School. Has foundry, flour mills, shoe factories, etc. Pop. (1920) 7213.

Kirkwall (kirk'wal), a scaport of Scotland, capital of the county of Orkney, on a bay on the east side of the island of Pomona or Mainland. Here are the old cathedral of St. Magnus (founded in 1137), the old castle of the earls of Orkney, and the ruins of the bishop's palace, in which King Hako died. The harbor is secure and commodical. dious. Pop. 8711.

See Kerman. Kirman.

Kirmanshah. See Kermanshah.

(kirsh'vås-er), a liq-ueur distilled in Ger-Kirschwasser many and Switzerland from the fermented juice of the small black cherry. (kish'fa'lö-di), ALEXAN-Kisfaludy was born in 1772; died in 1844. In 1793 he entered the Austrian army as a cadet, and made campaigns in Germany and Italy. During a residence in Vienna, as a member of the royal Hungarian body-guard, he devoted himself to the translat-ing of Tasso into Hungarian. In 1801 he left the army, and employed himself almost exclusively in agriculture and in literary pursuits. His principal lyrical work, Himfy Szerelmei ('Himfy's Love Songs'), gave him a first place among his native poets. He afterwards wrote the historical decrease Leby Marginete

(kē'she-nyef), miles. There are extensive mountainous districts; the rivers include the Dee and tributary of the Dniester. In 1812 it was

Kismayu (kis-ma'yā), a seaport on the coast of East Africa, south of the mouth of the Juba, the administration of which was conceded by the Sultan of Zanzibar to the Imperial British East Africa Company in 1889. Pop. 8000.

Kisoriganj (kēs-ō-rē-gunz'), a town of Hindustan, in Bengal, 13 miles east of the Brahmaputra. Pop. about 13,000.

Kiss, the mutual touching of the lips. With some nations, as the Germans and French, men often kiss each other after a long absence, etc. Kissing the hand of the sovereign forms part of the ceremonial of all European courts. Kissing the foot is a common oriental sign of respect, and the popes have required it as a sign of respect from the secular power since the eighth century. When this ceremony takes place the pope wears a slipper with a cross, which is kissed.

Kissingen (kis'ing-en), a watering place of Bavaria, on the Saale, 30 miles north of Würzburg. The springs, five in number, and all saline, contain a large quantity of carbonic acid gas, and are used both internally and as baths. Besides 20.000 visitors annually tles of water are annually exported. A complete course of water drinking and bathing occupies twenty-eight days. Pop. 4757.

Kistna (kist'na), or Keishna, a river of India, which rises among the Western Ghats, about 40 miles from the Western Ghats, about 40 miles from the Malabar coast, and flows in a general easterly direction, partly along the frontier of Hyderabad and the Madras Presidency, and falls into the Bay of Bengal 200 miles north of Madras; length, including windings, 800 miles. It is almost useless for inland navigation.

Kit-Cat Club, an English club formed about 1688, of a political character.

cal character.

Kitchener HERBERT, Baron, an English soldier, born in 1850. He entered the army in 1871, was in civil life 1874-82, took part in the Nile expedition of cz, took part in the Nile expedition of 1884, and commanded a brigade in the Suakim campaign of 1888. He was governor of Suakim 1886-88, adjutant-general of the Egyptian army 1888-92, and sirdar of this army, 1890-98. Promoted major-general in 1896, he commanded the Khartoum expedition of 1898 in which he completely defeated the Area and rehe completely defeated the Arabs and re-covered the Soudan for Egypt. This brought him the title of Baron Kitchener of Khartoum. He took an important part in the Boer war, was promoted lieutenant- form used in the general and field marshal, was made Earl Malay Peninsula. Kitchener and became war minister in the The frame con-European war in 1914, and in June, 1916, sists of two sticks crossing each other at

include furniture, rubber goods, and varithe form of a tetrahedron, or is built up ous foundry products. Pop. 19,767. Formerly known as BERLIN.

Kitchen-Middens (kich'en-mid-nz), the name given to shell mounds in which are embedded the refuse of prehistoric peoples, consisting of stone and horn implements, pottery, etc. These heaps are found in Denmark and along the coasts of N. and S. America.

Kite (kit), a raptorial bird of the fal-con family, differing from the true falcons in having a somewhat long forked falcons in having a somewhat long forked tail, long wings, short legs and weak bill and talons. This last peculiarity renders it the least formidable of the birds of prey. The common kite, glead, or glede of individual parts, the frame of each (Milvus ictinus, regalis, vulgāris), preys forming a tetrahedron. Dr. Alexander chiefly on the smaller quadrupeds, birds, Graham Bell's great tetrahedral kite in young chickens, etc. It usually builds in 1907 lifted Lieut. Selfridge 168 feet into the fork of a tree in a thick wood. The

attracted by the baths, about 500,000 bot- common kite of America is the Ictinia Mississippiensis.

Kite, Man-lifting. The familiar kite has for many centuries been used as a toy, its first scientific use being when Dr. Frank-

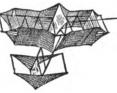


Fig. 1.—Aërocurve Kite.

lin employed it to bring down electricity from the clouds. late years, in its new form of the box or cellular kite, it has come into 1180 in observations of the atmos-

Fig. 1.—Aëçocurve Kite. Of the attitude phere, the conbeen discovered. Among the well-known types are the aërocurve kite invented by C. H. Lamson. It is of cellular construction, the forward sup-

porting surfaces are curved like the wings of bird, while the rear cell is flat smaller and size, forming a tail-like rudder. (See Fig. 1.) The Malay kite (Fig. 2) is a form used in the



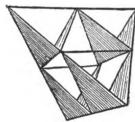
Fig. 2.-Malay Kite.

was drowned in a torpedoed vessel.

Kitchener,

a city of Ontario,
miles w. of Toronto.

It forms a bow. This bow balances the kite
has many factories with an output of so that it flies without a tail. In the
over \$20,000,000. Articles manufactured tetrahedral kite (Fig. 3), the frame is in



Kittanning (kit-tan'ing), a borough, church, the bishop's palace, provincial county seat of Armstrong house of assembly, town house, etc. The Co., Pennsylvania, on Allegheny River, 44 manufactures consist of woolens, leather, miles by rail N. E. of Pittsburgh, in a coal, white lead, etc. Pop. (1911) 28,011. iron ore and natural gas region. It has extensive iron and steel plants, and manufactures of returns glass chiral lumber of courters of returns of the contribution of the courter of the contribution of the courter of the c

gull (Larus tridactylus), found in great abundance in all the northern parts of the world wherever the coast

ern parts of the world wherever the coast is high and rocky.

Kitto (kit'tō), John, was born at Plymouth, England, in 1804; died at Cannstadt, in Germany, in 1854. Losing his hearing, he engaged in literature, producing the Pictorial Bible, Cyclopedia of Biblical Literature, etc. Engaged in missionary work at Malta and Begeled. Pensioned by the crown

Bagdad. Pensioned by the crown.

Kitzingen (kits'ing-en), a walled town of Bavaria, 10 miles east-southeast from Würzburg, partly on the right and partly on the left bank of the Main. Pop. 8489.

Kiu-kiang.

Kiung-chow (kē-öng'chou'), a sea-port of Japan in the island of Formosa, open to foreign trade. Pop. 40,000.

Corea, and from Hondo by the Strait of Sikoku. Its surface is mountainous and there are a number of active volcanoes. It produces coal, copper, tobacco, etc. Nagasaki is situated here.

Kiwi-Kiwi. See Apteryx.

Kizil-Irmak (kiz'il-ir-mäk; the Turkish for Red River'), a river known to the ancients as the Halys, the principal river of Asia Minor. Rising in the east of the penin-sula, it flows in a circuitous route for about 500 miles, and enters the Black Sea near Sinope.

Kizil-Kum (kiz'il-köm), an exten-siye_sandy desert in Asia, to the southeast of Lake Aral, occupying a great part of the space between the Amu Daria or Oxus and the Sir-Daria, in what is now Russian territory.

coal and iron mines, iron and steel works. Pop. 18,600.

Klagenfurt (klä'gen-fört), a town Carinthia, 40 miles north-northeast of

factures of pottery, glass, china, lumber, educated in the artillery school in typewriters, etc. Pop. (1920) 7153.

Kittiwake (kit'i-wāk), a species of 1847. In the Hungarian rebellion of 1848 Klapka joined the revolt as chief of the staff, and in 1849 he took command of an army corps. For the ability which he displayed he was made minister of war by Kossuth. When the Hungarians were defeated, Klapka refused to capitulate, and shut himself up in the fortress of Komorn, where he made a brilliant de-fense. Ultimately he surrendered under honorable conditions. He was compelled to leave the country, and so passed many of his years in exile. He wrote Memoirs of the War of Independence (1850), and The National War in Hungary and Transylvania. Died in 1892.

Klaproth (klap'rōt), Julius Hein-Rich, a German orientalist and traveler bern in 1783; died in 1835.

and traveler, born in 1783; died in 1835. He traveled through Asia to the Chinese frontier, and also in the Caucasus. Having taken up his permanent residence in Paris in 1815, he was appointed professor of Asiatic languages, and retained this Kiushiu (kyö'shyö'), one of the three situation till his death. Among his nuprincipal islands of Japan, merous writings may be mentioned his Deseparated from Corea by the Strait of scription of the Eastern Caucasus, Deservation of the Eastern Caucasus of the Eastern Caucasus of the Eastern Caucasus of the Eastern Caucasus of the Eastern Cauca scription of the Eastern Caucasus, Description of the Russian Provinces Between the Caspian and the Black Seas, Catalogue of the Chinese and Manchu Books and MSS, in the Royal Library of

Berlin, Asia Polyglotta and Collections of Egyptian Antiquities.

Klattau (klat'ou), a town of Bohemia, on a steep height in the beautiful and fertile valley of the Rasenbach, 73 miles s. w. Prague. It is an ancient place, and has six times been almost burned down. Pop. 12,793.

Klausenburg (klou'zen-burh; Hun-garian Kolosvár), an Austrian town, the capital of Transylvania, on the Little Szamos. It has a noble cathedral, and the house where Corvines, Hungary's great king, was born. There are various manufactures. Pop. 42,295.

Klausthal (klous'täl), a town Prussia, in Hanover, town of anover, 48 Kladno (klad'no), a town of Bohemia, his ustilai Prussia, in Hanover, 48 13 miles N. w. of Prague, with miles S. S. E. of Hanover, the principal

mining town of the Hartz. Pop. 8565.

Kléber (klā-bār), Jean Baptiste, a
French general, born at Strasof Austria, capital of burg in 1754, and assassinated in Cairo by a Mohammedan fanatic in 1800. Laibach, on the Glan. Among its public was one of the ablest of the revolution-edifices are the cathedral, the town ary generals, accompanied Napoleon to

Egypt and was left by him as commander-in-chief of the French forces.

Klephts (kleftz), properly robbers, the name formerly given to those Greeks who kept themselves free from the Turkish yoke in the mountains, and carried on a perpetual war against the oppressors of their country.

(klep-to-mā'ni-a; Greek kleptō, I Kleptomania steal), a supposed species of insanity manifesting itself in a desire to pilfer. In admitting the plea of kleptomania great caution is needed. The best way to arrive at a judgment is to consider the previous character and personal interests of the person charged; to determine the value and usefulness of the article appropriated; the methods of the appropria-tion and its probable motive. Thus when a baronet steals broken crockery, and a clergyman purloins innumerable cheap Bibles, the ordinary motives for theft are inapplicable, and when the article is taken ostentatiously there is then a strong

case in favor of kleptomania.

Klondike (klon'dik), the region drained by the Klondike (klon'dik), the region shoulders.

River, Canada, in the Arctic Zone. In shape it represents an inverted triangle, the lower point jutting into Alaska. The comparature regulation respectively resembles that of Alaska. The weed of Centaurea. C. nigra, black knapture resembles that of Alaska. only from July until the middle of October; during this season the hills are Knaresborough (närs'bur-o), a shothed with verdure and trees of spruce. clothed with verdure and trees of spruce, cottonwood, pine, etc., are numerous. The levels are carpeted with a luxuriant growth of Arctic moss. In winter the streams and soil become solidly frozen, being seldom thawed, except the upper strata, even in summer. Under these adverse conditions it brings forth an experifying properties: and several curious quisite flora: the Linnæa, violets, cornel and other wild flowers. Wheat, barley, and other wild flowers. Wheat, barley, **Knaus** (knous), Ludwig, a German painter, born in 1829. He cessfully raised. Mosquitoes, midges and studied at Düsseldorf under Karl Sohn flies infest the country during summer. Alaska and British Columbia have long thawed by artificial heat; and water, the 1874 he received an appointment in the great desideratum of the placer-miner, is, Art Academy of Berlin. from the same cause, very meager in supply. Dawson is the only town in the knee (ne), or Knee-joint, that joint in the lower limbs of man which

district, and is the distributing point for the mining region.

ANACHARSIS. Klootz.

Klopstock (klop'stok), FRIEDRICH Gornan poet, was born in 1724; died in He studied theology, and commenced in solitude the first canto of his sacred epic, *The Messiah*. The three first cantos of this grand and interesting work appeared in 1748, and excited universal attention.

Knapp (nap), MARTIN AUGUSTINE, justice, was born at Spofford, New York, in 1843. Admitted to the New York bar in 1869, he was corporation counsel at Syracuse 1877-83, and was appointed on the Interstate Commerce Commission in 1891, becoming its chairman in 1898. In 1910 he was appointed presiding justice of the Court of Comparison. presiding justice of the Court of Com-merce, created by Congress in that year. Knapsack (nap'sak), a bag of leather or strong cloth for carry-

temperature resembles that of Alaska, weed; and C. scabiosa, greater knapweed, but the atmosphere is much drier than are common weeds, being rough, hardy, the western portion. The summer lasts herbaceous plants growing by waysides. etc.

county of York (West Riding), on the left bank of the Nidd. 17 miles west by north of York. The environs of the town abound with objects of interest, including the ruins of the castle, founded in 1170; the dropping well possessed of powerful

and Schadow, but struck out a path for niest the country during summer. and schadow, but struck out a path for Alaska and British Columbia have long himself, painting subjects from everyday been known to contain rich deposits of rustic life. In 1852-60 he lived mostly in gold. In 1896 gold was discovered in Paris, and painted the chief pictures of abundance along the Klondike River, and his first period, The Golden Wedding, The since then this region has yielded propagation and The Setting-out for the fusely, the amount taken being valued at Dance. In 1861-66 he resided in Berlin, many millions of dollars. It has been and from 1866 to 1874 he lived in Dissetiment of the propagation of the struck below some estimated that from twelve to twenty seldorf, and to this period belong some millions of dollars have been taken an- of the pictures on which his fame as a nually from the mines. The severe frosts genre painter is most securely founded: nually from the mines. The severe frosts genre painter is most securely founded: make the working of the auriferous gravel The Children's Feast, The Funeral, The exceedingly difficult, as it must first be Goose-Girl, Brothers and Sisters, etc. In

corresponds to the elbow in the upper, praised by Dryden, Pope, Addison and and is formed by the articulation of the Steele, but his works have more value femur or thigh-bone with the tibia, or historically than as works of art. large bone of the leg. The lower end of the femur terminates in two oblong the femur terminates in two oblong the steeled to a certain military admitted to a certain military and the steeled to a certain military and the femur, which rest in two cavities in the upper part of the tibia; interposed between the two bones are the semilunar cartilages, which diminish the pressure of the femur on the tibia, and prevent the



HUMAN KNEE-JOINTS.

1, Right Knee-joint laid open from the front, to

displacement of the former. In front of the knee-joint is the patella or knee-pan. The joint is capable of flexion and extension, and of a very slight rotatory movement. The accompanying figures and explanations will enable the joint and its chief features to be thoroughly under-

stood. See also Leg.

Kneller (nel'er), Sir Godfrey, portrait painter, born at Lübeck
about 1648; died in London in 1723. He studied under Bol and Rembrandt at Amsterdam, visited Rome, Venice and Hamburg, and gained a good reputation for historical paintings as well as portraits. He came to England in 1684, and succeeded Sir Peter Lely as court painter to Charles II. He filled the same position under James II, William III, Anne and Charles II. and George I. The last named made him a baronet. In addition to all the celeb-rities of the English court, including the Ten Beauties of the Court of William, now at Hampton Court, he painted the 43 members of the Kit-Cat Club, and portraits of ten sovereigns, including Louis XIV and Peter the Great. He was highly

rounded masses, called the condyles of the rank, with special ceremonies. See Chivalry. In modern usage one who holds a certain dignity conferred by the sover-eign of Great Britain, and entitling the possessor to have the title of Sir prefixed possessor to have the title of Sir prefixed to his Christian name, but not hereditary like the dignity of baronet. The wives of knights have the legal designation Dame for which Lady is usually substituted. See Knighthood. Orders of.

Knight, Charles, English editor and publisher, born in 1791; died in 1873. He succeeded his father as a bookseller in Windsor, and for a number of years he edited a Windsor newspaper. Having removed to London in 1823 he commenced Knight's Quarterly Magazine, which contained the earliest contributions

which contained the earliest contributions to literature of Macaulay, Praed and others. In 1827 he undertook the super-1. Right Knee-joint laid open from the front, to show the internal ligaments. a, Cartilaginous surface of lower extremity of the femur, with its two ful Knowledge Society, for which he did condyles. b, Anternal semiluan fibrocartilage. c, Posterior do. d, Internal semiluan fibrocartilage. c, Part of the ligament of the patella turned down. g, Bursa or sac containing synovial fluid, laid open.

2. Longitudinal Section of the Left Knee-joint. terwards remodeled as the English Cyclonedia, etc. Among the many works of head of tibia. f, Anterior crucial ligament. g, Posterior ligament. h, Mass of fat projecting into the cavity of the joint below the patella. s, Bursa. is the most esteemed. His Half Hours with the Best Authors is very popular. The most important of his own writings, the Popular History of England, occupied him seven years, 1854-61. An autobiography, Passages of a Working Life During Half a Century, appeared in 1863-65.

Knighthood, OBDERS OF, the name given to organized and duly constituted bodies of knights. The orders of knighthood are of two classeseither they are associations or fraternities, possessing property and rights of their own as independent bodies, or they are merely honorary associations established by sovereigns within their respec-tive dominions. To the former class be-longed the three celebrated religious orders founded during the Crusades— Templars, Hospitallers and Teutonic Templars, Hospitallers and Teutonic Knights. The other class, consisting of orders merely titular, embraces most of the existing European orders, such as the order of the Golden Fleece, the order of the Holy Ghost, the order of St. Michael. The British orders are the order of the Garter, the Thistle, St. Patrick, the Bath. St. Michael and St. George, the Star of India, and the order of the Indian Em-pire. The various orders have each their

States, membership 90,000.

to law and loyalty to government. There are three degrees, called ranks—page, esquire, knight. The endowment rank has for its object the furnishing of a reliable

Knights of the Golden Eagle.

An association founded in 1873 in the United States, for social and benevolent purposes. It has 86,000 members. Knights of the Maccabees.

An association of benevolent character, founded in 1881. It has in the United States about 300,000 members.

appropriate insignia, which generally include a badge or jewel, a collar, a ribbon of a certain color, and a star.

Knight Service, the original and most honorable far as the series of loops are not thrown species of feudal land tenure. The holder of a knight's fee, the extent of which is knitting steel wires are used to form the now doubtful was bound to reader milinow doubtful, was bound to render mili-loops on. For manufacturing purposes tary service to his lord for forty days in hand-knitting has been entirely super-every year if required. seded by machinery.

knights of Columbus, an American Devolent society, founded in 1882, of Roman Catholic membership. The society of the free school of Sandwich, in Kent. C. A. during the European war, and by March, 1918, had raised a war fund of nearly three and a quarter million dollars to support the welfare work which the society conducted among the troops.

Knights of Honor. A fraternal benevolent society conducted among the troops.

Knights of Honor. A fraternal benevolent society founded in the United States in 1873; membership 22,000. Knights and Ladies of Honor, founded in 1877 in the United States, membership 90,000.

or more threads, cords, or ropes by tying, knitting, or entangling. Knots expressly Knights of Labor, a labor organimade as means of fastening differ as to zation founded form, size and name according to their at Philadelphia in 1869. Its operations uses, as overhand-knot, reef-knot, half-were secret, but its professed object was hitch, close-hitch, timber-hitch, fisher-the amelioration and protection of the laboring classes. Its membership is now gle-wall knot, double-wall knot, etc. The much reduced, labor unions and the term knot is also applied on shipboard American Federation of Labor, etc., taking its place. See Labor Organizations. same fraction of a mile as half a minute Knights of Pythias, a fraternal is of an hour; that is, it is the hundred in the United States in 1864, to dissembly the number of knots run off the seminate the principles of friendship, reel in half a minute shows the vessel's charity and benevolence, apart from sec-speed per hour in miles, so that when a charity and benevolence, apart from sec-speed per hour in miles, so that when a tarianism and politics. Its cardinal prin-ship goes 8 miles an hour, she is said to ciples are toleration in religion, obedience go 8 knots. Hence, the word has come to mean also a nautical mile or 6086.7 feet. Knot, a grallatorial bird of the family Scolopacide and genus Tringa (T. canūtus), closely allied to the snipe. and economical life insurance.

Knotgrass, a very common weed of Knights of St. John. See John aviculare), remarkable for its wide distribution. It is of low growth, with trailing stems, and knotted branched, joints (whence the name).

Knout (nout), a kind of whip or scourge serving as an instru-ment of punishment in Russia. It was formerly in use in the army, but a few strokes only are now inflicted, as a disgrace, in case of dismissal. It is still sometimes used for criminals. The nobles were exempted from the knout, but Knights Templars. See Wemplars. the exemption was not always observed.

Knitting (nit'ing), an industrial and ornamental art allied to weaving, but of much later origin. It to the stage in 1798, but meeting with

success, and from this time he had a prosperous career as author, actor and lecturer. About 1845 he retired from the He became afterwards a Baptist preacher, and published several theological works. In 1849 he received a pension of £200 a year from the government. The Caius Gracchus, Virginius, William Tell,
The Hunchback, The Wife of Mantua,
The Love-chase, and in 1847 and 1849 he published two novels, Fortescue and George Lovell.

Knox (nokz), John, the chief promoter of the reformation in Scotter of the reformation in Scotte land, was born at Gifford, in East Lothian, in 1505; died at Edinburgh in 1572. He was educated at the grammar school of Haddington, and at either Glasgow or St. Andrews, and had Dr. John Mair or Major as his philosophical and theological teacher, but did not take the degree of master of arts. He became a secular priest about 1530, and spent about 10 years in a religious establishment in East Lothian. He became an avowed advocate of the reformed faith about 1542, and entered the family of Douglas of Longniddrie as tutor to his sons and those of the laird of Ormiston. In 1546-47 he preached to the beleaguered Protestants in the castle of St. Andrews, and when it was taken by the French, Knox was sent to France with the other prisoners, and put to the galleys, from which he was released in 1549. He passed over to England, and, arriving in London, was licensed either by Cranmer or the Protector Somerset, and appointed preacher, first at Berwick, and afterwards at New-castle. In 1551 he was appointed chap-lain to Edward VI, and preached before the king at Westminster, who recom-mended Cranmer to give him the living of Allhallows, in London, which Knox declined, not choosing to conform to the English liturgy. It is said that he also refused a bishopric. On the accession of Mary, in 1554, he quitted England, and sought refuge at Geneva, where he had not long resided before he was invited by the English congregation of refugees at Frankfort-on-the-Main to become their minister. A dispute concerning the use enough to preach against it, but soon of a church service sent him back to after took to his bed and died. He was

indifferent success, he devoted himself to against the Monstrous Regimen of teaching, first in Belfast, and afterwards Women, chiefly aimed at the cruel govin Glasgow. His tragedy of Caius ernment of Queen Mary of England, and Gracchus was performed in 1815 with at the attempt of the queen regent of Scotland to rule without a Parliament. A Second Blast was to have followed; but the accession of Queen Elizabeth to the throne of England, who was expected to be friendly to the Protestant cause, pre-vented it. In May, 1559, he returned to vented it. In May, 1559, he returned to Scotland, and immediately joined the Lords of the Congregation. He preached at Perth on the occasion when the inflamed multitude made a general attack on the churches of the city, the altars being overturned, the pictures destroyed, the images broken, and the monasteries almost leveled to the ground. Similar vandalism took place in many other places, but these proceedings were censured by the reformed preachers and by sured by the reformed preachers and by the leaders of the party. Being appointed minister of Edinburgh, he took a prominent part in the proceedings of the Protestant leaders from this time onward, and had the principal share of the work in drawing up the Confession of Faith, which was accepted in 1560 by the parliament. In 1561 the unfortunate Mary arrived in Scotland. She immediately began the regular celebration of mass in the royal chapel, which, being much frequented, excited the zeal of Knox, who openly declared from the pulpit, 'that one mass was more frightful to him than 10,000 armed enemies landed in any part of the realm.' This freedom gave great offense, and the queen had long and angry conferences with him on that and other occasions. He preached with equal openness against the marriage of Mary and Darnley, giving so much offense that he was called before the council and inhibited from preaching. In the year 1567 he preached a sermon at the coronation of James VI, when Mary had been dethroned and Murray appointed regent. After the death of Murray appointed regent.
After the death of Murray, in 1569, Knox retired for a time to St. Andrews. In 1572 he was greatly offended with a convention of ministers at Leith for permitting the titles of archbishop and bishop to remain during the king's minority. At this time his constitution was quite broken, and he received an additional shock by the news of the massacre of St. Bartholomew. He had, however, strength Geneva, whence after a residence of a few twice married first to Marjory Bowes in months, he ventured, in 1555, to pay a 1555, and secondly, in 1564, to Margaret short visit to his native country. He Stewart, daughter of Lord Ochiltree. In again retired to Geneva, where he wrote addition to numerous polemical tracts, several controversial and other works, in-letters and sermons, Knox wrote a Hischard of the Trumpet toric of the Reformation of Religion



within the Realm of Scotland. The best opposed to the other three.

at Brownsvile, Pennsylvania, in 1853; was admitted to the bar in 1875, and in 1876-77 was made assistant U. S. district attorney for the western district of Pennsylvania. Resigning this position he continued in law practice until 1901, when he was appointed attorney general of the then Hiogo so closely as to form one the same of the then Hiogo and is strictly the portion.

the Lincoln Memorial University. It is metal cobalt has its name from this spirit. In a coal, iron, zinc and marble mining region and bas extensive industries, including iron and zinc works, cotton and flour mills, and many other industries, same name. Pop. 10.355.

There are over 200 manufacturing plants, Pop. (1910) 36,346; (1920) 77,818.

Knoxville, a borough of Tioga Co., Germany, in 1843. His reputation rests teriologist, born at Klausthal, Knoxville, Pennsylvania, on the Cowchiefly on his discovery of the bacterial germs of cholera and tuberculosis and his It has large flour mills and tobacco ware-

Koala (ko-ä'la), the native name for lia, commonly referred to the family Pha-langistide or phalangers. It somewhat resembles a small bear, hence its scientific name, Phascolarctos cincreus (Gr. phas-kos, a pouch, and arktos, a bear). It is a very gentle animal and will often suffer itself to be captured without offering much resistance and manifests little concern about its captivity. It is, however, subject to unexpected gusts of passion and when it is excited by rage it assumes a very fierce look and gives vent to yells that are sharp and shrill. It has been recognized as the link between the phalangers and the kangaroos. It is nocturnal in its habits and is not easily found, even in the localities which it most affects. It is not known to exist in a wild state outside of the south-eastern regions of Australia. On account of its tree-climbing habits it is sometimes called the Australian monkey as well as Australian bear. Its fur is of fine grey, same name in the lieutenant-governorIts forefeet have five toes, two of them ship of the Punjab, Pop. including

David Laing (1846-64); the standard The koala lives much on trees, feeding on biography is McCrie's Life of Know.

Knox, Philander Chase, an American lawyer and statesman, born born the leaves, and often burrowing for roots.

The best opposed to the other three. The peculiar to be a standard to the bind limbs. The koala lives much on trees, feeding on the leaves, and often burrowing for roots.

The best opposed to the other three. The peculiar to be a standard to the other three. The peculiar to be a standard to the other three. The peculiar to be a standard to the other three. The peculiar to be a standard to the other three. The peculiar to be a standard to the other three. The peculiar to be a standard to the other three. The peculiar to be a standard to the other three. The peculiar to be a standard to the other three. The peculiar to be a standard to the other three. The peculiar to be a standard to the other three. The peculiar to the other three three

was appointed attorney general of the than Hiogo, and is strictly the port United States. In 1904 he was elected to opened by treaty to foreign commerce. II. S. senator from Pennsylvania and in 1909 became secretary of state in President Taft's cabinet.

Knoxville (noks'vil), a city, capital of Knox County, Tennessee, an important commercial and manufacturing center on the Tennessee River, family, and appears in bodily shape. 165 miles east of Nashville. It contains the State University, the Knoxville Colthe State University, the Knoxville Col-lege (colored), the State Draf and Dumb evil to men, except when irritated. They School and the Medical Department of frequent mines as well as houses, and the the Lincoln Memorial University. It is metal cobalt has its name from this spirit.

It has large flour mills and tobacco ware-production of tuberculin, a remedy for the houses, creamery and cheese factories, etc. latter disease the efficiency of which has Pop. (1920) 7201.

The property and cheese factories, etc. latter disease the efficiency of which has properly on the fully established. He was properly of the property of the propert a marsupial animal of Austra- institute for infectious diseases in 1891, only referred to the family Pha- and in 1896 went to South Africa to or phalangers. It somewhat study the cattle disease. He died in 1910.

Kock, CHARLES PAUL DE, a French novelist, born in 1794; died in 1871. His novelist, norn in 1102; utcu in 1871. His novels dealt with scenes of low life in Paris and were long very popular.

Kodak (kō'dak), a form of camera adapted to take instantaneous photographs by the 'snap-shot' method. It has the shape of a small box, with a lens and shutter on one side and a reflector on top. When the operator sees the view he wishes in the reflector, he presses a button and an instantaneous negative is taken automatically

Ko'diak. See Kadiak.

Koel. See Aligarh.

(kō-hāt'). a town of India, Kohat

suburbs and cantonments, 30,762.

Koheleth, siastes.

See Diamond. Koh-i-noor.

Kohler (ko'ler), Kaufmann, a German-American theologian, man-A merican theologian, born at Furth, Germany, 1843; came to the United States to accept the post of rabbi of the Beth El congregation, Detroit, Mich., 1869. He was minister of the Sinai Temple, Chicago, Ill. 1870-79), and of Temple El, New York (1879-1943). In 1943, he was made heroscale. 1903). In 1903 he was made honorable minister for life to enable him to accept the presidency of the Hebrew Union College, Cincinnati. He was one of the editors of the Jewish Encyclopedia. His 723,600. The chief town, also called publications include On Capital Punish-Kolar, is situated 43 miles E. N. E. of ment according to Jewish Law (1869), Jewish Ethics, Church and Synagogue in their Mutual Relations, Lectures on Reform Judaism (1885), and Principles of Jewish Theology upon a Historical Basis (1917).

Kolhenny (kol-hä-dör'). a native In-

glass, automobiles, steel and brass goods, stellite, chemicals, toys, skates, pottery, stoves, chisels, wire fencing, nails, trunks, miles east by south of Prague. It has

rubber goods, and many other products. Pop. (1910) 17,010; (1920) 30,067.

Kokra Wood (ko'kra), the wood of Marshal Daun, June 18, 1757. Pop. 4porosa or Lepidostachys Roxburghii, a tree of the Spudgewort family (Euphorbiaceae), a native of India, used for musical instruments.

Kolomea (kō-lō-mā'a), a town of Christian (kō-lō-mā'a), a town of Ch

(kō'la), a seaport of Russia, in the government of Archangel, on the Kola, near its mouth in the Bay of

the Kola, near its mouth in the Bay of Kola; the most northern town in European Russia. Pop. 600.

Kola, Cola (kō'la), a genus of plants 34.188.

Kola, belonging to the natural order Sterculiaces, a native of western tropical Africa. The Kola or Sterculia acuminata produces a fruit which consists of sometimes more, separate pods consometimes more, separate pods consists of the sometimes more separate pods consists two, sometimes more, separate pods containing several seeds about the size of horse chestnuts. The seeds have been found to contain caffeine, the active principle of coffee, as also the same active principle as cocoa, with less fatty matter. A drink prepared from them is largely used in tropical Africa, and is said to

The have digestive, refreshing and invigoratdistrict has an area of 2838 square miles. ing properties. The tree has been intro-There are rich deposits of rock salt, duced into the West Indies and Brazil. some petroleum springs and sulphur The negroes of Jamaica are said to get mines. Pop. 217,865.

Koheleth. See Eccle-by using the kolanut. It has been introduced into Britain, manufactured into a paste, or into tablets, and is used as a tonic, but has only an effect like that of coffee or caffeine.

(kō-lä'ba), a British Indian district in the southern di-Kolaba vision of the Bombay Presidency, stretching along the coast southward from Bombay harbor for 75 miles; area, 1872 square miles; pop. 605,566.

See Kolhapur. Kolapoor.

variety of the cabbage, distinguished by a swelling at the neck of the root, which is valuable as food.

Kokomo (kō'kō-mō), a city, county seat of Howard Co., Indiana, on Wildcat River, 54 miles N. of Indianapolis. It has numerous manufactures of glass, automobiles. Kolhapur (kol-hä-pör'), a native Indian state, Bombay Presi-

Kolomea (kō-lō-mā'a), a town of Austria, in Galicia, 108 miles s. s. E. Lemberg, on the right bank of the Pruth. Petroleum refining, pot-tery, etc., occupy the inhabitants. Pop. tery, etc., occupy the inhabitants. 34,188.

Kolomna (ka-lom'na), a town of Russia, in the government of and 60 miles southeast of Moscow. It has manufactures of woolen, linen. soap, Pop. and an important trade.

(ka-li-mà'), a river of East-

The inhabitants are chiefly employed in making stockings and gloves. Pop. about 60,000.

Königshütte (keu'nihs-hut-è), a town of Prussia, province of Silesia, 49 miles E. S. E. of Oppeln. The

bank of the Elbe, at the confluence of raised in large quantities, and also zinc. the Adler, 64 miles E. N. E. of Prague. Pop. (1910) 72,640. It is the see of a bishop, and contains Königsmark (keu'nihs-mark), Maria an ancient cathedral. The battle of Sadowa was fought in the vicinity on July born at Bremen in 1670; died in 1728. She 3. 1866. Pop. 9773.

Prussia, capital of the province of East Konrad. Prussia, on the Pregel, about 4 miles konrad. above where it enters the Frisches-Haff. Koodoo above where it enters the Frisches-Haff.

It consists of three main parts—the Altstadt, or Old Town, situated on the strepsiceros, or Strepsiceros koodoo), a west; Löbenicht on the east (both north native of South Africa, the male of which of the Pregel), and Kneiphof, situated on is distinguished by its fine horns, which an island formed by the Pregel, besides are nearly 4 feet long, and beautifully extensive suburbs south of the Pregel, twisted in a wide spiral. The koodoo is Between the Altstadt and Löbenich is of a grayish-brown color, with a narrow the Schlossteich, a fine sheet of water.

Hungary, at the confluence of the Danube the schloss, or palace, begun in 1255, and Waag, with some manufactures and formerly the residence of the grand-masa considerable trade. There is here a ters of the Teutonic order, and now cona considerable trade. There is here a ters of the Teutonic order, and now convery strong fortress which has been retaining apartments for the royal family, peatedly besieged. During the Hungarian government offices, etc.; the schlosskirche, insurrection of 1848-49 it was besieged by or palace church, occupying a wing of the Austrians in vain, but was surrenteed dered by capitulation. Pop. 20,264. the Austrians in vain, out and dered by capitulation. Pop. 20,264. in 1862; the old university, the cathage, Komura, Jutaro, Baron, a Japanese a fine modern building; the city museum, statesman, was born in theater, etc. The university, founded in 1858. He studied at Harvard Law 1544 by the Margrave Alber, is attended by 800 to 900 students, and has connected School and became a judge in Japan. In by 800 to 900 students, and has connected 1902, as Foreign Minister, he effected the with it a library of 220,000 vols., a Anglo-Japanese alliance. In 1905 he was zoological museum, and other valuable Anglo-Japanese alliance. In 1905 he was zoological museum, and other valuable the chief Japanese plenipotentiary in collections. The manufactures of Königsthe Russo-Japanese Peace Convention at berg are various. The chief trade is in Portsmouth, New Hampshire. Died in grain, flax and hemp, timber, tea, etc. 1911.

Kong, a district of W. Africa, stretchbound for Königsberg land at Pillau, twinch is accordingly considered its port. Trade in cloth and gold. This district The fortifications surround the city on was declared a protectorate of France in all sides, and are now very strong. Königsberg and now constitutes a part of the nigsberg entered the Hanse League in French Ivory Coast, in the 'territory' of 1365. It suffered much during the Seven French West Africa. Pop. about 15.000. Years' war by the occupation of the Rus-Kongju, by s. of Chemulpo. Pop. severely from the French, who entered it in 1807, after the battle of Friedland.

36,000.

Kongmun, a town, China, in Kwangtung province. 40 miles

s. s. w. of Canton. Pop. 62,000.

Konia (kö'nē-ā), or Koniem (ancient
Iconium), a town of Asiatic
Turkey. capital of vilayet of same name. Pop. 5958.

The kind of the battle of Friedland, and laid it under heavy contribution.

Königsberg, a town of Prussia, provmiles north of Frankfort-on-the-Oder.

The kind of the battle of the battle

Königgrätz (keu'nih-grāts), a town inhabitants are chiefly employed in iron-of Bohemia, on the left working and mining, coal and iron heing

was celebrated for her beauty and mental Königinhof (keu'ni-gin-hōf), a town accomplishments; became the mistress of of Bohemia, 14 miles Frederick Augustus, elector of Saxony N. N. w. of Königgrätz, on the Elbe. and king of Poland, and mother of Maurice of Saxony (Marshal Saxe), the cele-brated French general. She was extravafied sea port town of gantly esteemed by Voltaire.

See Conrad.

the Schlossteich, a fine sheet of water. White stripe along the back, and eight or The principal buildings are the cathedral, ten similar stripes proceeding from it a Gothic structure, begun in 1333, redown either side. It is about 4 feet in stored in 1853, situated in the Kneiphof; height, and fully 8 in length.

Kookas (kö'kāz), a nigritic tribe of the central Soudan, east of nation with great success to infuse inte-Lake Chad. Koom. See Kum.

Koordistan. See Kurdistan.

Kooria Mooria Islands, a group of five

by which, indeed, all their transactions, written in prose, but the different parts civil, legal, military, etc., are regulated. of a sentence end in rhymes. In size it According to the Mohammedan belief, it is about equal to the New Testament; it rays on a gigantic tablet in the highest unequal length, each of which begins with heavens, and portions were communicated the phrase, 'In the name of God.' As by the angel Gabriel to Mohammed at the work was written at different times, intervals during twenty-three years in different moods, and on different occa-These were dictated by Mohammed to a sions, there is naturally great diversity scribe and kept for the use of his fol- in the style of different passages. The After Mohammed's death they were collected into a volume, at the com- It is, however, very different from the mand of Mohammed's father-in-law and spoken Arabic of modern times. Comsuccessor, Abu Bekr. This form of the mentaries on the Koran are exceedingly Koran, however, was considered to con- numerous. Koran, however, was considered to contain erroneous readings, and in order to remove these Caliph Othman caused a new copy to be made from the original fragments in the thirtieth year of the Hejra (625 A.D.), and then ordered all soudanese provinces of Egypt, but at the the old copies to be destroyed. The leading doctrine of the Koran is the Oneness of God, clearly laid down in the symbol of the Moslem—'God is God, and Mohammed is his prophet.' To Christ rassigns a place in the seventh or highest heaven, in the immediate presence of extremely unhealthy; in the dry season, lasting from June to October, is extremely unhealthy; in the dry season, est heaven, in the immediate presence of God, but he is simply regarded as one of the prophets—Adam, Noah, Abraham, Moses, Jesus and Mohammed. The doctions of good and head are all and doctions of good and head are all and doctions. trines of good and bad angels, and of the resurrection and final judgment, are fully set forth, as is also God's mercy. which secures entrance into heaven and not the merits or good works of a man. The joys of heaven range from music and women to the supreme joy of beholding Women to the supreme pays of hell are depicted in vivid colors. Idolatry and the defication of created beings are severely condemned. Another dogma is set forth in the Koran, yet not explicitly, for Buddhist pilgrims that of the unchangeable decrees of God. footprint of Buddha Mohammed used the doctrine of predestithe rock. Pop. 4000.

his adherents undaunted courage, which elevated them above all perils. The Koran prescribes prayer, fasting, alms, and the pilgrimage to Mecca and Mount Arafat. The great fast is that of Ramadan (which see). He prescribed prayer five times a day with the face turned towards Mecca. islands on the southeastern coast of Purification must precede prayer, and Arabia, belonging to Great Britain. where water is unattainable dry dust or There was formerly a considerable deposit of guano on the largest island, but always a particular trait of the Arabians, it was not of very good quality. It but Mohammed made it obligatory. The Kopek. See Copeck.

Koran (kō'ran; Al-Koran, that is the reading, or that which is to be and the decisions of the rabbis, only and moral code of the Mohammedans, and by which, indeed all their was written from the beginning in golden is divided into 114 surahs or chapters of language is considered the purest Arabic.

extremely unhealthy; in the dry season, though healthy, it is intolerably hot. The principal articles of trade are gum, hides, senna, ivory, cattle, gold, salt, slaves, etc. Cultivation is almost wholly confined to duchn, a species of millet. The inhabitants consist of negroes, Arabs, etc. Pop. estimated at 550,000. The chief town is El Obeid. Pop. about 10,000.

See Corea. Korea.

Kornegallé (kor-nā-gāl'le), a town of Ceylon, 55 miles N. E. of Colombo. It was formerly a capital, and has an ancient temple, a great resort for Buddhist pilgrims, on account of a footprint of Buddha being hollowed in



Körner (beur'ner), KARL THEODOR, a where it was buried in the cathedral, and German poet, born at Dres-where a monument was erected to him. den in 1791; killed in 1813. He wrote the A mound 150 feet in height, formed of tragedies of Rosamunds and Zriny, and earth from all the principal battlefields a large number of dramas for the Theater of Poland, was also raised to his memory Royal at Vienna, but owes his fame to his celebrated patriotic lyrics, which are all national in Germany. In 1813, when Germany took up arms against Napoleon, Körner joined the famous Lützow corps of black hussars, and was fatally wounded in a skirmish fought in the neighborhood of Gadebusch, in Mecklenburg-Schwerin. The collection of songs published soon after his death as Loier und Schwert ('Lyre and Sword') contains some of the finest war-songs in any language.

Körös (kew'reush), NAGY (nady), a septimate of handsome buildings, and has a considerable trade in wool and cattle. Pop. 26,512. Royal at Vienna, but owes his fame to in the vicinity of Cracow.

Pop. 26,512.

See Corvey. Korvei.

Korolenko (kor-ō-len'kō), VLADIMIR, korolenko

(kor-ō-len'kō), Vladdin bleeding of the body, since the Jews are forbidden to eat blood.

Köslin (kews'lin), a town in Prussia, province of Pomerania, 4 miles form the Baltic, and 85 miles northeast of Stettin. It has manufactures of paper, admiration and respect of the Russian people. His works include The Dream of Makara, Bad Company, etc.

Kosciusko

(kos-si-us'ko, or kosh-tsyush'kō). Th additional form to bleeding of the body, since the Jews are forbidden to eat blood.

Köslin (kews'lin), a town in Prussia, province of Pomerania, 4 miles of Stettin. It has manufactures of paper, kaz-lof'), or Kozlov, a town in Russia, in the government of Tambov, and 52 miles w. s. w. of the town of Tambov. It has a considerable

admiration and respect of the Russian people. His works include The Dream of Makara, Bad Company, etc.

Kosciusko (kos-si-us'ko, or kosh-tsyush'kō). Th Addets, and fambov, and 52 miles w. s. w. of the tsyush'kō. Th Addets, and fambov, and 52 miles w. s. w. of the town of Tambov, and 52 miles w. s. w. of the town of Tambov. It has a considerable to an ancient and noble family in 1746, and died at Soleure in 1817. He was educated in the military school at Warsaw, and was afterwards sent at the expense of the state to complete his studies in France.

Kossuth (kosh'shut), Lajos (Louis). Hungarian patriot, born at Monok in the county of Zemplin, Hungary, in 1802. He studied law, and in 1832 entered the Presburg Parliament. On his return to Poland he became tutor to the daughter of Gasnovski, marshal of Lithuania, but left his native country and betook himself to America (1776), where he attracted the notice of Washington, was appointed by him engineer, with the founded a national league in opposition of the Peate of 1783. In 1794 he was appointed generalissimo of the insurgent forces. He defeated the Russians at Raclavice, near Cracow, but at the battle of Maciejovice his army was defeated and he himself wounded and taken prisoner. He was liberated on the accession of Paul I of Russia rendered all the efforts of the Hungarian war for liberty he was chosen governor or dictator, but the intervention of Russia rendered all the efforts of the Hungarians unavailing. Kossuth resigned, was succeeded by Görgey whom he accused of treachery, and was interned in Turkey. He was released through the each of the sestate in Poland. In 1817 he issued from here a letter of emancipation to the serfs on his estate in Poland. In 1818 his body was removed at the expense of the Emperor Alexander of Russia to Cracow, cilable party, but in 1884 he becams

he a devout Jew, of high moral character, duly licensed by the chief rabbi. The main object is to insure the complete bleeding of the body, since the Jews are

reconciled to the Hapsburg rule.

flax are largely grown, and the industries include the manufacture of silver and copper wares, leather, chemicals, etc. The forests are extensive. Pop. 1,596,700.— Kostroma, the capital, stands on a height near the confluence of the Kostroma with the left bank of the Volga, 56 miles east of Jaroslav. It is an ancient place, and has a fine old cathedral situated in the Kremlin or former citadel. Pop. 41,268. Kotah (koʻti), an Indian native state in Rajputana, under the political superintendence of a British agent.

Area, 3777 square miles; pop. 544,879.— KOTAH. the chief town, is situated on the river Chambal, and has a pop. of 33,679. See Coethen.

Koti, a river and Dutch settlement on the east coast of Borneo.

(kot'bös), a town in Prussia, provice of Brandenburg and Kottbus government of Frankfurt, on the Spree, 65 miles 8. E. of Berlin. It is a busy manufacturing town. The chief manufactures are woolen cloth and yarns, linen, hosiery, tobaccos, toys and carpets. There are also distilleries and breweries.

herst, in 1816, was the first envoy who herst, in 1816, was the first envoy who a great part of which consists of Jews, refused to perform this ceremony, and the is 87.98%.—The government has an area

Kotzebue (kot'ze-bö), August Fried-RICH VON, a prolific German dramatist and miscellaneous writer, born Kraal (kral), a South African native at Weimar in 1761: assassinated at village or town, usually a colat Weimar in 1761: assassinated at willage or town, usually a col-Mannheim in 1819. In 1781 he went to lection of huts surrounded by a palisade. St. Petersburg, where, obtaining the Sometimes the term is applied to a single patronage of the empress, he was made hut.
governor of Esthonia and ennobled. **Kraguvevatz** (kra-go-ya'vats), a About 1800 he returned to Germany, and authors who had refused to associate arms factory, powder-mill and arsenal. with him. In 1806 he went again to Russia, and lived from 1807 on his estate Schwartze, in Esthonia. In 1813, as counselor of state, he followed the Russian headquarters, constantly writing to excite the nations against Napoleon. In Previous to the eruption of 1883 it meas-1817 he received a salary of 15,000 rounded in the control of 1883 it meas-1817 he received a salary of 15,000 rounded in two elevations, the many, and to report upon literature and

His public opinion. Kotzebue, who during chief residence was in his later years in the whole campaign had written in favor Italy. He died in 1894. of the Russians, even at the expense of Kostroma (kās-trā-mā'), an inland his native country, and had expressed the government of Russia, area, 32,480 square miles. The surface consists of wide level plains, occasionally eyes of most of his countrymen, and revaried by general acclivities. Hemp and garded as a spy. This feeling was so strong in the case of a young enthusiast named Sand that he assassinated him as a traitor to liberty. He wrote more than 100 plays, a history of Germany and other works, most of which are now forgotten. Two of his plays, The Stranger and Pizarro, are well known on the recent stage.—His son, Otto, born in 1787; died in 1846, made three voyages round the world, and discovered several islands in the Pacific. Kouba. See Kuba.

(kö'mis), or Kumiss, a preparation of milk, wheth-Koumiss er cow's, mare's, ass's, goat's, which is said to possess wonderful nutritive and assimilable properties. It consists essen-tially of milk in which alcoholic fermentation has been developed. On the Asiatic steppes, where it has been long used as a beverage, it is made of mare's milk; but koumiss of mare's milk or goat's milk has a somewhat unpleasant smell.

Koursk. See Kursk.

See Cusso. Koussa, Kosso.

Rotow (ko'tou), the ceremony of prostration and striking the fore-head nine times on the ground, performed 52 miles w. N. w. Vilna, on the left bank before the Emperor of China. Lord Amof the Niemen or Memel. The population, beart in 1816 was the first energy in 1816 was the f point then made was conceded by the of 15.602 square miles, and its population Chinese in the treaty of 1856.

See Cowloon. Kowloon.

Kraguyevatz (kra-gö-ya'vats), a town of Servia, on attacked Goethe and other great German the Lepenitza, with a cannon and small authors who had refused to associate arms factory, powder-mill and arsenal.

on Arakatoa, and rose to a height of some 2750 feet above the sea-level. Krakatoa was the scene of an eruption in 1680, but since that time its history was to volcanic activity were observed, and on August 27th a gigantic explosion took on August 27th a gigantic explosion took with Fichte, Schelling, Hegel, Herbart, place which actually blew away a large part of the mountain, and entirely altered the physical features of the island and the physical features of the island and the property of the mountain. the physical features of the island and wave swept over the shores of the neighboring islands occasioning a loss of life variously estimated at from 15,000 to 50,000. To the north two new islands appeared where the morning previous appeared where the morning previous there had been from 30 to 40 fathoms of water. An interesting result was the An interesting result was the Kreasote. fact that for several years afterwards remarkably red sunsets were common in the United States, ascribed to volcanic dust from Krakatoa, which had spread in the upper atmosphere around the earth. The principal locality the upper atmosphere around the earth. There are also manufacture of silks Kraken (krā'kn), the term, of Norand velvets. There are also manufacture of silks Kraken wegian origin, applied to a fabulous sea-monster, generally assumed to be a gigantic Cephalopod or cuttle-fish. It was first described by Pontopiddan, bishop of Bergen in Norway, but other vienna, Feb. 2, 1875. He entered the old writers have accounts of substantially Vienna Conservatory at seven vears of fact that for several years afterwards refabulous sea-monster, generally assumed Fop. (1910) 129,412.

It was first described by Pontopiddan, It was first described by Pontopiddan, Vienna, Feb. 2, 1875. He entered the old writers have accounts of substantially Vienna Conservatory at seven years of the same kind of monster. It is described age, winning the first prize three years as of enormous size; rising from the sea later, and that at the Paris Conservatory like an island about 1½ miles in circumin 1887. He toured in America with ference, with enormous mast-like arms Rosenthal, 1880-90, and on returning to with which it wrecked ships created Europe studied medicine and art and akin to the modern accounts of the great this country. sea-serpent. Naturalists are chary of accepting any but trustworthy evidence, yet Krementchug (krem - en - chök'), a cepting any but trustworthy evidence, yet recent researches and discoveries would ernment of Poltava, 67 miles southwest seem to indicate that very large members of the town of Poltava, on the Dnieper. of the cuttle-fish group do certainly exist. It has a considerable trade in wool, to-and that, from analogy, largely-developed bacco, candles, and timber. Pop. 63,000. forms of other marine classes may occasionally be found. Kranach. Lucas. See Cranach.

Krapotkine. See Kropotkine.

Krasnoiarsk (kras-nā-yarsk'), 'the Town on the Red Cliff'), a town in Siberia, capital of the government of Yenisseisk, at the junction of the Yenissei and Katcha. Manufactures of leather, etc., are carried on by artisan coavicts, and there are also some gold-washings in the neighborhood. Pop. Olimitz. Pop. (1911) 16,523. 27.300.

Krasnovodsk (kras-na-vadsz'). Rus-N. It has been the starting-point of (1910) 23,193.

of Krakatoa, and rose to a height of many important scientific and military

which was inaugurated by Kant.

See Creasote.

with which it wrecked ships, created Europe studied medicine and art, and whirlpools, and realized all that was pro-entered the army. Resuming his musical digious and strange in size, habits and studies, he appeared in Berlin in 1899 appearance. The kraken stories are much with success. He has since revisited

Kremlin (krem'lin; Russian, kreml) a fortress, in Russia the citadel of a town or city; specifically applied to the ancient citadel of Moscow. See Moscow.

Kremnitz (krem'nitz), a town in northwestern H u u g a r y, with silver mines in the vicinity. Pop.

Kreuznach (kroits'nah), a town in Rhenish Prussia, on the sian fortress on the Nahe, 28 miles southwest of Mayence, eastern shore of the Caspian Sea, lat. 40° with valuable mineral springs.



Holy Gate, Kremlin, Moscow.

as the map, representing bodies of troops of various strength (brigades of infantry, battalions of rifles, regiments of cavalry, besides artillery, engineers, pontoon troops, telegraph troops, etc.). The players are usually two on each side, and the game forms an exact miniature of tactical Each move represents the lapse operations. of two minutes, and rules are given to determine the distance that each branch of the service may move over in that time. When two bodies of men on opposite sides come into contact, the weaker in numbers and position is held to be de- nishes the subject of some legend, his

Kriegspiel (krēh'spēl; war-game), feated; but when they are equal in these a game of German origin, respects victory is determined to one side played with maps on a large scale, and or the other by the use of a die. The colored metal blocks, on the same scale game is a favorite one in the German army, and has been adopted to a certain

extent in that of Britain.

Kriloff (kre-lof'), or Krylow, Ivan Andreyevitch, a Russian fabulist, born at Moscow in 1758; died at St. Petersburg in 1844. His first com-positions were dramas, which were not successful. In 1809 his first collection of fables was published, which, meeting with instant favor, have continued to be the delight of all ages and classes in Russia, many sentences in them having become popular proverbs. They have been translated into German, French, Italian and English. From 1812 to 1841 Kriloff held a post in the St. Petersburg Imperial Public Library.

(krim'mit-shou), s. busy manufactur-Krimmitzschau

ing town in Saxony, 37 miles south of Leipzig, on the Pleisse, with woolen spinning and weaving, etc. Pop. 22,840.

Kris (krës), or Krees, the dagger or poniard forming the universal weapon of the inhabitants of the Malay Archipelago. There are many forms of it, short and long, with straight or searnenting short and long, with straight or serpentine blade, and with every variety in the shape and ornamentation of the hilt and scabbard.

Krishna (krish'na), in Hindu mythology, the eighth avatar of Vishnu and the most popular deity in

the Hindu pantheon. He was ostensibly the son of Vasudeva and Devaki of the royal family of the Bhoja reigning at Mathura. The reigning prince at the time of his birth W & 8 Kansa, who, to prevent the fulfillment of a prophecy, sought to destroy the young child, but his parents, assisted by divine power, succeeded in baffling all his efforts. baffling Every year of his life fur-



story showing a remarkable resemblance to those of the Greek Heracles and Apollo. After a series of amorous and heroic exploits, detailed at length in the Puranas, he slew Kansa, mounted the throne, and was at last killed by the arrow of a hunter, shooting unawares in a thicket.

(krish-nag'ar), a town Krishnagar of Hindustan, administrative headquarters of Nadiya district, Bengal, on the left bank of the Jalangi River. It has a college affiliated with the Calcutta University, a collegiate school, a considerable trade, and manufactures of colored clay figures. Pop. 24,547.

Kriss-Kringle, a corruption of Ger-lein (Christ child). It is another name for Santa Claus, or St. Nicholas, the good genius of Christmas, who has the credit of filling the children's stockings in that happy season.

Kronos. See Cronus.

See Cronstadt. Kronstadt.

Kroo, Kru, a native race of the w. coast of Africa, much employed in doing rough work on vessels trading on the Liberian coast. Their ter-

ciety, and began working his revolutionary ideas in Russia. He was condemned to three years' imprisonment, but made turer, born at Essen in 1812; died in 1887. newspaper La Révolté.

(krüg'er), STEPHEN JOHAN-NES PAULUS (1825-1904), a Kruger famous Boer statesman and president of the former South African Republic, known familiarly as 'Oom Paul,' born at the former Rastenburg, Cape Colony. At the age of eleven he left Cape Colony with his purents and accompanied them on the great trek' undertaken by the Boers who were discontented with British government in South Africa. This 'trek' resulted in the colonization of Natal, the Orange Free State and the Transvaal by the Boers. Young Kruger settled for a time with his prepare in the Orange Free time with his parents in the Orange Free State, and later moved to the region north of the Vaal River. He early entered the military service, but matters of govern-ment engrossed him and he soon began to be a power in the councils of state. In 1877, when Britain annexed the Transvaal, he was vice-president under President Burgers. He took a leading part in the first Boer war with England, 1880-81. In 1883 he was elected president, and was re-elected in 1888, 1893 and 1898. He succeeded in gaining certain governmental concessions from Great Britain and in 1882 the British government authorized the renaming of the state as the South African Republic. All went well till the Witwatersrand gold deposits were discovtrading on the Liberian coast. Their territory extends about 70 miles along the
coast; they are a stout, brawny race and
very industrious.

Kropotkine (k ro-pot'ken), Prince to a climax with the Jameson raid (q. v.)
Peter Alexenevitoh, a in December, 1895. War was narrowly
Russian anarchist, born at Moscow, in averted by the diplomacy of Kruger, but
1842. As attaché for Cossack affairs to it was only a temporary lull. In 1899
the governor of Eastern Siberia he made the second Boer war (q. v.) began, and numerous journeys in Siberia and Manthe might of England was hurled upon the churia; was made secretary of the St. small republic, eventually crushing it. Petersburg Geographical Society, and Pretoria fell on June 5, 1900, and Kruger wrote several esteemed scientific books. made his way to Europe. He settled in In 1871 he joined the International Society, and hegan working his revolution.

his escape and took up residence in Swit-He succeeded his father as proprietor of zerland. Here he founded his anarchist a small metal foundry at Essen, which he Expelled from gradually developed to an enormous ex-tuge in France, tent. He discovered a new method of Switzerland, he took refuge in France, tent. He discovered a new method of and was, in 1883, condemned to five years' casting steel in large masses, which he imprisonment for complicity in outrages exhibited in 1851. This led him to the at Lyons, but was pardoned in 1886, when manufacture of heavy steel ordnance, and he went to England. There he started a especially to the construction of heavy monthly magazine called *Freedom*, and breech-loading guns of a type invented wrote a number of articles for the *Nine*-teenth Century and other magazines. He went to Russia in 1917 on the overthrow subsequently effected, and the size imof the Czar, aided in the establishment of mensely increased. Though his name is nonview to subsequently agreed with the records. of the Czar, aided in the establishment of the Boylet republic, and counseled moderation to the Bolshevik leaders.

Krossen (krōs'en); a town in Prussia, on the Oder, in the provence of Brandenburg. Pop. 7367.

Hensely increased. Though his name is popularly associated with the manufacture of these large guns, the extensive works at Essen turn out also immense quantities of gun-carriages, shot, boilerplates, axles, wheels, rails, screw-shafts for steamers, etc. He was frequently Küblai Khan is the subject of a poetical called the 'Cannon King.' fragment by Coleridge.

Krushite (krush'it), an abrading material consisting of chilled cast-metal shot, made in very small sizes, down to a fine powder. Being very hard barrels, also for sawing and polishing stone and in making diamond drills.

Krypton (krip'tun), a chemical elect.; a considerable trade, and a pop. of ment discovered in 1898 by about 30,000.

Professors Ramsay and Travis, as a gas Kuenen (kii'nen), ABRAHAM, a Dutch rare atmospheric gases.

the Brahmans being first and the Vaisya and Sudra the third and fourth. The natural duties of the Kshatriya are bravery, generosity, rectitude and noble conduct generally.

Kuba (kö'ba), a town in Russia, in etc. He was one of the leaders of the Baku, district of Kuba, 47 miles s. s. E. criticism. He died in 1891.

Derbend. Pop. 15,346.

Kuban (kö'ban'), a Russian territory in the Caucasus, bordering on stretching over a space of about 1500

the sea of Azov and the Black Sea. Area, 36,370 sq. miles; pop. 2,275,400. The chief river is the Kuban, which rises in Circassia and falls, after a total course of about 400 miles, into the Black Sea at the Bay of Kuban.

Kubelik (kö'be-lik), Jan, Bohemian violinist, born near Prague, of humble parentage in 1880. From 1892 to 1898 he studied at the Conservatorium in Prague, and a successful appearance in Vienna in 1898 led to a tour in Italy. While in Rome he received the order of St. Gregory the Great and his first tour in the United States (1901-02) did much to establish his fame. did much to establish his fame.

Kablai Khan (köb'li-khan), a Mon-gol emperor and founder of the 20th Chinese dynasty, that of Yuen; was born in 1214; died in 1294. In 1259 he succeeded his brother as Grand Khan of the Mongols, and in 1260 he conquered the whole of Northern China, driving out the Kin dynasty. Nineteen years later he added to his em-pire Southern China. Küblai thus became sole ruler of an empire extending over a large part of Asia, as well as over those parts of Europe that had belonged to the cominions of chenghis chan. Marco Polo describes the splendor of his court and entertainments, his palaces and hunting expeditions, his revenues, his extraor-dinary paper currency his posts, etc.

fragment by Coleridge.

Kuch Behar. See Cooch Behar.

Kuching (ku-ching'), the capital of Sarawak, on Sarawak Rivand tough, it is used as a substitute for er, Borneo, and now known as Sarawak, sand in the sand-blast and in tumbling contains the residence of the rajah and those of several European merchants. It has forts, barracks, a courthouse, prison,

Kuenen (kü'nen), Abraham, a Dutch Biblical scholar, was born at that rises from liquid air. It is of the Biblical scholar, was born at helium series, density 22.5, and mona- Haarlem in 1828. He became professor tomic. It is one of the recently discovered of Hebrew and the Old Testament at the University of Leyden in 1855. He pub-Kshatriya (shatri-ya), the second lished in 1861-65 An Historical Inquiry or military caste in the into the Origin and Collection of the social system of the Brahmanical Hindus, Books of the Old Testament, which has exerted a decisive influence on Biblical scholars. He was also the author of The Religion of Israel, The Prophets and Prophecy in Israel, Natural Religions and Universal Religions (Hibbert Lecture), etc. He was one of the leaders of the

range or Central Asia, stretching over a space of about 1500 miles, and forming in its whole length the north frontier of Tibet, as the Himalaya does that of the south. Several of the summits reach an altitude of over 28,000 feet and the numerical section of the summits reach an altitude of the section of the summits reach an altitude of the section of the summits reach an altitude of the section of the summits reach an altitude of the section of the s feet, and the numerous elevated branches which stretch towards the Indus form valleys down which immense glaciers descend.

Kufic Writing. See Cufic.

(ko'horn), same as Alpen-Kuhhorn horn.

Kuhn (kön), Adalbert, a German philologist, born in 1812; died in 1881. He made important contributions to comparative philology, and is regarded as the founder of the science of comparative Indo-Germanic mythology. He edited for a number of years the valuable Zeitschrift

a number of years the valuable Levischrijfür Vergleichende Sprachforschung ('Journal of Comparative Philology').

Kuka (kö'kä), or Kukawa, a town in Western Africa, the capital of Bornou, about 20 miles west from the southwest shores of Lake Chad. Pop. southwest shores of Lake Chad. (estimate), 60,000.

Ku-Klux Klan (kö-kluks-klan), a secret society of a sociopolitical nature, which arose after the American Civil war and was bitterly opposed to the reconstruction measures which the government enacted and to the position then occupied by the late slaves. Its membership at one time spread over

in 1871, and it soon after died away. Kulbarga. See Gulbarga.

Kuldja, or Kulja (köl'jä), a city of Pop. 14,324.

territory Dzoungaria, on the right bank of the Ili River, an important caravan center. The district was taken possession of by the Russians in 1871, but retro-anni in 1801. Accused of adultery, she is gain to be a superior of Porm.

Kunigundé (kö-ne-zőn'de), Saint, daughter of Siegfried of Luxembourg, married Henry of Bavaria, afterwards Henry II of Germany; died as of by the Russians in 1871, but retro-anni in 1801. Accused of adultery, she is gain to have indicated beautiful particular.

of by the Russians in 1871, but retro-ceded to China in 1881. Pop. 12,500. Kulm (kulm).—I. A town of Prussia, province of West Prussia, 33 miles southwest of Marienwerder, on the Vistula. It has manufactures of woolen cloth and a trade in cattle. Pop. 11,665.

—2. A village in Bohemia, about 9 miles northeast of Teplitz, where, on the 29th and 30th August, 1813, a great battle was cought in which the allies under Bandar. army under Vandamme.

Kum, or Koom (köm), a town of Persia, 78 miles s. w. of Teheran, formerly a place of great magnificence, but destroyed by the Afghaus in 1722. Pop. about 30,000.

Kumaon, or Kumaun (k ö-m ä'ö n), a British district of Northern India, in the Northwest Provinces, belonging to the Himalayas. Area, 6000 sq. miles; pop, 493,641. The district is generally mountainous, but has important and valuable tea plantations. The capital is Almora, and there are two hill stations, Naini-Tal and Ranikhet. It of Kumaon, which has an area of 13,703 sq. miles, and a pop. of 1,207,030.

Kúmpta. See Coomptah.

(Citrus japonica) growing not above 6

between the Amu Daria and the Hindu

Kunersdorf

nearly all the States of the South, and ince of Brandenburg, near Frankfurt-on-committed many acts of violence, even the Oder, celebrated for the defeat of murder and arson. Strong measures were taken for the suppression of the society Russian and Austrian forces in August, 1759.

Kungur (kön-zör'), a town of Russia, in government of Russia. sia, in government of Perm.

is said to have vindicated herself by walksing over red-hot plowshares barefooted. She was canonized in 1200, her feast being March 3.

Kur, or Kura (kö'ra; ancient Cyrus or Kûros), a river of Western Asia, rises in the mountains W. of Kara, flows through the Russian governments of and 30th August, 1813, a great battle was Tiflis, Elizabethpol and Baku, and falls fought, in which the allies under Barclay into the Caspian Sea. after a course of de Tolly totally destroyed the French between 500 and 600 miles. It has

numerous tributaries, the principal of which is the Aras or Araxes.

Kurdistan (kur-di-stin'; 'Land of the Kurds'), an extensive territory of Western Asia. As it does not form a separate political division, its exact limits are not ascertained; but the eastern part of it forms the Persian provinces of Ardilan and Kermanshah, and the remainder, constituting the far larger portion, is in Turkey, where it forms the principal part of the pashalic of Van and a considerable part of that of Bagdad. It is a mountainous region, containing considerable forests of oak and dad. forms with the districts of Garhwal and other hard timber, and also numerous Tarai the division or commissionership pastures, on which horned cattle, sheep and fine-haired goats are reared, and in the valleys many fertile districts yielding Kumpta. See Coomptah.

Kumpta (kum'kwat), a very small tes and their tributaries. The Kurds, to (Citrus japonica) growing not above. confined within its limits, but are found feet high, and whose fruit, of the size of in considerable numbers eastward in Khoa large gooseberry, is delicious and rerasan and over the hilly region of Meaofreshing, having a sweet rind and an acid
taste. It is a native of China and Japan,
but has been introduced into America and
well formed, with dark hair, small eyes,
with well formed, with dark hair, small eyes,
the state of the size of Australia. In China it is preserved with wide mouth and a fierce look. On their sugar in jars, and forms an important own mountains they live as shepherds, export. Kunch (könch), a town of India, in language is a dialect of Persian, now much mixed with Arabic and Syriac; ince. Pop. 13,139.

Kunduz (kön-döz'), a portion of The Kurds owe but slight allegiance to Northeastern Afghanistan, either Turkey or Persia, living in tribes either Turkey or Persia, living in tribes under their own chiefs, who commonly exact duties on the merchandise which (ko'nerz-dorf), a village passes over their territory. Their numin Prussia, in the prov- bers have been estimated at 1,800,000.

Kuriles (kö'rilz), a chain of islands with a rocky promontory called Manora in the North Pacific, extend-Head, on which is a lighthouse, and by ing southwest to northeast, from Japan the Island of Kiamari on the east. The ing southwest to northeast, from Japan to Kamchatka, and belonging to Japan; area, about 5000 sq. miles. The whole chain is of volcanic origin, and there are many active volcanoes, one of which is sive commerce, fine harbor works, and from 12,000 to 15,000 feet high.

Kurnal, Kurnul. See Karnul.

of general in 1894, and cap-tured Weihaiwei from China in 1895. In the war of 1904-05 he made brilliant operations against the Russians at the Yalu, Liaoyang and Mukden.

Kuropatkin

(kö-ro-pat'kin), ALEXEI NICHO-LAVITCH, a Russian general, born in 1848. After a long service in Asia and Turkey, he was made commander-in-chief

of the Russian army in 1897 and minister Kusi. of war in 1898. He commanded in Manchuria in the war with Japan, but was dismissed from his command in March, 1905, as a result of the Russian disasters, tov. Pop. 17,932. for which, however, he was not responsible. He patriotically accepted a subordi- Küstendji (kūs-tend'ji), a Roumanian seaport of the Do-

It is much inferior to the Gulf Stream both in volume and high temperature.

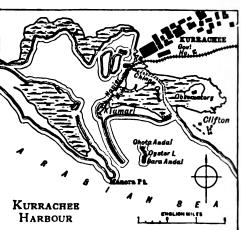
Kurrachee (ka-ră'chō), or Karachi, an important seaport of India, on the coast of Sind, Bombay Presidency, at the northern (or western) angle of the Indus delta, situated on a large and commodious creek or inleu, forming a good haven, perfectly safe in all winds, and out of the track of cyclones. The harbor is formed by a long narrow strip of sand on the west, ending

town, which is well built and has a good reputation for healthiness, came into British possession in 1842, and its extennumerous flourishing institutions have all Kurnal, Kurnul. See Karnul.

Kuroki (ko-ro'ki). Count Itel.

Japanese general, born in square miles. The surface is undulating, Satsuma. 1844. He took an active part and there are numerous streams, but in the revolution in favor of the mikado, none of them serviceable as waterways, rose to the rank of general in mild and dry, and the rich an sprung up since that time. Pop. 153,903.

and the rich soil produces abundant crops. Pop. 2,391,091 -Kursk, the chief town, on the Tuskora near its junction with the Sem, forms a railway junction from Mos-cow, Kieff, and Khartoff. The principal public buildings are the Cathedral of the Resurrection, the Ca-thedral of St. Sergius, and a monastery. Pop. (1912) 83,330.



See Coosy.

Kusnezk (kös-nyesk'), a town in Russia, government of Sara-

nate command under his successor.

Kuro Siwo, or Japan Current, the Bukarest. It is the chief outlet for the Bukarest. It is the chief outlet for the produce of the Dobrudja. Pop. about torial current, flows past kingman.

torial current, flows past Formosa, Japan. Küstenland (k ú s'ten-lànt; 'Coast-the Kuriles, the Aleutian Islands, and thence bends southwards to California. tive division of the Austrian Empire, at It is much inferior to the Gulf Stream the head of the Adriatic, consisting of the

junction of the Wartha with the Oder. ows, herds and horsemen, and often with It contains a castle in which Frederick boats and barges. the Great was confined by his father, and has manufactures of woolens, machinery, brass and copper wares, etc. Pop. 16,643.

Kutais (ky-tä'is), a Russian town, in Transcaucasia, capital of a government of the same name, 60 miles agent from the Black Sec. on the milway. government of the same name, 60 miles east from the Black Sea, on the railway between Poti and Tiflis. Pop. 32,492. The government has an area of 14,100 square miles, and pop. of 933,773.

Kutaya, or Kuta'iaH (kō-tā'yā), a town in Asiatic Turkey, 180 miles northeast of Smyrna, on the route between Constantinople and Konia. It is the center of the tract where the femous

(köt - el-a-ma'ra), a Kut-el-Amara small town in Mesopotamia on the Tigris at the junction of the Shatt-el-Hai. It is a coaling station for the Bagdad-to-Basra steamers. It acquired importance during the European war when a British force under General Townshend was surrounded by the Turks and forced to surrender. In February, 1917, the town was taken by Indo-British troops under Sir Stanley Maude.

Kuttenberg (köt'en-berg), a mining town of Bohemia, 38 miles E. S. E. of Prague. Pop. 14,709.

Kutusoff (kö-tö'sof), Mikhail, a Russian field-marshal, born

in 1745; died in 1813. He served against Poland, Turkey and France. For his victories over Ney and Davoust he received the title of Prince Smolensky.

Kuvera (kö-vê'ra'), in Hindu mythology, the god of wealth. He resides in the splendid palace of Alaka, on Mount Meru, and is borne through the sky by four attendants on a radiant car given to him by Brahma. He has no temples dedicated to him, and no altars. On his head is a richly ornamented crown, and two of his four hands hold closed flowers of the lotus.

Kuyp (kolp), or CUYP, ALBERT, Dutch painter, born at Dort in 1605; died in 1691. He studied under his father, Jacob Gerritsz Kuyp, a painter of some fame. He painted with great sucsome tame. He painted with great success landscapes, cattle, river scenes, portraits and pictures of still life. He particularly excelled in the purity and cordage, etc., from the effects of dry-rot, brilliancy of light; and he was not surpassed, even by Claude, in accurate representation of the atmosphere, and of sublimate. The best of his sublimate. This process is now almost the effects of sunshine. The best of his sublimate. This process is now almost entirely disused as word is much better.

Kwango, or Kuango (kwango), a great river of Central South Africa, belonging to the Congo system, flowing almost due north, and joining the Kassai.

Kwangsi (kwang'se'), a province of China, lying between lat. 22° and 26° N., and lon. 105° and 112° 30' E. It is mountainous, and is watered by the numerous branches of the Tao or Sikiang. Rice is largely grown, and gold, silver and mercury are mined. Area, between Constantinople and Konia. It is the center of the tract where the famous Turkey carpets are manufactured. Estimated pop. 25,000.

Kutch. See Cutch. Emperor Taoo Kwang, who died in 1850. His aunt, Tsze Hsi, the empress dowager, who had long been practically empress, continued to rule as regent during his minority. After he came of age he, under the influence of reformers, set in train a series of radical changes in the govern-ment. To prevent this the empress, supported by the conservative party, seized the reins of nower, holding him under strict palace surveillance. In later years, however, she consented, under the presented of the pr sure of events, to still greater reforms than those proposed by him. He died in November, 1908, and was succeeded by another infant emperor, Pu Yi. The empress dowager died the day after him.

Kwangtung (kwang'töng'), the most southerly province of China, bordering on the Gulf of Tonquin and the China Sea. The northern part is mountainous, but the southern

part is mountainous, but the southern region is about the most fertile in China. It includes Hainan and a number of smaller islands along the coast. The smaller islands along the coast. The capital is Canton; other ports are Swatow and Pakhoi. Area, 79,456 square miles; pop. about 30,000,000.

Kweichow (kwi'chou'), a province of S. W. China, bounded by Sechuen, Yunnan, Hunan and Kwangsi. It is rough and mountainous. produces rice, tobacco and timber, and has mines of copper, iron, lead and mercury. Area, 64,554 square miles; pop. above 8,000,000.

Kyanite. See Cyanite.

pictures are his landscapes, with mead- entirely disused, as wood is much better

a snore time before Shakespere. His wooden buildings in which the emperors extant works are Cornelia, or Pompey of Japan dwelt for so long in seclusion, the Great his fair Cornelia's Tragedy; retaining only their spiritual supremacy. The First Part of Geronimo; and The It is an active industrial city, its porce-spanish Tragedy. The last named dislain, brocades, enamels, bronzes and emplays much power and is thought to have broideries being highly esteemed. Pop. suggested to Shakespere some parts of (1914) 508,068. Hamlet.

of the emperors of the Hohenstaufen dyinvocation used in parts of the Roman nasty, on an eminence near the village Church service, and the name given to the of Tillida, Germany. There is a popular responses after the commandments in the tradition that the Emperor Frederick Baranglican Church. It is almost the only barossa still exists at this place in a part of the liturgy in which the Roman magnificent subterranean palace, in a Catholic Church has retained Greek state of enchantment, seated with his words.

knights around a stone table, through which his beard has grown. Every hundred years he partly wakes and sends someone to inquire how the time is go-box, Hereford, in 1724. He was dising. After a certain time he will awake tinguished by his active benevolence and

preserved by being saturated with creasote or coal-tar.

Kyoto (ki-ō'tō), or Miako, for over a thousand years the capital of Kyd (kid), Thomas, an English dra-Japan, is on a plain about 26 miles insote or coal-tar.

Kyd (kid), Thomas, an English dra- Japan, is on a plain about 20 mines ...

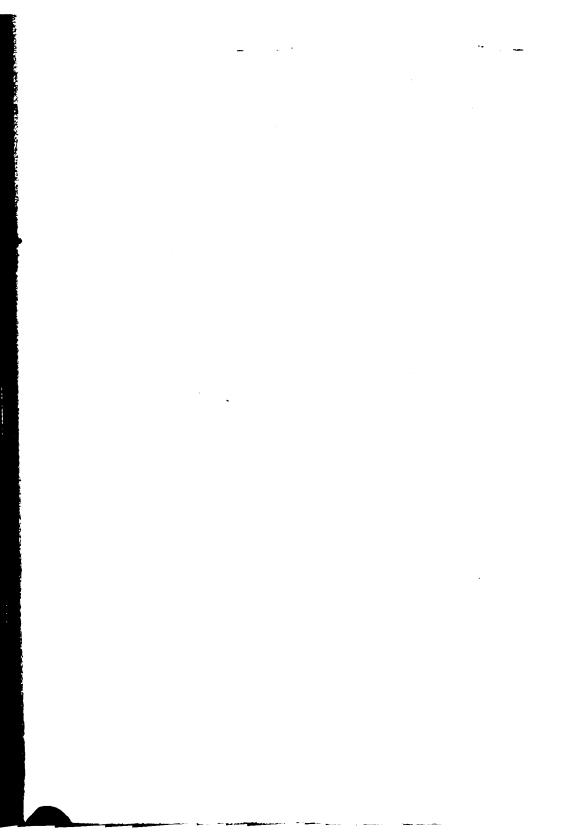
Kyd (matist, who flourished about 1580, land from Ozaka. Here remain the plain before Shakespere. His wooden buildings in which the emperors of Japan dwelt for so long in seclusion, and the state of the security of Japan which the emperors of Japan dwelt for so long in seclusion, and the security of Japan which the emperors of Japan dwelt for so long in seclusion, and the security of Japan which the emperors of Japan dwelt for so long in seclusion, and the security of the se

Kyrie Eleison (ki'ri-ē ā-lī-son; from the Greek Kyrie Kyffhäuser (kiffhol-zer), an ancient Kyffe Eleison the Greek Kyrie palace (now in ruins), eleëson, 'Lord, have mercy'), a kind of of the emperors of the Hohenstaufen dy-invocation used in parts of the Roman

and bring better times to his empire.

Kyle (kil), the middle district of Ayrshire, Scotland.

Reward is golf to say, Herelord, in 1724. He was distinguished by his active benevolence and also for enlisting the sympathies of his wealthy neighbors in his plans for making life more pleasant to his townsfolk.



itation Conference (q. v.) at Washington in November, 1921. Agreements were arrived at, not only with regard to the naval holiday and the 5-5-3 ratio of battleships, but amicable arrangements were made looking to the protection of the rights of other powers in the island of Yap and the other islands of the Pacific over which Japan had been given a mandate. Relations between China and Japan with regard to Shantung were also discussed. On the eve of the conference at Washington Premier Hara's great political career was dramatically ended by the dagger of a lunatic youth at Tokio, November 4, 1921. Viscount Korekiyo Takahashi, minister of finance, succeeded him as Premier. On November 25th Crown Prince Hirohito (born 1901) was

onslaught which surged over Servia during the European War, but had the satisfaction of seeing the complete defeat of his enemies and the erection of the new Serb-Croat-Slovene State (Jugo-Slavia), of which he was the ruler. Alexander, who succeeded him, had long been ill in Paris; he returned to Jugo-Slavia in November and assumed the are that the applicant must either own throne.

Kansas City, Missouri, was the scene of an impressive military spectacle on November 1, 1921, when the American Legion paid honor to Marshal Foch, assisted at the solemn dedication of the site of a \$2,500.000 memorial to the war dead, and then, 25,000 strong, marched through the streets behind Generals Pershing, Diaz Beatty.

The former imperial war port of Kiel. Kiel, Germany, has been com-pletely changed into a trade port. Only a single gunboat patrolling the harbor brings memories of the great naval sta-tion that loomed so large in the German mind when the war began in 1914. The enlarged and many warehouses erected.

King. William Lyon Mackenzie. King, William Lyon Mackenzie, posed the termination of the state of Premier of Canada, born at war by means of a legislative resolution, and this was effected eventually.

1874. He gained his M.A. at Toronto University, and studied at universities in the United States. He was deputy minimizer of labor and editor of the Labor independence to the Conference on the

Japan. Taking her place among the Gazette, 1900-08, during which time he three great naval powers of served as chairman of several royal comthe world, the other two being the United missions on labor and immigration prob-States and Great Britain, Japan was lems. In the Laurier administration he ably represented at the Armaments Lim- was minister of labor, 1909-11, and in was minister of labor, 1909-11, and in the latter year was a candidate of the Liberal party in the reciprocity cam-paign. During the great war, 1914-18, he rendered extensive service in furthering continuous and maximum production of essential war supplies through the adjustment of relations between workers and employers in several of the most important war industries in America. He was selected as the late Sir Wilfrid Laurier's successor as leader of the Liberal party of Canada at the National Liberal Convention, Ottawa, August, 1919. At the parliamentary elections in December, 1921, the Liberal party swept the Conservatives out of power by huge majorities, and Mr. King became Premier, succeeding Arthur Meighen.

Kiwanis (ki-wa'nis), an international organization of business and Trime Hitolito (1887) and Regent of Japan.

Jugo-Slavia. King Peter died August professional men, with clubs in over 600 cities throughout the United States and Canada. The membership at the end of 1921 was 54,355. The first Kiwanis Club—the Detroit club—was organized in January, 1915; the second club built was that of Cleveland; Pittsburgh was the third. Membership is allotted accordance to a least feet in the second club built was the company of the second club built was the third. ing to classification of business. Two representatives of a classification are eligible to membership. The requirements the business or a partnership or be an executive in the corporation. The motto of Kiwanis is the practice of the Golden Rule in business.

Knox, PHILANDER CHASE, United States Senator from Pennsylvania, former Secretary of State under President Taft, Attorney General under Presidents McKinley and Roosevelt, and a noted authority on international affairs, and Jacques, Marshal Foch and Admiral died at his Washington home October 12, 1921. He maintained a residence at Pitts-burgh and a beautiful estate at Valley Forge. When former President Wilson brought back the treaty of Versailles, Senator Knox was among the first of the senators to declare his opposition. After the long battle which defeated the treaty in the senate and caused rejection quays and bunkering stations have been of the League of Nations scheme by the voters of the country, Senator Knox proposed the termination of the state of

was made public on January 1, 1922, but no action was taken on it. The estimated area of Korea is about \$4,000 square miles; population (1918) 17,412,871; census population, 1920, 17,284,207. The vast majority of the foreign residents are Chinese, numbering some 18,972. The latest returns give the number of Americans as 597; British. 257; French, 107; Germans, 57. The urban prefecture of Seoul, the largest city, has 302,686 inhabitants (50,291 Japanese), and that of Ping-Yang 173,273. There has been a large immigration of Japanese into the peninsula of recent years. In Seoul there is one daily Korean newspaper, and two Japanese, besides others published at Chemulpo and other parts of the country. There is a government-owned daily newspaper in English, published at Seoul. The press is entirely in the hands of the Japanese, and a strict censorship is exercised. Korea is entirely an agricultural country; the cultivated area is about 7.770,000 acres. The chief crops are rice, wheat, beans, and grain of all kinds, besides tobacco and cotton. Whale fishing is carried on on the coast. Live stock is raised as a by-product of agriculture. The cattle are well known for their size and quality. Gold mining is carried on; there are four foreign-owned gold mines in active operation, and others in process of development. Copper, iron, and coal are abundant in Korea, but the development of these resources is impeded by defective means of communication. anthracite coal mine in the north of Korea is in operation Korea is in operation, and considerable extension of the workings are in contemplation. Graphite and mica are also found in large quantities. Education, formerly at a low ebb, is gradually improving. The knowledge of Chinese classics and of Confucian doctrine, hitherto essential to the education of the upper classes, is giving way under Japanese influence to a more practical system of instruction. There are about 1000 public schools of all sorts, with 141,000 pupils; other schools, Russian general, died 726, with 45,000 pupils. There is a large at Moscow February 12, 1921.

Limitation of Armaments at Washington number of Christian converts. There are about 1160 miles of railroad; transport in the interior is by porters, pack-horses, and oxen, and by river. Official correspondence, except with Korean provincial officials, is conducted in Japanese. The written language of the people is a mix-ture of Chinese characters and native script. The open ports are Chemulpo, Fusan, Wousan, Chinnampo, Mokpo, Kunsan, Songchin. Ping-Yang (inland city), Wiju, Yong-Am-Po, Chung-jin, and Shin-wi-ju. By an Imperial Rescript of Shin-wi-ju. By an imperial Rescript of 1919, Korea is to be treated as in all respects an integral part of Japan, Koreans to be on the same footing as Japanese. Members of the Korean Imperial House and the late Korean cabinet have had Japanese patents of nobility conformed upon them

ity conferred upon them.

Korfanty, ADALBERT, a Polish politician, born in 1873 at Sadzwaska, Upper Silesia. After graduating from the University of Breslau he served in Berlin as correspondent for Polish newspapers, and was very active in the Polish cause. He became the owner of several newspapers published in the Polish language and of a printing estab-lishment. As a deputy to the Reichstag and the Prussian Landtag, his influence grew gradually till he became recognized as a political leader. Following the defeat of Germany in the great war of 1914-18, and the establishment of the Republic of Poland, he became a member of the cabinet, but later returned to Posen and stirred up the people of this province. He became the driving force of the Polish nationalistic movement in Upper Silesia, and had much to do with the insurrection in 1921. The decision of the League of Nations to award part of Upper Silesia to Poland quieted the disturbances. See Silesia.

Kropotkine, PRINCE PETER ALEXEanarchist and author, died at Moscow February 8, 1921.

6 1922, The J. C. W. Co.

Letter of the English Labat (14-ba), JEAN BAPTISTE, a semivowel or a liquid. Letter of the and travelsemivowel or a liquid. Letter of the nearest ally of the pronunciation of which differs and is best known by his Nouveau Voyfrom that of t only in being accompanied age aux lies de l'Amérique. He also public a Nouvelle Relation de l'Americant de l'Am by a vibration of the tip of the tongue. There is no letter, accordingly, with Occidentale; I oyage en Espagne et which I is more frequently interchanged, Italie; Relation Historique de l'Ethiopie instances of the change of I into r and of Occidentale, and Mémoires du Chevalier r into l being both very common in va-d'Arvieu.
rious languages. In fact, in the history of the Indo-European alphabet l is considered to be a later modification of r. La, in music, the sixth of the seven syllables—ut or do, re, mi, fa, sol, la,

si (or ti)—representing the seven sounds laager is an enclosure made of the wagons

of a traveling party for defense against

Laaland (lol'lan), or LOLLAND, an island in Denmark, s. of Seeland, and separated from Falster on the land, and separated from ranter of the by the narrow Guldborgsund; greatest length, s. E. to N. W., 36 miles; breadth, varying from 9 miles to 17 miles; area, 462 square miles. The surface is low and level; the soil very fertile, yielding crops of corn, beans, hops, hemp and excellent timber. Pop. 70,596.

painter, born in 1613; died at Haarlem by the lips, as b, f. m. p, v. in 1674 or 1675. He made a long residence at Rome, returning to Holland about 1639. He painted generally lively scenes from peasant life, fairs, children's with a gamopetalous corolla presenting a

pending from it and hearing the Greek letters XP (that is, Chr), conjoined so as to form a monogram of the name of Christ.

lished a Nouvelle Relation de l'Afrique Occidentale;) o y a g e en Espagne et Italie; Relation Historique de l'Ethiopie

Labédoyère (la-ba-dwa-yar), Chables Angélique HUCHET, COMTE DE, French general, was born in 1786; shot in 1815. He entered the army in his 20th year, served with much distinction in Spain, Germany, etc., in the diatonic scale.

Laager (la'ger; D. 'a camp'), in Napoleon raised him to the rank of gensor or less fortified. The original Boer with great courage at Waterloo. After with great courage at Waterloo. After the battle he hurried to Paris, and there distinguished himself by his hostility to the Bourbons. On the capitulation of Paris he followed the army behind the Loire, but returning to Paris, he was taken, tried by court-martial, and sentenced to death.

Label (la'bel), in Gothic architecture, a projecting tablet or molding over doors, windows, etc., called a hood-molding, and a drip, dripstone, or weath-er-molding when it is turned square.

cellent timber. Pop. 70,596.

Labials (labialz), letters or characters representing a sound or articulation formed or uttered chiefly

with a gamopetalous corolla presenting a scenes from peasant life, fairs, children's with a gamopetalous corolla presenting a games, hunting scenes, landscapes, etc.

Labarum (lab'a-rum), the imperial four-lobed ovary, changing to four seedstandard adopted by Conlike monospermous fruits. This order stantine the Great after his miraculous contains about 2600 species, mostly fision of the cross and conversion to herbs, undershrubs, or shrubs with oppochristianity, differently described and figsite or whorled leaves, usually square ured, but generally represented as a pole stems, and a thyrsoid or whorled inhaving a crossbar with the banner deflorescence. They are spread throughout representing a prominent upper and lower lip, and a pole species, mostly fision of the cross and conversion to herbs, undershrubs, or shrubs with oppocations of the cross and conversion to herbs, undershrubs, or shrubs with oppocations of the cross and conversion to herbs, undershrubs, or shrubs with oppocations of the cross and conversion to herbs, undershrubs, or shrubs with oppocations of the cross and conversion to herbs, undershrubs, or shrubs with oppocations of the cross and conversion to herbs, undershrubs, or shrubs with oppocations of the cross and conversion to herbs, undershrubs, or shrubs with oppocations of the cross and conversion to herbs, undershrubs, or shrubs with oppocations of the cross and conversion to herbs, undershrubs, or shrubs with oppocations of the cross and conversion to herbs, undershrubs, or shrubs with oppocations of the cross and conversion to herbs, undershrubs, or shrubs with oppocations of the cross and lower lip, and lower lip the world, and abound in all temperate latitudes. Many are valued for their fragrance, as lavender and thyme: others for their stimulating qualities, as mint

Labiche Paris in 1815. He, chiefly in collaboration with other authors, brought out up-wards of 100 plays, many of them very successful. They are mostly distinsuccessful. They are mostly distinguished by extravagant plots, and are full of droll situations. In 1880 he was elected to the Academy. Died in 1888.

Labor, in political economy, one of the not undertake, however, to exercise any three leading factors in produc-absolute authority over affiliated societies. tion, the there two being land and capital. It has been especially active in agitating It is more fundamental than capital, for 'eight hour' legislation and in comwhich originally is the result of labor, bating what it considers the unjust use of A distinction insisted on by many economists is that into productive and unprostriven to extend the use of the union ductive labor. The former consists of label by its affiliated bodies, also of the those kinds of exertion which produce union button and store cards. It has utilities embodied in natural objects. The hear unider the able presidency of Samuel those kinds of exertion which produce union button and store cards. It has utilities embodied in natural objects. Un-been under the able presidency of Samuel productive labor, like that of the Gompers, with an intermission of one musician, while both useful and honorable, year, since its organization, and in 1913 does not add to the material wealth of embodied 113 national and international the community. Towards the close of the unions, representing approximately 27,-28th century the effect of the industrial 000 local unions, and had a paid member-revolution was to organize labor in large ship of about 2,000,000. One result of factories and similar undertakings; and the activity of organized labor has been in the early decades of the 19th century legislation of an important character, in-the growing ideas of freedom had begun cluding enactments providing for the into make other great changes in the con- surance of workmen against accident and dition of the workers. The formation of making employers responsible for accitrades-unions and co-operative societies dents due to negligence on their part; also

and peppermint; others as aromatics, as cluding many of these minor bodies. The savory, basil and marjoram; several are oldest of these is the Knights of Labor, used as febrifuges. Betony, ground ivy, organized in Philadelphia in December, horehound and others possess bitter tonic qualities. Numerous species are objects in 1886, its membership was over 500,000. It spread into Canada, Great Britain and Relgium but since then its membership. (la-besh), Eugene Marin, a Belgium, but since them as members and free authors, brought out up
Belgium, but since them as members and decreased, through the activity of other organizations. Of these the authors, brought out up
American Federation of Labor has made much the greatest progress. Its principal objects are to promote the interests and influences of trades unions, to aid in creating new unions, and to advance the general cause of organized labor. It does the growing ideas of freedom had begun cluding enactments providing for the inhas greatly strengthened the position of for the regulation of woman and child labor, and laws for the regulation of labor. The Industrial Workers of the are now intended not to fix wages as World is another powerful labor organizatormerly, but to protect the workers.

The Department of the control of the Labor, Department of the United States with existing political parties or antirovernment, created in 1913. It has charge of the labor interests of the country, and its head official is a member of the president's cabinet.

Labor Day, the first Monday in September, is set apart to be celebrated by the organizations of labor in the United States. It organized avadicalism in that great stress is laid. be celebrated by the organizations of dustries rather than by trades, and from labor in the United States. It originated syndicalism in that great stress is laid in 1882, and is now a legal holiday in upon having a form of organization to all the States.

Labor Organizations. The various countries of the world have been very active gon. The organization came into diswithin recent years in the organization favor in the Great War, many of its member which is the organization favor in the Great War, many of its member which were the property of the prior combined born being charged with disloyalty. Labor of workingmen, alike in minor combina- bers being charged with disloyalty. Labor tions of trades and general organizations, organizations in Great Britain have long embracing nearly all the artisans of a been prominent and exhibited their power country. Some of these, indeed, have ex-during the war. Germany, France, Italy panded to international dimensions. In and some other countries have similar orthe United States, for instance, in addi-ganizations. More recently Japan has tion to the very numerous trades unions, come to the fore in the matter of labor there are several great organizations in unions. Its leading organization is the

Yuai-kai (Friendship Association). See also Syndicalism. (lab'or-a-to-ri), a build-ing or workshop de-Laboratory signed for investigation and experiment in chemistry, physics, etc. It may be for special research and analyses or for quite general work. To the former class be-long the laboratories which are attached to dye-works, color works, chemical and similar works. Laboratories are also attached to mining and metallurgical schools, to mints, to arsenals, etc. A general laboratory, such as might be attached to a school or university, has to include a variety of specialties, partly because the whole science and its applications have to be taken into account and exhibited, partly because students with very different aims frequent such places. Labouchère (lab'u-shār), HENEY, an English politician and writer, was born in 1831, and educated at Eton. He was in the diplomatic service from 1854 to 1864; became a member of Parliament in the Radical interest for Windsor (1865-66), Middlesex (1867-68), and Northampton after 1880. He has gained a certain renown for his vivacious and satirical style, both in speaking and writing. He contributed speaking and writing. He contributed Letters of a Besieged President in Paris to the Daily News—of which he was part proprietor—during the Franco-German war. In 1877 he started Truth, a weekly society paper. He died January 16, 1912. (la-bo-la), EDOUARD Rena Lefebvre, a Laboulaye French publicist, born in 1811; died in 1883. He attained a high position as a writer of historical, social and playfully writings are History of Landed Property in Europe; History of the United States; Germany and the Slavic States; Paris in America; The New Bluebeard; The Poodle Prince; Prince Caniche, etc., etc.

Labrador (lab'ra-dor), a country on America, between Canada and the Atlantic Ocean. The interior consists mostly of a tableland 2000 or more feet high. of a tableland 2000 or more feet high. There are a number of lakes drained partly by rivers flowing towards Hudson face when lifted. Strait, partly by others (such as Grand River) reaching the Atlantic in the southeast. The wild animals include the caribou or reindeer, bears, wolves, foxes, as the type. The ventral fins are under martens, and other fur-bearing animals. The climate is rigorous, there being about Labrum. See Labium. The climate is rigorous, there being about nine months of winter. No ordinary cereal can ripen in the climate, though bar- Labruyère, JEAN DE. ley cut green is used as fodder, and po-tatoes and some culinary vegetables can be grown. The population (not over 15,-

000) consists of Indians, Eskimos and half-breeds, with a few whites on the coast. In summer it is increased by some 30,000 persons, chiefly from Newfoundland and connected with the fisheries. The Moravians have a number of missions along the coast, the Church of England one or two. The Hudson Bay Company has several posts. Labrador is also the name given to the whole peninsula be-tween the Atlantic, Hudson Strait and Hudson Bay and the St. Lawrence. See Canada, Northeast Territory, Quebec.

(lab'ra-dor-it), LAB-Labradorite BADOR FELSPAR, a mineral found on the coast of Labrador, and formerly called Labrador hornblende, though that is the designation of hypersthene. It is a lime-soda felspar, and is distinguished by its splendent changeability of color. Blue and green are the most common colors, but occasionally these are intermingled with rich flamecolored tints. It is sawed into slabs by the lapidaries, and employed in inlaid work.

Labrador Pine. Same as Banksian Pine.

given Labrador Tea, a name two species of the genus Ledum (L. latifolium and L. palustre). They grow in the north of Europe, and in America north of Pennsylvania. They are species of heath, and are low shrubs with alternate entire leaves clothed underneath with rusty wool. The fragrant crushed leaves are used by the natives of Labrador as a substitute for tea. They possess narcotic properties, render beer heady, and are used in Russia in the manufacture of leather.

Labret (labret), an ornament worn in a hole in the lip by certain tribes of savages. This custom is found among various Indian tribes and through parts of Central Africa, in some instances only by women, in others, as the Eskimos of Alaska, by men as well. Labrets may be oval pieces of wood, bone or ivory two inches wide, or may take other shapes. In Central Africa the labrets worn by women are so large and the lower lip so distended as at times to hide the whole

See Bruvère. (lii-bo-an'), a small British colony consisting of an

island on the N. W. of Borneo. Area, 31 square miles; pop. 6298, mostly Malays from Borneo. It is well supplied with water, and has a good harbor at the set-tlement of Victoria, on its southeast side. Coal of excellent quality is plentiful, but has been mined hitherto with indifferent Success. Other products are timber, caoutchouc, gutta-percha, wax and sago. Singapore. This island was taken possession of by the British in 1846, and is administered by a governor and a legislative council.

(la-bur'nam), a tree of the genus Cytisus, the Laburnum C. Laburnum, nat. order Leguminosse, a native of the Alps, much cultivated by way of ornament. It is well and widely known for the beauty of its pendulous racemes of yellow, pea-shaped flowers. The seeds contain a poisonous substance called cytisine, and are violently emetic. The wood is much prized by cabinet-makers and turners, being wrought into a variety of articles which require strength and smoothness.

(lab'i-rinth), a structure Labyrinth having numerous intricate winding passages, which render it difficult to find the way through it. The legendary labyrinth of Crete, out of which no one could find his way, but became the prey of the Minotaur, was said to have been constructed by Dædalus. to have been constructed by Dædalus. The hint of this legend was probably given by the fact that the rocks of Crete are full of winding caves. The Egyptian labyrinth was a building situated in Central Egypt, above Lake Moeris, not far from Crocodilopolis (Arsinoe), in the district now called the Fayoum. The building half cheer and half cheer half cheer. ing, half above and half below the ground, contained 3000 rooms. It was probably a place of burial. The labyrinth at Clusium, in Italy, was erected by the Etruscans, according to Varro, for the sepulcher of King Porsenna. There were other labyrinths at Lemnos and Samos, but their sites are unknown. Imitations of labyrinths, called mazes, were once fash-ionable in gardening. They were made ionable in gardening. They were made of hedges of privet, or some similar shrub. The best known is that of Hampton Court.

around two sunken country lanes, from which spread, for a mile and a half on either side, works of every kind, amply furnished with machine guns and bomb-throwers. It was taken by the French in June, 1915.

Labyrinthodon (lab-i-rinth'o-don), a genus of fossil amphibians, whose remains are found in the carboniferous, permian and trias for-mations, those of the trias being found in England, India and Africa. They were allied to the crocodile and to the frog, and were 10 to 12 feet long. The name is derived from the labyrinthine structure of a section of the tooth, when seen under the microscope. The hypothetical chei-rotherium has been identified with the Labyrinthodon.

or Lax, from the Sanskrit laksha Lac, Lac, or laksha, that is, 100,000. In the East Indies it is applied to the computation of money. Thus, a lac of rupees is 100,000.

Lac, a resinous substance produced upon numerous Indian trees by the exudations from the body of the fe-male of the Coccus ficus or Coccus lacca. The finest is found on the palas or dhak (Butea frondosa), the peepul (Ficus religiosa), and the koosum (Schleichera trijuga). It is composed of five different varieties of resin, with a small quantity of several other substances, particularly a red coloring matter. It is formed chiefly by the female insects, each of which inhabits a cell, the encrustation of which seems intended to serve as a pro-tection for the young. When the covering is complete the eggs are laid and the mother dies. The young break their way out, swarm on to the bark, and immediately commence the secreting of lac. India the cultivation of the lac insect has received much attention. Stick-lac is the substance in its natural state, encrusting small twigs. When broken off and washed with water it almost entirely loses its red color, and is called seed-lac, from its granular form. When melted and reduced to a thin crust, it is called shell-lac. Mixed with turpentine, coloring matters, and other substances, lac is used to make differently colored sealing wax. Dissolved in alcohol or other menstrua, by different Labyrinth, the name given, during the methods of preparation, it constitutes various kinds of varnishes and lacquers.—
tion of the battle line held by the GerLac-dye and lac-lake are coloring matters tion of the battle line neld by the vermans behind the village of Neuville-Saintvasst, near Arras, in the department of different processes from stick-lac. In the
Pas de Calais. It was a maze of blockstate in which they are found in comhouses, shelters, saps, caverned chambers,
and armored concrete defenses and tunnels, on which the German engineers had the East, but a superior kind of lac-dye
superior deliber science. It was built is now manufactured in England from exhausted all their science. It was built is now manufactured in England from

is analogous to cochineal.

Lacaille (lá-ka-yé), Nicholas Louis DE, a French mathematician and astronomer, was born in 1713; and died in 1762. He was educated for the church, but soon renounced theology for astronomy. He took an important part in the work of measuring an arc of the merician and in 1748 he was appointed mericaian, and in 1746 he was appointed professor of mathematics in Mazarin College. In 1751 he went to the Cape of Hope at the expense of the government. ment, where he determined the position of a bout 10,000 stars with wonderful accuracy. As his departure from the Cape was delayed he employed the interval in measuring a degree of the southern hemisphere. His works on geometry, mechanics, astronomy and optics were number of the southern hemisphere. merous. Among them are Lecons d'Astronomic and Astronomic Fundamenta. His Colum Australe Stelliferum and Journal Historique du Voyage fait au Cap de Bonne Espérance were published after his death.

Laccadive Isles (la'ka-div), a teen small coral islands including three reefs in the Indian Ocean, about 150 off the coast of Malabar, belonging to British India. The islands are well supplied with find a control of the coast of Malabar, belonging to British India. supplied with fish, and export quantities of coir or cocoanut fiber. Cocoanuts, jaggery, plantains, poultry, etc., are in only other exports, and are of of importance. The natives are a race of manufactures and Arab descent). They are bold and expert boat-builders. Pop. 10,274.

(lās), a delicate kind of netton work, formed of silk, flax, or cotton work, formed of silk, flax, or cotton read, and used for the ornamenting of men's dresses. It is made either by or machine, the former being product by the needle, or made on the pill we called point, the made on the pill we called point. those made on the villow, cushion, bobbin or made on the billow, tushing in all lac 🗨 is the pattern or ornament; this ma 🤝 De worked either with or without a growth. Pillow lace consists of hexago meshes, four of the sides of each being formed by twisting two three states are the being formed by twisting two three states are the the simple crossing of two wides by the simple crossing of two thresholds over each other. The pattern on partial point or vellum is attached to the pattern or paint or vellum is attached to the pattern or the pattern or which the threads are the Dattern, round which the threads are teachers and friends, Bunon and twisted so as to form the and twisted so as to form the ton, procured him the important situation of keeper of the collections belonging to of keeper of the collections belonging to the department of natural history in the department

stick-lac. The coloring matter of lac-dye tirely by the needle and single thread, are known as Brussels, Alencon, Maltese, etc. Guipure lace consists of a network ground on which patterns are wrought in various stitches with silk, etc. It was



Battenberg Lace.

originally a lace made in silk, thread, etc., on little strips of parchment or vellum. At Nottingham and elsewhere imitations of lace are produced by machines, called point net and warp net, from the names of the machines in which they are made. They are both a species of chain work, and the machines are varieties of the stocking-frame. The manufacture of lace appears to have existed from a considerably remote antiquity, as in the representations of Grecian female costume which have come down to us the dresses are frequently ornamented with lace of beautiful patterns. In modern times point lace originated in Italy, from which the manufacture spread to Spain and Flanders. Pillow lace was first made in the Low Countries. See Battenberg.

Lace-bark Tree (Lagetta linte a-ria), a tree of the natural order Thymelaceæ or Daphne family, is a native of the West Indies. It receives its common name from the fact that when its inner bark is cut into thin pieces, after maceration it assumes a beautiful net-like appearance. It is used by females by way of ornament, and the negroes manufacture matting from it. (la-se-dē'mun).

Lacedæmon (la-se-de'mun Sparta. Lace-leaf. See Lattice-leaf.

Lacépède (la-sa-pad), Bernard Ger-MAIN ETIENNE DE LA VILLE-SUB-ILLON, COUNT DE, a French naturalist, born in 1756; died in 1825. He abandoned the military profession, for which he was educated, and devoted himself to the study of natural history. His teachers and friends, Buffon and Dauben-

elected member of the legislative assembly, and belonged to the moderate party. During the reign of terror he found refuge in the country. Napoleon made Lacepede a member of the conservative senate, and conferred on him the dignity of grand-chancellor of the Legion of Honor. After the restoration he was made a peer of France. In 1817 he published a new edition of Buffon's works. His History of Fishes is considered his principal work. He published likewise the Natural History of Oviparous Quadrupeds and of Reptiles.

LACERTIDÆ. See Lizard. Lacerta.

Lace-winged Flies, insects of the Hemoingly voracious, and feed upon aphides. ous belief. The Lachaise (lashaz), François D'Aix tears, but perfume. member of the congregation of Jesuits, was

very great, and he published valuable editions of the Latin and old German classics.

Lachrymæ Christi (lak'ri-mē kris'tī; literally 'tears of Christ'), a sweet but piquant muscatel wine of agreeable flavor produced from grapes grown on Mount Somma, the second summit of Vesuvius. There are two kinds, the white and the red, of which the former is generally preferred.

See Eye. Lachrymal Organs.

Lachrymatory (lak'ri-ma-to-ri), a small glass vessel found in ancient sepulchers, in which it has been supposed the tears of a deceased robius, order Neuroptera, so called from person's friends were collected and pretheir delicate wings having many netted served with the ashes and urn. Later disspaces like lace. The larvæ are exceed-coveries have proven this to be an erroneingly voracious, and feed upon aphides. ous belief. The vessels contained, not

(lak-a-won'a), a city of Erie Co., New York, 5 born in the Château d'Aix in 1624; died miles s. of Buffalo, on severul railroads, in 1709. Lachaise commenced his course It has the extensive plant of the Lackaof studies in the Jesuit College at Rohan, wanna Steel Co., also scrap iron yards, and finished it at Lyons. He was the brake beam works, etc. The South Park provincial of his order when Louis, on Conservatory here is noted for its rarethe death of his former confessor, Father flowers. Pop. (1910) 14,549; (1920)

the death of his former confessor, Father flowers. Pop. (1910) 14,549; (1920) Ferrier, appointed Lachaise his successor 17,918.

1675. He had much influence with the king, and, acting with prudence and moderation, he kept the post till his death. (1701-74), a French mathematician, born the left philosophical, theological and archæological works. Louis XIV had a Godin and Bouguer, to determine the country house built for him to the west of Paris, the extensive garden of which made in Peru. His principal works are now forms the cemetery of Père Lachaise, the largest in Paris.

Lachesis (lak'e-sis), the name of one of the three Fates, whose duty it was to spin the thread of life.

Laching (la-kō'ni-a), a city, county seat of Belknap Co., New Hampshire, 100 miles N. of Boston, in the Laching (la-shēn'), a town of Cana-

Lachine (la-shen'), a town of Cana- lake region of the State. It has car shops, Lachine (la-sher), a town of Cana-lake region of the State. It has an analysis da, province of Quebec, on hosiery mills, manufactures of machinery, Montreal Island; essentially a manufacture etc. Pop. (1910) 10,183; (1920) 16,897. turing town. There are here rapids on the Lacordaire (la-kordar), Jean Bapt. Lawrence which are avoided by means

St. Lawrence which are avoided by means of a canal 9 miles long from Montreal a French pulpit orator, born in 1802; harbor. Pop. (1911) 11,519.

Lachlan (lok'lan), a river of Eastern law, which he renounced for the church, Australia, rising in New and received holy orders in 1827. In South Wales, to the west of the Blue 1830 he was associated with Lamennais Mountains. It is joined by the Murrum-bidgee, the united stream afterwards falling into the Murray. It has a total cated with great elequence and ability. ing into the Murray. It has a total cipies and extreme radicalism were advolved with great eloquence and ability.

Lachmann

(lahman), Karl, a German critic and philologist, born at Brunswick in 1793; died at himself to the duties of the pulpit, and Berlin in 1851. He studied at Leipzig and Göttingen, and became a professor at treated social affairs in his discourses Königsberg in 1818, and afterwards at attracted admiring and spell-bound audi-Berlin in 1827. His critical sagacity was

11.1

1840, and his fame as an orator being Great invited him to Gaul, and committed now fully established, his advocacy of to his care the education of his eldest charities was eagerly sought, not only son Crispus. He died at Treves about in Paris, but in the provinces. In the 325. His writings are characterized by first election after the revolution of 1848 he was chosen the representative in the Constituent Assembly for the department of Bouches-du-Rhône, but resigned his seat after a few weeks. In 1850 the pope conferred on him the office of provincial of the Dominicans in France, which he held for four years. In 1860 he was elected into the Académie Francaise, His chief works are Considerations on the Philosophic System of Lamennais, Sermons at Notre Dame, Letter on the Holy See, Letters on the Christian Life, etc.

Lacquer (lak'er), a varnish usually consisting of a solution of shell-lac (sometimes sandarach, mastic, etc.) in alcohol, colored by arnotto, gamboge, saffron, and other coloring matters, for coating brass and some other metals, to give them a golden color, to preserve their luster, and to secure them against rust. Lacquered brass appears as if gilt, and tin is made yellow. Lacquering is also applied to the coating with varnish of goods in wood and papier-maché. The Japanese and Chinese excel in works of this kind.

Lacrosse, a game at ball, originating with the Indians of Canada, cration football, except that the ball is urine. It is not only formed in milk when carried on a hooked stick fitted with a it becomes sour, but also in the fermentaloose net (the crosse), the player in possion running with it toward the enemy's goal, passing it by tossing to one of his toward the goal. There are 12 men on each side; the field 125 feet long.

Lactine, Lactose (lak'tōs), sugar of

La Crosse, a city, county seat of La Crosse, Co., Wisconsin, at the confluence of the La Crosse, Black and Mississippi rivers, 198 miles by rail through animal charcoal, and crystallizand Mississippi rivers, 198 miles by rail ing. It forms hard, white, semitransparent alroads. It has a number of fine public slightly sweet taste, and grate between buildings, notably the high school and manual training building. It is a notable into glucose by boiling with very dilute manufacturing city, with rubber and flour sulphuric acid. mills, tractor and plow factories, an extensive plant manufacturing automobile 30,363.

Lactantius (lak-tan'shi-us), Lucius a glass tube 1 foot long, graduated into CCELIUS FRIMIANUS, or LUCIUS CXECILIUS FRIMIANUS, or LUCIUS CXECILIUS FRIMIANUS, a celebrated father of the Latin Church, probably a native of Italy, and born about the middle of the third century. He lived for a long time at Nicomedeia as a teacher of rhetoric, until Constantine the

a clear and agreeable style. His seven



Crosse or Bat.

books, Institutiones Divina, are particularly celebrated, and worthy of notice.

(lak'te-alz), numerous mi-nute tubes which absorb or Lacteals take up the chyle or milk-fluid from the alimentary canal, and convey it to the

thoracic duct. See Chyle, Lymph.

Lactic Acid (lak'tik) (ColloOs), an acid found in several played somewhat on the principle of Asso-ciation football, except that the ball is urine. It is not only formed in milk when

Lactine, Lactose (lak'tōs), sugar of milk (C₁₂H₂₂O₁₁), a substance

(lak-tom'e-ter), or GA-LACTOMETER, an instruaccessories, also foundries, machine shops ment for ascertaining the different quali-and many other industries. Pop. (1920) ties of milk. Several instruments of this sort have been invented. One consists of

Ladakh (lä-däk'), a governorsnip un- heligion (1905).
der the Maharajah of Cashmere, of irregular outline, comprising part

Ladoga (lä'dō-ga) LAKE, the largest
mere, of irregular outline, comprising part is the well-known shawl-wool of Cash- in Russia, and of Lake Saima and other mere. There is a considerable transit lakes in Finland; and its own waters are trade. Ladakh being naturally the carried off to the Gulf of Finland by the great thoroughfare between Chinese Tar-Neva. The average depth of Lake tary and Tibet, on the one hand, and the Ladoga does not exceed 300 feet. Punjab, on the other. The trade is super-Lady (la'dl), as a title, is borne in British. The language is Tibet, and of Lake Saima and of the Gulf of Finland by the great three superstates.

importance is Rota. The islands are mostly of volcanic origin, and are very quently attached to large churches. It rugged. Five are of coral formation, was variously placed, but generally to They were discovered by Magelhaens in the eastward of the high altar, and in 1521, and were settled by the Spaniards, churches of earlier date than the thirdune 21, 1898, during the war with Spain, teenth century the lady chapel is frethe United States cruiser Charleston took quently an additional building. See possession of Guam, hoisting the American under Cathedral. the United States cruiser Unarieston under Uathearas.

possession of Guam, hoisting the American flag over Fort Santa Cruz. The United Lady-day, the 25th of March, the day States retains Guam. The other islands nunciation of the Virgin Mary, one of the United Lady-day in England and

finished his course at Andover Theological Lady-fern, a species of polypodiace-Seminary, 1869, and became pastor of the Prilatering ous fern, the Athyrium Seminary, 1869, and became pastor of the church at Edinburg, Ohio. From 1871

Filix-fæmina, common in Great Britain. to 1879 he was in charge of a church at It has bipinnate or tripinnate fronds of Milwaukee, Wis. During the succeeding delicate texture, and of a remarkably two years he held the professorship of philosophy at Bowdoin College and at the same time lectured on theological subjects at Andover. In 1881 Dr. Ladd accepted the professorship of philosophy at large inflated flowers. The species are confined to the northern regions of the 1905. He published among other books, 1906. Three species are natives of the Introduction to Philosophy (1890), Psychology, Descriptive and Explanatory the north, remarkable for the form of the (1894), Philosophy of Mind (1891), Philosophy suggests the name.

Lactuca (lak-tū'ka), the lettuce genus osophy of Knowledge (1897), Philosophy of Conduct (1902), and Philosophy of

mere, of irregular outline, comprising part lake in Europe, situated N. of of the valley of the Upper Indus and its Petrograd and crossed by the frontier-tributaries, and lying at the back of the line between that country and Finland. central range of the Himalayas; area, It is 129 miles in length, 78 in breadth, about 30,000 square miles; capital, Leh. and 6998 square miles in area. There The climate is characterized by cld and are numerous islands. It receives the excessive aridity. The wool of the goat waters of Lake Onega and Lake Ilmen is the well-known shawl-wool of Cash- in Russia, and of Lake Saima and other

and one British. The language is Tibet- and of all degrees above them, except the and one British. The language is Tibetan, and the government a despotism controlled by the priesthood. The inhabitants are of Mongolian race and Buddhist religion. Polandry prevails.

Ladanum (lad'a-num), a delicately scented, resinous gum which exudes from certain plants of the Cistus family growing in Crete, Cyprus and Asia Minor. In Cyprus the collected from the beards of goats.

Lady-bird, small coleopterous insects of beetles, common on trees and plants of the collected from the beards of goats.

and Asia Minor. In Cyprus the gum is collected from the beards of goats.

Ladrones (la-drōnz' or la-drō'nes), or MARIANA ISLANDS, a group of fifteen islands in the Pacific mented with scarlet spots. They are usually ornativated area about 420 square miles. Guam is the southernmost and largest; next in importance is Rota. The islands are mostly of volcanic origin and are very quently attached to large churches.

Ladd, George Trumbull, an American the regular quarter-days in England and psychologist, born at Painesville, Ohio, January 19, 1843; was graduated festivals of the Roman Catholic and (1864) at Western Reserve College. He Anglican churches.

Laennec (la-en-nek), RENÉ THÉO-PHILE HYACINTHE, a French physician, born at Quimper, in 1781; died in 1826. His fame rests on the splendid discovery of mediate auscultation; that is, of the use of the stethoscope. The original discovery, however, is claimed for Avenbrugger. In 1821 he was appointed professor of medicine in the College of France. The following year he was appointed professor of clinical medicine, and regularly performed the duties of his office till his death.

La Farge, John, artist, was born in New York in 1835, studied architectural decoration and painting, began painting with religious subjects and decorative work, then became a flower and landscape painter, and during his later years occupied himself with the naking of stained glass windows, inventing the new methods known as 'American' and completely changing the art of the glass stainer. Among his noted works are Paradise at Newport, Christ and Nicodemus, and the frescoes of Trinity Church Roston. He died in 1910.

and Nicodemus, and the frescoes of Trinity Church, Boston. He died in 1910.

La Farina (la fa-ré'na), Gluseppe, an Italian patriot, journalist and historical writer, born at Messina in 1815; died in 1863. He took part in the revolution of 1848, and subsequently coöperated with Cavour and Garibaldi. He wrote Souvenirs of Rome and Tuscany, the Revolution of Sicily, etc.

Marquis de Lafayette that had taken possession of the palace at Versailles. After the adoption of the constitution of 1790 he resigned all command, and retired to his estate of La.

COUNTESS DE, a French novelist, born in mand of the French armies, and directed some small operations on the frontier of Count Francis de La Fayette, and her Flanders, at the same time striving unbouse became a place of meeting for the successfully to defeat the Jacobins at Count Francis us and Last place of meeting for the house became a place of meeting for the most distinguished men of her time, including Rochefoucauld, Huet, Ménage, him, on which he determined to leave the country, and take refuge in some neutral country, and take refuge in some neutral of her novels are Zaide, La Princesse de Montpensier. Austrian patrol, he was confined at Oldives and La Princesse de Montpensier. Austrian patrol, he was confined at Oldives and La Princesse de Montpensier. Lafayette, Yves Gilbert Motier, estate, he lived for many years without taking part in public affairs, and declining the dignity of senator offered him by MARQUIS DE, was born in Auvergne in taking part in public affairs, and declination of the dignity of senator offered him by career at the court of Louis XV, at the period when hostilities were commencing consulate for life. In 1818 he was chosen between Britain and her American columber of the Chamber of Deputies, and onies. In 1777 he left France for America, having fitted out a vessel for himself, and was received by Washington and his army with acclamations. He joined their ranks as a volunteer, was wounded near Philadelphia, and commanded the van-guard of the American army at the cap-ture of Cornwallis. He returned to France on the close of the campaign; was called to the Assembly of the Notables in 1787, and was elected a member of the States-

General, which took the name of National Assembly (1789). In the assembly he proposed a declaration of rights, and the decree providing for the responsibility of the officers of the crown. Two days after the attack on the Bastille he was appointed (July 15) commander-in-chief of the National Guards of Paris. It was through his means that the lives of the king and queen were saved from the mob



mand, and retired to his estate of La. La Fayette (la-fa-yet), Marie Mag- Grange. In 1792 he was appointed one DELAINE DE LA VERGNE, of the three major-generals in the comwas a constant advocate of liberal measures. In 1824 he visited the United States, and was received with great enthusiasm. Congress voted him \$200,000 and a township of land. During the revolution of July, 1830, he was appointed general of the National Guards of Parisand it was chiefly to Lafayette that Louis Philippe owed his elevation to the throne.

Lafayette,
a city, capital of Tippe canoe County, Indiana, on

the Wabash River and Wabash and Erie Canal, and at the intersection of several railways, 63 miles northwest of Indianapolis. It is the seat of Purdue University, the State technical college. It has lumber lumber mills, sugar refinery, sash and door factory, compress, gins, machine shops, etc. Oil fields are nearby. Pop. 7855.

Laffitte (la-fēt), JACQUES, a French financier and statesman, born at Bayonne in 1767; died in 1844. He acquired a fortune by banking and was entrusted with the private property of both Napoleon and Louis XVIII. He took an active part in the revolution of July, 1830, was made minister of finance and president of the council, in which situation he remained until March 14, 1831. He lost his fortune in the crisis which followed, but a national subscription in 1833 relieved him from embarrassment.

Lafitte, Jean, a French privateer, edies; Ancreontiques, etc.

Lafitte, Jean, a French privateer, edies; Ancreontiques, etc.

Lager Beer (läger), a light beer, not so intoxicating as the pirates established at Grande Terre, in Batavia Bay, on the coast of Louisiana, and plied his art in the Gulf of Mexico.

In 1814, when the British fleet entered the Gulf for an attack on New Orleans, Lafitte was offered a large sum and a bakaford in 1858. She became a teacher and in 1891 published a collection of sale in 1891 published sa Lafitte was offered a large sum and a commission in the navy if he would aid piracy, but nothing is known of the time or cause of his death. His exploits have given rise to several tales and romances. La Follette, ROBERT MARION. states-awarded the Nobel prize for literature. Wisconsin, in 1855. He studied at the University of Wisconsin, was admitted to the bar in 1880, and was a Republican member of Congress from 1885 to 1891. a lake partly in Northern Italy, partly the took a prominent part in framing the in Switzerland about 20 miles leave and

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action was strongly sustained by the popular vote reëlecting him to the Senate in November, 1910. He vigorously op-posed the bill for reciprocity in trade with Canada in 1911. In 1908 he rethe State technical college. It has lumber with Canada in 1311. In 1908 he remills, foundries, and extensive packing, ceived 25 votes for the presidential nomilivestock, grain and manufacturing interaction, and in 1912 was prominent as a ests. Pop. (1910) 20,081; (1920) 22,486. candidate of the 'progressive' Republicans.

Lafayette, seat of Lafayette Parish, Louisiana, on Vermilion

River, 50 miles N. of Gulf of Mexico, in Château-Thierry in 1621; died in 1695. the cotton, cane and rice belt. It has He was invited to Paris by the Duchess humber mills given reference and defeather the progression of the state of the progression of th de Bouillon, and after being patronized by several persons of distinction Madame Sablière took him into her house, and Lafayette College, at Easton, Pa., chartered in habits of intimacy with Molière, 1826. Besides courses in the liberal arts Boileau, Racine, and all the first wits and sciences, there is a course in biblical instruction. It is under Presbyterian auspices. Student body, about 600.

Laffitte (la-fêt), Jacques, a French Louis XIV, who even hesitated some time to confirm his projection to the candor and simplicity of his projection. time to confirm his nomination to the French Academy. The first volume of French Academy. The first volume of his Contes or Tales appeared in 1664, a second in 1671. They are full of fine touches of genius, but are grossly indecent. Of his Fables (in which animals are represented speaking and acting) innumerable editions have been printed, and it is through them that he is universally known. Lafontaine is also the author of Les Amours de Psyché a reauthor of Les Amours de Psyché, a ro-mance; Le Florentin and L'Eunuque, com-

Latitte was offered a large sum and a bakatord in 1898. She became a teacher commission in the navy if he would aid and in 1891 published a collection of in the attack. He refused and gave his tales, Gästa Berlings Saga, followed in aid to General Jackson in the defense, on 1897 by her great romance, The Miracles condition of pardon to himself and fol- of Antichrist. These were so brilliant lowers. He subsequently reëngaged in style and character as to win her a piracy, but nothing is known of the time foremost place among recent Scandinavian writers. She has since published various other works, and in 1909 was awarded the Nobel prize for literature.

Lagerstemia. See Bloodwood.

member of Congress from 1885 to 1891. a lake partly in Northern Italy, partly He took a prominent part in framing the in Switzerland, about 39 miles long and McKinley tariff bill. He was elected 7 broad, traversed by the Ticino. It is (rovernor of Wisconsin in 1900, and was 621 feet above the level of the sea, and reflected in 1902 and 1904, resigning in at the northern end in some places as 1905 to become United States Senator. deep as 2500 feet. Its banks abound in He became active in reform measures. every Alpine beauty, and are adorned and rose to be the leading spirit in the with a number of picturesquely situated 'Insurgent' movement in Congress. His villages and towns. On all sides it is

surrounded by hills, and it contains pension induced him to settle in Paris. several islands. See Borromean Islands. He took no active part in the revolution, the geria, British West Africa, on eigners was not put in force against him. an island of the same name. It is the In 1794 he was appointed professor in seat of government and is one of the most the newly-established Normal School progressive cities of West Africa. There (Ecole Normale Supérieure) at Paris, is a good harbor. The chief exports are as well as in the Ecole Polytechnique. palm oil and kernels. Pop. 60,000. The The most important of his works are his former colony of Lagos (29,000 sq. miles; Mécanique Analytique, Théorie des Fonctopp. 2,250,000) was united with Southern tions Analytiques, Leçons sur le Calcul Nigeria in 1906; and in 1914 these were amalgamated to form the colony and protectorate of Nigeria.

Laguna (la-go'ni), a province in the center of Luzon I., Philip-Laguns (lia'gos), a city of Jalisco, pines, on Laguna Bay. It is mountainous

years of age Lagrange was made mathematical professor in the artillery school durable title to fame. at Turin. In 1764 he obtained the prize of the Academy of Sciences in Paris for the Academy of a treatise on the libration of the moon, N. of Sitapur. Pop. about 12,000. (la og), a cape of northern and in 1766 for another on the theory of the satellites of Jupiter. About this and in 1766 for another on the theory of the satellites of Jupiter. About this time he made a visit to Paris, where he became personally acquainted with department of La Manche. A naval bat-D'Alembert, Clairaut. Condorcet and to ther savants. Soon after his return he other savants. Soon after his return he received an invitation from Frederick the Great, to whom he had been recommended by D'Alembert, to go to Berlin, with the title of Director of the Academy. Here title of Director of the Academy. Here he lived for twenty years, and wrote his great work La Mécanique Analytique. After Frederick's death (1786) the perdict the french under Tourville and the Britorious.

Lahore (lä-hōr'), a city of Hindustan. Capital of the Punjab, and administrative headquarters of Lahore division and district, on the left bank of the Ravi, 265 miles northwest of Delhi,

Lagos (lä'gos), a city of Jalisco, pines, on Laguna Bay. It is mountainous in the southern part of the State. Pop. 12,243.

Lagos (lä'gösh), a seaport of Algarve, Portugal, on the south coast. Pop. 8291.

La Grande (la gränd), a city, county seat of Union Co., Oreset Wille, Wells, Wells,

La Grande (la gränd), a city, county seat of Union Co., Oregon, 50 miles s. of Walla Walla, Washington, in a rich wheat country. There are railroad shops, flour and lumber miles, beet sugar factory, etc. Pop. (1920) 6913.

La Grange, a city, county seat of Troup Co., Georgia, 71 miles s. w. of Atlanta, on 3 railroads. It has 9 cotton mills, lumber plants, cotton warehouses, etc. Home of La Grange Female College (Methodist). Pop. (1910) 5587; (1920) 17,038.

La Grange, a residential village of miles w. of Chicago. Pop. 6525.

Lagrange (lagrangh), Joseph Louis, a celebrated mathematician, was born at Turin in 1736; died at Paris in 1813. He was of French origin, and his great-grandfather was a cavalry officer in the French army, who afterwards passed into the service of Sardinia, where he early displayed a natural taste for mathematics. When scarcely nineteen years of age Lagrange was made mathematical professor in the artillery school matical professor in the artillery school miles, and the population about 177.000.
Laguna, the former capital of Teneriffe I.. Canaries, is situated 4 miles N. by w. of Santa Cruz. Oranges, raisins, wheat, and Santa Cruz. Oranges, raisins, wheat, and Santa Cruz. Oranges, raisins, wheat, and Santa Cruz. Oranges, is situated 4 miles N. by w. of Santa Cruz. Oranges, is situated 4 miles n. by w. of Santa Cruz. Oranges, is situated 4 miles n. by w. of Santa Cruz. Oranges, is situated 4 miles n. by w. of Santa Cruz. Oranges, raisins, wheat, and Santa Cruz. Oranges, raisins, wheat, and Santa Cruz. Oranges, is situated 4 miles n. by w. of Santa Cruz. Oranges, is situated 4 miles n. by w. of Santa Cruz. Oranges, is situated 4 miles n. by w. of Santa Cruz. Oranges, raisins, wheat, and Santa Cruz. Oranges, is situated 4 miles n. by w. of Santa Cruz. Oranges, is situated 4 miles n. by w. of Santa Cruz. Oranges, is situated 4 miles n. Dep. 13,000.

La Guayra.

La Harpe (

(la-här-pör'), a town of India, in Oudh, 17 miles

It covers an area of 640 acres, and is surrounded by a brick wall 16 feet high, flanked by bastions. The streets are extremely narrow, unpaved and dirty; and the houses have in general a mean appearance. The most remarkable buildings are the mosques of Aurengzebe, of Vizier khan and of Sonara; the mausoleum of Runjeet Singh, etc. The European quarter lies outside the walls on the south, and dates from 1849. Among the public buildings and institutions are the Punjab University, the Oriental College, Medical School Law School Mayor Henrital to School, Law School, Mayo Hospital, etc. In 1524 Lahore became the seat of the Mogul empire, under which it reached its greatest splendor. Before passing into the hands of the British it was the capital of the Sikhs. Pop. (1911) 228,687.

Lahr (lär), a town of Baden, 53 miles s. s. w. of Carlsruhe; manufactures textile fabrics, leather, etc. Pop. 13,577.

Lahsa. See El Hasa.

Laibach, or LAYBACH (lībāk), a town of Austria, duchy of Carniola, of which it is the capital. It is situated 35 miles northeast of Trieste, on both sides of the river of the same name. Its principal buildings are the Cathedral of St. Nicholas, with fine pictures, frescoes, and carvings; the old Gothic town house; the old castle; the years and other educational institutions. lyceum and other educational institutions. It manufactures woolen and cotton goods, paper, etc. Pop. (1910) 47,127.

Daring African traveler, born at Edinburgh in 1793; murdered in 1826. After serving in the army and attaining the rank of major, he entered in 1822 on his career as an African traveler. The results of his early journeys in West Africa were published in 1825. He explored the upper course of the Niger River, and

the upper course of the Niger River, and while doing so, was assassinated by his guide near Timbuctoo.

Laing, David, a Scottish antiquary, died in 1878. He became secretary of the Bannatyne Club, a position which he retained during the 38 years of the society's existence. All the publications of the club came under his superintendence, and in not a few cases he was the actual editor. In 1837 he was appointed served in the Scorety Years' war, in Amerlibrarian to the Society of Writers to the Signet, an office which he held till attained the rank of general, and was his death. He was in turn treasurer, commander-in-chief in Ireland during the secretary, vice-president, and foreign sections. Knox, with valuable notes: Select Ro- feated Holkar in 1805, returned to Engmains of the Early Popular Poetru of land in 1807, was made viscount, and up-

Scotland; editions of Dunbar's, Henry-son's and Sir David Lyndsay's poems; Wyntoun's Cronykill, etc., besides editing several of the publications of the Abbots-ford and Spalding clubs, and of the Shakespere and Woodrow societies.

Laing, MALCOLM, a Scottish historian, born in 1762; died in 1818. He was called to the Edinburgh bar in 1785. His best known work is the History of Scotland from the Accession of James VI to the Reign of Queen Anne, with a dissertation proving the participation of Mary Queen of Scots in the murder of Darnley.

Laissez-faire (la-sa-far), in economics, a term applied to the theory that a public authority should interfere in the concerns of a community as little as possible; that wealth tends to be produced most amply and economically where a government leaves individuals free to produce and transfer on mutually arranged terms, confining itself to the protection of property and person and the enforcement of contracts. This rule in practice is limited by various exceptions, as in government interference in the matters of education and the em-ployment of children; in the promotion of health or morality; and in the private economic interests of certain industrial classes.

See Edipus. Laius.

Lake (lak), a large sheet or body of water wholly surrounded by paper, etc. Pop. (1910) 47,127. water, wholly surrounded by Laing (lang), Alexander Gordon, an land, and having no direct or immediate African traveler, born at Edincommunication with the ocean, or with any seas, or having so only by means of rivers. It differs from a pond in being larger. Lakes are divided into four classes: (1) Those which have no outlet, and receive no running water, usually very small. (2) Those which have an outlet, but receive no superficial running

retary, vice-president, and foreign sect trouble of 1797-98, and in India during retary to the Scottish Society of Anti-the Mahratta war (1803), which he quaries. He published the works of John brought to a brilliant conclusion. He de-

Lake Unaries, of Calcasieu Parish, found in these buildings have thrown Louisiana, on the Calcasieu River, 219 much light on prehistoric man, large populations, including the critical parish, court house, consult Zeller's Lake Dwellings of Switzhigh school, etc. It is the gateway of the crland, etc.

Calcasieu long leaf yellow pine lumber Lakeland, a city of Polk Co., Florida, industry; center of the Gulf Coast rice industry; other resources are sulphur, peindustry. Has railroad and machine should be the property of the phosphate industry. Industry; other resources are sulphur, pe-industry. Has railroad and machine troleum, fish, game, general agriculture, shops, lumber plants, fruit-packing plants, berries and livestock. It is served by etc. It is the metropolis of the Polk Co. three trunk line and two branch line rail- lake region and is a health and pleasure roads. It has car shops, refinery, naval resort. Pop. (1920) 7062. stores, barge and ship yards, rice and planing mills, etc. Pop. (1920) 13,088.

ologists and others very largely since the discovery of the remains of a lake-dwelling in Ireland in 1839, of similar ones in Switzerland in 1854, and subsequently of numbers of others elsewhere. The archæological interest thus attaching to these lacustrine remains has drawn attention to the fact of similar dwellings being still used in various parts of the world, in Russia, the Malay Archipelago (Borneo and New Guinea), the Caroline Islands, Lake Maracaybo in Venezuela, New Zealand, and in a modified form in some parts of Central Africa. The first who is known to have described lake dwellings is Herodotus, who mentions certain dwellings of orus, who mentions certain dwellings of madder and alumina; orange lake, of turthis kind on Lake Prasias in Thrace as meric and alumina; carmine lake, of being approached by a narrow bridge, cochineal and alumina; purple lake, of each habitation having a trapdoor in the logwood and alumina; and so on. Lake floor, giving access to the water beneath, pigments are used in painting, calicotherouse which the contract of the contrac through which fish were caught. A great printing, and in the manufacture of wall-number of these pfahlbauten (pile struc-paper. number of these prantoauten (pile structures) have been discovered in the Swiss lakes, some belonging to the iron age, some few even to Roman times, but the greater number appearing to be divided in about equal proportions between the stone in common except their non-classicism, and bronze ages. The Celtic lake dwell-

pointed governor of Plymouth, where he ings, called orannoges, are more or less died.

artificial islands composed of earth and Lake, Simon (1866), an American stones strengthened by piles. Those of inventor, born at Pleasantville, Ireland are of a much later date than New Jersey. He invented the Argonaut, those of Switzerland, and are frequently the first sea-going submarine, and other noticed in early history as strongholds undersea devices.

Lake Charles, of Calcasieu Parish, found in these buildings have thrown Louisiana, on the Calcasieu River, 219 much light on prehistoric man, large populations.

Lake City, a city, county seat of an expansion of the river St. Lawrence, Columbia Co., Florida, 60 soon after it leaves Lake Ontario, bemiles w. of Jacksonville, in a cotton-tween Canada and the State of New growing section, with truck farming and the turpentine. It is the seat of Columbia College (Baptist). Pop. (1920) 7062.

Lake Dwellings, the name given to frontier of British America, and partly on small artificial or partly artificial isl-miles west of Lake Superior. It is upands in lakes, or on platforms supported wards of 70 miles in length, has an by piles near the shores of lakes. The use extremely irregular form, and a coast-of habitations of this nature is a subject line of about 250 miles. It is studded which has engaged the attention of archae-ologists and others very largely since the River, the principal feeder of the lake, enters it at its southeastern extremity; its discharge is at the north by the River Winnipeg.

Lakes, pigments consisting of a color-ing matter combined with a metallic oxide. They are obtained by mixing with a solution of the coloring matter a solution of alum or of a salt of matter a solution of atom or of a sait or tin, tungsten, zinc, lead, or other metal, and then adding an alkali or alkaline carbonate. Among the pigments prepared in this way may be mentioned blue lake, consisting of cobalt blue, indigo, or ultramarine and alumina; madder lake, of madder and alumina; orange lake, of turneric and alumina; carmine lake, of

the Westmoreland and Cumberland Lake he was made brigadier on the field of

Lakewood, township of Ocean Co., Pondicherry. known health resort. Pop. 6110.

Lakhimpur (lak-him-pör'), a British district of India, occupying the extreme eastern portion of Assam; area, 3724 sq. miles; a great teagrowing district. Pop. 375,000.

Lakshmî (luksh'mē), in Hindu mythology, the wife of Vishnu. She sprang in full perfection from the froth of the ocean. She is the Hindu

froth of the ocean. She is the Hindu Venus, the Ceres or goddess of abundance, and the goddess of prosperity. Flowers and grain are the offerings most com-monly given to her.

Lalande (la-land), Joseph Jérome Le Français de, a French astronomer, horn at Bourg-en-Bresse, dep. of Ain, in 1732; died at Paris in 1807. He devoted himself to mathematics and astronomy, and was sent by the academy in 1751 to Berlin to determine the parallax of the moon, while Lacaille went with the same object to the Cape of Good Hope. After having finished his operations at Berlin, he was chosen member of the Academy of Sciences in Paris in the year 1753. Thenceforward no volume of their Transactions appeared which did not contain some important communica-tions from him. In 1762 he was ap-pointed professor of astronomy in the pointed professor of astronomy in the Collège de France, where he lectured with immense success to the end of his life. His chief works are his Treatise on Astronomy; History, Theory and Practice of Navigation; and Astronomical Bibliography. He wrote all the astronomical articles for the great Encyclopédie, and rewrote them for the Encyclopédie Méthodique, and contributed to various scientific periodicals, hesides editing the scientific periodicals, besides editing the Connaissance des Temps from 1760 to 1775, and from 1794 till his death.

Lalita-Patan (181'i-ta-pa'tan), s town in Northern Hindustan, in Nepaul, near the south bank of the Baghmati, and two miles s. s. w. from Khatmandu, with which it is connected by a bridged road. It is an old place, and contains many Buddhist temples. Pon. 24,000.

Lally-Tollendal (la-le'-tol-en-dal), THOMAS ARTHUR, COMTE, born in Dauphiné in 1702, of Irish parents, his father having followed the fortunes of James II. Trained to arms,

District.

Lakewood, a residential city of Cuyahoga Co., Ohio, adjoining Cleveland, of which it is a suburb.

Pop. (1920) 41,732.

Was made brigadier on the field of Fontenoy for distinguished bravery. He accompanied the Pretender to Scotland in 1756 he was selected to restore the French influence in India, for which purpose he was made accompanied. which purpose he was made governor of Pondicherry. He utterly failed in this, New Jersey, 59 miles s. w. surrendered I'ondicherry in 1761, and was of New York, in the pine district; a well- brought prisoner to England. The following month he was allowed to return to France, where, after a long imprisonment, he was condemned and executed (1766) for treachery, etc. His son, supported by Voltaire, obtained in 1778 a complete authoritative vindication of his father's conduct.

Lalo. See Baobab.

Lama, in zoology. See Llama.

Lamaism (lama-izm), a variety of Buddhism, dating from the seventh century after Christ, and chiefly prevailing in Tibet and Mongolia; so called from the lamas or priests belonging The highest object of worship is to it.

Buddha, who is regarded as the found-er of the religion, and the first in rank among the saints.
The other saints comprise all those recognized in Buddhism, besides hosts of religious teachers and pious men canonized after their death. The clergy are the representa-tives or reincarna-tions of these saints on earth, and receive the homage due to them. Besides these saints a number of inferior gods or spirits are recognized by Lamaism and receive a certain worship. The Lama-



Lama of Tibet.

ists have a hierarchy in some respects resembling that of the Roman Catholic Church, and they have also monasteries Church, and they have also monasteries and nunneries, auricular confession, litanies, etc., and believe in the intercession of the saints and in the saying of masses for the dead. In the hierarchy there are two supreme heads, the Dalai-lama and the Tesho-lama, in whom Buddha is supposed to be incorrect. posed to be incarnate. Next in rank to these two grand-lamas are the incarna-tions of saints, after which follow those of patrons or founders of lamaseries, or Buddhistic monasteries, and then the

lower ranks, distinguished merely by tria, and after the peace became president talents or learning. The Dalai-lama and of the council. He was ambassador to Tesho-lama are nominally co-equal in Prussia in 1861, to France in 1867, and rank and authority; but the former from was governor of Rome 1870-71.—His elder rank and authority; but the former from possessing a much larger territory is in reality much the more powerful. The born in 1789; died in 1863, entered the former, whose residence is at Potala, near French army, and was military governor Lassa, is the acknowledged head of the of the island of Sardinia. He published Buddhists not only in Tibet, but throughout Mongolia and China. When either
of the two lamas dies, his place may be
filled according to directions given by
himself before his death, stating into
Macon in 1790; died in 1869. After being what family he purposed transmigrating. The present lama, infected by political ambition, sought to usurp the sovereignty of Tibet. In consequence, early in 1910, a force of Chinese troops was sent to arrest him and he was forced to flee, taking refuge in British India, where he now holds his court.

Lamar (la-mar'), LUCIUS QUINTUS CINCINNATUS, jurist, was born in Putnam County, Georgia, in 1825. Admitted to the bar in 1847, he served two terms as congressman from Mississippi (1828), established his poetic fame, and (1856-1860). In 1861, after taking part obtained from him admission into the in the secession convention of Mississippi, French Academy (1830). After the revolution of July he traveled in the East, and cause in Europe. After the war he was professor of political economy and law professor in the University of Mississippi, and afterwards served in both Houses of

Lamarck (lå-mårk'), Jean Baptiste Pierre Antoine de Monet, CHEVALIER DE, a French naturalist, born in Picardy in 1744; died at Paris in 1829. He devoted himself to the study of medicine and physical science. Among his chief works are Philosophie Zoologique, in which he promulgated a famous theory foreshadowing what is now known as the law of evolution; Histoire Naturelle des life. Animaux sans Vertebres, Tableau Ency-clopédique de la Botanique, etc. His religious beliefs have been described as a Lamarmora (la-mar'mo-ra), Al-Histoire de Russie; Le Conseiller de Fonso, Marquis, an Peuple; Le Civilisateur; Esprit de Mme. Italian soldier and statesman, born in de Girardin; Shakespere et son Œuvre; 1804; died in 1878. He left the military Vie de Tasse. His Mémoires appeared in academy of Turin in 1823, and thenceforward devoted himself to army reference. forward devoted himself to army reform. Lamb,

brother, ALBERTO COUNT LAMARMORA, born in 1789; died in 1863, entered the

educated at the Jesuit school at Belley he spent some years in the country and in traveling, without any definite occupation, devoting himself chiefly to poetry. By his first production, Méditations Poétiques (1820), he at once obtained a high place among the poets of the day. In 1820 he was attached to the legation at Naples, and married a rich English lady, Eliza Marianna Birch. The Nouvelles Méditations Poétiques (1823) and the Harmonies Poétiques et Religieuses on his return published Voyage en Orient, Souvenirs, Impressions, Pensées et Paysages (Paris, four vols., 1835). During his absence he had been elected a member of the Chamber of Deputies, and thence-Congress, manifesting a fraternal feeling of the Chamber of Deputies, and thence-towards the North that attracted general forward his career was as much political attention. In 1885 he was appointed Secretary of the Interior and in 1887 was histoire des Girondins (Paris, eight made a justice of the Supreme Court. vols.), in which he manifested strong republican leanings. After the February publican leanings. After the February revolution of 1848 he became a member of the provisional government in the capacity of minister of foreign affairs. For some months he enjoyed unbounded popularity, and his energetic behavior was on more than one occasion the means of averting serious evils. After the insur-rection of June, 1848, he lost his popu-larity, and in 1851 withdrew from public life. He was in later years much impoverished, and was voted an annuity in 1867. Among his later works, which did not add to his reputation, were Histoire de la Restauration: Histoire de Turquiz;

CHARLES, an English essayist and humorist, born in London He was engaged in checking the revolu-tionary movements of 1848, and soon af-ter became minister of war. In 1854 he was the son of a clerk to one of the commanded the Sardinian troops in the Crimea. He accompanied Victor Em-manuel to the field in 1859 against Aus-

On leaving the hospital he was employed for a short time in the South Sea House, from which he removed in 1792 to an appointment in the accountant's office of the East India Company. Here he remained till 1825, when he was permitted to retire on a pension of £450. The whole course of his domestic life was devoted to the safekeeping and care of his sister Mary, who in a fit of acute mania had stabbed her mother to the heart in 1796. His first appearance as an author was in 1798, when he published a volume of poems in conjunction with his friends Coleridge and Lloyd. His love for seventeenth century literature bore fruit in the Tales from Shakespere (1807) and Specimens of English Dramatic Poets who lived about the time of Shakespere (1808). He made two attempts at the drama: John Woodvil, written in imitation of the titled Mr. H., which was performed at Drury Lane in 1806, and proved a failure. On the other hand, his tale of Rosamund Gray (London, 1798) was well received when it appeared, and is still a favorite. when it appeared, and is similar to his the owes his literary distinction to his delightful Essays of Elia, chiefly contributed to the London Magazine. They tributed to the London Magazine. They have been frequently republished in a collected form. Here, in a style ever happy and original, he has carried the short hu-morous essay to a point of excellence permorous essay to a point of each state of eac Leicester's School, Tales from Shakes-pere and Poetry for Children.

Lamb, ISAAC WIXAN, nventor, born at Salem, Michigan, in 1840.

His principal invention is a knitting machine capable of producing more than 30 varieties of knit goods and of making 4000 loops a minute at ordinary speed. It can make both flat and tubular work.

Tambeth (lam'beth), a parliamentary borough of South London, opposite to Westminster, with the feet long. It has recently become famous feet long. It has recently become famous

1809. He was exhibited in London and

the principal towns of England, and at the time of his death was 5 feet 11 inches in height, weighed 739 lbs. (over 52½, stone), and measured 9 feet 4 inches round the body, and 3 feet 1 inch round the leg.

Lambert, John, parliamentary general the English civil war; born at Kirkby Malhamdale, Yorkshire, in 1619; died at Guernsey in 1692. He joined the parliamentary army under Fairfax, was colonel at Marston Moor, and meior-general in the war in Sectlary. and major-general in the war in Scotland. He took the lead in the council of officers who gave the protectorate to Cromwell, but he afterwards fell into disgrace, and was deprived by Cromwell of all his commissions, though a pension of £2000 was allowed him for past services. He headed the confederacy which deposed Richard Cromwell, and in 1660 set out for the early English dramatists; and a farce en- north to encounter Monk, but was deserted by his troops, seized, and commit-ted to the Tower. At the Restoration he was excepted from the act of indemnity, brought to trial, and condemned to death, but had his sentence commuted to banishment to Guernsey.

Lambert's Pine (Pinus Lambertiana), a N. American pine growing in California, and sometimes reaching the height of 300 feet. It yields when burned a sugary substance known as California manna. The leaves are in fives; the cones are 14 to 18 inches

geria, department of and 62 miles s. w. of the town of Constantine. It is the site of the ancient Lambæsa, and has important Roman remains.

Varied 1000 loops a manufacture of the manufacture department of the same name, 6 miles from the sea, on the river Lambayeque. drawn up by Archbishop Whitgift in Pop. 10,500. Area of department, 4614 square miles; pop. (1906) 93,070. trines of Calvinism. They were rejected by the queen and parliament, and again for his extraordinary size, was born in Lefcester in 1770; died in Lamego (la-ma'gö), a city of Portu-

(la-mā'gö), a city of Portu-al, in Beira, in a plain near Lamego

the Douro, 42 miles east of Oporto. It has an old Gothic cathedral, Pop. 9471. Lamellibranchiata (la-mel'i-brang-ki-ā'ta), a division of the higher mollusca, represented by the oysters, mussels, cockles, etc., which are distinguished by the possession of a bivalve shell, the absence of cal acrostics, successive verses, or in a distinct head, and the presence of four chap. iii, successive sets of three verses, a distinct head, and the presence of four lamellar or plate-like gills (whence the name).

Lamellirostres (la-mel-i-ros'trez), a family of swimming birds, distinguished by the flat form of the bill, which is invested by a soft skin, and provided at the edges with a set of transverse plates or 'lamellæ,' through which the mud, in which those birds grope for food, is sifted or strained. The family comprises the ducks, geese,

kwans, flamingoes, etc.

Lamennais (la-men-a), Hugues
Félicité Robert De, a French writer on religion and politics, born at St. Malo in 1782; died in 1854. He was ordained priest in 1816, and first attracted attention by his apology for Roman Catholicism, the Essai sur l'Indif-jérence en Matière de Religion. In 1824 he declined the offer of a cardinal's hat, and the following year published a work favoring ultramontane doctrines, La Re-ligion Considérée dans ses Rapports avec l'Ordre Civil et Politique. From this time he began to preach the separation of church and state, as he believed he could only deliver the former by freeing it from the yoke of the latter. On the outbreak of the July days of 1830 he became a convert to the dogma of the sovereignty of the people. In September of that year he began to publish his L'Avenir, which had for its motto, 'God and Freedom.' This journal, which advocated religious and political reforms, was in 1832 condemned by the pope and suppressed. In 1834 he finally revolted from Rome in his Paroles d'un Croyant ('Words of a Believer'). This book, which produced at almost unexampled sensation, passed in a few years through more than 100 editions, was translated into almost all living lan-guages, and reprinted in almost all for-eign countries. It was condemned by the pope, and Lamennais answered by the Affaires de Rome. His subsequent works were all extremely democratic, and he gradually became both atheist and socialist. At the revolution of 1848 he became a member of the national assembly. but after the coup d'état he lived in strict retirement.

Lamentations (la-men-ta'shups), the name given in the authorized version of the Scriptures to a

It pathetic poem made up of five distinct 71. elegies. They appear in the Hebrew canon with no name attached, but ancient tradition, internal evidence, and a prefatory verse which appears in the Septuagint point to the authorship of Jeremiah. The first four of the dirges are alphabetibeginning alphabetically. Chap. v is not in acrostic form. According to Josephus, Jerome, and also some modern critics, these poems were written on the death of King Josiah (see II Chron., xxxv, 25), but the contents of the book itself plainly show that a national calamity—the destruction of Jerusalem and the overthrow of the Judean state by the Chaldeans-is referred to.

Lamiaceæ (la-mi-ā'se-ē), a synonym of Labiatæ. See Labiatæ. (lam-i-nā'ri-a), a genus of dark-spored sea-weeds, Laminaria having no definite leaves, but a plain ribless expansion, which is either simple or cloven. L. digitāta is the well-known tangle on the shores of Great Britain.

Lamination (lam-i-nā'shun), the ar rangement of rocks in thin layers or lamine. This arrangement prevails amongst all the varieties of gneiss, mica, schist, chlorite schist, hornblende schist, etc.

Lammas (lam'mes), one of the four quarterly term days in Scotland, occurring on August 1. The name is from the A.-Sax. hlaf-masse, that is, loaf-mass, bread-feast; so called because on this day offerings were formerly made of the first-fruits of harvest.

(lam'er-gī-er; man, 'lamb Lämmergeier



Lämmergeier (Gypaëtos barbātus).

ture'), the bearded vulture, a bird of prey of the genus Gypaëtos (G. barbātus), family Vulturidæ, forming a link between the vultures and the eagles. It

inhabits the Swiss and German Alps, as well as the higher mountains of Asia and Africa, and is the largest European bird of prey, measuring upwards of 4 feet from beak to tail, and 9 or 10 in the expanse of its wings. Besides eating carrion, it preys on living chamois, lambs, kids, hares, and such like animals, but when hungry it does not disdain rats, mice and other small quadrupeds.

Lammermuir Hills, a range or Scottish hills stretching in a generally eastward direction from s. E. Midlothian to the German

(la'mont), DANIEL Lamont

Lamont (as mont), DANIEL SCOTT, cabinet official, born at Cortlandville, New York, in 1851; died in 1904. He engaged in journalism, was private secretary to President Cleveland

married the Comte de la Motte, a penniless adventurer, and settled in Paris about 1780. In the years 1783-84 the Princecardinal de Rohan, who had fallen into disgrace, was persuaded by her that the disgrace, was persuaded by her that the Queen Marie Antoinette regarded him with much favor, which would be increased if he would assist her in purchaster which was a problem of the problem. louis XV had ordered for Madame du Barry, but which was still in the jeweler's hands. The cardinal fell into the snare, he agreed to stand surety for the payment, and the necklace was delivered to him. There is here yet somewhat of mystery. Cagliostro, and probably the queen also, was in the plot; the necklace was delivered to him. disappeared, was broken up and sold, probably by the La Mottes. The jeweler, after waiting a long time for his money, applied direct to the court, and the plot was discovered. Cagliostro, the cardinal. and others were thrown into the Bastille, but at the trial only the La Mottes were convicted. They escaned to England, where the contesse wrote Mémoires implicating the guess is the found. cating the queen in the fraud. She was killed by falling out of a window. Her husband lived a miserable wandering life till his death in 1831.

La Motte Fouqué (fő-kā).

Lamp, a contrivance for producing artificial light, whether by means of an inflammable liquid, or of gas, or electricity; but usually the term applied to a vessel for containing oil or other liquid inflammable substance, to be burned by means of a wick. Baked earth was probably the substance of which the earliest lamps were composed, but subsequently we find them of various metalsof bronze more particularly. Modern lamps vary in form and principle widely, part of the boundary between Berwick variety of materials. The requisite propand Haddington shires. Highest summit Lammer Law, 1733 feet.

Lamnidæ (lam'ni-de), the porbeagles, matter and with oxygen. 2. It must convert the former into a gassawa chatter. convert the former into a gaseous state. 3. It must bring the gas so produced in contact with oxygen at such a temperature that the carbon will combine with the oxygen in the fullest degree to with the oxygen in the fullest degree to produce the greatest quantity of flame without any smoke. Until 1784 all the Northern Pacific R. R. Co.

La Motte (la-mot), JEANNE DE NIE ON TENER DE, a Aimé Argand of Geneva, and called. after family of Valois by an illegitimate child of Henry II. and the series of the lamb in use were far from meeting all these requirements. In that year an improved scientific lamp was constructed by Aimé Argand of Geneva, and called. after family of Valois by an illegitimate child of Henry II. and the series of the lamb with the oxygen in the fullest degree to produce the greatest quantity of flame without any smoke. Until 1784 all the lamps in use were far from meeting all these requirements. In that year an improved scientific lamp was constructed by Aimé Argand of Geneva, and called. after the control of the lamps in use were far from meeting all these requirements. of Henry II, and notorious for the part a circular wick, the flame of which is she played in the 'diamond necklace' nourished by an internal as well as an fraud; born in 1756; died in 1791. She external current of air, and by placing a external current of air, and by placing a glass chimney above the flame so as to increase the draught. A special arrangement ensures a uniform supply of oil. In the improved lamps that have succeeded that of Argand, the Argand burner has generally been retained, and the alterations have chiefly been made in the mode of keeping up a uniform supply of oil. The moderator lamp, invented by M. Franchot in 1837, long held a favorite place. In it the oil is contained in a reservoir at the bottom of the lamp. The reservoir is cylindrical in shape, and in the interior there is a piston which is pushed down on the oil by a spiral spring, causing the oil to ascend in the tube in which the wick is inserted. Since the invention of this lamp various modifications have been made in it by different manufacturers. For petroleum, paraffin and other mineral oils, which have of late years come into very extensive use for illuminating purposes, a very simple kind of lamp is used. The oil-vessel is placed below the burner, which usually consists of a simple slit, down which a broad wick passes into the oil. The wick may be raised or depressed by a screw, and when the lamp is burning is kept a short distance below the opening of the slit. The

of capillarity. A chimney is fitted on to the lamp, and creates so powerful a draft that the flame is kept perfectly steady, and the gas proceeding from the heating of the oil is completely consumed. There is an endless variety of lamps of this kind, the special features aimed at being increase of light by improved burners and immunity from explosion. Safety-lamps are used for mines (see Safety-lamp). Hydrocarbon lamps are used for magic lanterns, etc. The magnesium lamp, chiefly used by photographers, is one constructed for the combustion of magne-sium wire. A lantern is a form of lamp, generally a case enclosing a light and pro-tecting it from wind and rain, sometimes portable and sometimes fixed.

Lampblack, a fine soot formed by the condensation of the smoke of burning oil, pitch, or resinous substances in a chimney terminating in a cone of cloth. It is used in the manufacture of pigments, blacking and printing inks. See Carbon.

Lampedusa (lám'pā-dō'sā), a small island of the Mediterranean, about midway between Sicily and the coast of Tunis. It is about 13 miles in circumferance:

Lamprey (lam'pri), the popular name of several species of the order Marsipobranchii; eel-like, scaleless fishes which inhabit both fresh and



Sea Lamprey (Petromyzon marinus).

The lampreys have seven salt water. spiracles or apertures on each side of the neck, and a fistula or aperture on the top of the head; they have no pectoral or ventral fins. The mouth is in the form of a sucker, lined with strong teeth and cutting plates, and the river lampreys are often seen clinging to stones by it. The marine or sea lamprey (P. marinus) is sometimes found so large as to weigh 4 or 5 lbs. It is of a dusky brown, marbled with yellowish patches, is common round the Atlantic coast of Europe, and is also found in the Mediterranean. It ascends bogs of Lancashire form one of its rivers in the spring for the purpose of most remarkable physical features. The spawning, and was formerly much valued most extensive of these is Chat Moss as an article of food. The river lamprey (which see). The most important minor lempern (P. fluviatilis) is a smaller eral product of Lancashire is coal, which

oil is sucked up by the wick by the action species, and abounds in the fresh-water lakes and rivers of northern countries. It is colored black on its upper and of a silvery bue on its under surface. Lampreys attach themselves to other fishes

and suck their blood; they also eat soft animal matter of any kind.

Lamp-shells, the familiar designation of certain Brachiopodous Molluscs, especially those of the groups. Teachertile, the bireless to the state of the state genus Terebratula, the bivalve shells of which when closed bear a close re-semblance to the shape of the old Roman or classical lamp.

Lampyris (lam'pi-ris), the name of a genus to which the glowworm belongs.

(lii-mö'), an island and town Lamu on the coast of East Africa, lat. 2° 20' s., the administration of which was

granted in 1889 to the Imperial British E. Africa Co. Pop. 15,000.

Lanark (lan'ark), LANARKSHIRE, or CLYDESDALE, an inland southwestern county of Scotland, and the most populous in the country. Area, 879 square miles. The southern part is mountainous, the Lowther Hills reaching an elevation of 2400 feet. The mineral wealth consists of rich beds of coal, ironin circumference; produces wine and stone, limestone and sandstone, which are fruits; has a small harbor, and 1074 in-habitants. It belongs to Italy. county from S. S. E. to N. N. W., and for the greater part of its course nearly through its center. The county contains the large city of Glasgow. Pop. 1,339,327. —LANARK, the county town, situated on elevated ground near the right bank of the Clyde, 31 miles southeast of Glasgow. It is a very ancient place, and was erected into a royal burgh by Alexander I. Not far from Lanark are the Falls of the Clyde, in a romantic and richly wooded part of the valley, which render the town a favorite resort for tourists. Pop. 6440.

(lan'kā-sher), or the county palatine of Lan-Lancashire caster, a maritime county in the N. w. of England, bounded by Westmoreland, Cumberland, Yorkshire, Cheshire and the Cumberland, Yorkshire, Cheshire and the Irish Sea, has an area of 1880 square miles. The coast is of great extent, and is deeply indented by bays and arms of the sea, the principal of which are Morecambe Bay and the estuary of the Ribble. In the north the surface is rugged and mountainous; elsewhere it is generally level. The peat-mosses or Lancashire form one of its

has increased with extraordinary rapidity duties are nominal. of late years. Excellent freestone is Lancaster, House of, the name quarried near Lancaster. Limestone occurs abundantly. Lancashire is the great to designate a line of kings. Edmund, seat of the cotton manufacture, not only second son of Henry III, was created of England, but also of the world, Man-Earl of Lancaster and Leicester. His son and of England. Lancaster is the county to the dignity of a duke, and dying without town, but there are a great many others far larger, such as Liverpool, Manchester and Salford, Oldham, Bolton, Bolton, Preston, etc. Pop. 4,768,474. descended the kings III. From him Lancaster (lan'kas-ter), a municipal to treason. His grandson was advanced to the dignity of a duke, and dying without male issue, the inheritance fell to his daughter Blanche, who became the others far larger, such as Liverpool, Manchester and Salford, Oldham, Bolton, Bolto Lancaster (lan'kas-ter), a municipal borough and riverport, England, the county town of Lancaster, corn the left bank of the Lune, 45 miles north by east of Liverpool. It occupies the acclivities of a hill, on the summit of which stands the castle, now used as the county jail, built in the reign London in 1778; died at New York of Edward III, but with a keep supposed to be Saxon, and with a tower on the 1798 he opened a school for children in 1798.

lege and a theological seminary (Reformed emigrated to America in 1818, where he Church). It was the State capital 1799- at first received some support, but ulti1812. Pop. (1910) 47,227; (1920) mately fell into poverty. 53,150.

DUCHY or, a duchy an-Lancaster, Its revenues go directly into the privy The projectiles are also elliptical, so that purse of the sovereign, and are not reckoned among the hereditary revenues surlows the twist of the bore, acquiring a
rendered for the Civil List. The revenue rotary motion.

occurs abundantly in the south and south- is over £30,000. The chancellorship is a west. Another valuable product is the political appointment, and the chancellor hematite iron ore, the output of which is generally a member of the cabinet. The

chester being the principal center. Woolen Thomas added Derby and Lincoln to his goods are also largely produced, as are titles, became leader of the baronial opalso machinery of all descriptions, and a position to Edward II, and was beheaded vast variety of other articles. Liverpool for treason. His grandson was advanced is the great shipping port of the county to the dignity of a duke, and dying with and of England. Lancaster is the coun-out male issue, the inheritance fell to the town but there are great many his doubter Blanche with here were the county of the same than the county had been the same than the county but there are great many his doubter Blanche. wife of John of Gaunt, who was the fourth son of Edward III. From him descended the kings, Henry IV, V and VI, of the House of Lancaster.

Lancaster, John of Gaunt.

Lorent the House of Lancaster.

of Edward 11, but with a keep supposed through a carriage accident in 1838. In to be Saxon, and with a tower on the 1798 he opened a school for children in southeast attributed to the Emperor Hadrian. The industries comprise furniture, cordage, sail-cloth and cotton goods, river the system, which had been preture, cordage, sail-cloth and cotton goods, viously made known by Dr. Bell. (See floor-cloth, oil, varnish works, railway Bell, Andrew.) The principal features rolling stock, etc. Pop. (1911) 41,414. of the system were the teaching of the Lancaster, a city of Erie Co., New younger pupils by the more advanced students, called monitors, and an elaborate falo. It has iron and glass works, brick system of mechanical drill, by means of works, car shops, etc. Pop. 6059. works, car shops, etc. Pop. 6059.

Lancaster, a city, county seat of Fairnumbers at the same time. He soon River, 32 miles s. E. of Columbus. It has erect a schoolhouse, which in 1805 was ation foundries, paper and rubber mills, tended by 1000 children. The number of farm-implement factories, glass and glove his patrons and the amount of subscriptactories, etc. Pop. (1920) 14,706.

Lancaster, a city, county seat of Lancaster, caster Co., Pennsylvania, his system, which he now hoped to be able on Conestoga River, 68 miles w. of Philadelphia, in a section noted for its agriculture. delphia, in a section noted for its agricul- made extensive tours through Great tural products. It has an immense trade Britain and Ireland, and in 1811 had in tobacco, also has silk mills, watch fac- founded 95 schools, attended by 30,000 tories, and many other industries. It is children. He was reckless and improvithe home of Franklin and Marshall Col- dent in his abits; became bankrupt, and

Lancaster Gun, named from the inventor, a species crown in the reign of Edward IV, and an elliptical bore, of which the major which had separate courts of its own till axis moves round till it traverses one-the passing of the Judicature Act of 1873, fourth of the circumference of the bore.

Lancaster Sound, a passage from northwest of Baffin Bay west to Bar-row Strait. It was discovered by Baf-fin in 1616, is about 250 miles long, with a central breadth of about 65 miles. Lance (lans), a weapon consisting of a long shaft with a sharp point, much used before the invention of firemuch used before the invention of firearms, and still in use. It was common among the Greeks and Romans. The Macedonian phalanx was armed with it, and it was the chief weapon of the Roman infantry. The javelin, or pilum, was but secondary. The lance was the chief weapon in the middle ages, and was especially the arm of knighthood. The introduction of firearms gradually led to the disuse of the lance in the West of Europe, though it continued among the Turks, Albanians, Tartars, Cossacks, Turks, Albanians, Tartars, Cossacks, Poles and Russians, and other Slavonic tribes. Napoleon organized several regiments of Polish lancers for service in his army, and now most of the armies of Europe have regiments of Uhlans or lancers.

Lancelet (lans'let: Amphiosus lanceolatus), a singular fish, 2 or 3 inches long, with a slender, compressed, transparent, lance-shaped body, occurring in shoal water in the temperate and torrid parts of the earth. forms the sole member and representative of the order Pharyngobranchii or Leptocardii. No true or paired fins are represented, and in the other parts of its anatomy the low organization of the creature is readily appreciable. The vertebral axis consists of a slender rod (notochord) pointed at each end, and composed of the softest of cartilage. Lancet Window There is no skull. The mouth is of oval shape, situated below and slightly behind no true jaws. It is surrounded by a ring of gristly matter, which supports small pieces of the same material; and these latter give origin to a number of delicate ciliated filaments or cirri. The mouth leads backwards into a very large dilated chamber representing the expanded pharynx, which performs the part of a breathing organ; and the walls or sides of the pharynx are perforated by transverse clefts or fissures, whilst the inner lining of the chamber is plentifully provided with vibratile filaments or cilia. Breathing takes place by the admission of water through the mouth into the dilated water through the mouth mit the diagram, the effete water passing through the slits or clefts in the sides of the sac into the cavity of the abdomen, whence it escapes outwardly by an opening known as the 'abdominal pore.' The cir-

a passage lead-culation of the blood, which is destitute ing from the of color, is performed by contractile dilatations situated upon the main blood vessels, the heart being a simple expansion of the principal vein. The digestive system consists of a stomach and straight intestine. This animal has been pressed into the service of recent theories regarding the origin of living beings, as tending to illustrate how the higher and Vertebrate groups of animals may have become developed from lower and Invertebrate forms. Six species in all are known, one from Australia being regarded by some as a distinct genus.

Lancelot of the Lake (lan's e-lot), the the name of one of the paladins celebrated in the traditions and fables relating to King Arthur and the Round Table. According to tradition, Lancelot was the son of Ban, king of Brucic, was educated by the fairy Viviana (the Lady of the Lake), and be-came one of the chief knights of Arthur's court. His love for Genevra, or Guin-evere, the beautiful wife of Arthur, and his disregard of Morgana, a fairy, and the sister of Arthur, placed the knight in the most dangerous and marvelous sit-uations, from which, however, he always extricated himself by his valor and the assistance of the Lady of the Lake. Le Roman de Lancelot du Lac, a famous mediæval romance, compiled by Walter Mapes (1150-96), has appeared in many forms. Lancelot is one of the chief figures in Tanyron's Laurelot is one of the chief figures in Tanyron's Laurelot. ures in Tennyson's Idylls. Lancerote. See Lanzarote.

Lancet Window (lan'set), a high and narrow window with an acutely angled arched top. Lancet windows are a marked characteristic of the early English style of Gothic architecture, and are in a great degree peculiar to England and Scotland. They are often double or triple, and sometimes five are placed together, as in the window called the 'Five Sisters' at York. See Early English Architecture.

Lancewood (lans'wod), the popular name of the wood of several trees of the order Anonaceæ, as of the Oxandra virgata, a native of Jamaica, Duguetia quitarensis, a native of Cuba and Guiana, which possesses in a high degree the qualities of toughness and elaswell adapted for the shafts of light carriages, and all those uses where light, strong, but elastic timber is required. Lanciano (lan-cha'no), a town of Southern Italy, in the

the see of an archbishop. Pop. 18,316. Land, forms an important kind of nat-ural wealth susceptible of aphalf being owned by 312,500 individuals. Barely one in a hundred of the popula-tion owns more than an acre of soil. This state of analis does not exist to so great ne was able to reach Fernando Po, he an extent in any other country. In died soon after. He published Records France there are about 3,000,000 prop- of Captain Clapperton's Last Expedition erties under 25 acres, only 150,000 above in Africa, with R. Lander's Journal, 100 acres; 1,750,000 of the population cultivate their own land. Small holdings cultivated by the owners are common in Germany, Belgium. Switzerland. Landerneau (lander-nō), a scaport Lendark Norman Switzerland. Denmark, Norway, Sweden, Italy and other parts of Europe. The same is the case in the United States and the British Pop. 5779. colonies, the great estates being of minor importance as compared with the small farms.

TENURE OF. The various spe-Land, cies of tenures and customs relating to property in land are noticed under the particular heads. See Allodium, h'eudal System, h'ee, h'ee-farm, Copyhold, Entail, etc.

(lan'dou), a town of Rhen-Landau (lân'dou), a town of Rhen-ish Bavaria, on the river Queich, 47 miles N. N. E. of Strasburg. It was formerly strongly fortified, and has heen the scene of many stirring events. Pop. (1905) 17,165.

Land-crabs, mode of life, their habits leading them to live on land, and away from the sea, of Biscay and by the departments of even for considerable periods of time. Gironde, Lot-et-Garonne, Gers and The true land-crabs (genus Gecarcinus) Basses-Pyrénées. It has an area of 3599 occur in Asia, particularly in the Eastern Archipelago: in America, and specially in dissements, Mont-de-Marsan (the capitally in Austra-tall). Day and St Saver Forests are swamps and marshes, appears to feed miles. The vine is upon both vegetable and animal diet. siderable extent in Among other species of land-crabs may be Pop. (1906) 293,397. enumerated the sand-crabs (Ocupoda), the beckoning or calling crabs (Gelasimi) and the Thelpusæ, which inhabit fresh- trict of Liegnitz, in a beautiful valley at

province of Chieti (Abruzzo-Citeriore), water streams, but appear to be equally at home when on land.

Lander (lan'der), RICHARD, an African traveler, born at Trure, trail weatth susceptible of appropriation, and forming at the same time the principal deposit of the accumulated capital derived from the labor of preceding generations. In Britain, from various out with his brother John (1807-39) on of transfer, the land is in the hands of pices of the British government. He was comparatively a few owners, and the able to lay down with approximate corproperties are generally large. One-half rectness the lower course of the Niger, of the land of the United Kingdom is in and proved that it entered the sea by sevthe hands of 7400 individuals; the other eral mcuths at the Bight of Benin. In and proved that it entered the sea by several mouths at the Bight of Benin. In the beginning of 1834, while on a trading expedition in the delta of the Niger, he was wounded by the natives, and though state of affairs does not exist to so great he was able to reach Fernando Po, he

Landerneau (lan-der-no), a scaport of France, department Finistère, 13 miles northeast of Brest.

Landes (länd), a term specifically applied in France to extensive level and largely barren tracts stretching Landes from the mouth of the Garonne along the Bay of Biscay and from 60 to 90 miles inland, bordered with sand hills next the sea. They bear chiefly heath and broom, but on the seaward side are largely planted with the maritime pine, and considerable stretches have been reclaimed. The inland plains are chiefly occupied as sheep-runs. The inhabitants lead a sort of nomadic life. The landes are dry in summer and marshy in winter, and stilts are much used by the inhabitants in crabs so called from traversing them.

the West Indian Islands; and in Austratal), Dax and St. Sever. Forests are ex-lia also. The best-known species is G. tensive, and are gradually taking the place ruricola, found in the higher parts of of the landes (see above article). The Jamaica, which often proves very destructerial lands consist chiefly of the alluvial tive to the sugar plantations. The crabs valleys to the south of the Midouze and of the genus Cardisoma, represented by the Adour. The dunes, a sandy tract covthe common species C. carnifer, and in-habiting the West Indian mangrove of the department to a depth of about ? of the department to a depth of about 3 miles. The vine is cultivated to a considerable extent in the fertile districts.

Landeshut (lan'des-höt), a town of Prussia, in Silesia, dis-

foot of the Riesengebirge. (1905) 9000. (land'grav: German, Landgraf), in Germany, Landgrave originally, about the tweifth century, the title of district or provincial governors deputed by the emperor, and given them to distinguish them from the inferior

counts under their jurisdiction. Later, it was the title of three princes of the empire, whose territories—Thuringia, Lower and Higher Alsace—were called

landgraviates.

Land League, an organization pro-nell, the leader of the Irish national movement, in 1879, the ostensible object of which was to purchase the land of Ireland for the people of Ireland. Funds were largely subscribed, especially in America, but the stringent rules against landlords and tenants holding aloof from landlords and tenants holding aloof from it, and the alleged complicity of its members with many terrible outrages, caused it to be suppressed in 1881.

The land-lord in re-Landlord and Tenant. lation to a tenant is the person from whom lands or tenements are taken on lease (see Lease), or by some other con-tract or agreement. The tenant is the person who holds lands or tenements of another by any kind of contract or agreement, usually for a periodical rent. The laws governing tenancy vary in different countries. In the United States the statutes generally allow leases for only one year, or less, to be created by oral agreement, all others being required to be put in writing; and in some of the States they are also required to be under seal. Tenancies at will may still, as at common law, be created by oral agreement, followed by the entry or occupancy of the tenant. In cases where a tenant holds over the landlord may treat him as a trespasser, and eject him accordingly. If he forbears to do this the trespass is condoned and the wrongdoer acquires a certain legal status. In this case the latter becomes a tenant at will. If the landlord accepts rent and recognizes his right to enjoy possession for certain periods of time, the tenant must be treated as a tenant from year to year, or from month to month as the case may be. In such to month as the case may be. In such acases the terms of the new tenancy are usually determined by the terms of the expired lease. It is customary, however, to stipulate in leases that notice must be given by either party of his intention to terminate the lease at its expiration. As the statutes of the several States greatly vary, no special details bearing on this subject can be given.

Pop. Landon (lan'dun), LETITIA ELIZA-BETH, an English poetess, better known by her initial signature of L. E. L., was born in 1802; died at Cape Coast Castle, in 1839. She wrote much for the then fashionable annuals, and the romantic gloom and melancholy of her verses gave them a charm for many peo-ple. In 1838 she was married to a Mr. George MacLean, and sailed with him to Cape Coast Castle in Western Africa, where he was governor. She died there soon after her arrival, from an accidental overdose of prussic acid, which she had been in the habit of using medicinally. Her chief works are: The Improvisatrice; The Troubadour; The Golden Violet, etc.;

The Troubadour; The Golden Violet, etc.;
The Venetian Bracelet, etc.; The Lont
Pleiad; Ethel Churchill, a novel; and
Romance and Reality, a novel.

Landor (lan'dur), WALTER SAVAGE,
an English poet and prose
writer, born at Ipsley Court, Warwickshire, in 1775; died in 1864. He was
educated at Rugby and Oxford, from both
of which he was expelled for unruliness of which he was expelled for unruliness. He published a small volume of poems in 1795, and a lengthy poem, Gebir, in 1798. This latter he subsequently translated into Latin verse, being one of the most accomplished Latinists of his time. He succeeded to a large property on the death of his father, but he soon sold it off, determining to live abroad. In 1808 he raised a body of men at his own expense for the defense of Spain against France. In 1811 he married a Miss Thuillier of Bath, and settled at Florence, where many of his works were written. Having sepa-rated from his wife, he returned to Eng-land in 1835. In 1857 the publication of some ugly slanders against a lady of Bath led to a prosecution for libel, and Landor was brought in for £1000 damages. He left England, and once more found a rest-ing place in Florence, where he died. His fame chiefly rests on his Imaginary Conversations, between celebrated persons of ancient and modern times, which is a model of a pure, vigorous, finished English style. Among his other works are Count Julian, a tragedy; Hellenics, or Greek poems; Pericles and Aspasia, imaginary letters; Pentameron and Penta-logue; and the dramas Andrea of Hun-gary and Giovanna of Naples. His biography has been written by John Forster. Land-rail, or CORN-CRAKE. See Corn-crake.

Landrecies (lan-dr-se), or LANDRE-CY, a small French town, on the Sambre, dep. of Nord. It was formerly fortified, and played an important part in the French wars. Pop. about 3000.

Landsberg (lants'berg), a town of Prussia, province of Brandenburg, and 37 miles northeast of Frankfurt, on the Wartha. It has manufactures of engines and boilers, carriages, Pop. etc. woolens, tobac (1905) 36,934. tobacco, spirits,

Landscape (land'skap), a term applied to a portion of land or territory which the eye can comprehend in a single view, and to a painting

of such. See Painting.

Landscape Gardening, is the art laying out grounds, arranging trees, shrubbery, etc., so as to bring into harmonious combination all the varied characteristics and surroundings. It disposes flowering plants, shrubs and trees over varying levels in such a manner as to produce the most pleasing effects, it shuts out undesirable views by means of judicious planting, and introduces rock-work, water and other artistic embellishments where the local peculiarities of the ground permit.

Landseer (land'sēr), Sir Edwin, aniin 1802; died in 1873. He began to draw animals when a mere child; at thirteen he exhibited at the Academy, and the year following became a student. Thenceforward he exhibited regularly at the Academy and the British Institution. In 1826 he was elected A.R.A.; in 1830, R.A.; in 1850 he was knighted, and in 1865 he declined the presidency of the Academy. He takes the very highest rank among animal painters; and though he has been blamed for introducing too human a sentiment and expression into some of his animals, the humor and pathos of animal nature has had no finer exponent. Among his best-known works are: The Return from Deerstalking, Bolton Abbey in the Olden Time; The Return from Hawking; The Shepherd's Chief Mourner; A Distinguished Member of the Humane Society; There's Life in the Old Dog Yet; Laying Down the Law; The Stag at Bay; Monarch of the Glen; the celebrated work of sculpture, the lions at the base of Nelson's monument, Trafalgar Square, Jondon, etc.—CHARLES LANDSEER, brother of the above (born in 1799: died in 1879), had a good reputation as a painter of subjects from English history and poetry. He was chosen Academician in 1845, and keeper of the Academy in 1851.—THOMAS LANDSEER, also a brother (born in 1795; died in 1880), was celebrated as an engraver, and made many reproductions of his brothers' works.—
JOHN LANDSEER, engraver, father of the above (born in 1769; died in 1852). He 4s. per pound. In the latter year it prowas elected associate engraver of the duced about £2,000,000, when it was re-

Academy, 1807; lectured on and published several treatises on art.

Land's End, a headland in Corn-western extremity of England (lat. 50° 6' N., lon. 5° 45' w.). There is a light-house on the rocks, called Longships,

Landshut of the west.

Landshut old town of Bavaria, on the Isar, 40 miles N. E. of Munich. It has many interesting buildings, among which are St. Martin's Church, a fine Gothic structure built in 1407-77, with a steeple 462 feet high; the royal palace, the town house, and the old castle of Trausnitz. Landshut has manufactures of leather, starch, machinery, carriages, tobacco, paper, etc. It formerly had a university, transferred in 1800 from Ingolstadt, but removed to Munich in 1826. Pop. (1910) 25,137.

Landshut, a town of Prussia.

Landskrona (lans-krö'na), a sea. port of Sweden, län län: Malmo, on a tongue of land projecting into the Sound, 15 miles N. N. E. of Copenhagen. Its harbor is the best on the Swedish coast of the Sound. Pop. 14,399. Landslip (land'slip), the slipping or sliding of a considerable tract of land or earth from a higher to a lower level. Landslips are due to a variety of causes, chiefly the decay of supporting strata or excessive saturation of the soil by rain. Among the more disastrous occurrences of this kind are the slip of the Rossberg Mountain behind the Rigi in Switzerland in 1806, burying villages and hamlets with over 800 inhabitants; and that at Naini Tal, a sanitary hill-station in the Himalayas, in 1880, when 230 lives were lost.

See Public Lands. Lands, Public.

Landsturm (lant'sturm), a local militia of Germany, which is never called from its own district but in case of actual invasion. It comprises that portion of the reserve too old for the Landwehr (which see). Other European nations have a force of the same nature.

Land Surveying. See Surveying.

Land Tax, a tax levied on land. What is known as the land tax in Britain was imposed in the reign of William III as a substitute for escuage.

placed by a perpetual rent charge on in which he endeavors with unsparing pen land, with power of redemption, and a to paint the man as he really was. tax annually imposed on personal property, the latter tax abolished in 1833. In Lang, born at Selkirk, Scotland, in the land tax provision of the 1910 budget, the rates on landed property were considerably increased.

Landwehr (lant'var), that portion of the military force of Germany and other European nations which in time of peace follow their ordinary occupations, excepting when called out for occasional training. The landwehr in some respects resembles a militia, with this important difference, that all the soldiers of the landwehr have served in the regular army. This system has received its fullest development in Gevmany, in which country it adds enormously, and at comparatively little cost,

to the military power of the state.

Lane (lan), Franklin Knight, Secretary of the Interior in President Wilson's cabinet, was born on Prince Lange (lang'é), Johann Peter, a. German theologian, born in Edward Island, Canada, in 1864. He studied theology was taken to California in childhood and was educated at the University of California in California fornia. He engaged in newspaper work and became editor of the Tacoma Daily News. He studied law and was admitted to the bar in 1889. President Roosevelt to the bar in 1889. President Rooseven appointed him a member of the Interstate Commerce Commission in 1905, and he served till 1913, when President Wilson in 1828; died in 1875, is author of a invited him to enter the cabinet as Secretive of the Interior. It was mainly sophical works. through his efforts that the Alaska Railway Bill, providing for a government-built railroad, was passed.

(lan'frank), Archbishop of Lanfranc Canterbury, son of a wealthy citizen of Pavia; born in 1005; died in 1089. He became a monk of the Beneditcine abbey of Bec in 1042 and prior in 1046. In 1062 William of Norprior in 1046. In 1062 William of Normandy made him abbot of Caen, and after the Conquest he became archbishop of Canterbury (1070). He did much to purify and reform the church, at the same time preserving its insular independence. He enjoyed the confidence of William I and promoted the peaceable succession of William Rufus, under whom he exercised the chief authority till his death. His writings were printed in 1647, and again at Oxford in 1844.

Lanfrey (lan-frā), Pierre, a French historian, born in 1828; died the outbreak of the Franco-German war, when he joined the garde mobile. He was

Sorn at Scikirk, Scotland, in 1844; educated at Edinburgh Academy, St. Andrew's University and Balliol College, Oxford, where he took a distinguished position. A most versatile writer, he has published several volumes of ballades and other light verse; Custom and Myth, a valuable contribution to the science of comparative mythology; the article Mythology in the Encyclopædia Britannica; translations of Homer (with other collaborators) and of Theocritus, History of Scotland, 3 vols., his most valuable work, and numerous other works on varied topics. With A. E. W. Mason he wrote the humorous novel, Parson Kelly. He was a frequent contributor to the daily press and to periodical literature. Died in 1912.

at Bonn; was appointed professor of theology at Zürich in 1841, and at Bonn in 1854. His chief works, Life of Jesus, Christian Dogmatics, Apostolio Age, etc., have been translated into English, including the work well known under the title of Lange's Commentary.—FRIEDRICH

Langeland (lang'e-lan), ar island of Denmark between Laa. land and Fünen, about 30 miles in length and from 3 to 5 in breadth; area, 103 square miles; pop. 18,901. This island is fertile in every part. Rudkjöping is the chief town.

Langensalza (lang'en-zal-tsa), a town of Prussia, in the province of Saxony, 20 miles north-west of Erfurt, on the Salza. It is a busy place, with cloth and other factories. Three battles have been fought in the vicinity, in 1761, 1813 and 1866, the Hanoverians being defeated by the Prussians in the last. Pop. (1905) 12,545. Langholm (lang'om), a market town of Scotland, Dumfriesshire, on the Esk, 30 miles east by north of Dumfries. It consists of two parts—Old Langholm on the E. bank of the Esk and New Langholm on the w. bank-and in 1877. His life was entirely literary till is celebrated for its sheep fairs and its

woolen manufactures. Pop. 3142.

Langhorne (lang'hōrn). John. an
English poet and miscelelected a member of the assembly in laneous writer, born in 1735; died in 1873, and made life senator in 1875. His 1779. He published numerous poems, but chief work is his History of Napoleon 1, his chief work, done in conjunction with his brother William (1721-72), is a translation of *Plutarch's Lives*, which still holds a good position. He was prebend of Wells Cathedral at his death.

(lang'land), or Long-LAND, WILLIAM, the Langlande supposed author of the English poem, The Vision of William concerning Piers Plowman, was born about 1332, perhaps at Cleobury-Mortimer, Shropshire; and is traditionally reported to have been a sec-ular priest, educated at Oxford. From internal evidence it is gathered that the poem, in its earliest form, was composed about 1362. Its rhythmical structure deabout 1502. Its raythmical structure de-pends upon alliteration, which forms a substitute for rhyme. The poem is alle-gorical in form and satirical in spirit; the trials and troubles of life generally, but more particularly the corruptions of the church and the worldliness of the ecclesiastical order, are its theme. The Crede of Piers Plowman is an imitation of Langlande's work which appeared about the end of the fourteenth century. It is written by a follower of Wickliffe. There are three chief texts of Piers Plow-There are three chief texts of Piers Piers Piers, man, to which are assigned the respective dates of 1362, 1377 and 1393. These have all been p. blished by the Early English Text Society (1867, 1869, and 1873) under the editorship of Mr. Skeat. Piers Piers Piers of old English life, is of very great importance for the study of English in its earlier forms. Langlande is said also to be author of a new written in also to be author of a poem written in 1399, which Skeat has titled Richard the Redeles.

Langley (lang'li), SAMUEL PIEBat Boston, Massachusetts, in 1834; died in 1906. He was graduated at the Boston High School, was a professor in the U.S. Naval Academy and in 1887 became Secretary of the Smithsonian Institution. He designed a system of railway time service which came into common use, discovered an extension of the invisible solar spectrum, and was one of the first to experiment in he flight of heavier-than-air machines. He wrote The New Astronomy, Researches on Solar Heat, etc. Langobardi. See Lombards.

Langres (lan-gr), a town in France, department of Haute-Marne, near the left bank of the Marne, 22 miles s. s. E. of Chaumont. It occupies a steep bill commanding the entrance from the lecturer on English literature at Johns basin of the Saone into that of the Seine, Hopkins University. His poems, espeand is a fortress of the first class. It has cially his Centennial Ode, gave him a cathedral, chiefly Romanesque but partly Gothic, dating from the twelfth century. Pop. (1906) 6663.

He Contegerate army and atter 1849 was him Contegerate army and at

Langtoft (lang'toft), PIERRE DE, an English historian, canon of Bridlington, Yorkshire, in the reigns of Edward I and Edward II, author of a Norman-French chronicle of England to the end of the reign of Edward I. It has been published in the Rolls Series, and were translated into English shows by and was translated into English rhyme by Robert de Brunne.

Langton (lang'tun), STEPHEN, an English cardinal, and Archbishop of Canterbury in the reign of John, born about 1150. In 1206 Innocent III created Langton a cardinal and nomi-nated him to the see of Canterbury, con-secrating him archbishop next year. King John refused to accept him; it was only after England had been placed under an interdict and John excommunicated and threatened with deposition that he yielded. Langton was acknowledged in July, 1213, and in August he joined the insurgent barons, and acted with them in compelling John to sign Magna Charta. He crowned Henry III, and in 1223 he demanded of him the full execution of the charter. charter. He was the author of a number of theological treatises. He died in 1228.

Language. See Philology.

Languedoc (lan-ge-dok), one of the old provinces of Southern France, now forming the departments of Aude, Tarn, Hérault, Lozère, Ardèche of Aude, Tarn, Heraut, Lozere, Areche and Gard, as well as the arrondissements of Toulouse and Villefranche, in the de-partments of Haute-Garonne; and the ar-rondissements of Puy and Yssingeaux, in the department Haute-Loire. As to

the name see next article.

Langue d'oc (-dok), the name given to the independent Romance dialect spoken in Provence in the middle ages, from its word for yes being oc, a form of the Latin hoc. It was thus distinguished from the language spoken by the natives of the north of France, which was called Langue d'oui or Langue d'oil, their affirmative being oui or oil. The langue d'oc was the language of the Troubadours, and is known also as Provencal.

Lanier (lan'i-èr), Sidney, poet, born at Macon, Georgia, in 1842; died in 1881. He studied and practiced law, but abandoned it to devote himself to literature. He served as a private in the Confederate army and after 1879 was Verse and The English Novel and Its Lansford Development.

Lannes was born in 1769; mortally wounded at N. Y. He became a justice of the New Aspern in 1809. Originally a dyer, he York Supreme Court; chief justice in enlisted into the army in 1792, and served 1798; chancellor, succeeding Robert R. in Spain and Italy, where he attained the Livingston (q. v.), 1801-14. rank of brigadier-general. He accompanied Napoleon to Egypt in 1798, gained the victory at Montebello in Italy in 1800, cer, born at Watertown, N. Y., graduate and bore a chief part at Marengo. Auster-of Amherst College, 1886. He was counsel for the U. S. in various international questions such as the Bering Sea Commissions, Saragossa.

Lanolin, or wool fat, chieffy consists Alaskan Boundary Tribunal and the Britcholesterin and fatty ish and American Claims Arbitration. He scids; formula Callacoll. Lanolin is prewas secretary of state in President Wilbard from 'suint,' or the grease of son's cabinet 1915-20, succeeding William sheep's wool, by separating the account of the purifying the saponification, and then purifying the saponification, and then purifying the Lantern. See Lamp. residue—a pale yellow, glutinous solid, Lantern. See Lamp. odorless and neutral, and melting at 38° C. As it is easily absorbed by the skin, it is extensively used as a basis of ointments. It does not become rancid and is capable of taking up its own weight of the capable of taking up its own weight of taking up its own we

of India, 1888-93; secretary of war, 1895erection occurring on the top of a tower.
1900; foreign secretary, 1900-1905. In Lantha'nium, Lan'thanum (sym.
the Asquith coalition ministry he served
in the cabinet as minister without portfolio, 1915-16. While the European war oxide of cerium, and so named from its

while the European war oxide of cerium, and so named from its folio, 1915-16. While the European war oxide of cerlum, and so named from its was in progress he created a sensation by properties being concealed (Gr. lanthasuggestion of a peace parley with the mein, to lie hid), as it were, by those of German government.—WILLIAM PETTY, cerium. Lanthanum forms only one sefirst marquis, better known as Earl of ries of compounds, such as the oxide, Shelburne, born in 1737; died in 1805. He chloride and sulphide. began political life in 1763; became prime minister in 1782, but was driven from power by the Fox and North coalition. In ry Isles; greatest length, 36 miles; mean 1784 he was made Marquis of Lansdowne. breadth, 15 miles. Its coast is generally

(lans'ford), a borough of Carbon Co., Pennsylvania,

Lanidæ (lan-l'i-dē), the shrikes, a 35 miles N. of Reading, in a coal-mining family of insessorial or perching birds. See Shrike.

Lankester (lan'kes-tèr), British scientist, born in London in 1847, educated at Oxford. He was proof zoology and comparative anatomy at University College, London, 1874—Agricultural College is here. The Michigan of the Royal Institution, London, 1898—1900. Michigan Avenue spans the Grand River He was director of the natural history with a fine bridge. It has 200 manufactepartment of the British Museum, 1898—turing plants producing automobiles and 1907. He has published many scientific accessories, traction engines, gas and gasoworks.

Lanner (lan'er), a species of hawk, castings, furniture and store fixtures, Lanner (lan'er), a species of hawk, castings, furniture and store fixtures, found in Mediterranean counwagons, silk and woolen goods, farm imtries. Similar falcons are found in southplements, electrical goods, etc. Pop. (1910) 31,229; (1920) 57,327.

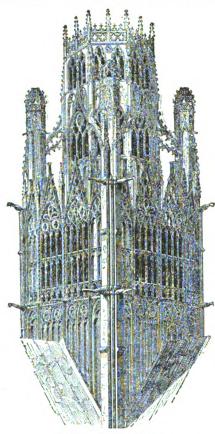
(lan), JEAN, Duke of Monte-Lansing, JOHN (1754-1829), an Amerbello and marshal of France, Lansing, ican jurist, born at Albany,

tions such as the Bering Sea Commissions, or wool fat, chiefly consists Alaskan Boundary Tribunal and the Brit-

As it is easily absorbed by the skin, Lantern (lan'tern), in architecture a extensively used as a basis of oint. promote ventilation, or to serve as a sort water.

Lansdowne (lans'down), Henry of ornament. (2) A tower which has the Charles K. Fitzmau- whole or a considerable portion of the mice, 5th Marquis of, was born in 1845 interior open to view from the ground, and held various posts in the British government, succeeding to the marquisate in dows, such as the towers which are commonly placed at the junction of the cross ada from 1883 to 1888; governor-general in a cruciform church; also a light open of India, 1888-93: secretary of war 1895.

Lanzi (lan'tse), Luigi, an Italian archæologist, born in 1732; died in 1810. He entered the order of the



Lantern-St. Owen, Rouen.

Jesuits in 1449, and was professor of the humanities in several colleges. He became assistant director of the gallery at siderable quantity of ivory, gold, silver, Florence, and devoted his energies to precious stones, silk, etc. The inhabitable quantity of ivory, gold, silver, precious stones, silk, etc. The inhabitable quantity of ivory, gold, silver, precious stones, silk, etc. The inhabitable quantity of ivory, gold, silver, precious stones, silk, etc. The inhabitable quantity of ivory, gold, silver, precious stones, silk, etc. The inhabitable quantity of ivory, gold, silver, precious stones, silk, etc. The inhabitant and other Ancient Languages of the Burmese in their racial, social, and religious peculiarities. The capital is left. And the History of Italian Paintlers, an esteemed work which has been translated into English by Roscoe.

Lao explored to the neighboring states a considerable quantity of ivory, gold, silver, precious stones, silk, etc. The inhabitants are reported to be connected with the Burmese in their racial, social, and religious peculiarities. The capital is left. The inhabitant precious stones, silk, etc. The inhabitant precious stones, silk, translated into English by Roscoe.

bold, and the hills in the center rise to an elevation of 2000 feet. The island is of volcanic origin, and one volcano is still active. Pop. 17,546.

Lanzi (lån'tsē), Luigi. an Italian by two enormous serpents sent by Apollo. The story has frequently furnished a subject to the poets, but it is chiefly interesting as having served as the subject of one of the most beautiful groups of sculpture in the whole history of ancient art. This was discovered at Rome among the ruins of the palace of Titus in 1506, and is now placed in the vatican. It is supposed to be the group described by Pliny as the work of three sculptors of Rhodes, a father and two sons, Agesander, Polydorus and Athenodorus, but doubts exist as to its date.

Laodicea (la-o-di-sē'a), the ancient name of several places in Asia Minor. One of these, now called Eski Hissar (Old Castle), 120 miles E. S. E. of Smyrna, was the site of one of the seven primitive Christian churches of Asia. Another is now known as

Latakia.

Laon (lan; ancient, Bibrax Suessi-Laon onum), a fortified town in France capital of the department Aisne, 74 miles northeast from Paris. It is situated on a height in the midst of a level country, and has interesting old buildings, especially the former cathedral, dating from the twelfth century. Laon was the seat of a bishopric as early as 500 A.D., and was made the capital of his kingdom by Charles the Simple of France about 900. Napoleon Bonaparte was defeated here in 1814. On September 9, 1870, it surrendered to the Germans without a blow being struck. Pop. 9787.

(lä'os), a territory in the Indo-China peninsula, surrounded by Laos the Shan States, Anam, Tonquin and the Chinese province of Yun-nan. A large part of it has been a French protectorate since 1893; the remainder is included in Siam. Its extent and the number of its inhabitants are unknown. but they have been estimated at one and a half millions. The country is intersected by mountain ranges and traversed by the Me-kong or Cambodia river, the alluvial valley of which produces abun-Jesuits in 1749, and was professor of the dant sugar, rice, tobacco, etc. Laos ex-

sometimes also called LAO-

KIUN, a celebrated Chinese philosopher, founder or reformer of one of the most ancient and important religious sects of ancient and important religious sects of China, known as the Tao, or sect of reason. Born about the year 600 B.C., we learn that he was historiographer and librarian to a king of the Chow dynasty; that he traveled to the borders of India, where he may have become acquainted with Buddhism; that he met Confucius and reproached him for his pride, vanity and ostenation; that he was nersuaded and ostentation; that he was persuaded to record his doctrines in a book, which to record his doctrines in a book, which he did in the Tao-ti-king or The Path to Virtue; that on completing this task he disappeared into the wilderness, and there, it is said, ascended to heaven. According to him, silence and the void produced the Tao, the source of all action and heing. Man is composed of two principles. and being. Man is composed of two principles, the one material and perishable, the other spiritual and imperishable, from which he emanated, and to which he will which he emanated, and to which he will return on the subjugation of all the material passions and the pleasures of the senses. Lao-tze's moral code is pure, inculcating charity, benevolence, virtue and the free will, moral agency and responsibility of man. From the insight and deep wisdom of his moral code it has been supposed that Lao-tze had been indebted to western teaching, but there is debted to western teaching, but there is no clear proof of this. Since the second

his intention to proceed to the Isle of France, but nothing more was heard of the unfortunate explorer. Eventually it was discovered that his two vessels, the Boussole and Astrolabe, had struck on a reef at Mallicolo in the New Hebrides, and that the crews were all either drowned or murdered.

Lapis Lazuli (la'pis laz'u-li), an aluminous mineral of a rich azure-blue color; luster vitreous:

a rich azure-blue color; luster vitreous; racture uneven; scratches glass; opaque; easily broken; specific gravity, 2.45. The finest specimens are brought from China, Persia and Central Asia, and it is much esteemed for ornamental purposes, especially for inlaid work. From it the pignary of the property of the ment called ultramarine is prepared, but this is now also manufactured artificially. Laplace (la-plas), PIEBE SIMON, MARQUISDE, a celebrated French mathematician and astronomer, born in 1749; died in 1827. At an early age he showed wonderful aptitude in mathematical studies; became professor of mathematics in his native town; subsequently sought fortune in Paris, and there made the acquaintance of d'Alembert. Under his guidance the youth soon sig-nalized himself by discovering the invariability of the mean distances of the planets from the sun. He was appointed examiner of the royal corps of artillery, century of our era the sect has continued and at the early age of twenty-four was admitted into the Academy of Sciences. Laparotomy (la-pa-rot'o-mi), a surabdominal cavity by incision. See Ovariotomy.

La Paz (1A-path'), or LA PAZ DE AYACUCHO, a town of Bolivia, and since 1898 capital of Bolivia. The city is built in amphitheater form, is the seat of a bishopric, and has a cathedral and since 1898 capital of Bollvia. The city is built in amphitheater form, is the parte he was made president of the sent of a bishopric, and has a cathedral ate, and in 1806 raised to the dignity of count of the empire. Notwithstanding the inhabitants are Aymara Indians, or 1814, voted for the establishment of a provisional government, and was rement has an area of 53,777 square miles and a population estimated at 445,616.

La Pérouse (pã-rös), Jean Francouse (pã-rös), Jean Francouse (pā-rös), Jean Francouse (pā-rōs), Jean Francouse (pā-rō

write Sea; area about 130,000 square miles, of which more than half belongs and order of Grallatores. The common to Russia, and the remainder is shared, in nearly equal proportions, between Sweden and Norway. The climate for nine months of a dark winter is avecessively cold. sweden and Norway. The climate for nine months of a dark winter is ex-cessively cold; spring and autumn are short; and the summer of two months, when the sun never sets, is extremely hot. Vegetation is scanty except in the form of birch, pine, fir and the abundant mosses which supply food for the herds of reindeer. The Lapps belong to the Finnic branch of the Turanian family. They are branch of the Turaman rammy.

a small, muscular, large-headed race, with high cheek-bones, wide mouth, flat nose, and scanty beard. Many of them are nomadic, owing their subsistence to their herds of reindeer; others support themselves by fishing. They are generally ignorant, simple hearted and hospitable. The Norwegian Lapps belong to the season these birds disperse themselves to the Lutheran and the Russian Lapps to the Greek Church. Their numbers do not exceed 30,000.

La Plata (lä plä'tà), the capital of Buenos Aires province, Argentine Republic, on La Plata estuary, 32 miles s. E. of Buenos Aires City. It is laid out in the form of a checkerboard, the streets crossing each other at right angles, about 6000.

Highway, in a lake country of great pic-surrounding mining and agricultural lands. turesqueness. Besides being a summer re-pop. (1920) 6301.

sort it has a number of industries, including the manufacture of bicycles, farm implements a picture of bicycles, farm implements picture.

ing the manufacture of bicycles, farm implements, pianos, woolen goods, meat ern United States, which extends through slicers and other products. Pop. (1910) 15,158.

Lappenberg (lap'en-berg), Johann The highest point is Laramie Peak, 10,000 feet high.

torian, was born at Hamburg in 1794; torian, was born at Hamburg in 1794; torian, was born at Hamburg in 1794; Larboard (lâr'bord), the left side of a ship looking towards the medicine at Edinburgh, he gave his attention to history and political science, and spent some time in London studying the English constitution. Returning to German history of another person with-

tem. The most important of his works are the Mécanique Céleste; Système du and Göttingen. He was made archivist Monde, a resumé of all modern astronomy; Théorie analytique des Probabilités; Essai sur les Probabilités. Lapland (lap'land), the land of the Lapps, an extensive terrimost remarkable work is his History of Europe, stretching between lat. 64° and 71° N., and from the shores of Norway east to those of the White Sea; area about 130,000 square miles, of which more than half belongs and order of Grallatores. The common



and has many fine buildings, including the about 6000.

Capitol, cathedral, museum, etc. Seat of a national university (founded, 1905;
2800 students), and an observatory. Pop. ming, 57 miles N. w. of Cheyenne. It is 7145 feet above sea level, with beautiful mountain scenery. It is the seat of the of Laporte (la-pōrt'), a city, county scat mountain scenery. It is the seat of the University of Wyoming, has railway and miles E. of Chicago, on New York Central machine shops, cement plaster mills, etc., and other railroads, and on the Lincoln and is an important supply point for the Highway in a lake country of great nice surrounding mining and agricultural lands.

out that person's consent. To constitute University of London. Having been conthis crime the removal of the goods to any victed in the law courts of immorality, he distance is not necessary, but it requires withdrew to America, but returned in to be shown that the article has comletely passed, for however short a time, into possession of the criminal. Concerning the kinds of things the appropriation

1845 and resided in Paris.

(la-re'dō), county seat of Webb Co., Texas, on the Rio Grande, ing the kinds of things the appropriation

153 miles s. w. of San Antonio. It is one of which is larceny, the common law re- of the great gateways into Mexico, for stricted them to personal property as dis- imports and exports, and for tourist travel. tinguished from real estate, but this dis- It is a railroad center, and is in a gas, cent statutes. Larceny was formerly divided into two kinds, grand and petty, Egyptian cotton, large onion trade, etc. which was determined by the value of the Hopen (1910) 14,855; (1920) 22,710.

Larcs (18'rez), a class of tutelary abolished in almost all the States. The penalty varies in the different States; but, generally, in ordinary cases, a person conticted of larceny is liable to imprisonment at hard labor for not more than two years; on a second conviction not more than ten, nor less than four.

Larch the common name of trees here tinction has been largely abolished by re- coal and shallow oil district. It has car

Larch, the common name of trees befamily took their meals some portion was offered to the lares, and on festive occasions they were adorned with wreaths. leaves, small, erect, oval, blunt-pointed to Abies.

This genus is now usually united to Abies.
This genus is now usually united to Abies.
The common larch (L. Europæa), though degree quicker than grave, and two a native of Italy, Switzerland and South is the diminutive of largo.

Germany, is one of the most frequently cultivated trees in Britain, and is remark.

Largs (lärgz), a seaside resort in Scotland, county of Ayr, on the shle for the elegance of its conical growth Germany, is one of the most frequently Largs (lärge), a seaside resort in cultivated trees in Britain, and is remarkable for the elegance of its conical growth and the durability of its wood, which is used for a variety of purposes. Besides the common larch, there are the Russian larch, the red larch and the black larch (L. Americana). a native of America. larch, the red larch and the black larch (L. Americana), a native of America. as the sea-gulls, sea-mews, or gulls, and The last species has also the name of of which the genus Larus is the type. See hackmatack or tamarack.

when it is heated to boiling point and then strained. It is chiefly composed of cleine and stearine, and is now largely Thessaly. It is the seat of an archused in the manufacture of candles, soap, bishopric, with a population in 1907 of pomades, etc. The best quality is found in the fat which surrounds the kidneys, Julius Cæsar's army before the battle of and this is employed in pharmacy for the preparation of unguents. When sub-Lard, is obtained from the fat of swine when it is heated to boiling point preparation of unguents. When sub-jected to pressure the oleine is liberated, forming lard-oil, which is much used as a They are characterized by a short, strong

nral philosophy and astronomy in the celebrated for the prolonged beauty of

the common name of trees be family took their meals some portion was longing to the genus *Laria*, offered to the lares, and on festive occa-

Gulls.

Larissa (lä'ris-sa), a town of North-

Lardizabalaceæ (lar-di-zab-a-lā'se-ē), a nat. order and the power to raise the feathers; or of plants, natives of South America and the power to raise the feathers on China, now regarded as a tribe of the Berberidaceæ or barberries.

They are characterized by a short, strong bill; nostrils covered with feathers; forked tongue; long, straight hind-claw; se-ē), a nat. order and the power to raise the feathers on the back part of the head in the form of a crest. Their distribution throughout the Old World is general, but there is no every notice to the back part of the head in the form the Old World is general, but there is no every notice to the back part of the head in the form the Old World is general, but there is no every notice to the back part of the back part of the Arrantee by the feathers. Lardner (lard'ner), Dionysius, popular writer on scientific subjects, born at Dublin in 1793; died in genus (Otocorys). They are terrestrial
1859. Educated at Trinity College, he
devoted his attention to science, contribnest upon the ground, and bring forth a
uted to the leading cyclopædias, and in
1827 was appointed to the chair of natis the sky-lark (A. arvensis), which is its song. The wood-lark (A. arborea) is less common than the sky-lark, and is known by its smaller size and less distinct colors. It perches upon trees, and is found chiefly in fields near the borders of woods. It sings during the night, and on this account has been mistaken for the nightingale.

Lark-bunting, a common fringilpiza bicolor) of the Great Plains of the United States. It resembles the bobolink in its great seasonal changes of plumage. It has an entertaining song, like that of the yellow-breasted chat, which it also resembles in singing while in flight.

Lark-finch, or lark-sparrow, a familiar brownish-gray sparrow (Choudestes gramniaca), of the prairie and plain regions of the United States. It breeds on the ground and has a pleasant song.

Larkhall (lark'hal), a town of Scotland, in Lanarkshire, 3½ La Ro miles southeast of Hamilton. The inhabitants are employed in coal mines, bleachworks, etc. Pop. 11,879.

Lárkhána (lär-kä'nu), a town of India, in Sikarpur district, Sind, Bombay Presidency, is situated on a fertile tract of land on the south side of the Ghar Canal. Pop. 14,543.

Larkspur (lark'spur; Delphinium), sometimes called lark'sheel, a genus of plants of the order Ranunculaceæ, distinguished by its petaloid calyx, the superior sepal of which terminates in a long spur. The Upright Larkspur (D. ajacis) and the Branching Larkspur (D. consolida) are well-known garden flowers.

Larksville, a borough in Luzerne County, Pennsylvania, 3 miles w. by N. of Wilkes-Barre. In a coal-mining region. Pop. (1920) 9438.

Larnaca (lär'nà-kà), or Lar'NICA (ancient Citium), a town on the south coast of the island of Cyprus, on a marshy plain about 1 mile from the shore. It is the chief commercial center in the island. Since the British occupation in 1878 the place has become of more importance. Pop. 7964.

Larne (lärn), a seaport of Ireland, County Antrim, 18 miles north by east of Belfast. The bleaching of linen is extensively carried on, and there are large flour-mills. The harbor, about a mile below the town, is one of the best in the east coast. Larne is much resorted to during summer as a watering-place. Pop. 4716.

La Rochefoucauld (rōs h-fō-kō), FRANCOIS, DUC

courtier and man of letters under Louis XIV, was born at Paris in 1613; died in 1680. He was a distinguished military officer attending the court of Louis XIII. but being suspected by Richelieu of favoring the party of Queen Anne of Austria he was exiled to Blois. Returning when the cardinal died, but not receiving the reward which he anticipated, he took the side of the Parliament in the Civil war, and was wounded in the Faubourg Saint-Antoine of Paris. Abandoning his military career, he began to cultivate literature and a social intercourse with Boileau, Racine, Molière, Madame de Sévigné and Madame de la Fayette. His Mémoires, published in 1662, and his Réfexions ou Sentences et Maximes Morales, published anonymously in 1665, were the fruits of his literary activity. The latter work, for its great brilliancy of style, is still considered a French clussic.

La Rochejaquelein (rosh-zhāk) lap), Henri Du Vergier, Comte de, a celebrated chief of the Vendenn royalists, was born in 1772. During the French Revolution he put himself at the head of the peasants of La Vendée, and gained sixteen victories in ten months. At the age of twentytwo he was shot by a republican soldier in the battle of Nouaillé, March, 1794. He was one of the most sincere and courageous of the French royalists.

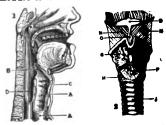
Larva (lar'va), the term applied in natural history to the first stage in the metamorphosis of insects, and certain other of the lower invertebrates. In insects it is equivalent to the grub or caterpillar stage. Many of the crustacea, as crabs and barnacles, and even vertebrata, as the frogs and newts, pass through larval forms. The larval crab was for long described as a distinct crustacean with the name of Zoča. See Metamorphosis.

Laryngitis (lar-in-ji'tis), inflammation of the mucous membrane lining the larynx. It may be acute or chronic. The first usually arises from a cold.

Laryngoscope (la-ring'a-skōp), a contrivance for examining the larynx and commencement of the trachea. It consists of a plane mirror introduced into the mouth, and placed at such an angle that the light thrown on it from a concave reflector, in the center of which is an aperture, is made to illuminate the larynx, the image of which is again reflected through the aperture in the reflector to the eye of the observer.

(lår-in-gos'cō-pi), Laryngoscopy of examining a larynx by the laryngo-scope (see above) or through a tube (Kirstein's autoscope).

Larynx (lar'inkz), the organ by aid of which the voice is produced, situated at the upper part of the trachea or windpipe. The larynx is formed mainly of two pieces of cartilage, called the thyroid and the cricoid, one placed above the other. The thyroid is formed of two extended wines meeting at formed of two extended wings meeting at the middle line in front in a ridge; above



Larynx internally (1) and externally (2).

and from the sides two horns project upwards, which are connected by bands to the hyoid bone, from which the larynx is suspended. The thyroid cartilage rests and is movable upon the cricoid, moving backwards or forwards, but not from at Rouen in 1643, emigrated to America side to side. The cricoid cartilage is in 1667, and made long fur-trading excursions among the native tribes. In shaped like a signet-ring (Greek krikos, shaped like a signet-ring (Greek krikos, a ring), the narrow part of the ring being in front. The cricoid carries, perched on its upper edge belind, the arytenoid cartilages, which are of great importance in the production of the voice. These various cartilages form a framework upon which muscles and mucous membranes are disposed. The mucous membranes are disposed. The mucous membrane which lines the larynx is thrown into various folds. These folds are called the true vocal cords, and by their movements the voice is produced. They are called true, as distinct from the false vocal cords which are above them, but take no part in producing the voice. The true vocal cords projecting towards the middle form a chink, which is called the glottis. By the contraction of various muscles this chink can be so brought to-gether that the air forced through it throws the edges of the membrane into vibration and so produces sounds. Variations in the form of the chink will affect Spain several times and obtained decrees tons in the sound. Thus the production of voice is the same as in musical little avail. In the cause of religion he instruments, the arrangements in the visited various parts of the New World, instruments, the arrangements in the visited various parts of the New World, larynx being such as to produce (1) the including Mexico, Guatemala, Peru. etc. larynx being such as to pregulate the In 1542 he wrote his famous Brevissima vibratory sounds, (2) to regulate

sound, (3) to vary the pitch, and (4) to determine the quality of the sound. The quetermine the quanty of the sound. The rapid, delicate, muscular movements involved are produced by nervous stimuli reaching the muscles from the brain. Thus the voice is produced in the larynx, and is modified by the rest of the respiratory passages. (See Voice.) In the act of swallowing, the glottis is covered by a cartilaginous plate called the eniolottis. cartilaginous plate called the epiglottis. In the accompanying cut, fig. 1 shows C the larynx internally, B being the epiglottis situated above the glottis or entrance to the larynx, A A the trachea, and D the cosophagus or gullet. In fig. 2 J is the trachea, B the hyoid bone, N N the thyrohyoid membrane, O the thyro-hyoid ligament, G the thyroid cartilage, II the crisid cartilage. coid cartilage, P the crico-thyroid ligament.

(la-sal'), a city of La Salle La Salle Co., Illinois, on the Illinois River, at the head of navigation, on the Illinois and Michigan Canal, and on the Rock Island, C., B. & Q., and Illinois Central railroads. Bituminous coal is mined extensively and it has numerous manufactured. extensively and it has numerous maintacturing plants including zine smelting and rolling mills, clock factories, cement plants, sheet metal and nickeloid works, pressed brick plants, etc. Pop. (1910) 11,537; (1920) 13,050.

La Salle, ROBERT CAVALIER DE, a facture in 1643, emigrated to America

in 1667, and made long tur-traums cursions among the native tribes. In 1675, appointed governor of Fort Frontenac, he built a vessel on Lake Erie, sailed through Lakes Huron and Michigan, and in 1682 descended the Mississioni in cances to its mouth. In 1684 he sippi in canoes to its mouth. sippi in canoes to its mouth. In 1034 ne attempted to found a French colony at the mouth of the Mississippi, but missed the location and landed in Texas. Attempting to proceed to Canada overland he was murdered in 1687 by mutinous companions. He was one of the most adventurous and daring of the explorers of America. of America.

(las käs), BARTOLOMÉ DE, a Spanish prelate, known Las Casas a spanish prenate, known as the 'Apostle of the Indians,' born in 1474; died in 1556. He accompanied Columbus to Hispaniola in 1498, and on the conquest of Cuba received charge as priest there, and distinguished himself for his humane treatment of the natives. In his zeal for the Indians he returned to Spain several times and obtained decrees

Relacion de la Destruction de las Indias. His untiring labors were productive of good to the natives, yet it is a singular fact that he proposed to purchase negroes in order to supply the Cuban planters with African laborers instead of the Indians. He was made bishop of Chiapas in 1544, but resigned this dignity in 1547, his humane efforts being fustrated. He died at Madrid.

Las Cases (las kas), Emmanuel Auguste Dieudonné Ma-RIN JOSEPH, COMTE DE, a French writer, born in 1766; died in 1842. Employed before the revolution as a lieutenant of marines, he afterwards retired to England, where he supported himself by private teaching. Returning to France, he employed himself upon his Atlas Historique, published under the name of Le Sage. Coming under the notice of Napoleon, he was by him made baron and min-ister of state. After Waterloo he shared Napoleon's imprisonment in St. Helena, where the emperor dictated part of his Memoirs to Las Cases, and took lessons from him in English. Removed to the Cape of Good Hope from St. Helena for carding out a scart letter he was not sending out a secret letter, he was permitted to return to France after Napo-leon's death, where he published the Mémorial de St. Hélène in his Atlas Historique.

(la se-rā'na), the capital La Serena of Coquimbo province, Chile, on a bay of the Pacific, connected by rail with the port of Coquimbo. Pop. 16,170.

Lasher. See Fatherlasher.

Lashkar. See Gwalior.

Las Palmas (las palmas), the former capital of the Canary Islands, on the N.E. coast of Grand Canary. important coaling station and has exports of wine, etc. Pop. 62,270.

Lassa
(las'sa), or Lhassa, the capital of Tibet, situated on the Kitchu, a tributary of the Brahmaputra.
All the public edifices worthy of notice are connected with the Buddhist religion, Lassa being the great center of Buddhism, and being greatly resorted to from China, Turkestan, Nepaul, etc., as a school of philosophy and Buddhism. About 11/2 miles northwest from the city is the Bot-Dalai (Grand) Lama, the ecclesiasti most elegant proced sovereign of Tibet, and supreme pondian architecture. tiff of the vast regions forming Central. Latakia (lat-a-kē'a). or LADIKI'A Eastern, and Southeastern Asia. A triple-peaked hill here rices abrundly out Mare), a seaport in Syria, 70 miles north

of the plain to the height of 367 feet; it is covered with convents and cells of monks, and in the center is the palace of the Dalai Lama, a fine edifice, four stories in height, with a vast number of apartments and a large dome. It has recently been occupied by Chinese troops, and the Lama, who sought the sovereignty of Tibet, is in exile. Lassa is the principal emporium of Tibet; silk stuffs, tea, and other articles being here exchanged for Tibetan, Indian and European goods. the Dalai Lama, a fine edifice, four sto-Pop. 15,000 to 20,000.

Lassalle (las sal-le), FERDINAND, a notable German socialist, born at Breslau in 1825, of Jewish parents; studied at Berlin University; first made himself known as a leader during the democratic troubles of 1848, and was imprisoned for a year. In 1861 he published his System of Acquired Rights. Thereafter he proceeded to organize the working classes, which caused the govern-ment to accuse him of sedition, and he was imprisoned for four months. In May, 1863, he founded a Labor Union, and began that socialist propaganda which has since become so widespread in Germany. In the summer of 1864 he sought rest in Switzerland, and was there killed in a duel occasioned by a love af-Fair. His best-known treatise is the famous Program for the Working Classes.

Lasso (las'o), a contrivance used in Spanish America and the Western United States, consisting of a long rope of plaited raw hide, at one end of which is a small metal ring. By means of this ring a noose is readily formed, and the lasso, or lariat, is then used for catching wild cattle, the rope being cast over the animal's head or leg while the hunter

is in full gallop.

Lasso, ORLANDO DI (Orlandus Lassus),
one of the great musicians of the It has a fine harbor and steamship com-sixteenth century, born at Mons in munication with foreign ports. It is an Hainaut in 1520 or 1530; died in 1594. He traveled in England and France, and was appointed chapel-master at Munich. A collection of his works was published at Munich (1604) under the name of

Magnum Opus Musicum.

Lastrea (las-tre'a), a genus of ferns containing the male-fern, etc. Lât, a name given to pillars common to all the styles of Indian architecture. With the Buddhists they bore inscriptions on their shafts, with emblems miles northwest from the city is the Bot- or animals on their capitals. They are tala or Buddha-la, the residence of the among the most original and often the Dalai (Grand) Lama, the ecclesiasti- most elegant productions of ancient In-

of Tripoli, on the Mediterranean. The harbor is well sheltered, though shallow, and cotton, while Latakia tobacco is famous throughout Europe. Pop. about 22,000.

Lateen Sail (la-tēn'), is a triangular sail used in xebecs, feluccas, etc., in the Mediterranean, and in the dahabiehs of the Nile. It is extended by a lateen yard, which is slung across a mast so as to make an angle of about 45

degrees with it, the lower portion of the yard being about a third of the whole.

Latent Heat, that portion of heat which exists in any substance without producing an effect upon another or upon the thermometer; termed also insensible as distinct from sensible heat. It becomes sensible during the conversion of vapors into liquids, and of liquids into solids; and on the other hand a portion of sensible heat disappears

originally by Constantine the Great, and dedicated to St. John of Lateran. It is dedicated to St. John of Lateran. It is the episcopal church of the pope, and the principal church of Rome. It has a palace and other buildings annexed to it. Every newly-elected pope takes solemn possession of the church, and from its balcony the pope bestows his blessing on the people. The site on which the buildings of the Lateran stand originally belonged to a person named Plautius Lateranus, who was put to death by Nero: hence the name. hence the name.

Lateran Councils, councils of the Roman Catholic Church, so called because they were held in the Lateran Church in Rome. There were eleven such councils, five of which were ecumenical, the most important being that convened by Alexander III, March 2, 1179, which established the form under which the popes are elected, and that called by Innocent III in November, 1215, which ordered the Crusade, which was a constant of the control of the contr condemned the Waldenses, and called the mystery of the eucharist transubstantiation.

viously appointed to the chair of English Latin Church, the Roman Catholic language and literature in University

College. His name is chiefly associated with researches in philology and ethnology. His best-known works are: Hisogy. His best-known works are: History of the English Language; Handbook of the English Language; Natural History of Man; The Varieties of Man; Descriptive Ethnology; The Ethnology of Europe; and a new edition of Todd's Johnson's Dictionary.

Lathe (lāth), a machine for turning and polishing flat, round, cylindrical, oval, and every intermediate form of body in wood, ivory, metals, etc., the

of body in wood, ivory, metals, etc., the object worked on receiving a rotary motion; it is also used in glass-cutting and earthenware manufacture. It may be turned by the hand, the foot, steampower, water, etc. A duplex lathe is one which works on two turning tools at once; Blanchard's lathe is one for turning objects of an irregular form, as lasts, gunstocks, etc. A throw-lathe is one in or individual into solucity and on the other guistocks, etc. A two w-take is one in hand a portion of sensible heat disappears which the mechanic drives the lathe with one becomes latent when a body changes its one hand, holding the cutting tool with the liquid to the gaseous state.

Lateran (lat'er-an), one of the historic churches at Rome, built the west-threads are laid parallel to each the state of the state of the state of the state of the west-threads are laid parallel to each the state of the state o other, shot after shot, in the process of weaving.

Lathyrus (lath'e-rus), a large genus of plants, natives of the northern hemisphere and of South America, nat. order Leguminosæ. Many are ornamental, such as the sweet-pea (L. odorātus) and the everlasting-pea (L. latifolius), and some useful as agricultural plants.

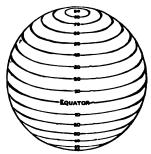
Latimer (lat'i-mer), Hugh, an English prelate, reformer and martyr, born about 1490. He entered Cambridge University about 1505, and became M.A. in 1514. He took holy orders, and by and by began to preach Protestant doctrine, which led to vigorous opposition. He was made chaplain to Henry VIII in 1530, and during the ascendency of Anne Boleyn in 1535 he was appointed bishop of Worcester. In 1538 he resigned his bishop in 1545 he resigned his bishop in 1545 he 1538 he resigned his bishopric, not being able to accept the Six Articles, and was put in prison, but on the accession of Ed-ward VI he was released and became highly popular at court. This continued until Mary ascended the throne, when Latham (lā'tham), Robert Gordon, Latimer was cited to appear, along with an English scholar, born in Crammer and Ridley, before a council at 1812; died in 1888. He was educated at Eton and Cambridge; was graduated in lay and a second trial, Latimer and Ridles2, and resided for some time in Denmark and Norway. He adopted the profession of medicine, and became physician to Middlesex Hospital, having been previously appointed to the chair of English

Tatimer was cited to appear, along with Crammer and Ridley, before a council at Oxford, and condemned. After much delay were burned at the stake, Oct. 16, 1555. His preaching was popular in his quaintness.

See Byzantine Em- Latium Latin Empire. Latin Language and Litera-See Rome. ture.

Latins (la'tins; Latini), the ancient inhabitants of Latium, in Italy. In very early times the Latins formed a an very early times the Latins formed a league of thirty cities, of which the town of Alba Longa, said to have been built by Ascanius, the son of Æneas, became the head. Rome was originally a colony of Alba, and thus the language of the Romans is known as the Latin language. Lati'nus. See Eneas.

Latitude (lat'i-tūd), in geography, the distance of any place on the globe north or south of the equator



Parallels of Latitude.

measured on its meridian. It is called north or south according as the place is on the north or south of the equator. The highest or greatest latitude is 90°, that is, at the poles; the lowest or smallest 0°, at the equator, between which and the poles any number of parallel cirthe latitude and longitude of a place are given its position on a map is easily found. See Longitude.

(la t-i-tū-di-nā'ri-Latitudinarians plied to certain broad church English divines of Charles II's time. They endependents on the other, and also between

(lā'shi-um), the ancient name applied to a district of Central Italy on the Tyrrhenian Sea, extending between Etruria and Campania, and inhabited by the Latins, Volsci, Æqui, etc.

Latona (la-tō'na; by the Greeks called $L\bar{e}t\bar{o}$), in Greek mythology, the mother of Apollo and Artemis. Latona Latona is represented as a mild, benevolent goddess, in a sea-green dress. She was worshipped chiefly in Lycia, Delos, Athens, and other cities of Greece.

Latour D'Auvergne (lå-tör dö-THEOPHILE MALO DE, a French soldier, born in 1743. Entering the military service in 1767, he became aide-de-camp to the Duke of Crillon, and distinguished himself at the siege of Mahon. When the revolution began he was a captain of grenadiers, refused higher positions, and was named First Grenadier of France by Napoleon. He commanded a corps of 8000 men, which was known as the infernal column. In 1799 he fought under Massena in Switzerland, and fell at Neu-burg, June 27, 1800.

La Trappe (la-trap), a Cistercian abbey of Northern France, situated in a narrow valley of Normandy, 30 miles northeast of Alencon. Founded in 1140, it had become in the seventeenth century a haunt of licentious monks known as 'the bandits of La Trappe.' the seventeenth century, however, the abbot Armand Jean le Bouthelier de Rancé instituted a vigorous reform, and caused the monks to adopt a life of severe asceticism. The austere Trappists prayed eleven times daily, spoke no word to each other except the salutation of Memento mori, fed upon fruit and pulse, and every evening dug their own graves. At the revolution the Trappists were obliged to cles called parallels of latitude may be returned to their old homes, though expulsioning the latitude of a place is by measuring the altitude of the polarita. of the order, and they have also establishments in various parts of Europe, and in America. The professed brothers wear a dark-colored frock, cloak and hood, which covers the whole face. A female order of Trappistines was founded by Louisa, Princess of Condé.

Latreille (la-tra-yé), PIERRE ANDRÉ, deavored to allay the contests that prevailed between the Episcopalians on the one hand, and the Presbyterians and Inentomology in the Paris museum, and a member of the Academy of Sciences. His Arminians and Calvinists. At present it writings, which are very numerous, ingenerally denotes one who commends or clude among others natural histories of sanctions deviations from the strict principles of orthodoxy.

At present it writings, which are very numerous, ingenerally denotes one who commends or clude among others natural histories of salamanders, apes, reptiles. etc., the Natural Families of the Animal Kingdom.

Latrobe (la-trob'), a borough in West-moreland County, Pennsylva-

Latrobe (la'trob), BENJAMIN HENRY, born in England in 1763; died in the United States in 1820. He emigrated to America in 1795, was employed as engineer by the State of Virginia, and was architect of the United States Bank in Philadelphia and the first Hall of Representatives in Washington.

His son, John Hazlehurst (1803-91), was active in forming the colony of Liberia, originated the park system of Baltimore, and was the author of numerous works of fiction, travel, biography, etc.

Latten (lat'en), a fine kind of brass

or bronze anciently used for crosses and candlesticks, brasses of sepul-chral monuments, etc. That employed by English workmen used to be imported from Germany and the Netherlands, the finest kind being known as Cologne plate. Latteners formed one of the recognized crafts of the city of London. In some localities the term is still applied to platetin.

Lattice-girder (lat'is), a girder of which the web consists of diagonal pieces arranged like lattice-work. Lattice-bridge is the name given when the cross-framing is made to resemble lattice-work.

Lattice-leaf, LATTICE-PLANT, a very plant of Madagascar (Ouvirandra fenes-



Lattice Plant (Ouvirandra fenestrālis).

tralis), by some referred to the nat. order Juncaginacem, by others to the Nai-adacem, and noteworthy for the structure of its leaves. The blade resembles latticework or open needlework, the longitudinal ribs being crossed by tendrils, and the interstices between them open.

Cicnera of Crustacea and Insects, and a Course of Entomology.

Latria. See Dulia.

Latrobe (la-trob'), a borough in Westmoreland County, Pennsylvania, 41 miles E. S. E. of Pittsburgh. It is in a casel mining district and has numerous (Charles I was born at Reading in Bark.)

in a coal-mining district and has numerous in a coal-mining district and has numerous charles I, was born at Reading in Berklarge collieries and coke furnaces, also shire in 1573. He was educated at St. steel, glass, paper and lumber mills. Pop. John's College, Oxford; took priest's orders in 1601; was made chaplain to Latrobe (la'trob), Benjamin Henry, Weile, bishop of Rochester, in 1608; benjamin to Neile, benjamin to came president of his college and king's chaplain, and in 1617 accompanied James I to Scotland, where he attempted to enforce Episcopacy, with no success. After the accession of Charles I Laud was translated to the see of Bath and Wells, and in 1628 to that of London, while his influence seemed to increase. In 1630 he was elected chancellor of the University of Oxford, which he enriched with a valuable collection of manuscripts, establishing also a professorship of Arabic. In 1633 he was promoted to the see of Canterbury. In 1634 he instituted rigorous proceedings against all who would not conform to the Church of England. By means of spies he hunted out the Puritans, and sought to extinguish all forms of dissent by means of fines, imprisonment and exile. He prosecuted Prynne, Burton and Bastwick for libel, and to him is attributed the severe sentences which they received. When the Long Parliament met (1640) the archbishop was impeached for high treason at the bar of the House of Lords by Denzil Holles and committed to the Tower. After three years he was brought to trial, but the lords deferred giving judgment. The House of Commons, however, passed a bill of attainder (January, 1644), declared him guilty of high treason, and condemned him to death. Accordingly he met his end on the scaffold at Tower Hill with great firmness. An edition of his works was published by Parker (Oxford, 1857-60).

Laudanum (la'da-num), tincture of opium, a 10 per cent. alcoholic solution. See Opium.

Lauder (la'der), Sir Thomas Dick, a Scottish writer, born in 1784; died in 1848. In early life he entered the army, but quitted it in favor of science and literature. He contributed papers to the Edinburgh Royal Society, and in 1817 wrote a tale called Simon Roy, which was attributed to the author of Waverley. He then tried historical romance in Lochandhu and the Wolf of Badenoch. In addition to these works are his Account of the March Places. are his Account of the Moray Floods in 1829; Highland Rambles and Long Tales

Lauderdale (la'der-dal), Jo JOHN born at Lethington, in Scotland, in 1616; died in 1682. He entered public life as a zealous Presbyterian, and was a party to the delivery of Charles I to the English army at Newcastle. Subsequently, he se-cretly undertook to raise an army in favor of the king, and tried to induce the Prince of Wales to accept the command, but without success. When in 1650 Charles II embarked for Scotland, he was accompanied by Lauderdale, who was taken prisoner at the battle of Worcester, and was not set at liberty till the Restoration in 1660. He received great favor from the restored king, and the gov-ernment of Scotland was almost entirely placed in his hands. This power he used with unscrupulous rigor in his efforts to force Episcopacy upon his former Pres-byterian friends. As a reward for his zeal and subserviency he was created Duke of Lauderdale (1672) and raised to the English peerage as Viscount Petersham and Earl of Guildford (1674), being later one of the junta known as the Cabal. As a result of his tyrannical conduct an address was presented to the House of Commons praying that he might be removed from all his offices. This was granted, and the disgraced duke died in a few months afterwards.

Lauenburg (lö-en-börg'), or SAXE-LAUENBURG, formerly a duchy of Denmark, but ceded to Prussia

in 1864.

Laughing-gas (laf'ing), nitrous oxide, or nitrogen monoxide, or protoxide of nitrogen; so called because, when inhaled, it usually produces

exhilaration. See Nitrogen.

or GIANT Laughing Jackass, KINGFISHER (Dacelo gigas), a bird allied to the king-fisher, deriving its former title from the singularly strange character of its cry. It is an inhabitant of Australia, being found chiefly in the southeastern portion of that country. It makes no nest, but deposits its eggs in the decayed hollow of a gum-tree. In length about 18 inches. it has a dark-brown crest, its back and upper surface is olive-brown, wings brown-black, and the breast and under portions white, crossed by faint bars of pale brown. The tail is longish, with a rounded extremity, tipped with white; its color is a rich chestnut, with deep black

to Shorten the Way; editions of Gilpin's Forest Scenery, and Sir Uvedale Price fishers it is often found in the great on the Picturesque; a Tour Round the arid plains of Australia far from any Coasts of Scotland; and the Queen's Visit streams that are sufficiently large to harto Scotland in 1842. streams that are sufficiently large to har-bor fish. The giant kingfisher is content with crabs or reptiles or insects and small mammalia. It is the first to welcome the approach of dawn with its singular, dis-sonant, abrupt, hysterical laugh, which is even more startling than the hyena's. From its early rising habits and its pierc-ing summons, it has been called the Set-tler's Clock. The natives call it Gogo-bers which means the chorus of demons bera, which means the chorus of demons.
A naturalist says: 'The laughing jackass is the bushman's clock, and being by no means shy, of a companionable nature, a constant attendant about the bush tent, and a destroyer of snakes, is regarded as a sacred bird.

> Laughter (laf'ter), the outward expression of a certain emotion or excited condition of the nervous system, manifested chiefly in certain convulsive and partly involuntary actions of which the air, being expelled from the chest in a series of jerks, produces a succession of short abrupt sounds; certain movements of the muscles of the face, and often of other parts of the body also taking place. Laughter is generally excited by things which are of a ridiculous or ludicrous nature, the ultimate cause being usually attributed to the perception of some incongruity, though mere incongruity is not always sufficient. It may also be caused, especially in the young, by tickling; it also accompanies hysteria, and sometimes extreme grief.

(lans), a name common to Launce two species of fishes, otherwise called sand-eels. They have their name from their lance-like form. See Sand-eel.

Launceston (läns'ton), a town of England, county of Cornwall, 19 miles north by west of Plymouth. Its chief interest is in its antiquity, it having an interesting Gothic church and ruins of an old Norman castle and an Augustinian priory. (1911) 4117.

Launceston, the second town 120 miles north of Hobart, at the confluence of the North and South Esk rivers with the Tamar, which is navigable up to the town from the sea at Port Dalrymple, a distance of 40 miles. Among the buildings are a government house, town hall. military barracks, jail and courthouse. There are also public schools, banks, postoffice and several newspaper establish-

apetalous exogens, consisting entirely of From the leaves of the cherry-laurel trees and shrubs inhabiting the warmer laurel-water is produced by distillation. parts of the world, and in most cases aromatic. Cinnamon, cassia, sassafras and camphor are products of the order. The New Orleans, on the Southern and other best-known species is the Laurus nobilis, laurel or sweet-bay.

Laureate (la're-āt), Poet, a designation first applied to poets who were honored by the gift of a laurel wreath. It is now the name of an official connected with the royal household of Great Britain, the patent for which appears to have been granted by Charles I, 1630, although Ben Jonson and others are said to have held the title previously. It was the chief duty of the laureate to furnish an ode on the birthday of the signed the preliminary treaty in Paris, king or upon the occasion of a national with Jay and Franklin.—John, son of victory, the emolument attached to the Henry, was confidential aide to Washoffice being £100 a year with a tierce of ington. At Yorktown he received the
canary. Since the reign of George III sword of Cornwallis. He was but 29 there have been no special duties connected with the office. From the time of Charles II the following poets have in succession held the office of laureate:

is a native of the north of Africa and similar position to the Laurentian. south of Europe, and is cultivated in gardens not only on account of its elegant appearance, but also for the aromatic fragrance of its evergreen leaves. The fruit, which is of a purple color, and also the leaves, have long been used in meditives. The common or cherry-laurel is Cerāsus lauroman or cherry-laurel is Cerāsus lauroman capita, the spurge-laurel Daphne Lauroman of the Mackenzie River. The average lusitanica, the spurge-laurel Daphne Lauroman of the mackenzie River. The average lusitanica, the spurge-laurel machine as a stain a height of 4000 feet. collars were crowned with wreaths of bay leaves, whence the terms laurels in sense of honors (and similarly bays), and laurel several oily substances have leaves, a yellowish oil with an odor of in 1896, and was at once asked to form

It has an important trade with laurel and a strong bitter taste; laurel South Australia and Tasmania. Pop. fat, a yellowish-green buttery substance, (1911) 23,726. used for embrocations in rheumatism, Tarrenace (la-ra'se-ē), the laurel paralysis, deafness, etc. The cherry-Lauraceæ (la-ra'se-ē), the laurel paralysis, deafness, etc. The cherry-family, a nat. order of laurel also yields a volatile poisonous oil.

railroads. Largest shipping point for yellow pine lumber. Pop. (1920) 13,037.

Laurens (lär'enz), HENBY, revolutionary patriot

tionary patriot, was born in Charleston, South Carolina, in 1724; died in 1792. In the Revolution he was president of the Council of Safety, and of the Continental Congress. In 1779 he was minister to Holland, but falling into the hands of the British he was a prisoner in the Tower of London for 15 months. He was Peace Commissioner in 1781, and years of age when he died.

Laurentian (la-ren'shi-an), in geology, a term applied to a vast series of stratified and crystalline John Dryden, Nahum Tate, Nicholas rocks of gneiss, mica-schist, quartzite, Rowe, Lawrence Eusden, Colley Cibber, serpentine and limestone, about 40,000 William Whitehead, Thomas Warton, feet in thickness, lying northward of the Henry James Pye, Robert Southey, William Wordsworth, Alfred Tennyson, Altian apparently lies below the fossiliferous freed Austin and Robert Bridges. Laurel (lor'el), a plant belonging to zoon Canadense, being now regarded as a the genus Laurus, nat. order mineral concretion. (See Eozoon.) The Lauracem, to which it gives the name. terms Archwan and Pre-Cambrian are The sweet-bay or laurel (Laurus nobilis) used in Britain for rocks occupying a Geology.

Laurentian Mountains, a range Cana-

the United States. Died Feb. 17, 1919.

Laurium (la/ri-um), a village of Houghton County, Michigan, in the extreme N. w. of the State, and on the Mineral Range and Copper Hand on the Mineral Range and Copper Hand on the Mineral Range and Copper Hand on the Mineral Range R. Rs. It is in one of the richest died 1710. The descendant of an ancient copper or regions of the United States, family she was brought to court by here

working of these has been recently re-Cadmium and manganese are sumed. also found.

Lausanne (lō-sann), a town in Switzerland, capital of the canton of Vaud, on the slopes of Mount Jorat, about ½ mile from the Lake of Geneva and 31 miles northeast of the town of Geneva. Lausanne is built on three hills, two of which are connected by a lofty vieduct and the most interest. by a lofty viaduct, and the most interesting building is the Gothic cathedral, founded about A.D. 1000. Lausanne has little trade or manufactures, but it is much visited by tourists, and its educational institutions attract many foreign pupils. In 1875 it became the seat of the supreme court of the republic. Pop. (1910) 63,926.

See Lusatia. Lausitz.

Lava (lava), the general term for all rock-matter that flows, or has flowed, in a molten state from volcanoes, and which when cooled down forms varieties of tufa, trachyte, trachytic greenaugite, etc., which enter into the com-position of the mass, and according to the slowness or rapidity with which it has cooled. The more rapidly this process of cooled. The more rapidly this process of valuable engravings of distinguished peocooling goes on the more compact is the rock.—Lava beds are of two kinds, namely, contemporaneous and intrusive. A doubted his own theory in some degree, contemporaneous lava bed is one which he published several other works; was has been poured out over the surface of imprisoned for the boldness with which one deposit, and covered by subsequent he denounced the excesses of the French resultation. one deposit, and covered by subsequent deposits. Such a bed is in its natural position, and usually alters only the bed beneath it. Intrusive beds are those which have been forced up in a molten state through or between strata, altering those on both sides.

enne, and on an acclivity washed by the River Mayenne, 154 miles w. s. w. of Paris. It is an interesting and picturesquely situated place; and among its principal edifices are Trinity Church 1031.

Tavaur (lå-vōr), a town of France, dep. of Tarn, 23 miles southwest of Alby. Its castle was stormed in 1211 by Simon de Montfort and the refuger were massacred. Pop. 4069. Laval (la-val), a town of France, capital of the department of May-

a ministry. He remained Premier of (now the cathedral), the church of the Canada until 1911, when he was defeated Cordeliers, and an ancient castle, now a in the context for reciprocity in trade with prison. The manufactures consist of

copper ore regions of the United States. family, she was brought to court by her Pop. (1920) 6696.

The description of the United States family, she was brought to court by her mother, became mistress to Louis XIV, Laurium, a promontory and hill range and bore him four children. The king of Attica, Greece, formerly raised the estate of Vaujour into a duchy famous for its silver and lead mines. The working of these has been recently rechildren. Superseded at court by Madame de Montespan, she retired to a Carmelite convent in 1674, where she died. She left a collection of letters, and a work entitled Réflexions sur la Miséricorde de Dieu.

Lava Millstone, a hard and coarse basaltic millstone, obtained from quarries near Andernach

on the Rhine.

Lavandula (la-van'du-la), a genus of and herbs, nat. order Labiatæ, natives of dry hilly places in the Mediterranean region, the Canary Islands, Madeira, etc.

See Lavender.

Lavater (la-va'ter), Johann Caspar, celebrated as a physiognomist, was born in 1741 at Zürich, Switzerland, and died in 1801. He first appealed to the public as a poet in 1767, and then became pastor of a Zürich church in 1774. Lavater is best known, however, as the originator of a system by means of which, when applied to the lines and contours of the face, he claimed stone and basalt, according to the vary- to be able to read the character of its ing proportions of felspar, horn blende, owner. He adopted the idea in 1769, and published his great work under the title of Physiognomical Fragments (4 vols., 1775-78). This book contained many valuable engravings of distinguished peorevolution; was shot in the street while succoring the wounded when Zürich was captured by Massena in 1799, and died from the effects of his wound in about a year. His work on *Physiognomy* was translated into English by Hunter (Lon-

Lava Ware, a kind of coarse ware the Academy in 1768, and obtained the post of farmer-general of taxes in 1769. from iron slag, cast into urns, tiles, table-

and became professor of economics at the its terminology. His most famous dis-University of Liège in 1864. He pub-coveries were those of oxygen gas and the lished many works on the science of eco-chemical theory of combustion. Accused lished many works on the science of economics, of which we may mention—Etude d'Economie Rurale (1864), Eléments d'Economie Politique (1882), and Le Nocialisme Contemporain. He died in 1892.

Lavender (lav'en-der; Lavandüla grant shrub 3-4 feet high, nat. order Labiate, a native of the south of Europe. Brunswick, Canada, 1858. Settling in Under favorable conditions it contains Glasgow, he became an ironmaster. In one-fourth of its own weight in camphor. 1900 he was elected representative to It also produces a volatile oil, which is Parliament; in 1911 he was chosen leader much in demand as an excellent perfume. Of the Unionist Party in the House of This oil is got by distilling the flowers. Commons. He took a deen interest in This oil is got by distilling the flowers. Commons. He took a deep interest in It has a pale-yellow color, aromatic odor, and a hot taste. Besides being employed the tariff reform, and opposed the Home as a perfume, it is used in medicine as a stimulant in hysteria, colic, and other affections. Spirits of Lavender is prepared by digesting the fresh flowers in rectified spirits and distilling. Lavender in rectified spirits and distilling. Lavender in spirit along with otto of roses, bergamot, musk, cloves, rosemary, etc. This prepared to the ablest debaters in the House.

[lan-ten'is], a modern game, played on grass, gravel, cinder, or asphalt courts, with racket consists of a net formed of tightly-strung gut. The balls are of rubber aration after standing for some time is strained and mixed with a certain proportion of distilled water. Enough oil weight. For a game between two playis produced annually in England to make ers (a single-handed game) the court is This oil is got by distilling the flowers. Commons. He took a deep interest in

Laveleye (láv-lã), EMILE DE, a well-known Belgian economist, dish gave impetus and direction to his born in 1822; educated at Bruges and studies. He was the first to organize Paris; published his first work in 1847, the methods of chemistry and establish

portion of distilled water. Enough oil weight. For a game between two playis produced annually in England to make ers (a single-handed game) the court is 30,000 gallons of lavender-water.

The feet long by 27 wide. It is divided across the middle by a net, the ends of species of algor of the genus Porwhich are attached to two posts, which are employed as food, salted, eaten with side. The height of the net is 3½ feet pepper, vinegar and oil; and are said to at the posts and 3 feet at the centre. At be useful in scrofulous affections and each end of the court, parallel to the net glandular tumors.—Green laver is the and 39 feet from it, are drawn the baseliva latissima. It also is employed as lines, the extremities of which are confood, stewed and seasoned with lemonnected by the side-lines, Half-way bejuice, and is ordered for scrofulous patterns. is drawn the half-court line, dividing the Lavoisier (la-vwā-si-ā), Antoine space on either side of the net into two Laurent, was born at Paris in courts. On either side of the net, at a 1743. The son of wealthy parents, he distance of 21 feet from it, and parallel than the Collège Magazine to it are drawn the courts. was educated at the Collège Mazarin, to it, are drawn the service lines. The studied mathematics and astronomy under players take up their positions on oppostudied mathematics and astronomy under players take up their positions on oppo-Lacaille, worked in the laboratory of site sides of the net, and one of them, Rouelle, and received lessons on botany decided by tossing, called the server, from Bernard de Jussieu. His first pubstanding with one foot behind and one lic distinction was to receive the prize foot on the base-line, serves the ball from for the best essay on lighting the streets his right court into the diagonally opportunities of Paris (1766). About this period he site court. The non-server is called the published several treatises, traveled through France collecting material for turn the ball. On either player winning a geological chart, became an associate of the first stroke the score is called 15 for that player; on either player winning his canals, and Niagara Falls by the Welsecond stroke the score is called 30 for land Canal. The river's breadth between him; on either winning his third stroke Montreal and Quebec is from ½ mile to his score is called 40; and the fourth 4 miles; the average breadth, about 2 stroke won by either player is scored game miles. Below quebec it gradually widens for that player. However, if both play-till it enters the Gulf of St. Lawrence ers have won three strokes, the score is (see next article). From the beginning of for that player. However, if both play-till it enters the Gulf of St. Lawrence ers have won three strokes, the score is (see next article). From the beginning of called deuce; and the next stroke won by December to the middle of April the nayeither player is scored advantage for that igation is totally suspended by ice. In player. If the same player win the folpart of its course it forms the boundary lowing stroke, he wins the game. Three-between the United States and Canada. handed and four-handed lawn-tennis dif-fer in no essentials from the game as here described.

rian persecution the saint was commanded to reveal the treasures of the church. For answer he consected them as the treasure which sepresented them as the treasure which secured heaven. For this he is said to residency of Lucknow, he organized the have been burned in the year 258. His defense, but was killed by a shell, July day in the Catholic Church is August 10.

Lawrence, St., one of the largest Lawrence, in the world, which drains the great chain of N. American lakes. The streams connecting the lakes man in 1797, and was with Decatur as are known as the Niagara, Detroit, St. first lieutenant in the engagement against Clair and St. Mary's rivers, and the headwaters as the St. Louis, the name St. 1813, he captured the Peacock in a 15-minute fight. Put in command of the answer he collected the poor and sick and headwaters as the St. Louis, the name St. Lawrence being confined to the stream between Lake Ontario and the ocean. It receives the Ottawa, its principal auxiliary, at Montreal, as also the St. Maurice. rice, the Saguenay, and numerous other large rivers from the north. The river is navigable for Atlantic steamers to the city of Montreal, 600 miles up, and from Montreal upwards by river and lake steamers. The rapids between Montreal and Lake Ontario are passed by means of

Lawrence, St., Gulf of, a large in-let of the North Atlantic in British North America, forming the Lawrence (la'rens), a city and one continuation of the estuary of the river of the capitals of Essex St. Lawrence, and separated from the County, Massachusetts, on both sides of Atlantic chiefly by the island of Newthe Merrimac River, 26 miles north of foundland, Cape Breton and Nova Sco-Boston. The principal buildings are the tia. It communicates with the ocean by Boston. The principal buildings are the tia. It communicates with the ocean by courthouse, opera-house, public library, the opening betwixt Newfoundland and etc. The river yields immense water Cape Breton, about 65 miles wide, by the power, and the cotton, woolen and worst-Strait of Belle-Isle and the Gut of Canso.

power, and the cotton, woolen and worsted mills are among the largest in the world. There are also paper mills, and other industries. Pop. (1900) 62,559; (1910) 85,892; (1920) 94,270.

Lawrence, county seat of Douglas Co., this brother Abbott a very large business Kansas, on Kansas River, 41 miles w. of Kansas City, in a rich farming section. It is the seat of the State acts of beneficence, expending \$640,000 University (4000 students) and the Haskell Institute, for Indians (700 students).—His brother, Arbott, was born in Grothard and engaged in the state of beneficence, expending \$640,000 University (4000 students) and the Haskell Institute, for Indians (700 students).—His brother, Arbott, was born in Grothard acts of beneficence, expending \$640,000 University (4000 students) and the Haskell Institute, for Indians (700 students).—His brother, Arbott, was born in Grothard acts of beneficence, expending \$640,000 University (4000 students) and the Haskell Institute, for Indians (700 students).—His brother, Arbott, was born in Grothard acts of beneficence, expending \$640,000 University (4000 students) and the Haskell Institute, for Indians (700 students).—His brother, Arbott, was born in Grothard acts of beneficence, expending \$640,000 University (4000 students) and the Haskell Institute, for Indians (700 students).—His brother, Arbott, was born in Grothard acts of beneficence, expending \$640,000 University (4000 students) and the Haskell Institute, for Indians (700 students).—His brother, Arbott, was established, including manufactures, was established, including manufac

Register of the Anti-Slavery party of the same and was partly destroyed in 1863. 1855.

Pop. (1910) 12,374; (1920) 12,456.

Lawrence, St., a Roman deacon and martyr. During the Vale-in 1806. He proceeded to India in 1821 and served in the Afghan campaign of 1843. At the outbreak of the mutiny he was made commander-in-chief of the province of Oude; having retired to the residency of Lucknow, he organized the defense, but was killed by a shell, July

minute fight. Put in command of the frigate Chesapeake, he was challenged to fight by the Shannon while lying at Boston and partly equipped. He put to sea in this condition, with the result that his ship was taken and he mortally wounded. He won lasting fame by calling out, while being carried below, 'Don't give up the ship!'

Lawrence, Governor-general of In JOHN LAIRD MAIR, LORD where his rare administrative ability at-tracted attention, and caused him to resioner of the Punjab in 1853, after he had served in minor posts. The wisdom of this appointment was demonstrated cles of California cypress of this appointment was demonstrated cles of California cypress. during the Indian Mutiny of 1857. He was known as the savior of India, and was made governor-general in 1863.

dia, born in Yorkshire in 1811; died in tained. It is a tall, slender shrub, with London in 1879. Educated at the college a profusion of small, white, fragrant flow-of Haileybury, he went to India in 1829, ers; it is sometimes spiny, and in this ers; it is sometimes spiny, and in this state has been described under the name of L. spinosa; when without spines it has been called L. inermis. See Henna.

Lawson's Cypress (Cupressus Law-soniana), a spe-

Lawton, county seat of Comanche Co., Oklahoma, 90 miles s. w. of Oklahoma City. It has an abundance of excellent water for domestic and irrigation

was made governor-general in 1863.

Lawrence, Sir Thomas, English portrait painter, Hoyal Academy, was born at Bristol in 1769. In 1792 he was appointed painter to the king, and was knighted in 1815; and on Benjamin West's death in 1820 he succeeded him as President of the Royal Academy. He died in London in 1830. Lawrence was by far the favorite portrait painter of his time, but his work, in spite of its elegance and taste, scarcely rises above the conventional level.

Lawrence, William Beach, and Maerican jurist, born in New York City in 1800; died in 1831. Beach, and in 1899 was sent to Manila. Here he took an active part in the fighting and was killed in an engagement at San Mateo, December 21, 1899.

Layrence in partnership with Hamilton Fish. He attained eminence as an economist and pleader, and was one of the promoters of the Erie R. R. His later years brought him distinction in international law, a subject on which he wrote and lectured extensively. His Lectures on Political Economy (1832), The Law of Charitable Uses (1845), and Administration of Equity Jurisprudence (1874) are among his chief works.

Lawrence Strike, one of the most ration of Equity Jurispruaence (1874) are among his chief works.

Lawrence Strike, one of the most translation from a Welsh or Breton original. Layamon's work appears to have

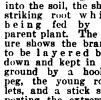
cents of recent years, lasting from January 11 to March 14, 1912, and ending in victory for the workers. During that time some 20,000 hands were idle. The immediate cause was the reduction in pay made when the 54-hour law went into effect. More than 200,000 textile workers has a result.

Lawrenceville, county seat of Lawrenceville, rence Co., Illinois, rence Co., Illinois, and agricultural district. Has refineries, eries in 1849-53. He was appointed machine shops, asphalt plant. Pop. 5080. attaché to the British embassy at Connatural order Lythraces, containing only callivated, especially in oriental regions. and ambassador to the Porte in 1877 until is the plant from which henna is ob-

he accomplished the annexation of Cy- to the spiritual wants of the poor.

Laybach. See Laibach.

Lay Brothers, are an inferior class of monks employed as servants in monasteries. Though not in holy orders, they are bound by the three monastic vows of poverty, chastity and obedience. They wear a dress somewhat different from that of the other monks. In nunneries a similar distinction pre-vails between the nuns proper and the lay sisters.





continued in the extremity of the shoot in an upright position.

Lay-figure, a jointed human figure used by painters, made of wood or cork, which can be placed in any attitude, and serves when clothed as a model for draperies, etc.

Laynez (II-neth'), JACOBO, second general of the Jesuits, born in Castile in 1512; died in 1565. He was educated at the University of Alcala, and from that he went to Paris, where he made the acquaintance of Ignatius Loyola. Laynez was ordained priest in Venice 1537, and while there he and Loyola formed the project of establishing the Society of Jesus. After the order had heen confirmed by Paul III (1540), and Loyola, at the request of Laynez, had been appointed the first general, he made many journeys for the purpose of extending the society of the Jesuits, and in 1558 he succeeded Loyola as general of the order.

Lazaretto (laz-èr-et'tō), a public of Deadwood; situated over the famous house, for the reception of those afflicted with contagious diseases. It is more particularly applied to buildings in which quarantine is performed. See Quarantine.

Lazarists (laz'ar-istz). or PRIESTS of THE MISSION, an ormation of priests founded at Paris by St. Vincent de Paul in 1625 for the purpose of supporting missions and of ministering to the formation of supporting missions and of ministering to the famous ty, South Dakota, 3 miles s. w. ty, South Dakota, 3 miles s. w. deposite ty, South Dakota, 2 miles s. w. deposite ty, South Dakota, 3 miles s. w. deposite ty, South Dakota, 2 miles s. w. deposite ty d

Prus. He is best known by his books: foundation was confirmed by letters-Nineveh and its Remains (1849) and patent of Louis XIII, May, 1627, and the Discoveries in the Ruins of Nineveh and Babylon (1853). Died in 1894.

Laybach, See Laibach.

They have houses in all quarters of the world.

Lazulite (laz'ū-lit), blue-spar, a phosphate of aluminium, magnesium and iron, a mineral of a light or indigo-blue color, crystallizing in oblique, four-sided prisms.

Lazzaroni (laz-a-ro'ne), a class of persons in Naples with out employment or home, and having no settled means of support. The name is said to be derived from that of Lazarus Layering (lā'er-ing), in gardening, in the parable, though it is more directly the propagation of plants connected with the hospital of St. Lazaby bending the shoot of a living stem rus, which served as a refuge for the into the soil, the shoot destitute of the city. For a long time striking root while they played an important part in all Neabeing fed by the politan revolutions. and under Massparent plant. The fig. niello accomplished the revolt of July 7, ure shows the branch 1647, against the Duke d'Arcos. They

to be layered bent are now no longer a separate class. down and kept in the ground by a hooked peg, the young roothets, and a stick supand wrote Superstition and Force, Highest, and a stick supand wrote Superstition and Force, Highest, and wrote Superstition and Force, and Force and wrote Superstition and Force, History of Sacerdotal Celibacy, Studies in Church History and History of the Inquisition in the Middle Ages, works which gave him an international reputation. Ile died in 1909.

Lea, ISAAC, naturalist, born at Wilmington, Delaware, in 1792. He engaged in the publishing business with

engaged in the publishing business with his father-in-law, Matthew Carey, and became an ardent student of conchology, his writings on this subject being of high value. He was made president in 1858 of the Academy of Natural Sciences of Philadelphia. Among his writings were Contributions to Geology, Fossil Foot-marks in the Red Sandstones at Pottsville, etc. He died in 1886,-His son, MATTHEW CAREY (1823-97), was an expert in chemistry, to which he devoted his life, making important discoveries. He was elected to the National Academy of Sciences in 1892.

Lead (led), a city of Lawrence County, South Dakota, 3 miles s. w.

and ductile, possessing the former quality to a considerable extent, but in tenacity it is inferior to all ductile metals. It fuses at about 612°, and when slowly cooled forms octahedral crystals. It is an cooled forms octahedral crystals. It is an abundant and widely distributed metal. It is a constituent of a very large number of minerals, all of which could be used as sources of it if they could be obtained in sufficient quantity. In practice the metal is got from only a few of these minerals, especially from the sulphide, carbonate and one or two others. The most important of all the ores of lead along which has is the sulphide or lead glance, which has been described under the term Galena. The carbonate, also called cerusite, or lead-spar, like all the salts of lead, is perfectly unmetallic in its appearance, and is not infrarequently rejected from and is not infrequently rejected from among common lead ore as an earthy mineral. It occurs in veins in primitive and secondary rocks, accompanying galena and other ores of lead. It is abundant in European countries, and at different localities in the United States. The sulphate of lead, anglesite, or lead vitriol, was found originally at Anglesey. Chromate of lead, crocoisite, or crocoite was originally found in Siberia; it has since been met with in the Philippine Islands, in Brazil and in Hungary. It was in this mineral that chromium was first discovered. Phosphate of lead is found accompanying the common ores of lead, though rarely in any considerable quan-tity. Finely crystallized varieties are found at Leadhills in Scotland, and in Cornwall. In the ores of lead silver is a very common constituent. There are four oxides of lead: (1) The suboxide (PbO), of a grayish-blue color. (2) The protoxide or yellow oxide (PbO), called also massicot. Litharge is this oxide in the form of small spangles, from having undergone fusion. (3) The red oxide (PbO₄), the well-known pigment called red lead or minium. (4) The dioxide or red lead or minium. (4) The dioxide or brown oxide (PbO₂), obtained by putting red lead in chlorine water or in dilute nitric acid. Of the salts formed by the action of acids on lead or on the protoxide, the carbonate, or white lead and the acetate, or sugar, of lead are the most important. The protoxide is also employed for glazing earthenware and porcelain. Carbonate of lead is the basis of white oil-paint and a number of other colors. The salts of lead are poisonous, but the carbonate is by far the most virulent poison. Lead is one of the most easily reducible metals, and from the native carbonate can be got by simply heating with coal or charcoal. The sulphide, or oxide of lead, may all produ however, which is the most abundant of less serious lead poisoning.

its ores, is not so readily acted on by coal. and a reverberatory furnace, or a special variety of blast-furnace, is employed. Lead obtained in this way is usually too hard for use, and it has to be subjected to a process of purilication. This is effected by roasting the lead, sometimes for several weeks, in a reverberatory furnace. By this process the antimony, which is the chief impurity, is burned off, and the dross, which consists of the oxide of that metal with oxide of lead, is afterwards reduced and utilized as a source of antimony. The lead, when judged suffi-ciently pure, is then cast into ingots or pigs of lead. Prepared in this way the lead retains all the silver present in the original ore, and as that is always of value it used to be extracted whenever the quantity of silver present amounted to above 10 oz. per ton. 1 part of tin and 2 of lead form an alloy fusible at 350° Fahr., which is used by tinmen under the name of soft solder. Lead also forms an imperfect alloy with copper. With antimony lead forms the important alloy called type-metal. Pewter is a hard alloy of four parts of tin and 1 of lead. In these proportions the lead is not attacked by organic acids, such as acetic. For the poisonous effects of lead see Lead Poisoning.

Lead, an instrument used on shipboard for discovering the depth of water. It is composed of a large piece of lead shaped like an elongated clockweight, from 7 to 11 lbs. in weight, and is attached to a line, generally of 20 fathoms length, called the lead-line, which is marked at certain distances to denote the depth in fathoms. When the depth is great the deep-sea lead, weighing from 25 to 30 lbs., is used. The line, which is much longer than the former, and called the deep-sea line, is marked by knots every 10 fathoms, and by a smaller knot every 5.

Lead Plaster. See Diachylon.

Lead Poisoning, a disease caused by the presence of lead in some quantity in the system. It may be due to lead which has been taken up by water or other beverage from lead pipes or vessels in which it has been contained. The use of lead in the arts is also a frequent cause of painful, and sometimes of fatal effects, from the metal finding its way into the system. The glazing of culinary vessels with lead; the coloring of confectionery with the chromate, chloride, or carbonate of lead; the sweetening of sour wine by litharge or oxide of lead, may all produce more or But the painters coile, or dry beny-acne. 2. Lead alustrana and south America. The rheumatism or arthralgia. 3. Lead palsy males have long antennæ and wings, and or paralysis, more particularly of the can fly; the females have short antennæ, muscles of the forearm. 4. Disease of and are incapable of flight. the brain, manifested by delirium, coma, or convulsions—a form, however, of rare occurrence. Opium and cathartics are

The English land league is 3 statute with the converse of the converse occurrence.

Once a center of gold-mining, rich Pop. (1920) 4959.

Leadwort (led'wurt), a name for the plants typical of the order Plumbaginaceæ.

(lef), the green, deciduous part of a plant, usually shooting from the sides of the stem and branches, but sometimes from the root, by which the sap is supposed to be elaborated or an expanded part, called the blade or

Leaf-Cutting Insects, a name given to certain species of solitary bees, from cutting ants, which carry the fragments held its first session in November, 1920. to their nests, where they form a soil Leake for the growth of certain foliage of which

most frequent and virulent cases occur plants that they are easily mistaken for among painters and persons engaged in the vegetable productions around them. white-lead factories; and four forms of The eggs too have a curious resemblance disease, either simple or complicated, are to the seeds of plants. They are for the apt to manifest themselves—1. Lead or most part natives of the East Indies, painters colic, or dry belly-ache. 2. Lead Australia and South America. The

occurrence. Opium and cathartics are the chief medicines administered.

Leadville (led'vil), county seat of rial miles, or 3.457875 statute m French metric league is reckoned in a lake region 10,000 feet above sea League. an alliance or county seat of the chief medicines administered.

The English land league is miles, and the nautical league is miles, and the nautical league frial miles, or 3.457875 statute m French metric league is a miles, and the nautical league is miles, and the nautical league 3 equatorial miles, or 3.457875 statute miles. The 78 French metric league is reckoned as equal

League, an alliance or confederacy between princes or states for their mutual aid or defense. What in French history is known distinctively as argentiferous lead mines were discovered in 1877, creating new prosperity for the French history is known distinctively as town. The production of the lead mines The League was headed by Henry, Duke has amounted to over \$400,000,000. It of Guise, in 1576, against Henry III of Galacies sine oxide plant, etc. France. Its ostensible object was the support of the Catholic religion, but the Duke of Guise used it as a political machine; it was dissolved in 1595. For certain other leagues see League of Nutions, Corn Laws, Covenant.

League of Nations, also called So-TIONS, a pact agreed to by the United States, the British Empire, France, Italy, fitted for the nourishment of the plant by Japan and the other nations associated being exposed to air and light on its with them in the European war (q. v.), extensive surface. When fully developed 1914-18. It became an essential part of the leaf generally consists of two parts, the treaty of peace with Germany (see Treaty), and the treaties with the other an expanded part, called the blade or freely), and the treaties with the other limb, and a stalk supporting that part, belligerents, and was signed first at Vercalled the petiole or leaf-stalk. Free sailles, June 28, 1919. Its object was 'to quently, however, the petiole is wanting, promote international co-operation and to in which case the leaf is said to be achieve international peace and security sessile. Leaves are produced by an ex-by the acceptance of obligations not to pansion of the bark at a node of the stem, resort to war; by the prescription of and generally consist of vascular tissue open, just and nonorable relations between in the veins or rips, with cellular tissue nations; by the firm establishment of the or parenchyma filling up the interstices, understandings of international law as the and an epidermis over all. Some leaves, actual rule of conduct among govern-however, as those of the mosses, are entirely cellular. See Botany.

The vertices of rins, with the vertices of the interstices, understandings of international law as the and an epidermis over all. Some leaves, actual rule of conduct among govern-however, as those of the mosses, are entirely cellular. See Botany. name obligations in the dealings of organized en to peoples with one another. President from Wilson undertook to sign the covenant of their lining their nests with fragments of the League of Nations on behalf of the leaves and petals of plants cut out by United States, but the Senate refused to their mandibles. There are also leaf-ratify the pact. The League Assembly

(lek), WILLIAM MARTIN, an English officer and author of these species of ants are fond. works on the topography and antiquities the name given to or- of Greece, born in 1777; died in 1860. Leaf-insects, the name given to or- thopterous insects be- He entered the Turkish service, and was longing to the family Phasmidæ, and sent on several missions to Syria, Egypt popularly known also by the name of and Greece. Among his principal works walking-leaves. Some of them have wing- are Researches in Greece, etc. (1841); covers so closely resembling the leaves of Topography of Athens (1821); Travels

Leap-year (lep-yer), one of the years which contain 366 days, being every fourth year, which leaps over a day more than a common year. Thus a day more than a common year. Thus in common years, if the first day of March is on Monday the present year, it will the next year fall on Tuesday, but in leap-year it will leap to Wednesday, for leap-year contains a day more than a common year a day being added to the month. mon year, a day being added to the month

estate can of course lease his property only during his life. This is the case with a great part of the landed estates of Europe, the very object of entailments and other limitations being to secure the property against alienation, and against incumbrances to the prejudice of the heir or successor to the inheritance; and yet of the incumbent could not make a lease for a certain time it would be a great bridgment of the value of the estate to

in the Morea (1830); Travels in North-ern Greece (1835); Numismatica Hel-laws therefore provide that certain pro-prietors of estates for life may lease, on Leamington (lem'ing-tun), a mu-certain terms, for any time not exceeding Leamington

(le m' ing-tun), a municipal borough and watering-place of England, in Warwickshire, 2 miles east of Warwick, with which it is united in parliamentary representation. Its sheltered position and the beauty of its scenery, together with the excellence of its medicinal springs, have gained it much favor and the name of 'Leafy Leamington.' The springs, for ever so many years, as a hundred or which include the three varieties of sulphurous, saline and chalybeate, attract numerous visitors. Pop. (1911) 26,717.

Leander. See Hero.

Haws therefore provide that certain proprietors of estates for life may lease, on certain terms, for any time not exceeding a certain period, as twenty-one or forty years. The English common law makes distinction as to the dignity of leasehold estates, which in many cases does not correspond to their comparative value and importance, the maxim being that a life-estate, being that of a freeholder, is whereas a lease is but a chattel interest, though the term may be longer than the longest life.

Leander.

Leather (leth'er), the skins of animals dressed and prepared for use by tanning, tawing, or other processes, which preserve them from putrefaction and render them pliable and tough. The skins employed are chiefly the skins of particular than the skins of the s those of cattle, though the skins of horses, asses, sheep, pigs and goats are also converted into leather. Hides are received by the leather-maker in various states, leap-year contains a day more than a common year, a day being added to the month of February. Every year is a leap-year those from a distance being usually cured by salting or sun-drying, sometimes by which is divisible by 4 without remainder, except the concluding years of centuries, process of tanning, the cured hides revery fourth only of which is a leap-year; thus the years 1800 and 1900 were not leap-years, but 2000 and 2400 will be.

Lease (les), a permission to occupy lands or tenements for life or a certain number of years, or during the pleasure of the parties making the contract. The party letting the lands or tenements is called the lesser, the party to whom they are let the lesser, and the compensation or consideration for the lease the rent. A lease for a period not exceeding three years may be by verbal contract. If, however, the term be longer than three years, the lease must be by deed. A breach of any of the covenants contained in a lease was formerly sufficient to render it void, but now any payment. The power to lease necessarily added. A proprietor who has only a life estate can of course lease his property only during his life. This is the case a moist chamber at a uniform temperathose from a distance being usually cured main in a pile and covered, it necessary, with fermenting tan; the preferable cold method consists in hanging the hides in a moist chamber at a uniform temperature of 60° or 70° F. When the hair is sufficiently loosened the hides are usually thrown into the 'stocks,' where the alime and most of the hair is worked out of them. Other unhairing processes consist them. Other unhairing processes consist in treatment with alkaline sulphides, especially sulphide of sodium or sulphide of arsenic. To remove the loosened hair, the hide is generally thrown over a beam

and scraped with a blunt two-handled void of feathers and presenting a leathery knife, but several anhairing machines appearance. Called also friar bird. have been invented. After unhairing, the Leather-wood (Dirca palustris), and frequently shaken in it to remove lime or dirt prior to undergoing the employed to ferment and render light the process of tanning (see Tanning) and fresh dough with which it is mingled. Its currying (see Currying). The brilliant use dates from remotest antiquity; the smooth surface of patent, enameled, lac-addition of yeast is more recent. quered, varnished, or japanned leather is Leavenworth, a city, county seat of due to the mode of finishing by stretching the tanned hides on wooden frames and Kansas, on the Missouri River, 30 miles

Leather, Arifficial, the general and industrial farm for women is 3 miles name of certain fabrics possessing some of the qualities and often Lebanon (1920) 16.912.

Lebanon Co., Pa., 28 miles earliest methods of fabrication consisted w. of Reading. It has extensive iron and in applying oily pigments to cloth which steel manufactures; also textiles. was subsequently rolled and coated with (1910) 19,240; (1920) 24,643. was subsequently rolled and coated with (1910) 19,240; (1920) 24,643.

a sort of enamel paint. An article of Lebanon, a city, county seat of Boone this sort, known under the name of leather-cloth, was first produced in the of Indianapolis. It has flour, saw and United States about 1849. Another kind consists of leather parings and shavings reduced to a pulp, and then molded into buckets, machinery-bands, picture-frames, and other useful and ornamental objects. A so-called vegetable leather consists of caoutchouc dissolved in naph.

Lebanon, a city, county seat of Boone Co., Indiana, 28 miles N. w.

Lebanon, a town in Grafton Co., New Hampshire, on the Connectute River. Has manufactures of wool-consists of caoutchouc dissolved in naph.

MOUNTAINS OF, two nearly parallel mountain ranges consists of caoutchouc dissolved in naphtha, spread upon a backing of linen. is of considerable strength and durability, and is used for table-covers, carriage-aprons, soldiers' belts, harness, bookaprons, soldiers' binding, etc. V binding, etc. Various other substitutes for leather have been recently introduced, one consisting of cloth with a thin facing of leather; but the commonest material is still obtained by varnishing textile fabrics with coatings of some resinous sub-stance, and then painting or embossing

Leatherhead, an Australian bird, the Tropidorhynchus corniculatus, a species of honey-

Leather-wood loose flesh and fat are scraped, brushed, and the lacese, a bush of the United States, with or pared from the inner side, and the lacese, a bush of the United States, with hides intended for sole leather are rounded small, yellow flowers, flexible jointed or separated into 'butts' and 'offal'— branches, and a tough, leathery, fibrous the latter the thinner parts, including the bark, which is used by the Indians for cheeks, shanks and belly pieces. The thongs. The twigs are used for baskets, butts are then suspended for from twelve etc. Called also moose-wood and wicopy, to twenty-four hours in soft fresh water, Leaven (lev'n), dough in which fermand from the latter than the Leaven mentation has commenced,

the tanned hides on wooden frames and Kansas, on the Missouri River, 30 miles applying successive coats of varnish, each N. of Kansas City, in a region noted for its coat being dried and rubbed smooth with wheat, apples, and pure-bred dairy cattle. pumice stone. Other special kinds of It has over 50 industrial plants, with an leather are seal leather, Russia and Monual pay rolls of \$2,500,000. Products invoce leathers (which see). Tawed leath-clude mill machinery, furniture, wagons, ers (see Tawing) consist chiefly of the farm implements, steam engines, bridge skins of sheep, lambs, kids and goats and structural iron, stoves and ranges, treated with alum, or some of the simple soap, flour, etc. It was named for Fort aluminous salts, the principal tawing in-Leavenworth, adjoining the city; here are dustries being the manufacture of calf kid the Army Service Schools and Staff Colfor boots and glove kid. Shamoy, or oil-lege; also the Disciplinary Barracks of for boots and glove kid. Shamoy, or oil-lege; also the Disciplinary Barracks of leather, is prepared by impregnating hides the army. The U. S. Federal prison is and skins with oil (see Shamoy).

parallel mountain ranges It in the north of Palestine, stretching from southwest to northeast, and enclosing between them a valley about 70 miles long by 15 miles wide, known anciently as Cœlē-Syria. The range on the west is called Lebanon, and that on the east Anti-Lebanon; the Arabs, however, call the former Jebel-Libnan, and the latter Jebel-esh-Shurky. Lebanon, which runs almost parallel to the Mediterranean coast, is the far loftier range of the two, and presents almost a continuous 1idge, its loftiest summit—Jebel Sunnin, near Beyrout—being about 10.000 feet above the sea. Though under the snow limit, eater. So called from its head being de- snow and ice remain throughout the year

in the higher ravines. Anti-Lebanon claims the culminating point of the whole chain, Jebel-esh-Sheikh (about 11,000 chain, Jebel-esh-Sheikh (about 11,000 feet). In the south part of the chain the Upper Jordan has its source. The habitable districts are occupied towards the north by the Maronite Christians, and towards the south by the Druses. The forests of cedar for which Lebanon was famed have to a large extent disappeared. Lebedin (lye-be-dyen'), a town of Russia in the government of Kharkov, and 75 miles west northwest of the city of that name. Pop. 14,206.

Lebrija (le-brē'hā), a town of Spain, Andalusia, province of Seville, and 28 miles from the city of that name. Pop. 10,997.

(le-ka-nō'ra), a genus of lichens, a species of which Lecanora yields cudbear.

Lecce (let'chā), a town in Southern Italy, capital of the province of its own name, 50 miles E. S. E. of Taranto. It has noteworthy ancient build

ranto. It has noteworthy ancient buildings, and a large tobacco factory, textile manufactures, etc., and is noted for its olive oil. Pop. 35,179.

Lecco (lek'kō), a town of Northern Italy, on an arm of Lake Como, called from it Lago di Lecco. Pop. 10 359 10,352.

Lecky (lek'i), WILLIAM HARTPOLE, an English historical writer, born at Dublin in 1838. He wrote The Leaders of Public Opinion in Ireland; History of the Rise and Influence of the Spirit of Rationalism in Europe; History of European Morals from Augustus to much circumspection and received a generating of England in the ovation on his return to America. Eighteenth Century (8 vols.). He died died in 1905. in 1903.

Le Conte, JOSEPH, scientist, born in Liberty County. Georgia, in 1823. He practiced medicine for several years at Macon, Georgia, but in 1850 nental Congress, 1775-1779, often president to Cambridge, Massachusetts, where in committee of the whole; and was a he studied natural history under Agassiz.

(1818-94), French poet, born at St. Paul, Isle of Bourbon, 1818; died in 1894. After extensive travels he returned to Paris and assisted in the foundation of a paper, Le Sifflet. Leconte de Lisle's first poem, Venus de Milo (afterwards incorporated in his Poèmes Antiques), was published in 1848, and showed a keen interest in politics with a strong republican bent. politics with a strong republican bent, fairs, Lee specially distinguished himself. His Poèmes Antiques, which appeared He was known in the army as 'Light in 1852, contained some of his best work. Horse Harry.' On the conclusion of the

In 1872 Leconte de Lisle was made libra-

rian to the Senate.

Leda (le'da), in Greek mythology, the wife of the Spartan king Tyndarus. By Zeus, in the form of a swan, she was mother of Castor and Pollux.

ARTHUR, American diplomatist Lee, born in Westmoreland County, Va., December 20, 1740; died December 12, 1792. He became American agent in England, 1770; was appointed commissioner to France, 1776; conducted negotiations with France Spain Paradia. tiations with France, Spain, Prussia and Holland; member of Congress, 1782-85.

CHARLES, a general in the American Revolution, born at Dernhall, Cheshire, England, 1731; died at Philadelphia October 2, 1782. He was appointed major-general by the Continental Congress in 1775. He disobeyed orders at the battle of Monmouth, and was sentenced to one year's suspension from military service. He was afterwards dis-

mistary service. The was afterwards dismissed altogether.

Lee, Fitzhugh, general, a grandson of Henry ('Light-Horse Harry')
Lee, of Revolutionary fame, was born in Virginia in 1835. He was graduated at West Point in 1856, and at the outbreak ago di Lecco. Pop. of the Civil war became a general of cavalry in the Confederate army. In 1885
WILLIAM HARTPOLE, he was elected Governor of Virginia and reëlected for the succeeding term. In 1895 he was deputed by President Cleveland as Special Consul to Havana, where he remained until the rupture with Spain in 1898. He carried out his duties with much circumspection and received a great

> Francis Lightfoot, signer of the Lee, Francis independence, was born in Stratford, Virginia, in 1734; died in 1797. He was a member of the Continental Congress, 1775-1779, often presidframer of the articles of confederation.

he studied natural history under Agassiz. Iramer of the articles of confederation. He subsequently held several professorships, and after 1869 occupied the chair of geology and natural history in the University of California. Died in 1901.

Leconte de Lisle (le cont' de lel), ary general, born in Westmoreland County, Virginia, in 1756; educated at Princeton College, and in 1776 appointed captain of a company of cavalry in Colonel Bland's Virginia regiment, and (1818-94), French poet, born at St. Paul, served in Washington's army until 1780, where he inited General Greene in the where he joined General Greene in the South. In the memorable retreat of Greene before Lord Cornwallis, Lee's legion acquired fame as the rear guard of the American army, the post of the greatest danger. At the battles of Guildford Courthouse and Eutaw, and in other afwar he was sent to Congress as a delegate from Virginia, and in 1792 was 1838, and in 1847 was appointed engineer-chosen governor of that State. In 1799, in-chief of the army for the Mexican on the death of Washington, he was second to propounce an enlow on him and lected to pronounce an eulogy on him, and characterized him as 'first in war, first in peace, and first in the hearts of his countrymen.' In 1801 he republic life. He died in 1818. In 1801 he retired from

Lee, NATHANIEL, an English dramatic poet, born about 1657, and educated at Cambridge, whither he went in 1668. He afterwards went to London, and in 1675 produced his tragedy of Nero, and in 1675 produced his tragedy of Nero, from that time to 1681 producing a tragedy yearly, the best known being the Rival Queens (1677). He also tried his abilities as an actor, but failed in the attempt. In 1684 he became insane and was confined in Bedlam until 1688, when he was discharged and wrote two more tragedies, the Princess of Cleves and the Massacre of Paris, which appeared in 1689 and 1690. He died in 1691 or 1692. Lee, RICHARD HENRY, a distinguished horn Jan. 20, 1732, at Stratford, Westmoreland County, Virginia. He received a part of his education in England, and after his return to his native country was chosen a delegate to the House of Burgesses from Westmoreland County. In the opposition to unjust British claims he played throughout a most important part, and on being sent as delegate from Virginia to the first American Congress at Philadelphia (1774) was at once recog-nized as a leader in that assembly. He drew up most of those addresses to the king and the English people which were admitted by his political opponents to be unsurpassed by any of the state papers of the time. When war became inevitable Lee was placed on the various committees appointed to organize resistance. On the 7th of June, 1776, he introduced the motion finally breaking political connection with Britain. In consequence of weak health he was unable to serve in the field, but his activity as a politician was as unceasing as valuable. In 1784 he was unanimously elected president of the Congress, and when the federal constitution was established he entered the Senate for his native State. In 1792 he retired into private life, and died in Virginia in 1794. Lee, ROBERT EDWARD, general, com-mander-in-chief of the Confederate army, one of the most skilful tacticians who took part in the great Civil war, was born in Virginia in 1807, the son of General Harry Lee, of Revolutionary fame. In 1829 he left the military academy of West Point with the rank of second lieu-

at Cerro-Gordo, Contreras, Cherubusco and Chapultepec (at the latter he was wounded) speedily gained for him the



General Lee.

rank of colonel. From 1852 to 1855 he was superintendent of military studies at West Point. In 1861 he became colonel of his regiment, but on the secession of Virginia from the Union he threw up his commission, in 1862 was given the command of the Virginia army, and subsequently was goldent by quently was selected by President Davis as commander-in-chief. In June, 1862, he defeated the Federal army he defeated the Federal army under McClellan, and aided by Stonewall Jack-son, defeated Pope at Manassas Junc-tion on the 30th. Lee now crossed the Potomac into Maryland and fought an indecisive battle with McClellan at Antietam, subsequently crossing the Potomac and withdrawing behind the Rappa-hannock. On the 13th of December he defeated the Federalists under Burnside at Fredericksburg, and on the 2d and 3d May, 1863, defeated Hooker at Chancellorsville. This victory was followed by an invasion of Pennsylvania, where he was beaten by Meade at Gettysburg, July 1st and 3d, and forced to retreat into Virginia. The campaign of 1864 was begun by the advance of General Grant on May 4. A succession of stubbornly con-tested battles followed from the Wilderness by way of Spottsylvania and Cold Harbor to Petersburg. The siege of Petersburg was protracted until April 2, 1865, when Grant broke through Lee's In 1829 he left the military academy of defenses, and forced him to abandon West Point with the rank of second lieu-tenant of engineers. After making a tour great superiority of men gradually hemmed in the Confederate forces, and on April 9, Lee and his army surrendered to Grant at Appomattox Court House. General Lee retired into private life; was elected president of Washington College, Lexington, Va., in 1865. He died Octo-ber 12, 1870.

Leech (lech), a name for those Annelida or Worms that form the neida or worms that form the type of the order Hirudinea (synonyms, Suctoria, Discophora) of that class. The distinctive feature of the leeches consists in the presence of one or two sucking discs. The rings or segments of the body are very numerous and closely set. Usually leeches breathe either by the general surface of the body or by little sec-Usually leeches breathe either by the general surface of the body or by little saclike pouches known as the respiratory sacculi. They chiefly inhabit fresh-water ponds, though some live among moist grass, and some are marine. The familiar horse leeches (*Hæmopsis sanguisāga*) of fresh-water ponds and ditches are included in this group. The land leeches of Caylon are terrestrial in habits, living Ceylon are terrestrial in habits, living among damp foliage and in like situations. They fasten on man and beast, and are a serious pest to travelers. The species generally employed for medical species generally employed for medical purposes belong to the genus Sanquisiga, and are usually either S. officinalis (the Hungarian or green leech), used in the south of Europe, or S. medicinalis (the brown-speckled or English leech), used in the north of Europe. The latter variety, however, is now rare in England, owing the the desirance of begg and ponds. The to the drainage of bogs and ponds. The mouth, situated in the middle of the anterior sucker, is proyided with three small rior sucker, is provided with three small white teeth, serrated along the edges, and capable of inflicting a peculiar Y-shaped wound, which, like that produced by the soldier's bayonet, is difficult to close, and permits a large and continuous flow of blood. From 4 drachms to 1 oz. may be stated to be the average quantity of blood that can be drawn by a leech. After detaching themselves, leeches are made to disgorge the blood they have drawn by being placed in a weak solution of salt, or by having a little salt sprinkled over them. Leeches appear to hibernate in winter, burying themselves in the mud at

Leech, the border or edge of a sail which is sloping or perpendicular.

Leech, John, an English artist and humorist, born in London in 1817; educated at the Charterhouse School. He studied at St. Bartholomew's Hospital for a time, but forsook medicine, and commenced drawing on wood for pub-lications. His first important work was tall, and the flowers are disposed in large

illustrations to the Ingoldsby Legends. In 1841 he joined the staff of Punch, his first drawing appearing in August of that year. For that periodical he worked with preëminent success, supplying weekly political satires and pictures of all phases of English life, showing no less artistic power than versatile humor. He died suddenly in 1864. His designs for Punch have nearly all been republished as Piotures of Life and Character, and as Pencilings from Punch. He also executed the illustrations for Mr. Sponge's Sporting Tour, The Comic History of England, and other books. No artist has excelled John Leech in his particular line of artistic production.

Leechee. See Litchi.

Leeds (leds), a borough and manufacturing city of England, in the West Riding of Yorkshire, on the river Aire, which here becomes navigable, and is crossed by eight bridges; 185 miles by railway N. N. w. from London. Among the most conspicuous of the public buildings are the town hall, considered one of the finest municipal buildings in the kingdom; the infirmary, a building in the Gothic style; the municipal offices and free library and the royal exchange. The University of Leeds has handsome buildings and about 1200 students. In the vicinity is Kirkstall Abbey, a noble ruin which belongs to the borough, and in the environs is a beautiful park of 300 acres. Leeds has been for generations the chief seat of the woolen manufacture of Yorkshire. In the wholesale clothing trade several thousand hands are employed, as also in steel works, iron foundries, rollingmills, tool and machine factories. boot and shoe factories, the leather trade, and the cloth-cap trade also employ large numbers of men and women, and there are extensive color-printing works, to-bacco manufactories, chemical and glass works, works for making drainage pipes, taching themselves, feeches are made to works, works for making drainage pipes, disgorge the blood they have drawn by fire-bricks, terra cotta, pottery, etc. being placed in a weak solution of salt, Nearly a hundred collieries are worked in or by having a little salt sprinkled over the district. The history of Leeds extends them. Leeches appear to hibernate in over more than 1200 years, the town winter, burying themselves in the mud at being mentioned under the name of Loid the bottom of the pools, and coming forth in the spring. capital of a small British kingdom about 616. Leeds was not made a parliamentary borough till 1832, when it was allotted two members; in 1867 it got a third, and in 1885 two more. In the neighborhood is the fine ruin of Kirkstall Abbey. Pop. (1911) 445,568.

Leek (lēk; Allium Porrium), a mid kind of onion much cultivated for culinary purposes. The stem is rather

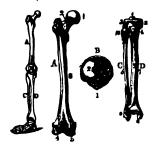
compact balls, supported on purple peduncles. See also Allium.

Leek, a market town of Staffordshire, England, picturesquely situated in the valley of the Churnet, 28 miles from Manchester. The staple industry is the manufacture of sewing silks and silk trimmings, silk dyeing, etc. Pop. 16,665.

Leeuwarden (la'u-var-den), a town of Holland, capital of the province of Friesland, on the Ee, 70 miles northeast of Amsterdam, intersected by numerous canals. The principal edifices are the palace of the former stadtholders of Friesland, several churches, town house and provincial courthouse. The industrial establish-

ments are various. Pop. 32,203. Leeuwenhoeck (la'u-ven-hök), Antony van, a Dutch microscopist, born in 1632; died in 1723. He completed Harvey's discovery of the circulation of the blood by showing that it passes from the arteries to the veins through the capillaries. He also discovered the red corpuscles of the blood, the

spermatozoa, the infusorial animalcules,



Bones of the Human Leg.

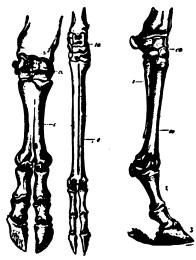
A, Femur: 1, Head; 2, Neck; 3, Shaft; 4, External condyle; 5, Internal do. B, Patella: 1, Apex of the bone. 2, Surface of articulation, with external condyle of the femur; 3, Do. with internal condyle. c, Fibula: 6, Shaft; 9, Lower extremity, the external malleolus: 10, Upper extremity. D, Tibia: 1, Spinous process: 2, Inner tuberosity: 3, Outer do.; 4, Tubercle; 5, Shaft; 7, Internal surface of shaft; the sharp border between 5 and 7 the creat of tibia: 8, Internal malleolus the crest of tibia; 8, Internal malleolus.

etc. He contributed papers to the Philosophical Transactions of the Royal Society, London.

Leeward (le'ward, lo'ard), in nautical phraseology, a term that refers to the quarter towards which the wind blows. See Lce.

Leeward Islands. See West Indies. See Nicosia. Lefkosia.

Leg, any limb of an animal that is used in supporting the body, and in walking and running; in a narrower sense, that part of the human limb from the knee to the foot. The human leg has two bones, the inner called the *tibia* or shin-bone, the outer called the *fibula* or clasp-bone. The tibia is much the larger



A, Foreleg of Ox (Bos taurus). B, Hind-leg of stag (Cervus elaphus). ca, Carpus; ta, Tarsus; c, 'Canon-bone,' composed of the united metacarpals or metatarsals of the third and fourth digits. c, Foreleg of horse. ca, Carpus; m, Metacarpal othe third digit; s, 'Splint-bone,' or rudimentary metacarpal; 1, First phalanx or 'great pastern'; 2, Second phalanx or 'small pastern'; 3, Third phalanx or 'coffin-bone.'

of the two, and above is connected with the thigh-bone to form the knee-joint, the fibula being attached to the outer side of its head. In front of the knee-joint, situated within a tendon, is the knee-cap or patella. (See Knee.) The lower end of the tibia and of the fibula enter into the ankle-joint, the weight being conducted to the foot by the tibia. (See Foot.) In the foreleg are muscles which extend the foot, and on the back of the leg are two large muscles which form the bulk of the calf of the leg, and which unite in a thick

tendon, the tendo Achillis. These muscles are used in walking, jumping, etc.

Legacy (leg'asi), a gift by will of personal property, as goods and chattels; a testamentary gift of real property being called a devise. The mode of compelling executors to pay a legacy

of the testator's assets; courts of common same on the other side of the Channel, law have not, in general, any jurisdiction. He died in 1833. He particularly dis-Executors cannot be compelled to pay a tinguished himself by profound investigalegacy until the expiration of a year after tions as to the attraction of elliptical

Le Gallienne (lè-gal-i-en), RICHARD, author, born at Liverpool, England, in 1866. Since 1898 he has resided in New York. His books include The Book-Bills of Narcissus, The Religion of a Literary Man, Retrospective Reviews, Rudyard Kipling, Prose Fancies, additional forms of tricks performed with such art and adroitness that the manner or art eludes

cept in payment. See Money.

Legates (legatz), persons sent by some combination of these. In the more elaborate phases of the art the aid of foreign courts. Legates a latere, highest in rank, were sent on particularly important minimum and the sciences is in the science of t tant missions, and were always cardinals. Leghorn (leg'horn; Italian, Livorno), a seaport of Northern Italy,

tyrs, or of remarkable stories relating to them, because they were read at matins and in the refectories of cloisters, and were earnestly recommended to the perusal of the laity. The Roman breviaries contain histories of the lives of saints and martyrs, which were read on the days of the saints whom they commemorated. They originated in the twelfth or thirteenth century, and they contributed much to the extinction of the old German (heathen) heroic traditions. Among the best-known collections were the Legenda Sanctorum or Historia Lombardica and the Golden Legend (q. v.). The term is used in a general sense for any remarkable story handed down from early times, and is also applied to the motto or words engraved in a circular manner round the head or other figure upon a medal or coin and to descriptive texts beneath illustrations in books, etc.

Legendre (lé-zhin-dr), Adrien Marte, mathematician, born at Paris in 1752, early a professor of mathematics in the military school there, and in 1783 a member of the Academy. In 1787 he was employed along with Cassini and Mechain to measure a degree of letitude hetween Dunkirk and Boulogne. latitude between Dunkirk and Boulogne, 6000, often with a complement of cavalry.

is by suit in equity for the administration while English mathematicians did the the testator's death; and even after that spheroids, and his method of calculating legatees must refund money if necessary the course of the comets. His best-the payment of creditors. Géometrie (1794), translated into English by Thomas Carlyle, and edited by Sir David Brewster.

adroitness that the manner or art eludes several volumes of poetry, etc.

Legal Tender, money which a creditor is bound to acdefinition and the phenomena of legerdefinition and the phenomena of legerdefiniti mechanical contrivances, confederacy, or

Legation (le-gā'shun), the body of in the province of Leghorn or Livorno, an embassy. Formerly in Italy legation on the Mediterranean, 12 mles s. s. w. of Florence. Leghorn is for the west past made to the leghorn in the Mediterranean of Plan and 50 miles w. s. w. of Florence. Legend (lej'end), ordinarily the title sons that were to be read daily in the service of the early church. The term objects of interest are the duomo or calegend was afterwards applied to collections of biographies of saints and markets. It is and 50 miles w. s. w. of Florence. Leghorn is for the most part modern, and well and regularly built. It is interested by canals, and a navigable canal connects it with the river Arno. Among objects of interest are the duomo or calegend was afterwards applied to collections of biographies of saints and markets. synagogue richly ornamented with mar-bles; the English chapel and cemetery (containing Smollett's tomb); the laza-rettos, particularly San Leopoldo, one of the most magnificent works of the kind in Europe; etc. The manufactures are varied. Shipbuilding is carried on, and within recent years several iron-aleds here been constructed in the deckclads have been constructed in the dockyards. Trade is principally carried on with the ports of the Levant and the Black Sea, and with the United Kingdom. Leghorn was a mere fishing village when it came into the possession of the Florenit came into the possession of the Forentines in 1421, and it continued to be a place of no importance till the sixteenth century. It now ranks among the chief ports after Genoa and Naples. Pop. (1911) 105.315.

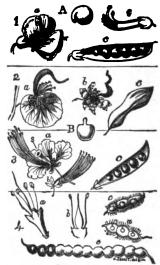
Leghorn, a kind of plait for bonnets straw of bearded wheat cut green and bleached; so named from being imported from Leghorn.

Legio Fulminatrix. See Aure Antoninus. Aurelius Legion (le'jun), in ancient Roman armies a body of infantry consisting of different numbers of men at different periods, from 3000 to above Legion, AMERICAN, an organization They are trees, shrubs, or herbs, differing of American veterans of the widely in habit, with stipulate, alternate European war, formed in Paris, March, (rarely opposite), pinnate, digitately 1918, formally recognized in St. Louis, compound or simple leaves, and axillary May, 1919. Lieut.-Col. Franklin D'Olier, or terminal one or many flowered pedunof Philadelphia, was elected the first cles of often showy flowers, which are national commander.

Legion of Honor (Légion d'Honorder), a French order for the recognition of military and civil merit, instituted by Napoleon while consul, May 19, 1802, and inaugurated July 14, 1804. The decoration originally consisted of a star containing the nally consisted of a star containing the portrait of Napoleon surrounded by a wreath of oak and laurel, with the legend, 'Napoleon empereur des Français'; on the reverse was the French eagle with a thunderbolt in his talons, and the legend, 'Honneur et patrie.' The order has been considered several times, the last occasion remodeled several times, the last occasion being subsequent to the downfall of the second empire. There are now five ranks or classes: ordinary chevaliers or knights, officers, commanders, grand-officers, grandofficers, commanders, grand-officers, grand-crosses. The profuse granting of the decoration of the order latterly brought the institution into discredit, and the number of chevaliers is now restricted to 25,000, the officers to 4000, the commanders to 1000, the grand-officers to 200 and the grand-crosses to 70. The star now bears a figure emblematic of the republic, with the inscription 'République Française, 1870,' on the reverse two flags, with the inscription 'Honneur et Patrie.'

Legros (la-gro), Alphonse, a French artist whose work has been for the most part done in England; born near Dijon in 1837, and largely self-instructed. He went to Paris in 1851, and in 1857 exhibited for the first tipe in the Salon. He subsequently settled in the Salon. He subsequently settled in London and in 1876 became professor at the Slade School in University College. His more important pictures are the His more important pictures are the Anglers, the Pilgrimage, the Spanish and Casalpinies.

Cloister, the Benediction of the Sea, the succeeded by a leguminous fruit. Four suborders are recognized: Papilionaces, Swartzies, Casalpinies and Mimoses. bupitsm and the Coppersmith. His etchings are of higher value, among the most noteworthy being his Death and the Woodman and Le Repas des Pauvres, both marked by a fine breadth in con-



LEGUMINOSE.

LEGUMINOS...

1. Papilionaces: a, Flower of the pea: s, Standard; w, Wings: k, Keel; b, Stamina, nine connected, one free; c, Legume, seeds fixed to the upper suture in one row. 2, Swartzies: a, Flower of Swartzia grandifora, with its single petal and hypogynous stamens: b, Calyx; c, Legume. 3, Czesalpiniese: a, Flower of Poinciana pulcherima, showing its difform interior upper petal; b, Calyx; c, Legume. 4, Mimosees: a, One flower of common sensitive plant (Mimosa pudica), showing its regular corolla; b, Stamina, hypogynous; c, Legume exterior; d, Legume interior; e, Legume of Acacia arabica. A, Curved radicle, as in Papilionaces. B, Straight radicle, as in Swartzies and Czesalpinies.

etchings are of higher value. among the most noteworthy being his Death and the Woodman and Le Reyas des Pauvres, to contains a great variety of useful and both marked by a fine breadth in conception and handling.

Legumin (le-gū'min), a material logwood, and many other dyeing plants, acacias, senna, tamarinds, etc.

Leguminosæ (le-gū-mi-nō'sē), one sea-level, and 2 miles from the right bank of the largest and most important natural orders of plants, there are of very rich architecture. Leh which are dispersed throughout the world.

tween the Punjab and Chinese Tartary a principal article of trade being shawl wool from the latter. Population variously estimated from 4000 to 12,000.

beautiful, picturesque, wild scenery.

Lehighton, a borough in Carbon County, Pennsylvania, on the w. bank of the Lehigh, 4 miles S. of Mauch Chunk. It is in a coal-mining district, and has railroad shops, silk factories, an automatic press company, etc. Pop. (1920) 6102.

Lehigh University, an institution of learning, at South Bethlehem, Pennsylvania, founded and liberally endowed by Asa Packer for the instruction (without charge) of young men from any part of the country or of the world. It has fine buildings, a library of over 60,000 vols., etc. It gives in-

of over oo, our vois., etc. It gives instruction in the various branches of general literature and technology, and is especially noted for the latter.

Leibnitz (librits). Gottffree Willelbnitz (librits). Gottffree Willelbnitz (librits). Gottffree Willelbnitz (librits) and philosopher, born in 1646

at Leibzie He studied law mathematics at Leipzig. He studied law, mathematics and philosophy at the university of his by circumstances. Authorities seem gen-native town, where he published a philo-sophical dissertation, De Principio Indi-cidui, as early as 1663. This was fol-lowed by several legal treatises, for ex-ions, so that each of these great men in ample, De Conditionibus (1665), and by a remarkable philosophico-mathematical treatise, De Arts Combinatoria (1606). After holding political appointments under After holding political appointments under the Elector of Mainz he went to Paris in 1672, and there applied himself particularly to mathematics. He also went to England, where he was elected a member of the Royal Society, and made the acquaintance of Boyle and Newton. About this time he made his discovery of the differential calculus. The Duke of Brunswick-Lüneburg then gave him the office of councilor and a pension, and after a further stay in Paris he returned to Hanover in 1676, and entered upon the superintendence of the library. For the tower, and fine public square with fountation of his life he served the Brunswick tain; the guild hall, the public library, family, chiefly residing at Hanover, etc. The staple manufactures are cotton though visiting also Berlin, Vienna, etc.

posed a scheme to reunite Protestants and Catholics. Having assisted the Elector of Brandenburg (afterwards Frederick I of Prussia) to establish the Royal Lehigh River (16/h), a river of Academy of Sciences at Berlin, he was Pennsylvania, rising made president for life (1700). He was in Pike County and joining the Delaware also made a privy-councilor by Emperor at Easton, after a course of 100 miles, of Peter the Great. In 1710 he published which 70 are navigable. It is noted for his celebrated Essai de Théodice, on the goodness of God, human liberty and the origin of evil, in which he maintained the doctrines of preëstablished harmony and optimism, and which was followed by his Nouveaux Essais sur l'Entendement Humain. A sketch of his philosophy was given by him in his Monadologie, 1714. His controversy with Newton concerning the discovery of the differential colonium with the pairs of the ferential calculus, with the pains of the gout, embittered the close of his active life. He died in 1716. The principal metaphysical speculations of Leibnitz are metaphysical speculations of Levinder Contained in his Théodicée, Nouveaux Essais, Système nouveau de la Nature, De Ipsa Natura, Monadologie, and in portions of his correspondence. He controverted Locke's rejection of innate ideas, holding that there are necessary truths which cannot be learned from experience, but are innate in the soul, not, indeed, actually forming objects of knowledge, but capable of being called forth by circumstances. Authorities seem generally agreed that Leibnitz discovered the differential calculus independently of any howledge of Newton's method of flux self.

Leicester (les'ter), a municipal and parliamentary borough of though visiting also Berlin. Vienna, etc. and worsted hosiery, elastic webs, iron-Being commissioned to write the history ware, boots and shoes, shawls, lace, of the ducal house of Brunswick-Lüne-thread, etc. Leicester is a place of conburg, Leibnitz went in 1687 to Vienna, siderable antiquity, and was known to and thence to Italy. The three years spent the Romans under the name of Ratæ in these tours of investigation supplied Its walls and strong castle were demolhim with an immense mass of political ished in the reign of Henry II. It sufmaterials, portion of which appeared in fered severely during the wars of Iancasseveral works. About this time he protection of the property of the property of the property of the property in the property of the property

first taken by storm by the royalists, and 1830. At fourteen he entered the Acadthen retaken by the republicans. Pop. emy of Berlin, but a year later went to
227,242.—LEICESTERSHIRE is bounded by Frankfort-on-Main to continue his genNottingham, Derby, Warwick, Northamperal education. His subsequent art studton, Rutland and Lincoln; area, 813 sq. ies were made at Florence (1845-46), miles, almost all arable land, meadow and miles, almost all arable land, meadow and pasture. The surface is varied and uneven, but possesses no bold features. The county is nearly equally divided geologically by the lias and sandstone formations; the former on the east, the latter on the west side. The coal formation to the extent of about 15. exists to the extent of about 15 square miles on the west, and the clayslate in Charnwood Forest. Dairy farms are numerous, and the cheese known as Stilton is chiefly made in Leicestershire.

Stilton is chiefly made in Leicestershire. The Leicestershire sheep are much valued for their wool. Principal towns besides Leicester—Loughborough, Market-Harborough, Melton-Mowbray and Hinckley. Pop. (1911) 476,603.

Leicester, Robert Dudley, Earl of, fifth son of John Dudley, Duke of Northumberland, born in 1532; died in 1588. In 1549 he was married to Amy Robsart, daughter of a Devonshire gentleman, and is said to have been acgentleman, and is said to have been ac-cessory to her murder in 1560. Eliza-bein created him Earl of Leicester and privy-councilor, and bestowed titles and estates on him lavishly. Her fondness for him caused his marriage with her to be regarded as certain. His marriage with the Countess of Essex in 1578 mortally offended her. He successfully commanded in the Low Countries, and when England was threatened by the Spanish Armada, in 1588, was appointed lieutenant-general. in 1588, was appointed lieutenant-general. Leidy (li'de), JOSEPH, an eminent naturalist, was born in Philadelphia in 1823. In 1845 became prosector to the chair of anatomy in University of Pennsylvania, in 1853 professor, and in 1884, director of the department of biology. He was elected president of the Academy of Natural Sciences in the same year. An ardent zoologist and palæontologist, his published papers on biological subjects number over 800. Many of these had to do with microscopic Many of these had to do with microscopic

mentary war, having in the latter been Royal Academy, born at Scarborough in



Sir Frederick Leighton, P. R. A.

the academy at Frankfort-on-Main (1346-48), Brussels (1848-49), Paris (1859), and Frankfort again (1851-53). From Rome, where he spent some three winters, he sent to the academy of 1855 his piche sent to the academy of 1850 us picture of Cimabue's Madonna carried in procession through the streets of Florence, which called forth general admiration, and was purchased by the queen. For four subsequent years he resided at Paris, availing himself of the friendly counsel of Ary Scheffer, Robert Fleury, and other painters, and then finally took up residence in London. In 1864 he was up residence in London. In 1864 he was elected an associate of the Royal Acadelected an associate of the Royal Acau-emy, and in 1869 an academician. In 1878 he succeeded Sir Francis Grant as president of the Academy, was knighted, and was named an officer of the Legion of Honor. Seven years later he was made a baronet, and he received various honors and honorary degrees. From the Many of these had to do with microscopic forms, which he studied diligently, describing his researches in the Fresh Water Rhizopods of North America. Another with Death (1871), the Daphnephoria work of value was The Extinct Mamma-lian Fauna of Dakota and Nebraska. He died in 1891.

Leigh (lē), a town of England, county of Lancaster, 7½ miles from and Iphiagenia (1884). Captive Andromache (1888), and Ball Players (1889); of Lancaster, 7½ miles from and the large frescoes at the South Kensolinity, and it has glassworks, textle factories, etc. Pop. (1911) 44.109.

Leighton (la'ton), SIR FREDERICK, painter, president of the scripting a Python (1876),

and his Sluggard (1886). The special in the circle of Leitmeritz, merit of his work lies in the perfection of N. N. E. of Prague. Pop. 10,674. his draftsmanship and design, his color-ing. though possessing unfailing charm his draftsmanship and design, his coloring, though possessing unfailing charm of harmonious arrangement, being only podide, of which the only species is the the point of view. He had fine poetic upon of the aboriginal Australian, and quality, conjoined with elegance in drawther the 'native pheasant' of the colonists. ing and great refinement in execution. He died in 1896.

Leighton, ROBERT, a Scotch prelate, the Australian jungle-fowl, constructs mounds in which to lay its eggs.

Leighton, Born in Edinburgh or London in 1611. He was educated at Edinburgh University, and then spent about ten years on the continent, chiefly at Douay. On his return to Scotland in Commerce in Germany, 64 miles w. N. w. 1641 he became pastor of the parish from Dresden. It lies in an extensive church of Newbattle, but resigned his and fertile plain on the Elster here joined church of Newbattle, but resigned his living in 1652, and in the following year was chosen principal of Edinburgh University. On the attempt at the accession of Charles II to establish Episcopacy in Scotland, Leighton accepted reluctantly picturesque appearance, having about it the bishopric of Dunblane, in the hope of the town hall (Rathhaus), built in 1556, moderating the violent dissensions of the and other buildings in the renaissance time. He twice visited London (1665 and other buildings in the renaissance time. He twice visited London (1665 at the contains a fine war monument and 1669) to implore the king to moderate in 1888. The Augustus-Platz erate the zeal of Sharpe and Lauderdale, is one of the finest squares in Germany, and accepted the archbishopric of Glasgow in 1670 only after a promise of court
new theater, etc. The Pleissenburg or
assistance in the attempt to carry out a
castle, now partly used as a barrack,
liberal measure for the comprehension of
the Presbyterians. The promise being memorable as the scene of the famous
broken, he resigned his see, and subsequently resided for the most part at
Dr. Eck in 1519. The suburbs contain quently resided for the most part at Broadhurst, his sister's estate in Sussex. He died in London in 1684. He was celebrated for his learning, gentleness and disinterestedness. He founded exhibi-tions in the colleges of Edinburgh and

Glasgow. Leighton-Buzzard, a town of Eng-shire, 18 miles southwest of Bedford, on the Ouse, and near the Grand Junction Canal. It carries on lacemaking and

tillage and pasture lands and its wealth in minerals. Pop. 1,150,480.

Leipa, or Leippa (Böhmisch), (bew-mish-li'pà), a town of Bohemia,

43 miles the 'native pheasant' of the colonists.
The bird is a native of Australia, is of

and fertile plain on the Elster, here joined by the Pleisse and Parthe, and consists of an old central or inner town and more modern and much more extensive suburbs. The marketplace in the old town has a Dr. Eck in 1519. The suburbs contain the post-office buildings, the Church of St. John, the fine new Church of St. Peter and the Roman Catholic church; the Rosenthal (Valley of Roses), with pleasant wooded walks; and numerous places of recreation. The university, founded in 1409, is the second in importance in Germany (that of Berlin being first), and has over 3000 students, and a library of 350,000 vols. Schools are numerous the Ouse, and near the Grand Junction of 350,000 vols. Schools are numerous straw-plaiting. Pop. (1911) 6784.

Leiningen (lin'ing-en), a former principality of Germany, and and good, the conservatory of music being of some celebrity. Besides being the center of the book and publishing trade of Germany, Leipzig possesses considerable and partial and Hesse at the Peace of Lunéville in 1801.

Leinster (lin'ster), a province of Ireland, divided into twelve counties—Wexford, Kilkenny, Carlow, Wicklow, Jublin, Kildare, Queen's County, Keng's County, Westmeath, Longford, us defeated Tilly near it at Breitenfeld. Meath and Louth: area, 7620 sq. miles. Leinster which is in the southestern part is the most favored of the four battle of the nations' (Völkerschlacht) trovinces of Ireland in the extent of its tillage and pasture lands and its wealth in minerals. Pop. 1,150.480.

Leinig (Ils'nih), a town of Saxony, Leining (Ils'nih), a town of Saxony, Ils and good, the conservatory of music being and good, the conservatory of subches and good, the conservatory of music being and good, the conservatory of subches and good, the conservatory of subches and good, the conservatory of subches and good, the conservatory of some celebrity. Besides being the center of the book and publishing trade of some celebrity. Besides being of some celebrity of 350,000 vols. Schools are numerous

Leisnig (lis'nih), a town of Saxony, in the circle of Leipzig and

28 miles from that city, on the left bank independent magistracy till 1832. of the Mulde. Pop. 8147. (1911) 80,488. See Franconian Wines. Leistenwein.

Leitch (lech), WILLIAM LEIGHTUN, landscape painter, born at Glas-Lettch (lech), which are the two divisions of the Austrogow in 1804; died in London in 1883. Hungarian Empire (the Cisleithan or Commencing his career as a house painter Austrian and the Transleithan or Hunin his native city, he removed to London garian); afterwards passing into Hunearly in life and practised scene painting gary and joining the Danube at Altenburg. Leitmeritz (lit'me-rits), a town of Bohemia, beautifully situated on a height above the right bank of pupils were Queen Victoria and all the members of the royal family. At the It is the see of a bishop, and contains a request of a deputation of influential artists he became a member of the Naw Society of Painton. a deputation of intuential me old cathedral. Fop. 13,076. artists he became a member of the New Leitrim (lêtrim), a county of Ire-Society of Painters in Water-colors in land, in Connaught, touching 1861, and from that time was a regular Donegal Bay on the north. Area, 613 contributor to the society's exhibitions, sq. miles. A considerable portion of its and to those of its successor, the Royal western boundary is formed by the Shan-Institute of Water-color Painters. Many non, which first flows through Lough of his subjects are Italian and Sidilian Allan a laboration of the second control of the subjects are Italian and Sidilian Allan a laboration of the second control of the subjects are Italian and Sidilian and Allan a laboration of the second control of the subjects are Italian and Sidilian and Allan a laboration of the subjects are subjects and subjects are subjects as a subject of the subjects and subjects are subjects as a subject of the subjects and subjects are subjects as a subject of the subjects and subjects are subjects as a subject of the subjects and subjects are subjects as a subject of the subjects and subjects are subjects as a subject of the subjects and subjects are subjects as a subject of the subjects are subjects as a subject of the subjects and subjects are subjects as a subject of the subject of the subjects are subject of the subject of his subjects are Italian and Sicilian scenery, but scenes in Scotland and elsewhere are not of infrequent occurrence. His productions (the majority of which power in rendering atmospheric effects. A number of them have been engraved as book illustrations and also as separate prints.

Leith (leth), a seaport in the county of Midlothian, Scotland, about 11/2 miles from the center of Edinburgh, on the south shore of the Firth of Forth. on both sides of the Water of Leith. It is connected with Edinburgh (of which it is the port) by Leith Walk and other lines of streets, and by branch lines of the railways centering in Edinburgh. Among the principal public buildings are the custom house, exchange buildings, courthouse, Trinity House, corn-exchange, The chief manufactures are ropes, sail-cloth, soap, candles, paints, colors, artificial manures, and there are breweries, distilleries, shipbuilding yards, sugar refineries, iron foundries, engine-works, etc. The foreign trade is chiefly with the continent, particularly with the ports on the Baltic, and the principal French and German ports; there is also of receiving the largest vessels. Letth died insane, however, in 1552, without is mentioned for the first time, under the having completed his task. The great name of Inverleith, in a charter of David bulk of his collections was ultimately I granted in 1128; and in 1329 a charter placed in the Bodleian Library in an of Robert I made a grant of the port indigested state. Hearne printed a conand mills of Leith to the city of Edinsiderable part, forming the Itingrary of burgh. It did not obtain a separate and John Leland and Lelandi Antiquarii de

Leitha, or LEYTHA (Il'ta), a river ris-ing in Lower Austria and form-WILLIAM LEIGHTON, ing for some distance the boundary be-

Allen, a lake situated near the center of the county, and almost cutting it in two. The surface in the north is somewhat rugged and mountainous, but elsewhere are done in water-colors) are not numer-ous, but of great merit. They are distin-quished by graceful composition, perfect limestone, is fertile. The principal crops balance of the several parts, and much are oats and potatoes. The minerals include iron, lead and copper, all at one time worked, and coal, still raised to some

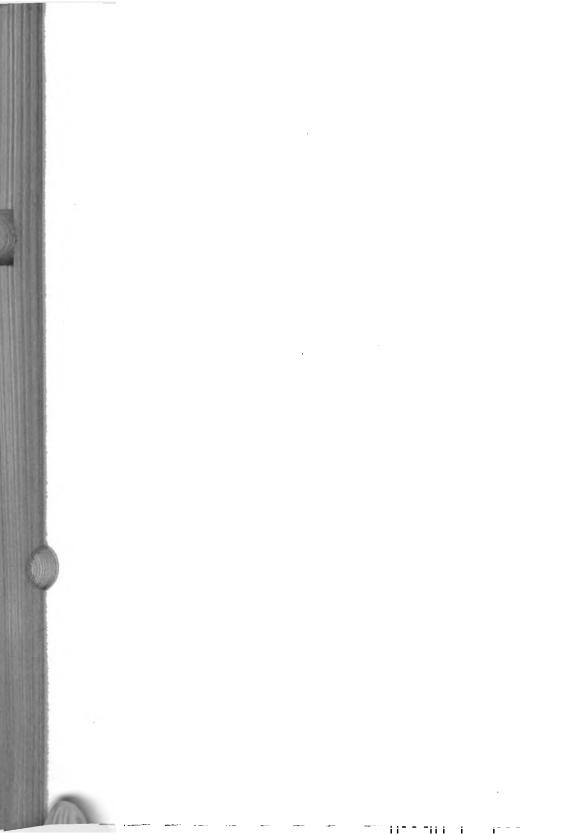
time worked, and coal, still raised to some extent. County town, Carrick-on-Shannon. Pop. 69,343.

Leland (18'land), CHARLES GODFREY, author, born at Philadelphia in 1824; studied law, but abandoned it for a literary life. He is best known through his quaint Hans Breitmann Balads in Pennsylvania Dutch dislact and lads in Pennsylvania Dutch dialect, and

lade in Pennsylvania Dutch dialect, and his works on the language and poetry of the Gypsies. He died in 1903.

Leland, or Laylonde, John, an Engabut 1500, educated at St. Paul's School, and Christ's College, Cambridge, afterwards studying at Oxford and at Paris. On his return Henry VIII made him his chaplain and librarian, and gave him the title of royal antiquary. In 1533 he was title of royal antiquary. In 1533 he was empowered, by a commission under the great seal, to search for objects of an-tiquity in the archives and libraries of all cathedrals, abbeys, priories, etc., and having spent six years in traveling for this purpose, he retired to his house in and three public graving docks, capable mass of historical material acquired. He of receiving the largest vessels. Leith died insane, however, in 1552, without is mentioned for the first time, under the having completed his task. The graving arms of Inverleith, in a charter of David

IELAND STANFORD JUNIOR UNIVERSITY, PALO ALTO, CALIFORNIA Founded in 1885 by Leland Stanford and his wife Jane Lathrop Stanford as a memorial to their son, Leland Stanford. Ir.



who died in 1884, in his seventeenth year.
The endowments amount to over \$30,000.
The endowments amount to over \$30,000.
Its site covers 900 acres. The buildings are notable for their architecture, following demonstration, and prefixed which reproduces the style of the old Spanish missions. The curriculum intellecture to theorems, in order to render Spanish missions. The curriculum intellecture to theorems, in order to render their demonstration less perplexed and cludes the usual courses, but considerable intricate, or to problems, to make their liberty is allowed in the matter of 'electives.' The attendance in 1914 was 1879, and the number of instructors, 229. The library contains 240,000 volumes.

Lemming (lem'in), in mathematics, a preliminary proposition, laid down in order to clear the way for some demonstration, and prefixed either to theorems, in order to render their demonstration less perplexed and cludes the usual courses, but considerable intricate, or to problems, to make their solution more easy and short.

Lemming (lem'in), in mathematics, a preliminary proposition, laid down in order to clear the way for some demonstration, and prefixed either to theorems, in order to render their demonstration less perplexed and cludes the usual courses, but considerable intricate, or to problems, to make their solution more easy and short.

Lemming (lem'in), in mathematics, a preliminary proposition, laid down in order to clear the way for some distriction, and prefixed down in order to clear the way for some distriction, and prefixed down in order to clear the way for some distriction, and prefixed down in order to clear the way for some distriction, and prefixed down in order to clear the way for some distriction, and prefixed down in order to clear the way for some distriction, and prefixed down in order to clear the way for some distriction, and prefixed down in order to clear the way for some distriction, and prefixed down in order to clear the way for some distriction, and prefixed down in order to clear

Lely (1871), SIR PETER, painter, born ria, and the northern parts of America.

1617 or 1618. Lely or Le Lys was properly a nickname borne by his father, whose family name was Van der Vaes. He was first instructed by Peter Grebber at Haarlem, but went to England in 1641, and commenced portrait painting. He finished portraits both of Charles I He finished portraits both of Charles I and of Cromwell; but it was not until the Restoration that be rose to the height of his fame. He fell in with the voluptuous taste of the new court, and was in great favor with Charles II, who knighted him. He died in 1680. The Hampton Court Collection of portraits of the ladies of the court of Charles II contains some of his best work; the finest of his few historical works being the Susannah and the Elders, at Burleigh House. the Elders, at Burleigh House.

Lemaître (leh-ma'tr), JULES, a French critic and poet, born at Vennecy in 1853; died in 1914; held a professorship at Grenoble, but resigned it in 1884 to devote himself to literature; he was made a member of the French Academy in 1896. He wrote La Comédie après Molière, Les Contemporains, Dis Contes, Les Rois, Jean Jacques Rousseau, etc., and a number of plays.

Leman (leman), Lake, a name sometimes given to the Lake of Geneva. See Geneva, Lake of.

Lemberg (lem'berg; Polish Lwow), a city of Poland, capital of the province of Galicia, on the Peltew, 212 miles E. S. E. of Cracow. Though founded in the thirteenth century, it has all the appearance of a modern town from its rapid increase in recent times. Besides being the seat of the government, and the important courts and public offices necessarily connected with it, it possesses three metropolitan sees-Greek, Armenian and

Rebus Britannicis Collectanea. His Roman Catholic. It has a university collections have been sedulously mined (library 86,000 volumes), attended by subsequent antiquaries.

Leland Stanford, Jr., UniverLiterary Institute (library 78,000 volumes). The manufactures are extensive sity, a co-educational, non-sectarian inand varied, and there is a large trade. In
twas founded in 1885 by Leland Stanby the Russians in 1914; retaken by Ausford and his wife in memory of their son, trians and Germans in 1915. Pop. 212,000,
who died in 1884, in his seventeenth year.

The endowments amount to over \$30,000.

The endowments amount to over \$30,000.

The printing order to clear the year to come.

species, found in Norway, Lapland, Sibe-



Common Lemming (Myodes Lemmus).

European lemming (Myodes Lemmus), of which the body color is brownish variegated with black; the sides of the head and belly white, or of a grayish tint. The legs and tail are of a gray color. The head is large and shortened, the body thick-set, and the limbs stout. It feeds on plants, and is exceedingly destructive to vegetables and crops. It burrows under the ground at a limited depth. It is very prolific, and vast hordes sometimes It is migrate towards the Atlantic and the Gulf of Bothnia, destroying all vegetation in their path. Great numbers of wild animals—bears, wolves, foxes—hang upon them in their march, making them their prey, thus tending to keep their numbers in some degree in check. Many of them are drowned in the sea.

Lemna. See Duck-weed.

Lemnian Earth (lem'ni-an), a kind of astringent medicinal earth, of a fatty consistence and reddish color, used in the same cases as bole. It removes impurities like soap. It was originally found in Lemnos, but oc-curs also in Bohemia, Russia and India, resulting from decay of felspathic rocks, like kaolin, to which it is related. Called also Sphragide.

(lem-nis-ka'ta), or LEM-Lemniscata NISCATE, in geometry, the name given to a curve having the form of the figure 8, with both parts symmetrical.

Lemnos (lem'nos; Italian Stalimene), the most northerly island of the Grecian Archipelago, between the Hellespont and Mount Athos. It has an area of 147 square miles, and abounds in vines, wheat, etc. The principal town on the island is Limno, or Kastro. Lemnos formerly contained a volcano, Mosychlus, let it stand, with occasional stirring, till which was regarded as the workshop of Hephaistos (Vulcan). Pop. about 30,000.

Lemoine (le-mwan), FRANÇOIS, a French historical painter, born in 1688. In 1718 he became a member of the Academy and or his returns the result of the Academy and or his returns the result of the Academy and or his returns the result of the Academy and or his returns the result of the Academy and or his returns the result of the Academy and or his returns the result of the Academy and or his returns the result of the Academy and or his returns the result of the Academy and or his returns the result of the Academy and or his returns the result of the Academy and or his returns the result of the Academy and or his returns the result of the Academy and or his returns the result of the Academy and or his returns the result of the Academy and or his returns the result of the return t born in 1688. In 1718 he became a member of the Academy, and on his return from a visit to Italy in 1723 was appointed professor at the Academy. He painted the chapel of the Holy Virgin in the Church of St. Sulpice, and subsequently the celling in the Hall of Hercules at Versailles, a painting 64 feet long and 54 broad, which occupied him seven the subsequently the celling in the Hall of Hercules at Versailles, a painting 64 feet long and 54 broad, which occupied him seven about 1750 was graduated at Oxford In a fit of insanity he put an end years. to his life in 1737.

Lemon (lem'un), the fruit of the lemon tree (Citrus Limonum), originally brought from the tropical parts of Asia, but now cultivated very extensively in the south of Europe, especially in Sicily. It is congeneric with the orange and citron, and belongs to the natural order Aurantiacem. It is a knotty-wooded tree of rather irregular growth, about 8 feet high; the leaves are oval, and contain scattered glands which are filled with a volatile oil. The shape of the fruit is cent. of citric acid. It also contains sugar, albuminous and vegetable matters, and some mineral matter, nearly half of which consists of potash. The oil of lemon is an ingredient of syrup of lemon and tinc-

the establishment of Punch in 1841 he became joint-editor with Henry Mayhew, and two years later sole editor. He was also the literary editor of the Illustrated London News, and an occasional writer for Dickens' Household Words, Once-a-Week, and other periodicals. Among his later productions are some novels of average merit. He died in 1870.

Lemonade (lem'un-ād), a drink made of water, sugar and the juice of lemons. A good recipe is: two sliced lemons, 2½ oz. of sugar, boiling water, 1½ pints; mix, cover up the vessel,

born about 1750, was graduated at Oxford as A.M. in 1792, in which year he became head-master of Abingdon grammar school. He was afterwards master of the free grammar school at Exeter. In 1811 he was presented to the rectory of Meeth, Devonshire, which living, together with that of Newton Petrock, in the same county, he held till his death. His Classicounty, he held the his death. His Classical Dictionary, published in 1792, was of great value in its day. Among his other works was a Universal Biography, published in 1808. He died in 1824.

Lemur (lemur), a name popularly given to any member of the Lemuroida, a suborder of the Quadrumana or Monkeys, but more strictly constants.

oblong, and its internal structure is similar to that of the orange. The juice is Lemuroida, a suborder of the Quadru-acid and agreeable; and in addition to mana or Monkeys, but more strictly conits use in beverages is employed by calico-fined to members of the family Lemur-printers to discharge colors. As expressed ide. Their zoological position has been from the ripe fruit it has a specific grav- a matter of considerable debate, as they from the ripe fruit it has a specific grav- a matter of considerable debate, as they ity of 1.04, and contains about 1.5 per possess characteristics which distinguish them from the monkeys, and ally them with the insectivores and rodents. simplest classification places them, how-ever, with the lower Quadrumana. The consists of potasn. The own of termon is ever, when the lower Quadrumana. The a volatile oil of yellow or greenish color Lemuridæ or True Lemurs are specially got from the fresh rind of the lemon. It distinguished by the habitually four-is used in perfumery, and in medicine as footed or quadrupedal mode of progresastimulant and rubefacient; it also forms sion. The tail (except in the short-tailed Indris) is elongated and furry, but is never prehensile. The hind limbs are an ingredient of syrup of lemon and the ture of lemon.

Lemon, MARK, humorist and dramatic longer than the forelimbs: the second to in the lighter drama, supplying the London stage with more than sixty pieces, and especially of the foot, is longer than farces, melodramas and comedies. On the others. The thumb can always be

Lemuroida. See Lemur.

Baikal, about 70 miles E. N. E. of Irkutsk. Roos van Dekama, Klaasje Zevenster, into the Arctic Ocean in lat. 73° N., and lon. about 128° E. Its course, windings included, is about 2770 miles.

Lenine, Nikolai, leader of the mountains plays, a collection of poems, and several bistorical works, but is perhaps best known by his historical romances, De leading through several branches etc.

Lenine, Nikolai, leader of the mountains plays, a collection of poems, and several bistorical works, but is perhaps best known by his historical romances, De len'i len's-rec' len'i len'i len's-rec' len'i len'i len's-rec' len'i len'i len'i len's-rec' len'i len

Included, is about 2770 miles.

Lenine, Sheviki government in Russia, which supplanted the Kerensky régime, was born at Simbirsk, Volga, in 1870; son of a Russian nobleman. He received a university education, studied law and university education, studied law and Johnson, who is said to have written he founded the first Social-Democratic organization in Russia, the Petersburg Union for the Emancipation of the Working Classes, and published an exhaustive History of Capitalism in Russia under the rother works included Shakespere Illustrated (1753-54), a collection of the History of Capitalism in Russia under tales used by Shakespere for his dramas, his real name, Ulianoff. He was exiled to a translation of Sully's Memoirs, Henrichta (1758), and Rophia (1763).

Lenormant (le-nor-mān), Charles, a French archæologist. Iskra (The Spark), a Social-Democrat Lenormant (le-nor-man), Charles, paper, and preached orthodox Marxism as Lenormant a French archæologist, papered to the moderate Socialism then born in 1802; in 1825 made inspector of prevalent in Russia and Germany. Leon fine arts. He accompanied Champollion Trotzky (q. v.), who had also been exiled to Egypt in 1828, and afterwards became to Siberia, made his escape and joined the staff of The Iskra. It was these two men ministry of the interior, professor at the ministry of Prevalence of Formation. who took the government of Russia into their hands in 1917 and concluded a sepawho took the government of Russia into Sorbonne, and professor of Egyptian their hands in 1917 and concluded a sepa-archæology at the College of France. He rate peace with the Central Powers. Durleft a considerable number of treatises in rate peace with the Central Towers. During the first revolution of 1905 Lenine was chief editor of New Life, the first Socialist daily in Petrograd. When the revolution was quashed Lenine went to Finder Company, a French olution was quashed Lenine went to Finder Company, a French olution was quashed Lenine went to Finder Company, a French olution was quashed Lenine went to Finder Company, a French olution was quashed Lenine went to Finder Company, a French olution was quashed Lenine went to Finder Company, a French olution was quashed Lenine went to Finder Company, a French olution was quashed Lenine went to Finder Company, a French olution was quashed Lenine went to Finder Company, a French olution was quashed Lenine went to Finder Company, a French olution was quashed Lenine went to Finder Company, and the Company of the Company of

opposed to the other fingers, and has a Cracow. He was in Cracow when the broad, flattened nail. The ears are small war broke out in 1914 and was arrested and the eyes large. The incisor teeth are by the Austrians, but subsequently regenerally four, the canines two, and the leased. He removed to Switzerland and molars twelve in each jaw. The true remained there till the early months of lemurs are exclusively confined to Madather revolution of 1917 which resulted in gascar and neighboring islands, but other the overthrow of Nicholas II. He gained manylars of the family are found in Africa paramission to page through Corporate to

gascar and neighboring islands, but other members of the family are found in Africa and as far east as the l'hilippines.

Lemures (lem'ū-rēz), among the ancient Romans, the name given to the ghosts or souls of the dead. In order to appease them a ceremony called lemuria was observed on the nights of May 9th, 11th and 13th.

Lemuria (le-mū'-i-a), a hypothetical continent supposed by some to have at one time extended from Madagascar and S. Africa across what is now at lending Ocean to the Asiatic Archipelago; named from its corresponding with the habitat of the lemurs.

See Lemur

Lemuroida See Lemur

the overthrow of Nicholas II. He gained permission to pass through Germany to Russia and at once placed himself at the lead of the Maximalists, or Bolsheviki. See under Russia for text of treaty which he negotiated.

Lenkoran (len-kō-rän'), a Russian town and harbor on the Caspian Sea near Baku. Pop. 8768.

Lennep (len'ep), a town of Prussia, province of Rheinland, 21 miles E. S. E. of Düsseldorf, with worsted and woolen manufactures. Pop. 10,323.

Lennep, Jacob van, a Dutch novelist, historian and dramatist, born in 1802; died in 1868. He was a successful advocate, and was attorney-general for ful advocate, and was attorney-general for Lena (le'na), a river of Siberia, one of representative of the romantic movement the largest in the world, rising in Holland. He left upwards of thirty

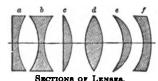
olution was quashed Lenine went to Finland, but being pursued by the Russian 1837; son of Charles Lenormant. After police he went to Geneva and then to traveling in the East he became, in 1874.

professor of archæology at the Biblio-thèque Nationale. He died in 1883. He was an authority on the Cuneiform inscriptions and the Accadian language.

Lenox (len'okz), JAMES, philanthropist, born in New York city, in 1800. From his father he inherited several millions of dollars. For half a century his time was devoted to the forming of a library and gallery of paintings, which he conveyed to New York city in 1870, the total value being over \$2,000,000. He was a liberal donor to many churches and charities. He died in 1880.

Lenôtre (lenôtr), ANDRÉ, a French architect and ornamental gardener, born in 1613. His plans for the decoration of the park of Versailles contributed principally to getablish his contributed principally to establish his reputation. He afterwards embellished the gardens of Trianon, Chantilly, St. Cloud, Sceaux, the Tuileries, etc. Louis XIV in 1675 bestowed on him letters of nobility. He died in 1700. His style of ornamental planting was fashionable in Britain, till it was superseded by the designs of Kent, Brown, and the modern landscape gardeners.

Lens, a transparent substance, usually glass, so formed that rays of light passing through it are made to a transparent substance, usually change their direction, and to magnify or diminish objects at a certain distance.



- a, Plano-concave. c, Plano-convex. e, Meniscus,
- b, Double concave. d. Double convex. f. Concavo convex.

Lenses are double convex, or convex on both sides; double concave, or concave on both sides; plano-convex, or plano-con-cave, that is, with one side plane and the other convex or concave, or convex on one side and concave on the other. If the convexity be greater than the concavity. or if the two surfaces would meet if produced, the lens is called a meniscus; and if the concavity be greater than the convexity, the lens is termed concavo-convex. See Optics, Microscope, Telescope.

Deule, ten miles northeast of Arras. It is located in the midst of extensive coal has increased of late years, and it is to

population numbered 31,746 in 1911. During the European war the town was reduced to a mass of roofless houses and rubbish heaps. It was in the center of the fiercest fighting, and it was here that the Canadian forces played havoc with the German armies. The Germans held the town, but their casualties were enormous. They had provided underground tunnels reinforced by concrete, but the Canadians blew up the tunnels with heavy shells that pierced deep and exploded with fearful offert. Thousands died in these fearful effect. Thousands died in these underground passages, which became death traps. Many times the Canadians filled the town of Lens with poison gas (first introduced in warfare by the Germans), which soaked down into the dugouts and stifled the Teutons before they had time to put on their masks.

Lent, the forty days' fast in spring beginning with Ash Wednesday and ending with Easter Sunday. In the Latin Church Lent formerly lasted but thirty-six days; in the fifth century four days were added, in imitation of the forty days' fast of the Saviour, and this usage became general in the Western Church. The close of Lent is celebrated in Roman Catholic countries with great rejoicings, and the carnival is held just before it begins. The English Church has retained Lent and many other fasts, but gives no directions respecting abstinence from food.

Lentibulariaceæ (len-tib-yu-la-ri-ā ce-ē), a small na. order of monopetalous exogens, growing in water or in marshy places, sometimes The flowers (often large and cpiphytes. handsome) are usually yellow, violet, or blue. There are four genera, of which Utricularia (bladderwort) and *Pinguicu!a* (butterwort) are the best known.

Lentil (len'til: Ervum lcns), a plant belonging to the papilionaceous of the nat. order Leguminose, cultivated in Southern and Central Europe. It is an annual, rising with weak stalks about 18 inches, and with British flowers hanging from the axils of the leaves. Two varieties are cultivated—the large garden lentil and the common field lentil—the former distinguished by its size and the greater quantity of mealy substance which it will afford. The straw of lentils makes good fodder. As food for Lens (lans), a town in the Department man the seeds are very nutritious, and in fields and in 1914 had a number of large them that the foods advertised as reve-engineering works, iron and steel foun-lenta or ervalenta owe their name. They dries and sugar and soap factories. The are also coming into use in United States.

Lentini interesting ruins, and enjoys a considerable trade. Pop. 11,134.

Lentiscus (len-tis'kus), or Lentisk, the mastich tree Pista-

Lentiscus (lentiscus), or Lentisc, nead of his forces in the holy league the mastich tree Pista-against France. He was made prisoner cia lentiscus), a tree of the nat. order by the French at the battle of Ravenna Anacardiaceæ, a native of Arabia, Persia, in 1512, but soon after regained his free-Syria and the south of Europe. The dom and returned to Bologna, where he wood is of a pale brown, and resinous and

fragrant. See Mastic.

Lento (len'to; Italian, slow), a term used in music; rather faster than adagio.

Virgo. The sun enters it about July 22, and leaves it about August 23. The constellation contains 95 stars, and is noteworthy for its remarkable nebulæ. There will be a star of the star is also a constellation of the northern hemisphere known as Leo Minor, and con-

taining 53 stars.

Leo I, St. LEO, called the Great, pope, born about 390. The Popes Celestine I and Sixtus III employed him From the Vandal Genseric, however, he died suddenly in 1521. was unable to obtain more than the promise to forbid the murder of the citiwas unable to obtain more than the promise to forbid the murder of the citizens, the burning of the city, and the plunder of the three principal churches 1837, bishop of Daniretta in 1843, archible in the first pope whose writings are and bishop of Perugia in 1846, the is the first pope whose writings are He is the first pope whose writings—sermons, letters, etc.—have been preserved. by Pius IX, whom he succeeded as pope In his earnest effort to keep the Archin 1878. As such he was opposed to bishop of Constantinople from having radical measures and extreme views, himself declared primate of the East at though he strongly held for the temporal the Council of Chalcedon in 451, he was dominion of the papacy. He died in defeated by the ambition of that prelate 1903. and the emperor.

Leo III, a Roman by birth, elected pope on the death of Adrian I in 795. He commenced his rule by making submission to Charlemagne, so that when driven from Rome in 799 by his rival Paschel, Charlemagne reëstablished him on his throne, receiving from him in 800 the imperial crown. Leo died

in 816.

Leo X, GIOVANNI DE MEDICI, second son of Lorenzo the Magnificent, born at Florence in 1475, received the tonsure in his seventh year, and was Leather glovenaking is the chief indus-loaded with benefices. In 1488, when try. Pop. (1911) 5737. only thirteen years old, he was made a cardinal, and in 1492 took his seat as a

(lën-të'në), a town of Sicily, province of Syracuse. It has pope Julius II made him governor of ruins, and enjoys a consider-Pop. 11,134.

(len-tis'kus), or Lentisk, head of his forces in the holy league conducted the government as legate. After contributing to the reëstablishment of the Medici he remained at Florence until used in music; rather faster the death of Julius II recalled him to adagio.
(18'0), the Lion, the fifth sign of chosen to succeed Julius in 1513. He the zodiac, between Cancer and made a favorable peace with Louis XII, who was compelled to abandon Italy, and who was compelled to an angular name public tranquillity being thus restored in the first year of his government, he gave all his attention to the promotion of literature and the arts. The university at Rome was restored and endowed; a so ciety established for the publication of Greek authors, and great encouragement given to scholars. In 1515 he had an in-terview with Francis I at Bologna, and Celestine I and Sixtus III employed him terview with Francis I at Bologna, and in important ecclesiastical affairs, and on formed with him a concordat, which rethe death of Sixtus III in 440 he was elemained in force nearly three hundred vated to the papal chair. The beginning years, and gave to the king the right to of his pontificate was marked by conmoniate bishops in his own dominions. demnation of all holding the Manichean, To procure money, particularly for the Pelagian, Priscillian and Eutychean completion of St. Peter's, he encouraged heresies. He was employed by Valentinian to intercede for peace with Attila, incidentally promoted the Reformation, in who, at his request, evacuated Italy. Calling forth the attacks of Luther. Leo From the Vandal Genseric, however, he died suddenly in 1521.

and was made a cardinal priest in 1853

Leoben (la-o'ben), a town tria, in Styria, 44 miles N. N. w. of Gratz, on the right bank of the Mur. Pop. 10,204.

Mur. Fop. 10,204.

Leominster (lem's ter or lem'insters, an old municipal borough and market town of England, county of Hereford, 12 miles north of Hereford, in a fertile valley on the right bank of the Lugg. The spacious priory church (restored and enlarged in 1868 and 1879) exhibits fine specimens of Norman and early English architecture. Leather glovenaking is the chief indus-

sachusetts, on the Nashua River, 40 miles w. n. w. of Boston. It is the center of the comb manufacture of the state;

mora and Salamanca.

Madrid. It is for the most part in a Leonine Verse (18'u-nin), a kind of somewhat decayed condition. The principal edifices are the cathedral, a beautiful in the middle ages, consisting of hexpecimen of the purest Gothic; the ameters and pentameters, of which the Church of San Isidoro, an ancient massive final and middle syllables rhyme; so Structure: and the fine old palace, called alled from Leo or Leonius, a poet of the La Casa de los Guzmanes. Pop. 15,580. twelfth century, who made use of it. The —The province has the Asturias as its following distich may serve as an examnorthern boundary, a branch of which ple, being the Latin version of 'The devit mountains divides it into two portions. was sick,' etc.: The western portion is adapted rather for pasture than tillage, but the eastern has wide and undulating plains, on which the Ast ubi convaluit, mansit ut ante fult.' vine and various grain crops are successfully cultivated. Area, 5986 square Area, 5986 square miles. Pop. 386,083.

Leon, a town of Central America, capi-tal of the department of Leor, state of Nicaragua, on a large and fertile plain near the Pacific coast. It is regu-larly built, and the public buildings, which are considered among the finest in Central America, include a massive cathedral, an old episcopal palace, a new episcopal palace, and several churches. A railway connects it with the coast at Corinto. The town has suffered a good deal from the civil wars. Pop. about

60,000.

Leon, a city of Mexico, State of Guanajuato, on a fertile plain more than 6000 feet above sea-level, a well-built place, with flourishing industries of various kinds, which its railway connections are helping to develop. It is one of the most thriving towns of Mexico. Pop. (1910) 57,722.

Leon, a province of Central Ecuador, area 2590 square miles. In its N. E. portion is the volcano of Cotopaxi. Pop. about 125,000.

See Vinci. Leonardo da Vinci.

See Hastings. Leonard's. St.

(le-on'i-das), in Greek his-Leonidas who ascended the throne 491 B.C. When or the comb manufacture of the state; who ascended the throne 491 R.C. When also produces paper, pianos, buttons, jewelry and toys. Pop. (1920) 19.744.

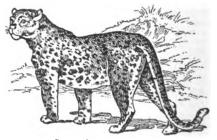
Leon (lā-ōn'), one of the old divisions of Spain, formerly a kingdom, is of Thermopylæ. His force, according to bounded north by Asturias. east by Old Herodotus, amounted to over 5000 men, Castile, south by Estremadura, and west of whom 300 were Spartans. After the by Portugal and Galicia. It is now Persians had made several vain attempts divided into the provinces of Leon, Zato force the pass, a Greek named Ephilaltes hetraud to them a mountain rather than the pass, a Greek named Ephilaltes hetraud to them a mountain rather than the pass assigned to Leonidas the command of the force destined to defend the pass assigned to Leonidas the command of the force destined to defend the pass assigned to Leonidas the command of the force destined to defend the pass assigned to Leonidas the command of the force destined to defend the pass assigned to Leonidas the command of the force destined to defend the pass assigned to Leonidas the command of the force destined to defend the pass assigned to Leonidas the command of the force destined to defend the pass as a control of the force destined to defend the pass as a control of the force destined to defend the pass as a control of the force destined to defend the pass as a control of the force destined to defend the pass as a control of the force destined to defend the pass as a control of the force destined to defend the pass as a control of the force destined to defend the pass as a control of the force destined to defend the pass as a control of the force destined to defend the pass as a control of the force destined to defend the control of the force destined to defend the pass as a control of the force destined to defend the control of the force to force the pass, a Greek named Ephialtes betrayed to them a mountain path by which Leonidas was assailed from Leon, a city of Spain, capital of the by which Leonidas was assailed from province and ancient kingdom the rear, and he and his followers for the same name, 176 miles northwest of after a desperate resistance (B.C. 480). the rear, and he and his followers fell

Leonine Verse (le'u-nin), a kind of Latin verse, in vogue final and middle syllables rhyme; so called from Leo or Leonius, a poet of the

'Dæmon languebat, monachus tunc esse volebat;

Leontodon (le-on'to-don). See Dan-delion. But dandelion is often put in a separate genus, Taraxacum (being called T. officinale or T. dens-leonis), certain allied plants being assigned to Leontodon.

Leopard (lep'ard: Felis leopardus). habiting Africa, Persia, India, China, etc.. by some regarded as identical with the panther. The ground or general bodycolor of both is a yellowish fawn, which



Leopard (Felis lcopardus).

is slightly paler on the sides, and becomes white under the body. Both are also marked with black spots of various sizes, Leonforte

(lā-ōn-fōr'tā), a town of Sicily, in the province of being ring-shaped. The African animal Catania, and 37 miles w. n. w. of Catania. It carries on a considerable trade the back, and to this form some would in corn, wine and silk. Pop. 19,751. preys upon antelopes, monkeys, and the smaller quadrupeds, rarely attacking man unless itself attacked. It can ascend trees with great ease, often using them both for refuge and ambush. It is not infrequently trapped by means of pitfalls. Besides the common leopard there is also a useful and docile Asiatic species, the chetah or hunting leopard (Felis jubata). See Chetah.

Leopardi (la-o-par'de), GIACOMO, COUNT, an Italian poet and scholar, born in 1798. He conducted his own education, and at an early age he had written a History of Astronomy, and translated, with learned notes, l'orphyry's Life of Plotinus. He also translated into Italian verse the Battle of the Frogs and Mice, some fragments of the Odysscy, etc. A commentary on l'etrarch, and an essay on the errors of the ancients, appeared in 1815; and in 1818-20 an ode to Italy and other poems raised him to the first rank of lyric poets. He lived at various times in Rome, Milan, Bologna, Florence, almost constantly a victim of ill health; in 1833 he removed to Naples, where he died in 1837.

Leopard's-bane, Doronicum pardaorder Compositæ, a robust plant, with large, roughish leaves and conspicuous, yellow flower-heads.

Leopard-wood, the wood of Brositree of Trinidad and Guiana, allied to the cow tree.

Leopold I (le'u-pold), King of the Belgians, son of a Duke of Saxe-Coburg, was born in 1790. In 1816 he married the Princess Charlotte, heir-apparent of Great Britain, who died in 1817. In 1831 he accepted the crown of Belgium. He married a daughter of King Louis Philippe of France. He was popular among his subjects, being liberal and attentive to their constitutional rights. He died in 1865, the Belgians.

popular among his subjects, being liberal and attentive to their constitutional rights. He died in 1885.

Leopold II, King of the Belgians, succeeded his father, Leopold I, in 1865. As Duke of Brabant, he had been an active legislator before his accession. Queen Charlotte, his wife, was a niece of Francis Joseph of Austria. During his reign Belgium became the administrator of the Congo Free State, and Leopold its sovereign. He was accused of working the natives cruelly in his own interests and of growing wealthy from the fruits of their enforced labor. He surrendered his sovereignty over this state to the government of Belgium in 1907, and died in December, 1909, being succeeded by his son Albert.

Leopold I. See Germany.

Lepadidæ (le-pad'i-dě), the barnacles or goose-mussels, a family of cirriped crustaceans, free-swimming when in the larval state, but when adult attached by the antennæ to submarine bodies. See Barnacle.

Lepanto (le-pan'to), or EPAKTO (ancient Naupaotus), a seaport town of Greece, in the nome of Phokis, on the Gulf of Corinth or Lepanto, near the Strait of Lepanto. Its harbor is now silted up, but it was anciently of considerable importance. It is memorable for the naval battle, from which dated the decline of the Turkish power in Europe, fought within the gulf on October 7, 1571, between the Ottoman fleet and the combined fleets of the Christian states of the Mediterranean, under Don John of Austria, when the former, consisting of 200 galleys and 60 other vessels, was destroyed.—The strait connects the Gulf of Corinth with the Gulf of Patras, and is about 1 mile wide at its narrowest part. Lepas (lep'as), the generic name of Barnacle.

Leper. See Leprosy.

Leper-houses (lep'er), houses for the treatment of leprosy; once very numerous in England, nearly every important town having one or more of these houses. The house of Burton Lazars in Leicestershire, built by a general subscription raised over England in the time of King Stephen, was the head of all lazar-houses in England.

cess Charlotte, itain, who died pted the crown a daughter of cance. He was s, being liberal constitutional the Belgians, in 1835, and old I, in 1865. had been an his accession, was a niece of a. During his administrator and Leopold its and of working the class for which they were a bandoned or appropriated to other objects. Lepidium (lep-id'i-um), and Leopold its led of working the nat. order Crucifere. L. sativum is the common garden-cress.

Lepidodendron

(lep-i-dō-den'dron; GreekLepidodendron lepis, scale, and dendron, Sternbergii. tree), a genus of fossil blants, cryptogamic and acrogenous. The stalks are dichotomous, the leaves simple, linear, or

lanceolate, but only towards the extremity. Their internal structure is intermediate between that of the Conifers and Lycopodiaces. They are found only in the coal-measures. Some of the species were of immense size, fragments of stems being found upwards of 40 feet in length.

Lepidoganoidei (lep-i-dō-ga-noi'de-1), Hepidosiren enufic enufic mud-fishes. See Dipnoi. ishes, distinguished from the placoganoid fishes by their external covering consisting of scales, and not, as in the latter, pike of the of plates. The best-known living fishes belonging to the Lepidoganoidei are the bony pike and the polypterus.

Lepidus

Lepidus

or peach-blossom, passing into gray; luster pearly; easily split into thin, translucent, flexible scales or plates. The mineral is one of the principal sources of the metal lithium.

Lepidoptera (lep-i-dop'te-ra; Greek, lepis, a scale; pteron, a wing), the scientific name of the order of insects which includes the butterflies and moths (which see), and which is so named from the presence of innu-



LEPIDOPTERA.

1, Butterfly—Hipparchia galathea, marbled white butterfly. 2, Hawk-moth or sphinx—Macrogioses stellatarum, humming-bird hawk-moth. 3, Moth—Abraxas grossulariata, magpie moth. 4, Palpi and spiral mouth of butterfly. 5, Antenns—a, Butterfly's; 5, Sphinx's; c, Moth's. 6, Portion of wing of cabbare-butterfly, with part of the scales removed. 7 Sealet of same magnified. 7. Scales of same, magnified.

and from the presence of these scales the beautiful tints and colors of the lepidop-terous insects are derived. The Butterflies form the diurnal Lepidoptera; while the Moths, flying about chiefly at twilight or during the night, are termed crepuscular or nocturnal Lepidoptera.

Lepidosiren (lep-i-dō-si'ren), the scientific appellation of the

Lepidosteus (lep-i-dos'te-us), the generic name of the bony pike of the North American lakes.

of plates. The best-known living names belonging to the Lepidoganoidei are the bony pike and the polypterus.

Lepidolite (le-pid'o-lit), or Lithia Mica, a species of mica Mica, a species of mica in 44 appointed by Cæsar to the government of Narbonese Gaul and Nearer onal prisms, or in masses composed of Spain. He was in Rome at the time of small, crystalline scales. Its color is pink or peach-blossom, passing into gray; luster pearly; easily split into thin, translucent. Heylike scales or plates. Spain and Narbonese Gaul as his share in their division of the empire. After the battle of Philippi (42) a redivision took place, in which Lepidus received Africa, where he remained till 36, when he was summoned by augustus to assist him against Sextus Pompey. He then tried to seize Sicily, but was overcome by Augustus, who removed him from the triumvirate, and banished him to Circeii, where he lived under strict surveillance. died in B.C. 13.

(lep-is'mi-de), a family of Lepismidæ minute wingless insects belonging to the order Thysanura, having the abdomen furnished at its extremity with three caudal bristles, which are used in leaping. The common species (Le-pisma saccharina) is found under wet planks or in similar damp situations.

Leporidæ (lep'or-i-dē), the hare tribe, or the family of rodents of which the genus Lepus is the type.

Leprosy (lep'ro-si; Greek, lepros,

Leprosy rough), a name applied at one time to several different skin diseases characterized by roughness or scaliness.

True leprosy is the elephantiasis of the Greeks, the lepra of the Arabs, whose old English name was the myckle ail or great disease. It is to be distinguished from the elephantiasis of the Arabs, which is a local overgrowth of skin and subcutaneous tissue. There are several well-marked types. The first is characterized by the formation of nodules or tubercles merable small, membranous scales, which in the skin, common about the eyebrows, come off like fine dust or powder when the wings (four in number) are touched a frowning or leonine aspect. After a by the finger. The scales are merely modifications of the hairs with which the ulcers, which discharge for a time, and wings of most other insects are covered; may cause extensive destruction and de-

formity. The tubercles may form in the seat of a university; has manufactures or nostrils; in the throat, altering the voice; textiles, glass, etc. Pop. 24.531.—The on the eyelids, extending into and deprovince, bounded north by France, has stroying the eyeball. In the second type an area of 4690 square miles traversed the chief features are insensibility and numbness of parts of the skin, accompanied by deep-seated pains, causing sleeplessness and restlessness. In a third sleeplessness and restlessness. The largest St. Margueite, is numbness of parts of the skin, accompanied by deep-seated pains, causing sleeplessness and restlessness. In a third variety much mutilation occurs owing to the loss of bones, chiefly of the limbs, a occupied by a prison, especially famous portion of a limb being frequently lopped of painlessly at a joint. All these variety much make the residence for twelve years of the Honorat contains the ruins of a once off painlessly at a joint. All these varieties begin with the appearance on the skin of blotches of a dull coppery or curplish tint, the affected part being thickened, puffy and coarse looking. When the redness disappears a stain is believed to be caused by a minute organism—a bacillus (see Germ Theory of Disease), and to be contagious. Though the disease is not so widespread as at one it was, it still prevails in Norway and Iceland, the coasts of the Black Sea and Mediterranean, in Madagascar, Mau. ritius, Madeira, the Greek Archipelago, East and West Indies, Palestine, the Pa-cific Islands, etc. In Hawaii an island is set aside expressly for the residence of died in 1625. lepers, they being removed thither as soon Lermonton

Lermontoff (ler'mon-tof), Michael, a Russian poet, born in Repsius (lep'se-us), Karl Richard, a Russian poet, born in Respiration in 1810; died in 1884. After officer of the guard. His first important studying at Leipzig, Göttingen and Berlin, he carried on studies and researches temporary banishment to the Caucasus. After the poem, on the death of Pushkin, caused his poem, and he also made two visits to Egypt. He was professor in the Berlin University, director Demon, Ismail Bey, etc., belong to the Egyptian section of the royal murger of

The tubercles may form in the seat of a university; has manufactures of

and confiscated much of their property. Under Philip IV his administration of the treasury was challenged, and he was compelled to refund considerable sums. He

Lermontoff (ler'mon-tof), MICHAEL,

made two visits to Egypt.

fessor in the Berlin University, director of the Egyptian section of the royal museum, director of the royal institute, head of the royal library, etc. He was author of a large number of important works on Egyptian subjects.

Leptocardia (lep-to-kar'dē-a), Müller's name for the Müller's name for the represented by the limbs, eyes and other organs of sense distincts. Leptocardia (lep-to-kar'de-a), fishes. The young lernæan as it first lowest order of fishes, represented by the lancelet, now called Pharyngobranchii.

Lepus (lep'us), the genus of rodents which comprises the hares and commodive limbs, but the limbs, eyes and other organs of sense disappear when it assumes the parasitic condition.

Lerici (la'ri-che), a seaport of Northern Italy, in the province of Genoa, on the eastern shore of the Gulf Spezzia, 57 miles E. S. E. of Genoa. Pop. 9326.

Leroux (1e-ro), Pierre, a writer on social and economic questions, Pop. 9326.

Lérida (la're-tha; ancient *Norda*), town of Spain, province of Lerida, Catalonia, on the right bank of the Segre, here crossed by a handsome the Segre, here crossed by a handsome the Barcelona. As the key of Aragon and Catalonia it was early fortified, and still continues to be one of the most important oyclopedia (1838). He was afterwards military points in Spain. It was long the

Lerwick (ler'wik), a seaport town Russians. of Scotland, capital of Shet-Lesina Pop. 4654.

Le Sage, or LESAGE (lè-Săzh), ALAIN RENÉ, a French novelist and dramatic writer, born in 1668 at Sarzeau, in Brittany. He studied at the college of the Jesuits at Vannes, in 1692 went to Paris to study law, and in 1694 he married. To procure a livelihood he handond law for literature his first at abandoned law for literature, his first at-tempts being in imitation of the Spanish drama. He subsequently translated Avel-laneda's continuation of the Adventures of Don Quixote, and adapted a play from Calderon; but his first success was with This was followed by Turcaret, his theatrical masterpiece, and one of the best comedies in French literature. Le Diable Boiteux, imitated from a Spanish romance, El Diablo Cojuelo, appeared the same year. In 1715 he published the first two volumes of Gil Blas, one of the best romances in the French language, the third volume appearing in 1724, the fourth in 1735. In 1732 he published Les Aventures de Guzman d'Alfarache (based on Aleman's work). In 1734 appeared L'Histoire d'Estevanille Gonzales. The last of his novels was Le Bachelier de Salamanque (1738). He died in 1747. (les'bos), a Greek island sit-uated off the northwest coast Leshos of Asia Minor, now called Mitylene, from its capital. In shape it is nearly triangular; has an area of 276 square miles, and a population of about 25,000. Acquired by Greece from Turkey on June 13, 1914. It is mountainous, but is exceedingly fertile, its principal products being figs, grapes, olive-oil and pine timber. The island formerly contained nine cities, the chief being Mitvlene. It was a flourish-ing state in ancient times, till conquered by Athens, and was the birthplace of the poets Alcœus and Sappho.

Lescovats (les'ko-vats), Lescovac, a town in Servia, between Nish and Vranya, the headquarters of the Servian hemp industry. Pop. 13,707.

in founding the Revue Independants (1841), and sat in the National Assembly (1848) as an extreme radical. From religion, inhabiting the eastern Caucasus, 1851 to 1869 he lived in Jersey and Switzerland, but returned to Paris after the amnesty, and died there in 1871. His chief work was De l'Humanité (1839).

Caucaian peoples in their resistance to the Russians.

(les'ē-nil), or Les'sına, an island in the Adriatic, on the land, in Bressay Sound, on the southeastern shore of Mainland. There are no manufactures of consequence; but the trade, favored by the fine anchorage in the bay, is considerable. Many of the inhabitants are employed in the fisheries.

Testina island in the Adriatic, on the coast of Dalmatia, consisting of a long and narrow strip, stretching east to west for 40 miles, with a breadth of 2 to 6 miles, and presenting a continuous chain of hills, which, on the coast, form lofty and precipitous cliffs. Wine, olive-oil of hills, which, on the coast, form lofty and precipitous cliffs. Wine, olive-oil and fruit are produced. The principal town, bearing same name, is on the southwest coast, and has a good natural harbor. Pop. 18,091.

Lesley, John, Scottish historian, born Scottish prelate and was devoted to the cause of Mary, Queen of Scots, and was her chief legal adviser in the negotiations with Queen Elizabeth. For his intrigues he was imprisoned for a time in the Tower of London, being liberated in 1573. He wrote A Defence of the Honour of Marie, Queene of Scotland, De origine moribus et rebus gestis

Scotorum, etc. He died in 1596.

Lesley (les'lè), J. Peter, geologist, born at Philadelphia in 1819; died in 1903. He was engaged for several years on the geological survey of Pennsylvania, in 1873 was appointed professor of geology at the University of Pennsylvania, and in 1874 was put in charge of the State Geological Survey, which he conducted with much ability. He wrote A Manual of Coal, Man's Origin and Destiny, etc.

Leslie (les'le), ALEXANDER, Earl of
Leven, a Scottish general, born
about the end of the 16th century
He went abroad, and rose to be fieldmarshal in the service of Gustavue Adolphus. Returning home in 1639 he was chosen general-in-chief of the Covenanters' army, and defeated the king's army at Newburn. In 1644 he went to the assistance of the English Parliament, and led a division at Marston Moor. In 1646 Charles I gave himself up to Leslie's army, then encamped at Newark. At the battle of Dunbar he served as a volunteer, and was soon afterwards thrown into the Tower by Cromwell, but soon liberated at the intercession of Christina of Sweden. He died at an advanced age in 1661.

Leslie, CHARLES ROBERT, painter, born in London in 1794, was when very young taken by his parents to the United States, where he was apprenticed to a bookseller in Philadelphia. Having

shown artistic ability, he was sent to England, and became a pupil at the Royal Academy about 1813. Among his most successful early pictures were Anne Page and Slender (1819); Sir Roger de Coverley going to Church (1820); and Mayartha price of Church (1820); day in the reign of Queen Elizabeth. In 1824 he produced Sancho Panza and the Duches, the first of his pictures from Don Quizote—a work which furnished him with some of his happiest subjects. to, from Tristram Shandy, and from other popular novels, and a number of historical incidents. He was elected an incidents of the state associate of the Academy in 1821, an academician in 1826. From 1848 to 1851 he was professor of painting at the Academy. He died in 1859. Leslie is distinguished for the delineation of character and expression, and for excellence in composition rather than for his coloring.

Leslie, DAVID, LORD NEWARK, a Scottish general and Presbyterian leader, born in Fifeshire in the early part of the seventeenth century. He served for some time under Gustavus Adolphus, king of Sweden, but returned to Scotland about the commencement of the civil wars, and in 1644 accompanied the Earl of Leven with the Scottish force sent to assist the parliament. His Scottish horse supported Cromwell's decisive charge at Marston Moor. Leslie was then recalled to check the successes of Montrose in the north, and routed him at Philiphaugh, near Selkirk. With the change in Scottish politics the Scottish army returned home, and Leslie was employed for some time in putting down insurrection, chiefly in the north and west among the High-landers. When, however, the Scottish Parliament took up arms on behalf of Charles II, Leslie was appointed com-mander-in-chief, and proved himself no unworthy opponent of Cromwell, but was finelly defeated at Dunbar in 1650. He finally defeated at Dunbar in 1650. He afterwards retreated to Stirling, where he was joined by Charles II, who assumed the command of the army. After the battle of Worcester Leslie was captured in Yorkshire, and imprisoned in the Tower till the restoration. In 1661 he was rewarded for his services to the royal cause with the title of Lord Newark, and a pension of £500. He died in 1682.

Leslie, ELIZA, an American prose writer, sister of Charles Robert mentioned above, was born at Philadelphia in 1787; died in 1858. She wrote sketches, the humor and satire of which gave them great popularity. Her novels include Atlantic Tales, Rival Sketches, etc.

Leslie, John, Bishop of Ross, prelate and diplomatist, born in Scotland in 1526 or 1527, studied at Aberdeen, Toulouse, Poitiers and Paris. He escorted Queen Mary from France in 1561, and was always one of her most active friends. For his intrigues on her behalf he was imprisoned in the Tower, and on his liberation went to France, where in 1593 he was made Bishop of Coutances. He died in a monastery near Brussels in 1596. His works include a work De Origine, Moribus, et Rebus Gestis Scotorum (1578); and a History of Scotland from 1436 to 1561.

Leslie, Sir John, a Scottish physicist mathematician, born at Largo, Fife, in 1766. He studied at the University of St. Andrews, and then at Edinburgh. After a short stay in America he returned to London, where he com-menced his translation of Buffon's Natural History of Birds, published in 1793. He invented the differential thermometer about the year 1800, and four years later published his Essay on the Nature and Propagation of Heat. In 1805 he was elected to the chair of mathematics in the University of Edinburgh, a post which in 1819 he exchanged for the professorship of natural philosophy. Through one of his contrivances, his hygrometer, he arrived in 1810 at the discovery of a process of artificial congelation, which enabled him to freeze mercury. In 1809 he pub-lished his *Elements of Geometry*; in 1813 an Account of Experiments and Instru-ments depending on the Relation of Air to Heat and Moisture; in 1817 his Philos-ophy of Arithmetic; in 1821 his Geomet-rical Analysis and Geometry of Curve Lines; in 1822 a volume of Elements of Natural Philosophy; and in 1828 his Rudiments of Geometry. Besides these works he contributed largely to the Edinburgh Review, the Encyclopædia Britan-nica, etc. He died in 1832, having been

Lesseps (la-sep), FERDINAND, VI-COMTE DE, a French diplomatist and engineer, born in 1805. After holding several consular and diplomatic posts he retired from the government service, and in 1854 went to Egypt, and proposed to the viceroy the cutting of a canal across the Isthmus of Suez. This great work was successfully completed in 1859 - 69, under his supervision, and brought him high honors. Another grand scheme undertaken by him was the unfortunate Panama canal (which see), in the management of the construction of which his reputation suffered sadly. He was accused of breach of trust and sentenced to a fine and five years' imprisonment, but was too ill to be taken from his house, where he died in 1894.

Lessing (les'ing), GOTTHOLD
EPHRAIM, a German critic,
dramatist and scholar, born in 1729 at
Kamentz, in Upper Lusatia. He entered the University of Leipzig in 1746 to study theology, but his love of the drama and his intimacy with Schlegel, Mylius, Weisse, and other young men of literary tastes led him to abandon this intention. He undertook, with Mylius, in 1750, a publication entitled Beiträge zur Historie publication entitled Beiträge sur Historie und Aufnahme des Theaters ('Contributions to the History and Improvement of the Theater'); published some poems under the title of Kleinigkeiten ('Trifles'); translated a work of the Spanish philosopher Huarte; and wrote some articles in Voss's Gazette. He entered at this time into friendly relations with Moses Mendelssohn and the bookseller Nicolai, in conjunction with whom he established the critical journal, Briefs die neueste Literatur betreffend ('Letters on the Newest Literature'). In 1650 appeared Miss Sara Sampson, a 1755 appeared Miss Sara Sampson, a tragedy dealing with English life. In 1760 Lessing became secretary to General Tauenzien in Breslau for five years, when he returned to Berlin and published comedy Minna von Barnhelm. About 1767 he became director of the National Theater at Hamburg. While here he Theater at Hamburg. While here he wrote his *Dramaturgie*. His criticisms made him enemies, and having been compelled to quit Hamburg, the Duke of Brunswick appointed him his librarian at Wolfenbüttel. In 1775 he went to Vienna and accompanied Prince Leopold of Brunswick to Italy. He married in 1776, but his wife died in little more than a year. At this period he was involved in fierce theological disputes, which his philosophical drama Nathan der Weise (1779) did nothing to allay. Besides those mentioned, he wrote another drama, Emilia Galotti (1772). Brunswick in 1781. He died at

Lestrange (les-tranj'), SIR ROGER, Journalist and translator, born at Hunstanton Hall, Norfolk, in 1616. In 1629 he attended Charles I in his expedition into Scotland. In 1644 he formed a plan for surprising Lynn, but was seized and condemned as a ny. He was however. It may arise from a plathoric health from

close of the reign of James II, and himself edited the Public Intelligencer in 1663, the London Gazette in 1665, and the Observator in 1679, the latter existing till 1687. He died in 1704. He was the author of a great number of coarse and virulent political tracts, and translated Josephus, Cicero's Offices, Seneca's Mor-

Lestris (les'tris), the genus of birds to which belong the Arctic gull and the skua gull, the most formidable of all the gull kind.

he painted for the corporation of gold-smiths the Preaching of the Apostle Paul at Ephesus. All of these are large paintings, and are now in the Louvre. Among the most distinguished of his later works the Laokoon oder über die Grenzen der are some mythological scenes. He died Malerei und Poesie ('Laocoon, or on the in 1655. His works are distinguished for Limits of Painting and Poetry'), and his grace rather than power, and are inferior grace rather than power, and are inferior in respect of color.

Lesueur, JEAN FRANÇOIS, a French musical composer, a descendant of the painter Lesueur; born in 1760. In 1788 he was appointed chapel-master at Notre Dame, but his first opera proving successful, he resigned this post, and for some time devoted himself to operatic work. His chief operas were La Caverne (1792). Paul et Virginie (1794), Télémaque (1796). Les Bardes (1804), and La Mort d'Adam (1809). He was made professor of music in the National Institute and though afterwards tional Institute, and though afterwards displaced by intrigue, was again restored by Bonaparte. In 1814 he was appointed composer to the king; and in 1817 professor of composition to the Conservatoire. His sacred music consists of thirty-three

condemned as a spy. He was, however, It may arise from a plethoric habit, from respited from time to time until he had deficient circulation in the brain, from lain in prison four years, when he made nervous exhaustion of that organ, from a his escape to the continent. In 1653 he poisoned state of the blood, or from a returned to England. He was licenser of suppression of urine. When it is the conthe press from the restoration until the sequence of alcoholic intoxication or of the action of narcotics it should be treat- It nests in the village shrubbery and has ed by stimulants, the application of heat, a short but very sweet song, uttered while

Lethbridge, a town of Alberta, Canada, about 120 miles south of Calgary, in a farming and coalmining region. Pop. 11,000.

Lethe (le'the; Greek, lethe, forgetfulness), the River of Oblivion, one of the streams of the lower regions celebrated in ancient mythology, whose water had the power of making those who drank of it forget the whole of their former existence. Souls before passing into Elysium drank to forget their earthly sorrows; souls returning to the upper world drank to forget the pleasures of Elysium.

Lethington. See Maitland, William.

See Latona. Leto.

See Attor-Letter of Attorney. ney. Letter of Credit. See Credit.

See Marque. Letter of Marque.

Letters. See Alphabet, Och Vowel, Writing, etc. Consonant,

Letters-patent, the name of an instrument, not sealed, granted by the government, conferring on a person or a public company special or peculiar privilege. Letters-patent are issued to protect new inventions, and from this is derived what is called patentright. See Patent.

Letts (letz), a Slavonic people closely akin to the Lithuanians inhabit-

when in flower. A number of species are known from various parts of the globe.

Lactucarium, or lettuce opium, the inspissated juice of the lettuce, is used medicinally as an anodyne.

Leucoma (lū-ko'ma), a white opacity of the cornea of the eye, the result of acute inflammation. Called also inspissated juice of the lettuce, is used Albugo.

Leuconathy See Albinos.

Lettuce-bird, the American gold-finch (Spirus tristis). It is a bird of the gardens and orchards and one of the most widely distributed discharge of a catarrhal, white, yellowish,

in flight.

(18-ka'di-a), or SANTA Leucadia MAURA, one of the Ionian Islands, on the west coast of Greece, 18 to 20 miles long, and 7½ to 10 miles wide. Its surface is mountainous and rugged. The eastern side is waste and barren, but the western and northern parts are very productive, yielding vines, parts are very productive, yielding vines, clives, citrons, etc. The southwestern extremity, now Cape Ducato (also known as the Leucadian Rock, or the Lover's Leap), is a white cliff rising to the height of at least 2000 feet. On its summit was a temple of Apollo, in whose honor a criminal was annually thrown honor a criminal was annually thrown nonor a criminal was annually infound from the rock into the sea as a sinoffering. Sappho, Artemisia, and other despairing lovers are said to have thrown themselves from it. Amaxichi is the chief town. Pop. of the island, 31,769.

Leuchtenberg (loik'ten-berk), in the middle ages an inderendent landgraviate of Germany, which.

pendent landgraviate of Germany, which, by the extinction of the male line, fell to Bavaria in 1646. From it Eugène Beauharnais took the title of Duke of Leuchtenberg.

Leuchtenberg.

Leucippus (lū-sip'us), a Greek philosopher, founder of the atomic school, lived 500 years n.C., and is said by some to have been a native of Abdera; by others, of Elis or the Island of Melos. His instructor was Zeno the Eleatic, or, according to others, Parmenides, and he himself was the teacher of Democritus.

Leuciscus (lü-sis'kus), the genus of fishes which contains the roach, dace and bleak.

akin to the Lithuanians inhabitin Courland, Livonia, Vitebsk and Kovno. Their language, along with the Lithuanian and Old Prussian (extinct), forms the Lettic or Lithuanian branch of the Indo-European family of tongues. The Letts number about 1,500,000.

Lettuce (let'is: Lactica satira), a plant, containing a milky juice, and in general use as a salad. The stem grows to the height of about 2 feet, and bears small, pale-yellow flowers; the inferior leaves are sessile, and undulate on the margin. The young plant only is eaten, as the lettuce is narcotic and poisonous when in flower. A number of species are

Leucoma (lu-ko'ma), a white opacity of the cornea of the eye, the

Leucopathy.

(lū-ko-rē'a), in medi-Leucorrhœa cine, a pathological of the smaller seed-eating American birds. or greenish mucus from the female genital organs, due to acute or chronic inflam-mation, which may be infectious in char-acter. It is treated by antiseptic and astringent douches, paying particular attention to any local condition found present and to the general health of the afflicted person.

(lūk'tra), a village in Bœotia, on the road from Thes-Leuctra piæ to Platæa, famous for the victory of the Theban Epaminondas over the Spartan king Cleombrotus, which put an end to Spartan domination in Greece (371 B.C.). Leuk (loik), a town of Switzerland, canton of Valais, on the right bank of the Rhone, 15 miles E. N. E. of Sion. About 5 miles to the north the celebrated thermal saline baths of Leuk (Leukerbad)

Ze (loit'seh), EMANUEL, artist, was born in 1816 in Würtem-Germany; died in Washington, in 1868. He was a pupil of Les-Leutze D. C., in 1868. Salamanca, Columbus Before the Queen, The Landing of the Norsemen in America, Cromwell a d his Daughter, Washington Crossing the Delaware, News From Leaington and Westward the Star of Empire Takes its Way; the latter in

interior of Africa, his accounts of which were published in 1790 and 1796. He died in 1824.

(lē-vant'), a term applied in Levant the widest sense to all the regions eastward from Italy as far as the Euphrates and the Nile, and in a more contracted sense to the Asiatic coasts of the Mediterranean and the ad-

(lev'ē), a morning reception Levee held by a prince or great per-The term is chiefly applied in Britain to the stated public occasions on which the sovereign receives visits from such persons as are entitled by rank or fortune to the honor. In the United States the term levee is applied to an official reception, at any hour of the day or evening

(Fr. levée), in America, an em-Levee bankment on the margin of a river, to confine it within its natural channel, such as may be seen extending for long distances along the banks of the lower Mississippi.

Level (lev-el), an instrument by which to find or draw a straight line parallel to the plane of the horizon, and by this means to determine the true level or the difference of ascent or descent between several places, for various pur-poses in architecture, agriculture, engi-neering, hydraulics, surveying, etc. There is a great variety of instruments for this purpose, differently constructed and of different materials, according to the particular purposes to which they are applied, as the carpenter's level, mason's level, gunner's level, balance level, water level, mercurial level, spirit level, surveying level, at a level, instruments. ing level, etc. All such instruments, however, may be reduced to three classes:—
(1) Those in which the vertical line is determined by a suspended plumb line or. balance weight, and the horizontal indicated by a line perpendicular to it. Such are the carpenter's and mason's levels.

(2) Those which determine a horizontal lie. Among his best known paintings line by the surface of a fluid at rest, as are: Columbus Before the Council of water and mercurial levels. (3) Those water and mercurial levels. (3) Those which point out the direction of a horizontal line by a bubble of air floating in are spirit-levels, which are by far the most convenient and accurate. All levels From Lexington and Westward the Star of Empire Takes its Way; the latter in the Washington capitol.

Levaillant (level-yan), Francois, a French traveler, born in 1753. He made two expeditions into the interior of Africa, his accounts of which were published in 1790 and 1796. He died in 1824.

The most convenient and accurate. All levels depend on the same principle, namely, the action of terrestrial gravity.

Levelers (lev'el-erz), a name more particularly given to a party which arose in the army of the Long Parliament about the year 1647, and was put down by Fairfax. They aimed at the establishment of an equality in titles and estates throughout the kings.

in titles and estates throughout the kingdom.

Leveling (lev'el-ing), the art or operation of ascertaining the different elevations of objects on the sur-Alexandria in Egypt.

Leva'ri-facias (le-vär'i fā'shi-as), a writ of execution issued at common law. ducting water, draining low grounds, rendering rivers navigable, forming canals, and the like. In ordinary cases of leveling (for example, for canals, railways, etc.) the instruments commonly employed are a spirit-level with a telescope attached to it, and a stand for mounting them on, and a pair of leveling staves. leveling staff is an instrument used in connection with a spirit-level and telescope. It is variously constructed, but consists essentially of a graduated pole with a vane sliding upon it so as to mark the height at any particular distance above the ground. In leveling two of them are used together, and being set up

at any required distance the surveyor, by 1842. means of a telescope placed between them perfectly horizontally, is enabled to compare the relative heights of the two places.

Leven (le'ven), Loch, a lake of Scotland, about 10 miles in circumference, in the county of Kindoss. It contains four islands, on one of which was formerly a priory, and on another stand the remains of the castle of Loch Leven, once a royal residence, granted by Robert III to a Douglas. Mary Queen of Scots was confined in this castle after her capture by the confederate lords in 1567, but succeeded in escaping by the aid of George Douglas, her keeper's brother, on May 2, 1568.

Lever (le'ver), a bar of metal, wood, or other substance turning on a and is of three kinds, viz.: (1) When the fulcrum is between the weight and the power, as in the handspike, crow-bar, etc. In this case the parts of the lever on each side of the fulcrum are called the arms, and these arms may either be equal, as in the balance, or un-equal as in the steelyard. (2) When the weight is between the power and the fulcrum, as in rowing a boat, where the fulcrum is the water. (3) When the power is between the weight and the fulcrum as in reight a least a few that the water. power is between the weight and the ful-crum, as in raising a ladder from the ground by applying the hands to one of the lower rounds, the fulcrum in this case being the foot of the ladder. The law which holds in the lever is: the power multiplied by its arm is equal to the weight multiplied by its arm. It is evi-dent that when the power has a very large arm, and the weight a very small large arm, and the weight a very small great one, the small force acts through and Aaron were of this tribe.

a much greater distance than that through which the great force is overcome, or as is sometimes said, 'What is gained in than, meaning a long-jointed monster, applied in left in time.' is sometimes said, 'What is gained in power is lost in time.'

CHARLES JAMES, an Irish nov-He was graduated in arts at Trinity some species of serpent.

College, Dublin, in 1827, and in medicine in 1831, also taking a doctor's degree a little latter at Göttingen. He then re-brother), the custom among the Jews of a man's marries the widow of a brother) the custom among the Jews of

The first chapter of Harry Lorrequer appeared in that magazine in 1837. Meanwhile he was attached as physician to the British legation at Brussels, where he practised for three years. During his three years' editorship of the Dublin University Magazine he resided in the neighborhood of the Irish capital, but after his resignation he took up residence on the continent, mainly occupying him-self with fiction. His Charles O'Malley, Tom Burke, Jack Hinton, etc., constituted a literature entirely sui generis. His later novels were more thoughtful and artistic. He obtained a diplomatic post at Florence about 1845, was appointed vice-consul at Spezzia in 1858, and in 1807 at Trieste, where he died in 1872.

Leverrier (leva-ri-a), Urbaan Jean Joseph, a French astronomer born at Spirit 14 (Marche) in 1811. or other substance turning on a JOSEPH, a French astronosupport called the fulcrum or prop, and mer, born at Saint-Lo (Manche) in 1811; used to overcome a certain resistance died at Paris in 1877. He devoted himself (called the weight) encountered at one at first to chemical research, but some part of the bar by means of a force memoirs on the stability of the solar (called the power) applied at another system drew on him the attention of part. It is one of the mechanical powers, Arago, who induced him to persevere with and is of three kinds, viz.: (1) When astronomical studies. His observations the fullcrum is between the weight and on the trensit of Massury in 1845 proon the transit of Mercury in 1845 pro-cured him admission into the Academy of Sciences. His great work was his investigation of the irregularities in the movements of the planet Uranus, carried on simultaneously but independently with those in the same line by John Couch Adams, which led to the discovery of the planet Neptune. He entered political life in 1849, and was made a senator by Napoleon III. He succeeded Arago as director of the observatory, but his arrogance and violence of temper made his tenure of the office a failure. His ta-bles of suns and planets are in general

use among astronomers.

Levi (le vi), the third son of Jacob and Leah. The chief incident recorded of him, as apart from his brethren, is the part which he played in the massa-cre of the Shechemites. Three sons went one, a very small power will overcome a cre of the Shechemites. Three sons went great resistance. In the lever, as in all down with him to Egypt—Gershon, Komachines when a small force overcomes a hath and Merari (Gen., xlvi, 2). Moses

applied in Job, xli, and elsewhere in Scripture to an aquatic animal, variously

turned to Ireland to practise. In March, a man's marrying the widow of a brother 1834, he contributed his first paper to who died without issue. The same custhe newly-started Dublin University Mag- tom or law prevails in some parts of szine, of which he became editor in India.

Levis the south bank of the St. Lawrence opposite Quebec with which there is ferry communication. It carries on a large trade by river and rail. Pop. 7452. (le'vitz), the name generally employed to designate not the whole Jewish tribe that traced its descent from Levi, but a division within the tribe itself, in contradistinction to the priests, who are otherwise called the 'sons of Aaron.' They were the ministers of worship, specially singled out for the service of the anctuary. Together with the priests they formed the sacerdotal tribe. A permanent organization was made for their maintenance. In place of territorial possessions they were to receive tithes of the produce of the land, and in their turn to offer a tithe to the priests. After the settlement in Canaan, to the tribe of Levi were assigned forty-eight cities, six of which were cities of refuge, thirteen of the total number being set apart for the priests. To the Levites was to belong the office of preserving, transcribing and interpreting the law, and they were to read it every seventh year at the feast of tabernacles. Their position was much changed by the revolt of the ten tribes, and they are seldom mentioned in the New Testament, where they appear as the types of formal, heartless worship.

Leviticus (levit'i-kus), the name of the third book of the Pentateuch, so called from the first word of its contents. By the later Jews it was called the 'Law of the Priests,' and some-times the 'Law of Offerings.' It consists of seven principal sections, but it may be generally described as containing the laws and ordinances relating to Levites, priests and sacrifices. The integrity of the book is very generally admitted, the Elohist, or author of the original document (see *Elohim*), being credited with having written nearly the whole of it, and the rest being considered originally Elohistic.

See Nicosia. Levkosi'a.

(lev-o-glū'kōs), Lævo-Levoglucose

of general defense or offense when the existing troops are insufficient to meet the exigencies of the situation. When a coun-

(lev'is), a town of Canada, on levée en masse is sometimes made, every man capable of bearing arms being called out. If the occasion be less urgent the levy may be restricted to men of a fixed class, as between 18 and 40 years of age. Lewes (18'es), a municipal borough of England, in Sussex, on the Ouse, 7 miles northeast by east of Brighton. It is built on an acclivity, and is a place of great antiquity, containing the ruins of many ecclesiastical buildings. The chief manufacture is agricultural implements. In its vicinity, in 1264, the barons, under Simon de Montfort, defeated the royal army under Henry III. Pop. (1911) 10,972.

Lewes (18'es), GEORGE HENRY, philosophical writer and con-

tributor to most departments of literature, born in London in 1817. He was in turn a clerk, a medical student, and a student of philosophy in Germany, from which he returned in 1840 to devote himself to general literature. His first important work was his Biographical History of Philosophy from Thales to Comte, originally published in 1845, and subsequently much extended and altered subsequently much extended and altered—a work written more or less from a Positivist point of view, and sufficiently proving his ability as a thinker and writer. From 1849 to 1854 he was literary editor of the Leader, during that time publishing his Life of Robespierre (1850) and a compendium of Comte's Philosophy of the Sciences (1853). His Life of Goethe, which won him a European reputation, was published in 1855. Life of Goethe, which won him a European reputation, was published in 1855. From 1854 he was largely engaged in physiological investigations with special reference to philosophical problems. To this period belong his Seaside Studies (1858), Physiology of Common Life (1860), and Studies in Animal Life (1861), besides papers contributed to the British Association on the spinal cord and on the nervous system. In 1864 he and on the nervous system. In 1864 he and on the nervous system. In 1864 he published a study on Aristotle, and in 1865 founded the Fornightly Review, but was compelled by ill health to retire a year later. The chief work of his life, aiming at the systematic development of his philosophical views, is entitled Problems of Life and Mind (1873-77). He died in 1878. Besides the works already mentioned he wrote the Spanish drama, Lone de Vega and Calderon (1846): two meric with dextroglucose, but distinguished from it by turning the plane of polarization to the left, and always occurring along with it in honey, in many Lope de Vega and Calderon (1846); two fruits, and in other sacchariferous vegetable organs.

the compulsory raising pared various plays for the stage under pared various p

Lewis and Clark Expedition. try is in danger of instant invasion a When he had completed the Louisiana

Purchase in 1803, adding a vast western first edition of which was suppressed. His region to the territory of the United other works include Fewdal Tyrants, Rostates, President Jefferson resolved to mantic Tales, Tales of Wonder, etc. carry out a project he had proposed while Lewis, Measurether (1741-1809), have the fair morthweath and the proper of the protection of the collection of the collection of the collection of the collection of the celebrated Revolutionary wether Lewis, one of his secretaries, and Charlottesville, Va. the latter selected Captain William Clark, Expedition). He was born near wether Lewis, one of his secretaries, and the latter selected Captain William Clark a brother of the celebrated Revolutionary soldier, George Rogers Clark, as his assembly the collection of the Missouri in the spring of 900 miles. The course lies partly in 1900 miles, and the most of the Missouri in the spring of 900 miles. Its course lies partly in 1900 miles, and wintered near the site of and partly in Washington. Additionally the course of the Columbia River, discovered by Captain Grey fourteen years before and named after his vessel, and floated down its stream. On the morning of Nor Lewiston, a city of Androecoggin Conventions of the Pacific Ocean. They spent River, 35 miles the winter on the coast, and then realism the stream of the western territory. Their exploit was commemorated by a grand 31,71.

Lewis (1841), Six George Coara. They spent River, 35 miles of Portland, Oregon, in 1965.

Lewis (1841), Six George Coara. They spent River, and has great manufacturing plants torian, born in 1808: died in 1863. After Sorthern and Chicago, Milwaukee & St. serving in parliament 1847-52, he became in 1852 editor of the Editory of Revenue of Rev

Lexington, county scat of Lafayette overstudy, and died of fever during an count River, 42 miles E. of Kansas City, in a corn and coal region. Pop. (1920) 4695.

Lexington, county scat of Davidson Co., Missouri, on Missouri River, 42 miles E. of Kansas City, in a corn and coal region. Pop. (1920) 4695.

Lexington, county scat of Davidson Co., North Carolina, 88 miles w. of Raleigh, in a wheat, cotton and the scientific world by Muschentobucco region with cotton miles furniture brook of Leyden in 1748; hence its reme factories, hosiery mill, etc. Pop. 5254.

Ley. See Lye.

(li'den; Lat. Lugdunum Ba-tavorum), a town of Hol-Leyden land, 22 miles southwest of Amsterdam, on both sides of the Old Rhine. Leyden is encompassed by windmills, and suris encompassed by windmills, and surformed by country seats, pleasure knob at the top, grounds, gardens and fertile meadows. is fixed into the mouth of the jar, Broad Street (Breede-straat) being esteemed one of the finest in Europe. In communicate with the inside coating, it is situated the town hall (Stadhuis), and when the jar is to be charged the a picturesque old building, with some important paintings. None of the churches conductor of an electric machine. As the are very runrkable. The most important electric fluid passes to the inside of the educational institution is the miversity in a ran equal quantity passes from the outeducational institution is the university, formerly one of the most famed in Europe. It is attended on the average by about 700 students, nearly one-half studying law. Leyden has cloth and other manufactures. A memorable event in its history was its siege by the Spaniards in 1573-74, and its relief by the Prince of Orange, who opened a dike and flooded the Spanish camp. The pop. about 100,000 in the seventeenth century, is now 59,207

Leyden, JAN, or JOHN OF. See article Anabaptists. Leyden, John, a Scottish poet and orientalist, born at Denholm, Roxburghshire, in 1775; died at Batavia in 1811. Being intended for the Scottish church, he was sent to the University of Edinburgh in 1790. Here his studies included not only theology and the learned languages, but also French, Spanish, Italian, German, Icelandic, Arabic and Persian. He published translations and original noems in the Edinburgh Magaoriginal poems in the Edinburgh Magaoriginal poems in the Lainburgh Maya-zine; contributed to Lewis Tales of Won-der; assisted Sir Walter Scott in procur-ing materials for his Minstrelsy of the Scottish Border, and wrote a History of African Discoveries. In 1798 he was ordained a Presbyterian minister, but the

from Boston to seize military stores at ing a surgical degree, which he obtained Concord, were opposed by the Lexington after six months' study. In India he conmilitia (70 men), who were dispersed with tinued his favorite philological studies, beal loss of four killed and nine wounded, came professor of Hindustani at Bengal The town has many memorials and places College, and shortly after a judge at Cale of historic interest. Pop. 6350.

tobacco region, with cotton mills, furniture brock of Leyden in 1746; hence its name.

It consists of a glass vial or jar coated inside and outside, usually with tin-foil, to within a third of the top. A metal-lic rod, having a



electric fluid passes to the inside of the jar an equal quantity passes from the outside, so that the two coatings are brought into opposite states, the inside being positive and the outside negative. The jar is discharged by establishing a communica-tion between the outside coating and the knob. When a number of jars are placed in a box lined with tin-foil connected with the earth, their knobs being joined together, they form a battery; a quantity of electricity equal to the sum of the charges which would be received by each jar can be collected in such a battery, capable of melting fine metallic wires, puncturing plates of glass or cardboard, killing animals, rupturing bad conductors, etc.

See Lassa. Lhassa.

L'Hôpital (lo-pi-tâl). MICHEL DE, an eminent French chan-celler and author; born about 1504; died in 1575. Admitted to the bar in Paris, he rapidly rose in hat refession until he superintendent of the became finances in 1554, a position in which his services were of the highest value. In 1560 he was appointed to the chancelloship of France. The country suffered severally this in the chance of the chancel of the chancel of the chance of the country suffered severally this in the chance of the chance verely at this time from the struggles between Catholics and Protestants. L'He ministry not being to his taste, he accepted service as assistant-surgeon under the East India Company, a post demandance of 1562. When violence was resentatives. Numerous remains of plants solved on for the extermination of the occur in the line. See Geology. reformed religion, he found it necessary to resign. The atrocities of St. Bartholo-mew's day in 1572 were a great shock to him, and he only survived that event by a few months.

Li, LE, or CASH, the only copper coin of China, with a square hole in the middle, and an inscription on one side. Ten lis make one candareen, 100 a mace, 1000 a liang or tael, the only Chinese silver coin, of varying value, averaging a little over a dollar. Li is also a Chinese measure of length equal to about 1/3 of an English mile.

Liability, LIMITED. See Joint-stock Companies.

or STONE OF DESTINY, Lia-fail, broad gray stone on which

overtop the heads of the tallest trees, and intertwine the entire forest by their cablelike shoots, forming an impenetrable network, which it is necessary to break through with the hatchet. Vanilla, sarsaparilla, and other medicinal plants are true lianas.

(lē-'ou-töng), a region of Liaotung Liaotung Manchuria, a region of Manchuria, stretching into the Yellow Sea between the gulfs Liaotung and Corea. Port Arthur is situated at the extremity of the peninsula thus formed. It forms the greater part of the province of Shing-King. It was an important seat of the Russo-Japanese

Triassic or New Red Sandstone. The formation is highly fossiliferous, ammonites being found in such quantities and varieties as to be called into use in the classification of the different beds. Gryphites and belemnites are also very common molluses. Fish remains are fre- justice, etc., and its publica quent; but of all its fossil remains by far tutes also a misdemeaner.

occur in the lias. See Geology.

Libanius (li-bā'ni-us), a distinguished Greek sophist and rhetorician, born at Antioch about A.D. 314; died at the same place about 395. He studied at Athens, and taught with great success at Constantinople and at Nicomedia. He used his eloquence in obstructing the spread of Christian ideas, and in the defense of pag: ism. St. Basil and St. Chrysostom were warmly attached to him. His letters have, besides great lit-erary merit, much historical value, as they were addressed to the most eminent men of his time.

Lib'anus, MOUNT. See Lebanon.

(le'bou), an important seaport Libau of Russia, government of Courthe kings of Scotland were crowned in land, at the mouth of the lake of the same the Abbey Church of Scone. In 1206 Edname, on the Baltic. It has an artificial ward I carried it to England, and it still harbor, which has been recently much imward I carried it to England, and it still remains under the coronation chair in proved, and has gained importance as a Westminster Abbey. Tradition has it seaport. Its trade in corn. flax, hemp, that it is the very stone upon which the patriarch Jacob laid his head in the plains of Luz.

Lianas (lean'az), a term applied to those climbing and twining plants found in profusion in tropical climbing to public hatred, contempt, or ridiplants found in profusion in tropical climbing to renutation. When the plain is to public hatred, contempt, or ridiplants, where in many instances they ger, causing a breach of the peace, injury to renutation, business, etc. The difference in the plain is the plain of the peace in the plain is the plain in the plain is the plain in the plain in the plain is the plain in the plain is the plain in the plain in the plain is the plain in the plain in the plain is the plain in the plain in the plain is the plain in the plain in the plain in the plain is the plain in the harbor, which has been recently much imto reputation, business, etc. The difference between libel and slander is, that in the former case the defamation must have been effected in writing, printing, or some other visible manner, while in the latter the offense is committed verbally. Publication is held to have taken place if the libel is seen but by one person other than the person libeled. The law distinguishes defamatory, seditious and obscene libel. A defamatory libel may result in civil Lias (li'as), in geology, the name given to that series of strata, consisting principally of thin layers of limestone embedded in thick masses of blue, argillaceous clay, lying at the base of the Colitic or Jurassic series. and criminal proceedings against both the publisher and the writer, but to come under this category it is essential that the of extortion, to offer to abstain from or to prevent others from publishing a libel. In the United States the punishment for this offense is imprisonment fixed by statute in the different States. A sedi-tious libel is one directed against the head of the state, the legislature, the courts of justice, etc., and its publication consti-tutes also a misdemeaner. The term the most important are those of the great obscene libel comprises any obscene pubreptiles, of which the ichthyosaurus, lication, and the publisher thereof is liaplesiosaurus and enaliosaurus are repreble to imprisonment with hard labor. If

the charges contained in the libel are true a civil action cannot be maintained, but the truth of the libelous matter is no defense at common law; at the same time it generally secures the defendant the merciful consideration of the court. In a civil action the plaintiff recovers damages, the amount of which is settled by the jury; upon an indictment, the jury has merely to acquit the defendant or to find him guilty, after which the court passes judgment, and awards punishment, generally fine or imprisonment, or both. Recent legislation and decisions in this branch of law in Great Britain and the United States (the American laws differ but little from those of Great Britain) have a tendency to limit liability for action to purely false, scandalous and ma-licious libels. Truth, if published with good motives and for justifiable ends, is now admitted as a good defense, and even motive alone, though the statements may prove untrue.

Libel, in nearly all ecclesiastical and given to the formal written statement of the complainant's ground of complaint, in the civil litigation, against the defendant. In Scotch law, an indictment on which either a civil action or criminal prosecu-

tion takes place.
Libel'lula. See Dragon-fly.

Liber. See Bark.

Liberal Arts. See Arts.

Liberal Party (lib'er-al), in modern politics, the party which claims to be distinctively that of reform and progress. The main objects of liberal agitation and legislation are to vest increased power in the people, and to extend privileges to the masses which were formerly monopolized by the favored classes. Most European countries have a powerful liberal party, and liberalism is rapidly spreading in Europe, particularly in Great Britain, Germany, Italy, Spain, Holland, Norway and In Great Britain Liberal and Sweden. Conservative ministries follow each other at irregular intervals, and on the whole the system works well. In the United States the party of progress, that standing between conservatism and radicalism. has adopted various titles in different

Libe'ria, a negro republic on the west coast of Africa, founded in 1820 by liberated American slaves under the auspices of the American Colonization

San Pedro and Manna, has 500 miles of seaboard, and extends some 100 miles inland; area 14,000 to 15,000 square miles. The soil is fertile, well watered, and highly adapted to the cultivation of all tropical products. The chief crop is coffee, increasing quantities of which are grown from year to year and exported, other exports being palm-oil, groundnuts, caoutchouc and ivory. The climate is caoutchouc and ivory. The climate is very unhealthy for Europeans. British weights, measures and moneys are mostly in use. The English language predominates among the governing class, Protestant churches and schools are amply provided, and civilization is making rapid strides among the natives. The popula-tion consists of some 60,000 immigrants from the United States and their descendants, and about 2,000,000 natives: Monrovia is the capital. The government of the republic is on the model of the United States. Recently, its territory has been trenched upon by adjoining British and French settlements, and protection has been asked from the United States. In response this country undertook the full charge of the finances, military organization, agriultural methods and boundary questions of Liberia, and made arrangements for a loan to pay off the existing debt and obligations of the country.

(lib'er-tinz), or LIBER-TI'NI, a sect of fanatics Libertines in the sixteenth century in Holland and Brabant, who maintained that nothing is sinful but to those who think it sinful, and that perfect innocence is to live without doubt. They advocated community of goods, etc. The name was also applied in England to the early Anabaptists about the middle of the sixteenth century.

Liberty Bell, the famous bell which has been given the credit of announcing to the people of Philadelphia the signing of the Declara-tion of Independence on July 4, 1776, and which is now regarded by the people of the United States as the sacred historical emblem of their liberty. It long hung in the dome of the old State House, later known as Independence Hall, in Philadelphia, for which location it was cast in England and brought to that city in 1752. Its purpose was to call the members of the Colonial Assembly of that date to its meetings. While being taken from the ship it met with an accident that spoiled its tone, and it was recast in Philadelphia in 1755. On it was inscribed the Scriptural passage, 'Proclaim liberty throughout all the land unto all the inhabitants Society, and recognized as an independent thereof,' a phrase highly significant in state in 1847. It lies between the rivers relation to its later history. The story

that it was rung on the date of the sign- inheritance taxes and supertaxes. ing of the Declaration of Independence has no historical evidence to sustain it, but there seems no doubt that it was rung on the occasion of reading the Declaration to the people in Independence Square, a few days later. When the British occupied Philadelphia in 1777 the bell was taken down and sunk in the Delaware River near Trenton, but was returned to the State House after their departure. It was subsequently rung on every Fourth of July and on other memorable occasions, until 1835, when it was cracked while being tolled for the burial of Chief Justice currance hall of the State House on a Francis I. Lemoyne were its candidates puedestal with 13 sides, representing the number of original states. In 1893 it was taken to Chicago for the World's Fair of that date and was greeted with natrical enthusiasm in "" was placed in the on April 1, 1840. James G. Birney and for President and Vice-President, they retained that date and was greeted with natrical enthusiasm in "" that date and was greeted with patriotic enthusiasm in all the cities and states through which it passed. Since then it has been exhibited in other cities holding world be expended to the property of the company of t World Fairs, and it is now looked upon by American citizens as their most im-portant and significant historical memorial. Few visitors to Philadelphia fail to see and revere the old bell.

Liberty Cap, or Cap of LIBERTY, a times as a symbol of liberty. Roman slaves, when given freedom, were accustomed to put on what was called the Phrygian cap as a token of their liberty. In modern times the name of Cap of Liberty has been given to the red cap worn by the French and other revolutionists.

the European war.
The First Liberty Loan was for \$2,000,-The First Liberty Loan was for \$2,000,-MM,000, bearing interest at 3½ per cent, and was offered to the public in May, 1917. There were two types of bonds of-fered, one being coupon bonds in denomi-nations of \$50, \$100, \$500, and \$1000; the other, registered bonds of \$100, \$500, \$1000, \$5000, 10,000, \$50,000 and \$100,-000. These were to be free from all taxa-tion event the Edderd inherituals taxation except the Federal inheritance taxes, their date of maturing being June 15, 1947. They were made convertible into the bonds of any subsequent issue. Subscriptions amounted to \$3,035,226,850.

A Second Liberty Loan, for \$3,000,000,000,000.

000, was offered to the public in October, and the interior of the torch holds 12 per-1917, the interest rate on which was in-creased to 4 per cent. These bonds also been installed in the torch, bathing the were exempt from all taxes except State statue in a soft white light.

\$3,808.000,000. redeemable allotment.

allotment, \$3,808,000,000, reflectmable after 1927; subscribers, 10.020,000, Third Liberty Loan: Total allotment, \$4,176,000,000, bearing interest at 4½ per cent, redeemable in 1928; number of

subscribers, 17,000,000.

Fourth Liberty Loan: Total allotment, \$6,989,047,000, bearing interest at 41/4 per cent, redeemable after 1933; number of subscribers, 21,000,000.

Liberty Party, the title assumed by the first political organization of the Abolitionists of the United States. This title was taken by Morris, of Ohio, for Vice-President. They received 62,300 votes, a seemingly negligible number, but it had an important effect on the result of the contest of that year between Clay and Polk. It turned the scale in New York and Michigan against Clay, the Whig candidate, and aided in electing Polk, the Southern Demto the Abolitionists, and in the two succeeding Presidential elections they made no nominations, but cast their vote for the Free Soil Party. In 1856 they formed the advance guard of the new Research is some the state of the president and the source of the new Research is source to the state of the source of publican party, though not fully endorsing its platform.

Liberty, Statue of, the name given a bronze statue Liberty Loan, a popular loan insti-tuted by the United of colossal dimensions, the tallest in the States government by Act of Congress, world, which stands on Bedloe or Liberty approved April 24, 1917, after the en-trance of the great American republic into sculptor Bartholdi designed and executed it, the citizens of France presenting it to the people of the United States in 1876, the hundredth anniversary of American It was not until 1886, independence. however, that it was completed and placed in its present position, the pedestal on which it stands being built by popular subscription of American citizens. represents a female figure holding an uplifted torch, indicating 'The Goddess of Liberty enlightening the world.' The pedestal stands 150 feet above the water level, the statue being 1111/2 feet high and 151 feet including the beight of the torch. Forty persons can stand within the head and the interior of the torch holds 12 per-

Libra the zodiac.

Library (li'bra-ri), the name given to the building in which it is located. Libraries existed in ancient Egypt and Assyria, and Pisistratus is credited with the honor of introducing a public library at Athens about B.C. 337. Cicero and various wealthy Romans made collections of books, and several Roman emperors established libraries, partly with books obtained as spoils of war. By far the most celebrated library of antiquity was the Alexandrian. (See Alexandrian Library.) In the West libraries of some note were founded in the second half of the eighth century by the encouragement of Charlemagne. In France one of the most celebrated was that in the abbey St. Germain des Prés, near Paris. In Germany the libraries of Fulda, Corvey, and in the eleventh century that of Hirschau, were valuable. In Spain, in the twelfth century, the Moors had seventy public libraries, of which that of Cordova contained 250,000 volumes. In Britain and Italy libraries were also founded with great zeal; in the former country by Richard Aungerville; in the latter by Petrarch, Boccaccio, and others. After the rn times are the national library at Paris, with about 2,500,000 of books and 10,000 MSS., and the British Museum library, London, with 2,000,000 books and 100,000 MSS. The central court library at Munich, the imperial library at St. Petersburg, and the royal library at Berlin have each over a million volumes and thousands of MSS. Other large and valunble libraries are the imperial library at Vienna; the royal libraries at Stuttgart, Dresden and Copenhagen; the university libraries of Genoa, Prague, Göttingen, Upsala, Oxford, Cambridge and Dublin; also the libraries of Moscow, Venice, Florence, Milan, Bologna, Naples and the Advo-cates', Edinburgh. The Vatican library, Rome and the Bodleian, Oxford, are par-ticularly valuable in rare books and MSS. In the United States the era of libraries began with that of Harvard College, founded in 1638, and now possessing over tounded in 1058, and now possessing over 850,000 books. A public library was founded in New York in 1700, and the Yale College library began the same year. Franklin in 1731 founded the first library to the college library began the same year.

(li'brà), the seventh sign of pies the most magnificent and well-the zodiac.

(li'brà-ri), the name given the shelves of which are about 1,750,000 to a collection of books, and to a collection of books, with large numbers of manuscripts, maps, prints, etc. At present all our principal cities have large and rapidly growing libraries, those of Boston, New York, Philadelphia and Chicago being especially notable. The spread of education and the consequent growing taste for knowledge have called into existence in numerable smaller libraries ready of numerable smaller libraries, ready of access, and providing such literature as the special class of readers demand. This public library system has naturally been most developed in highly-educated countries, such as th United States, Germany, France and Great Britain. Public libraries, the books of which are loaned free to readers, have had an especially active development in the United States, the recent movement in this direction having been greatly stimulated by the liberal donations of Andrew Carnegie, who has provided funds for the founding of libraries in many of our smaller cities, and for large numbers of branch libraries in the principal cities. The American in the principal cities. The American Library Association was founded in 1876. Libration (lib-rā'shun), a term denoting certain movements trarch, Boccaccio, and others. After the invention of the art of printing this was of the moon, chiefly apparent, by which done more easily and at less expense. its globe seems to turn slightly round to The principal European libraries of moderach side alternately, so that we see a little farther round her globe on all sides in turn than we would if she kept absolutely the same face towards us. motion, as it refers to the N. and S. edges of the moon's disc, is called libration in latitude; as it refers to the E. and W. edges, libration in longitude.

Libretto (li-bret'tō; It. little book), the book containing the story of an opera. In very many cases this is destitute of any literary quality, taste, or consistency. The Italian librettos are especially poor, and the German and Eng-lish little better. Many poets and author playwrights have attempted libretto writing and subjects for operas have been taken from the works of Shakespere, Goldsmith, Goethe, Scott, Hugo, etc. Wagner stands alone in having written

the librettos of his own music-dramas.

License (li'rens), in law, the grant of permission to do some lawful act; also the document conferring such authority. All civilized countries require that persons should not carry on certain Franklin in 1731 founded the first library trades or professions, or do certain acts, in Philadelphia, which he spoke of as 'the without previous grant of license, and mother of all North American subscription libraries.' A national library was of regulating traffic or raising revenue, founded at Washington in 1800. It is Most numerous are licenses issued to employed the subscription of the subscription now the Library of Congress, and occu- power persons to sell certain articles. In

Great Britain the articles not to be dealt lichens are not simple plants, but are in without a license include: beer, cider, fungi parasitic on algae, the two being wines and spirits, tobacco and snuff, mutually dependent. They have neither patent medicines, gold and silver, game, stem nor leaves, but consist mainly of a sweets; besides these there are licenses thallus deriving its nourishment from the for auctioneers, appraisers, armorial bear-air. They are reproduced by spores contained the state of the state tor auctioneers, appraisers, armorial bearings, carriages, dogs, guns, hawkers and peddlers, male servants, pawnbrokers, etc. are regarded as the fungi of the particular The license laws of America vary in the licen. They are common everywhere, different States. A number of the States have adopted Local Option in the cure have adopted Local Option, in the question of liquor sale; others have prohibited tion of liquor sale; others have prohibited the sale of intoxicants as a beverage, and some have imposed an almost restrictive license duty. The States that have adopted prohibition embrace Maine, Arizona, Arkansas, Colorado, fusion in the Arctic regions, where it Gorgia, Idaho, Iowa, Kansas, Mississippi, North Carolina, North Dakota, Oklahoma, Oregon, Tennessee, South Carolina, also abundant in the Arctic regions, and Washington and West Virginia. Alabama in 1911 voted to repeal prohibition and Maine, the original prohibition State, narrowly defeated repeal. Local option has Maine, the original prohibition State, nare use allord dyes of various colors, these rowly defeated repeal. Local option has being chiefly obtained from rocks in the brought about the prohibition of liquor Azores and Canaries. Litmus is also obtained from a lichen. See Archil, Lit-In Canada an act for the licensing of places for the sale of liquor came into places. Litmus is also obtained from a lichen. See Archil, Littus, and the sale of liquor came into places for the sale of liquor came into places. Litmus is also obtained from a lichen. See Archil, Littus, and the sale of liquor came into places for the sale of liquor came into places. Litmus is also obtained from a lichen. See Archil, Littus, and the sale of liquor came into places for the sale of liquor came into places. The sale of liquor came into places for the sale of liquor came into places for the sale of liquor came into places.

a person authorized by a presbytery to preach, and who thus becomes eligible to

a pastoral charge.

T.ichen (li'ken, or lich-en), in medi-Lichen adults. It consists of a number of pimples, red or white in color, either clustered or disseminated over the surface of in 1796. In 1847 he settled in California, the skin with or without fever, or de-rangement of the digestive organs, usually in 1876, leaving by will about \$5,000,000 terminating in slight desquamation, and to various public uses, chiefly educational very liable to recur, though not conta- These include a school of mechanical very liable to recur, though not conta-gious. There are several varieties of this arts and the Lick Observatory. eruption, but in the milder forms all that eruption, but in the milder forms all that Lick Observatory, situated on Mt. is necessary is to avoid excess, especially Lick Observatory, Hamilton (4227) and the use of stimulants. in rich food and the use of stimulants, ft.), 50 miles south of San Francisco. and to take a light diet, with diluent It belongs to the University of California drinks, and a gentle laxative occasionally. ATINKS, and a gentle laxative occasionally. Strong external applications should not be employed, but lotions of lime-water or weak solutions of the bicarbonate of ammonia, afford relief. The prickly heat so well known to dwellers in tropical climates, is a species of lichen.

Tichens a very extensive order of the bicarbonate of the largest in the world.

to rocks, the trunks of trees, barren soil, etc. They are found flourishing to the very verge of perpetual snow, and one species, the reindeer-moss (Cladonia

Licentiate (II-sen'shi-āt), literally a person licensed. It may express that a person possesses certain medical or other qualifications. Thus there are licentiates of the Royal College of Surgeons, licentiates in dental surgery, etc. Among Presbyterians it is applied to a person at the result of the result of the result of the Royal College of Surgeons, licentiates in dental surgery, etc. Among Presbyterians it is applied to a person at the result of the resul Johnson, to whom a monument has been erected facing the house where he was born. The see of Lichfield was founded in 656. For parliamentary representation (ll'ken, or lich-en), in medithe city is now included in the Lichfield cine, a skin disease affecting division of Staffordshire. Pop. 8617.

Lichens, a very extensive order of Lictors (lik'turz), in Rome, were the public servants who attended plants. According to a modern theory, upon the chief magistrates, consuls, præ-

Lie (le), Jonas Laurits Idemil, poet and novelist, born at Ecker, Norway, in 1833; died in 1908. He studied and practised law, but devoted his life to literature and became one of the most popular of recent Norwegian writers. His books include The Pilot and His Wife, The Clairvoyant, and other novels; Grabow's Cat and Lystige Knur, come-

dies: Digte, poems, etc.

Lieber (leber), Francis, a GermanoAmerican writer, born at Berlin in 1800; died at New York in 1872. In youth he served as a volunteer, and fought at Ligny and Waterloo. On the termination of the war he again took up his literary studies, and in 1821 obtained his degree at Jena. Getting into trouble with government on account of his liberal opinions, he went to London in 1826, and the following year to America, where he edited the Encyclopædia Americana, based on the German Conversations-Lexikon. The South Carolina College, Columbia, elected him in 1835 professor of history and political economy, a post he held until 1856, when he accepted a similar appointment in Columbia College, New York. He wrote many books and pamphlets on morals, education and political economy.

Liebig (le'bih), Justus, Baron von, one of the most eminent of modern chemists, born at Darmstadt in 1803; died at Munich in 1873. At the age of sixteen he entered the University of Bonn, and afterwards that of Erlangen, where, in 1822, he gained the degree of Doctor of Philosophy (Physical and Mathematical Sciences). At the expense of the Grand Duke of Hesse he repaired to Paris to complete his studies. He first secured the attention of the chemical world in 1824 by reading a paper before the French Academy of Sciences on fulminic acid and the fulminates, the true composition of which were until ter's influence he was appointed extraor-dinary, and in 1825 ordinary professor of chemistry at the University of Giessen, a chair he held for 25 years. In 1850 he destroyed by replaced Professor Gmelin at Heidelberg, fell into Ge and in 1852 he accepted the chemistry chair at Munich, with charge of the laboratory. The Munich Academy of Sciences

tors, etc., to clear the way for them, and elected him president in 1860. The recause due respect to be paid to them. suits of Liebig's labors were generally They carried axes tied up in bundles of rods, called fasces, as ensigns of office, but chiefly in his own organ, The Annand were selected from the lower class of len der Pharmacie, in the Transactions free men. The number of lictors preceding the state dignitaries depended upon the rank of the latter.

The (18) JONAS LAURITS IDEMU. Does the ment of the Royal Society of the ment of organic chemistry, owing to the ment dignitaries of the ment of the latter. ganic chemistry, owing to the many discoveries he made in this department. He did much to improve the methods of analysis; his Chemistry of Food has brought about a more rational mode of cooking and use of food; while agricul-ture owes much to his application of chemistry to soils and manures. The Grand Duke of Hesse created him an hereditary baron, and he received many honors from universities and learned societies of Europe and America.

(lēh'ten-stīn), Liechtenstein practically a portion of the Austro-Hungarian monarchy, between Vorarlberg, Tyrol and Switzerland; area, 68 square miles. Pop. 9477. The surface has a fertile soil, yielding abundance of pasture, corn, wine, fruit and flax. The chief place, Vaduz, has about 1000 inhabitants. Liège (li-azh; Flem. Luik; Germ. Lüttich), a town of Belgium, capital of the province of same name, 54 miles east by south of Brussels. It is picturesquely situated on both sides of the Meuse, the larger part rising on heights above the river on the left bank, opposite the influx of the Ourthe. It is the principal manufacturing town of Belgium, its foundries, firearm, metal and Belgium, its foundries, firearm, metal and tool manufactures being very extensive; besides these there are important woolen mills, tanneries, and printing offices. For 168,532.—The province has an area of 1117 square miles, with a population of 863,254. Until 1795 it was an independent state, governed by the prince-bishops of the German Empire; in that year France included it in the department of the Ourthe, but it was restored to Belgium in 1815, excepting certain portions gium in 1815, excepting certain portions annexed to Prussia. When the German armies invaded Belgium in 1914 the gallant defenders stayed the onrush of Prussian hordes at Liege for three all-important days, siding thereby in the disruption then unknown. This also gained him the of the German plans which had included favor of Humboldt, and through the lat- the occupation of Paris. The hold-up of ter's influence he was appointed extraor- the Teutonic forces at Liège enabled the French to make preparations to meet the Germans. The Liege forts were finally Germans. The Liège forts were finally destroyed by huge mortars and the town fell into German hands, See European

(leh'nits), a town of Prumin, in the province of 89 lesia, 40 miles w. n. w. of Breslau. It is an old but well-built town, defended by a castle, and surrounded by a boulevard planted with fine trees. It contains interesting churches, schools, and other public buildings. Its manufactures in-clude machinery and hardware, pianos,

gloves, woolens, cottons and linens, hosiery, etc. Pop. (1910) 68.620.

Lien (li'en, or len), in law, in its most usual acceptation, signifies the right which one person, in certain cases, possesses of detaining property placed in his possession belonging to another, until some demand which the former has is satisfied. In the United States liens are of two kinds: (1) specific liens, that is, where the person in possession of goods may detain them until a claim, which accrues to him from those identical goods, is satisfied; (2) general liens, that is, where the person in possessions, that is, where the person in possessions. sens, that is, where the person in possession may detain the goods, not only for his claim accruing from them, but also for the general balance of his account with the owners. An important class of liens has also been created by statute. They are called mechanics' liens, and give to men who labor, or who furnish labor or material for the erection or repair of buildings, a lien upon such buildings. This class of liens is irrespective of possession. Lieou-Kieou. See Loo-Choo.

Lieutenant (lef-ten'ant, lu-ten'ant; French lien, place, ten-

It command of a regiment, and is responsible for the discipline and comfort of the troops under his command, and for the various details of their organization.

Lieutenant-general, a general ofarmy, ranking above a major-general and below a general.

Life (lif). To give an unobjectionable

definition of life is impossible, as whatever the definition may be it will probably err either from redundancy or defect. Life has been defined as: 'the sum total of the forces that resist death,' the constant uniformity of interest death,' the constant uniformity of internal phenomena with diversity of external influences,' 'the special activity of organized bodies,' 'organization in action,' 'a collection of phenomena that succeed each other during a limited time in an organized body, 'the twofold internal movement of composition and decomposition, at once general and continuous.' Herbert Spencer's conception of life is: 'The definite combination of heterogeneous changes, both simultaneous and successive, in correspondence with external co-existences and sequences.' Mr. G. H. Lewes suggests the definition: 'Life is a series of definite and successive changes, both of structure and composition, which take place within an individual without destroying its identity.

See Insurance. Life-assurance.

Life Boat, a boat for saving persons hipwreck. The first life boat was patented in Great Britain by Lukin in 1785, but Henry Greathead introduced an improved form in 1789. Lieutenant (lef-ten ant, French Won, place, tonant, holding), in military language, the blow a captain. First and second lieutenants exist in the American and British armies. A lieutenant in the army is the officer next in command to 1851 was almost the only one in use. It the captain of a ship. He takes rank is recognized that a life boat, to be effective, should possess the following characteristics with a captain in the army.

Lieutenant, Great Britain, an officer

Lieutenant, Great Britain, an officer of any water breaking into her. 5. and chief local representative of the sovereign. The office is supposed to have been instituted about the reign of Henry VIII. He appoints a certain number of number of passengers. The life boat duly qualified deputy-lieutenants, these transporting carriage is an important appointments being subject to his majesty's approval: he also nominates to the lord chancellor persons to serve as transporting carriage is an important appointments being subject to his majesty's approval: he also nominates to the lord chancellor persons to serve as ready for immediate transportation to the lustices of the peace for the county, the latter being also subdeputy lieutenants. He may also recommend for first commissions in the reserve forces. He is estable to the case to fice a member of the County Council.

Lieutenant-colonel, in the regular army, is without a carriage she could not be got the senior of a major. He has actual

from it in an upright position with her crew on board. The Lifesaving Service of the United States is supported by government funds, and the Atlantic and some of the lake coasts are now studded

Lifebuoys, Liferafts, Lifebelts.

Various kinds of buoys or other apparatus for the preservation of human life in cases of shipwreck or danger from drowning in other circumstances have been introduced from time to time, constructed in all sorts of shapes and materials. India rubber has been largely used in the construction of lifebuoys, generally in the form of belts which can be easily in the form of belts which can be easily inflated by the wearer in the course of a few seconds. They are very buoyant and portable, but easily punctured or torn, and soon decay if put aside while damp. Hence the interior has come to be divided into cells, so that the rupture of one effects only a partial damage. Another sort is in the form of a waistcoat; and inflated pillows and mattresses made on the seme principle have been found very the same principle have been found very effective. Naval officers have also strongly recommended mattresses stuffed with cork. The lifebuoy most favored by seamen of late years is composed of slices of cork so neatly arranged that they form a buoyant zone about 32 inches in diameters have the stuffer of the stuff of the stuffer of the stuff of the stuffer of the stuffer of the stuffer of the stuffer of eter, 6 inches wide, and 4 inches thick. It contains about 12 lbs. of cork, is compactly covered with painted canvas to protect it from being injured by the water, and furnished with looped life-lines, that several, if necessary, may at once have a convenient hold.

Life Estate, in common law, an estate or interest in real property for life.

See Guards. Lifeguards.

Life Insurance. See Insurance.

thrown either from a ship in distress to missiles are those that are discharged from a mortar or gun by gunpowder, having a line attached to them. The lifemortar of Captain Manby, invented in 1807, is practically still that in use, though variations in details have been made on it from time to time. His mismade was a shot with curved barbs, resembling the fluxes of an anchor, to grant the fluxes of an anchor the fluxes of an anchor to grant the fluxes of an anchor the fluxe

is Rogers's life-anchor. It consists of a three-fluked anchor, 12 lbs. in weight, having the flukes so hinged that they pack closely together. When the anchor has been shot out from a mortar 100 or with lifesaving stations, provided with 200 yards, the flukes open and fasten to suitable boats, appliances and houses of refuge for the saved.

200 yards, the flukes open and fasten to the beach or to a ship, and thus establish a communication between the two for dragging boats or men ashore. The best lines are those made of loosely-spun Italian hemp. There are several ways of arranging or faking the line so that it may run out quickly without kinking or entangling. The sling lifebuoy, or breeches buoy, is employed in conjunction with the rocket apparatus, after communication has been established by a rope from the shore to the vessel. It consists of a circular cork lifebuoy, having a pair of canvas breeches attached to it. The legs of the occupant protrude below the breeches, while his armpits rest on the buoy. The shipwrecked are by this means brought to the shore one by one, the buoy being drawn backwards and forwards by means of a traveling block. Or rocket apparatus, after communication wards by means of a traveling block. Or the lifecar, a sort of covered boat, may be used to convey the men ashore. In the United States the management of the liferocket apparatus is under the control of the Lifesaving Service. The stations sur-round all parts of the Atlantic and lake coasts, presided over by a general superintendent, with headquarters at Washington. They are supported by appropriations made by Congress. On the Atlantic beaches the stations are located five miles apart.

Lifesaving Service, a branch of the States Treasury Department, organized in 1871 and exceedingly useful in saving the crews and passengers of vessels wrecked on the coast. In 1910 there were 280 lifesaving stations on the ocean, and gulf coasts, and one at the falls of the Ohio, Louisville, Kentucky. Since the intro-duction of the system more than 22,000 persons and \$225,000,000 value in prop-erty have been saved. Life boats, life Life-rockets, projectiles by means erty have been saved. Life boats, life of which a rope is lines and buoys, etc., are the chief appliances used.

the shore, or from the shore to the ship, generally the latter. The most reliable missiles are those that are discharged low, runs w. into Kildare, then turns N. Liffey (liffi), a river of Ireland, which rises in County Wick-

sembling the flukes of an anchor, to grapple the rigging or the bulwarks of a ship.

An ingenious rocket-apparatus now in use elastic white bodies which surround the

joints, and connect bones, or strengthen similar measurements, and it has been the attachments of various organs, determined that light travels at the rate the attachments of va or keep them together. ious organs, Every joint is surrounded by a capsular ligament; the tendons at the wrist and ankle are bound down by what are called the annular liga-ments. In dislocations of joints the capsular ligament is often broken.

Ligan. See Flotsam.

Light (lit), the agent which enables us through the organ of sight to take cognizance of objects; it has a heating and chemical action which is allimportant to animals and plants; without it there would probably be neither animal for plant life. The sun, the fixed stars, nebulæ, certain meteors and terrestrial bodies in a state of incandescence or phosphorescence are self-luminous. The origin of light has been explained by two nain theories, the emission or corpuscular theory adopted and developed by Newton. and the undulatory or wave theory, the fundamental principles of which were laid down by Huygens and Euler. Newton held that the sun and other light-giving hodies threw off, with immense velocity, vast numbers of exceedingly minute particles of matter, which passed into space, the substitution of the and by their mechanical action upon the eye brought about the sensation of light. Numbers of distinguished men accepted this theory, and many of the phenomena of light were plausibly explained by it. Huygens suggested that light was due to Huygens suggested that light was due to some sort of wave motion transmitted through a medium. His theory, offered towards the end of the seventeenth century, made little progress until the beginning of the nineteenth century, when its truth was amply established by the labors of Young, Fresnel and others; and it is now universally accepted. Though we are warranted in recognizing the existence of the transmitting medium called istence of the transmitting medium called ether, of its nature we are as yet largely in ignorance. Rays of light proceed in straight lines, and when a screen is removed to twice or three times its distance from a luminous point it receives only one-fourth or one-ninth of the light per unit of area which it received formerly. This is the law of inverse squares, viz., the intensity of the light received from a luminous point is inversely proportional. luminous point is inversely proportional to the square of the distance from the point. Advantage is taken of this fact nount. Advantage is taken of this fact in determining the relative illuminating powers of two sources of light by means of the photometer. In 1676 Roemer discovered that light is not instantaneously propagated from luminous bodies to the eye; and he calculated its velocity. Bradley, Foucault, Fizeau, Cornu, etc., made

of about 186,000 miles per second.

When light falls upon the surface of a body part of it is reflected. When the surface is smooth and regular an eye placed to receive the reflected rays generally observes an image of the source of light, and the surface may be called a mirror. When it is not smooth the light which falls upon it is scattered in all directions, so that the surface itself becomes visible; planets and nearly all ter-restrial objects become visible in this way by means of reflected solar light. part of the light which falls upon the surface of a body is reflected, part enters into the body, which absorbs or destroys a certain amount of it and may allow the rest to pass through. When light the rest to pass through. When light falls nearly vertically on a glass surface very little of it is reflected, but as the incidence becomes more and more oblique ncidence becomes more and more oblique a steadily increasing proportion of the light is reflected. Polished metals, particularly silver, are good reflectors of light at all incidences, and hence metallic surfaces are most commonly used as mirrors. The law of reflection was known to Archimedes; it is—the incident and reflected rays make equal angles with a perpendicular to the surface, and lie to a perpendicular to the surface, and lie in the same plane with it. When a ray has passed obliquely from air into water, although in the water as in the air it is a straight line, this is not a mere continua-tion of its old path; it is bent to some extent at the point where it enters the new medium, the bending of the ray being called refraction. This bending of a ray when it passes from one medium, such as air, into another homogeneous medium, such as glass or water, or from air into denser air, is subject to a particular law. denser air, is subject to a particular law. The law of refraction was discovered in the seventeenth century; it is—whatever be the obliquity of a ray passing from one medium to another, the sines of the angles made by the incident and refracted rays with the perpendicular to the refracting surface are in a constant ratio, which has been called the index of refraction. When a ray of light passes through a medium, such as the atmosphere, which continuously varies in density from place continuously varies in density from place to place, its direction continuously changes, so that it is a curved line, a fact to which the phenomenon of the mirage is due. The application of mathematics to the two laws of reflection and refraction is called optics: this science includes the formation of images by mirrors and lenses, the eye, microscopes, telescopes, etc. See Ontics.

Nawton found that red light is not so Newton found that red light is not so

much refracted as blue light when it passes from one medium to another. When a ray of solar light is refracted in passing through a glass prism he found that a great number of rays of different colors left the prism, the blue ray being most bent from its former path and the red ray least. (See Prism, Rainbow.) Letting these rays fall upon a screen he obtained a band of colors which he called a spectrum. Thus he had decomposed solar light and found it to consist of a mixture of lights of every gradation of refrangibility. On permitting all the colored rays to pass through a lens before falling on the screen they combined and became white light again. Newton failed to observe one peculiar feature of the spectrum which has since been studied, and has led to important results-namely, that it was not really continuous, but was crossed by a number of dark lines. From this has arisen the instrument called the spectroscope and the branch of physics called spectrum analysis. S these words.

In Newton's experiment with solar light and the prism we find that the blue and green rays very slightly affect a ther-mometer, the yellow rays affect it slightly, and the extreme red rays possess great heating properties; moreover, when the thermometer is passed beyond the red into a space in which there are no luminous rays a maximum heating effect is produced. Again, the red and yellow rays are all but incapable of blackening photographic paper, whereas the blue and violet rays exert a rapid chemical action, and this is even exceeded by the invisible rays beyond the violet. It is evident then that (1) some of the solar rays which pass through the prism do not affect the retina; these rays are either less refrangible than red light, or are more refrangible than violet; (2) the least refrangible solar rays possess most heating power; (3) the most refrangible rays are capable of exerting the most powerful chemical action. As glass prisms absorb many of the heat rays it is convenient to use prisms of rock salt in examining the heat (red) end of the spectrum.

Young showed that two rays of light may destroy each other's effects and produce darkness. He applied this discovery to the explanation of many natural phenomena, such as the colors in mother-ofpearl, on soan-bubbles, etc. It has also been shown that ravs of light may bend round obstacles. When a ray of light enters Iceland spar it divides into two

These polarized rays cannot be made to interfere or destroy each other's effects, but either of them may be divided into two interfering rays. These and other allied phenomena are accepted by physicists as proofs that (1) there exists throughout all space a very elastic medium of small density, known as the ether; (2) the particles of all bodies are in a state of vibration; a rise in temperain a state of vibration; a rise in temperature of a body indicates an increase in the rapidity of vibration of its particles; (3) radiation of heat consists in the transmission of these vibrations from the particles of a body through the ether to all parts of space; (4) when these vibrations communicated by the ether become rapid enough they are able to affect the retina of the eye and are then called light; (5) lights differ in color when their vibrations are not executed in equal times; (6) the vibrations of particles of the ether are all executed at right angles to the direc-tion of propagation of the light; (7) in a ray of polarized light the vibrations are all executed at right angles to a certain plane called the plane of polarization;
(8) the planes of polarization of the two
rays in Iceland spar mentioned above are at right angles to one another.

Light, ABERRATION OF. See Aberra-

Light, Artificial, any kind of illuminant for supplementing the light of the sun. Some form of artificial light must have been in use for domestic purposes from the very earliest times, but though large cities and a high state of civilization existed among the Egyptians, Greeks and Romans, the systematic lighting of streets was unknown to them. From the writings of Libanius, however, who lived in the beginning of the fourth century after Christ, we may conclude that the streets of his native city, An-tioch, were lighted by lamps, and Edessa, in Syria, was similarly illuminated about A.D. 500. Of modern cities Paris was the first to light its streets. In the beginning of the sixteenth century it was much infested with robbers and incendiaries, so that the inhabitants were ordered, in 1524, to keep lights burning after nine in the evening, before all houses fronting a street. In 1558 falots (a large vase filled with pitch, rosin, and other combustibles) were erected at the corners of the streets. In London in 1668 the inhabitants were instructed to hang out candles. A more definite order was issued in 1690. Every enters Iceland spar it divides into two housekeeper was required to hang a light rays, which travel in different directions; or lamp, every night, as soon as it was these two rays possess peculiar properties dark, between Michaelmas and Ladyday, which are not exhibited by ordinary rays and to keep it burning till the hour of light, and are said to be polarized. of twelve at night. Successive acts of Parliament and orders of the common council provided from time to time for which letters patent were granted by the better lighting of Loudon. The Hague James I shortly after his accession. Uncommenced street lighting in 1552, Hamburg in 1675, Berlin in 1679, Copenhagen were provided by private persons; subsection 1681. Vienna in 1684, Hanover in quently they began to be built by the corporation. The application of coal gas to economical purposes by Murdoch in 1805 ration to purchase all private lights. In opened a new era in artificial lighting. The United States cities came later into the field of efficient lighting, gas not being the United States the lighthouses are unche field of efficient lighting, gas not being charge of all buoys, beacons, etc., on the coasts and waters of the States. The had been introduced in England. The earlier lights were simply of wood, and development of electric lighting, however, later fires of coal exposed in open chaufhas proceeded more actively here than fers upon the top of a tower. When oil elsewhere, and within recent years the brilliancy of street, store and house lighting was made a few years previous illuminating power of coal gas has been to the French Revolution by the introduc-

Lightfoot (lit'fut), John, an English divine and Hebrew scholar, born at Stoke-upon-Trent in 1602; died at Ely in 1675. He was educated at Cambridge. He held various livings, and in 1655 became vice-chancellor of Cambridge; but his claim to notice rests chiefly on his great knowledge of rabbinical literature and Hebrew antiquities, and his able Biblical criticism. Of his writings the Hora Hebraica at Talmudica, etc., are the most important.

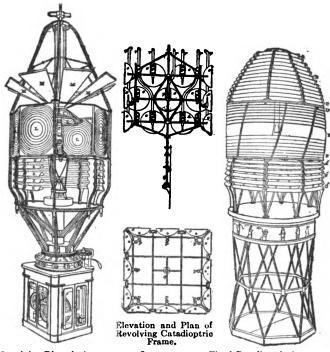
warning of danger to navigators at night. The Pharos of Alexandria, founded about paratus in which consists of thirteen respressly as a lighthouse of which we ronged one above another in an oval form. The five middle rings form a cylindrical to have been 550 feet high. Lighthouses are supposed to have been erected by the Romans at Flamborough Head, Dover while the other rings or prisms, five of and Boulogne. In modern times the first important lighthouse erected was the are supposed to have been erected by the trail lamp are transmitted by refraction, Romans at Flamborough Head, Dover while the other rings or prisms, five of and Boulogne. In modern times the first which are upper and three lower, are important lighthouse erected was the constructed in such a manner as to pro-Tour de Cordouan, at the mouth of the ject by reflection the light from the focus Garonne in France, founded in 1584 and in a direction parallel with the refracted completed in 1610, altered and improved rays. The light thus obtained is termed in 1727. It is 197 feet in height, and in the catadiontric light. A modification of architecture surpasses all other light the dioptric and catadioptric systems, so houses in the world. The first sealight on the British coasts, for which a toll was rays of light, and thereby increase the in-

elsewhere, and within brilliancy of street, store and house lighting was made a lew ing has made phenomenal progress. The lighting was made a lew ingreatly increased by use of the Welsbach to yield a brilliant light. See Electric Light, Gas, Parafin, Petroleum.

Tight Cavalry, or Horse. See Improved of the greatest utility in the lamps and reflectors was introduced, and has proved of the greatest utility in the lamps and reflectors was introduced. and has proved of the greatest utility in establishing a distinction between lights. The reflectors are composed of sheet-cop-Lighter (li'ter), a large, open, flat-bottomed vessel, employed to per plated with silver, and formed into a parabolic curve by a laborious and delicate process. This mode of lighting is lish divine and Hebrew termed the cutontrio or reflecting system. termed the catontric or reflecting system. It is so called in opposition to the diopric or refracting system, in which the illumination is produced by a central lamp, the rays from which are transmitted through a combination of lenses by which it is surrounded. The adoption of lenses in lighthouses, though suggested as far back as the middle of the last century, was first carried into practical effect in was first carried into practical effect in 1788 by M. Augustin Fresnel, a distinguished French savant. The superior advantages which this system has been found to possess over that of reflectors Lighthouse (lithous), a tower or guished French savant. The superior advantages which this system has been with a powerful light at top, erected at found to possess over that of reflectors the entrance of a port or on some rock has led to its general adoption in most or headland, and serving as a guide or lighthouses. Fresnel likewise contrived a warning of danger to navigators at night. combination of the two systems, the approach above the state of the consists of thirteen.

tensity of their resultant beam, was introduced by Mr. Thomas Stevenson under the designation of the holophotal system, its object being to effect the useful application of the whole of the light. The catoptric, dioptric and catadioptric syscation of the whole of the light. The Oil, particularly paraffin, has long been catoptric, dioptric and catadioptric systems are illustrated in the accompanying in isolated lighthouses. Gas was the first

increases to its full effect, then decreases till it is eclipsed. Other methods add to the diversity of lights, as the intermittent, the alternate, etc.



Revolving Dioptric Apparatus. LIGHTHOUSE. Fixed Catadioptric Apparatus.

figures. In the first the reflectors o o are substitute for oil. dioptric apparatus F is the light, L L L' L' are lenses, M M plane mirrors reflecting the rays falling on them in a horizontal direction, Z Z zones or belts of glass prisms. In the other figure ABC, A'B'C', are respectively upper and lower zones of prisms, DEF the cylindric refracting belt. Various means of exhibiting the light have been adopted, so as to make a distinction between different lighthouses. Thus the flashing light shows five or more flashes and eclipses alternately in a minute; the fixed light has a white or red flash in ad-

With it an eclipse shown as arranged on the revolving can be simply produced by a partial stop-frame, p p being the oil-lights, r r copper page in the supply pipes, and there is no tubes conveying away the smoke. In the such waste of light as when oil is employed. A burner for gas invented by Mr. J. R. Wigham presents a total of 108 jets arranged in concentric circles. Gas has been successfully employed in illuminating buoys for the guidance of vessels. The buoys (which, of course, are gas and water-tight) are charged to a pressure of perhaps ten atmospheres, giving a continuous light for three of four months; a luminous paint has also recently been applied with advantage to buoys. The electric light has been more recently adopted, and experiment proves it to be dition, at intervals of several minutes; the most powerful and penetrative of all in the revolving light the light gradually lights, too much so in some cases, as its intensity is apt to be blinding when vessels are near at hand. It has not yet been demonstrated that oil as an illuminant has been especially improved upon. In the United States the reliability of oil has been fully demonstrated and the conclusion reached that vaporizing the oil and using it to heat incandescent mantles of refractory materials is the most efficient and economical method. Buoys have been placed in the Ambrose channel to New York harbor in which acetylene is the illuminant used. It has proved years satisfactory. The Eddystone and Bell Rock are the two most celebrated bell Rock are the two most celebrated of the world lave been collected, and it station, opposite Tillamook Head, Oregon. Opposite Crescent City, Cal., at Northwest Seal Rock, the difficulties were even greater. In Delaware Bay, on a shoal known as Fourteen-foot Bank, an extremely difficult foundation was overvex streamly difficult foundation was overvex streamly difficult foundation was overvex streamly difficult foundation was overvex els at ordinary temperatures about 1100 feet per second, so that a thunder-clap from a distance of one mile would reach us in about five seconds. See Conductor, Electricity.

Lightning (lit'ning), a flash of light in the resulting from a sudden serving as a lighthouse in positions where

power being without a rival.

Lightning (lit'ning), a flash of light resulting from a sudden discharge of atmospheric electricity. It may be a diffused reddish white or violet flash, seemingly spread over a considerable extent of the sky, or a zigzag or rather sinuous line of very brilliant light, resulting from a discharge between two clouds or between a cloud and the earth. Heat or sheet lightning is unaccompanied by thunder; it is now generally held to be the reflection from aqueous vapor and clouds of a discharge occurring beyond the horizon. Sometimes during a thunderstorm fireballs are seen, but no exact observations of them have yet been made. Experiments show that the discrete flightning is unaccompanied by the discharge occurring beyond the horizon. Sometimes during a thunderstorm fireballs are seen, but no exact observations of them have yet been made. Experiments show that the duration of a flash of lightning is inconceivably small,

between peat and coal. It occurs in the tertiary strata in many European countries, occasionally in thick beds, as in figsh of lightning is inconceivably small, tries, occasionally in thick beds, as in in some instances not more than a Germany and France, and vast deposits millionth part of a second. The spectrum of lightning shows the presence of incan especially in North Dakota and Montana. descent nitrogen, oxygen, hydrogen and sodium. Certain electroscopic experiments seem to show that previous to a discharge grades of subbituminous coal, the total between two clouds internal discharges supply in the United States, exclusive of are taking place in both. Lightning in Alaska, being estimated at 740 billions of passing through air and non-conductors, tons. Alaska has also a large supply. This coal was long deemed useless for nomena of the passage of a very great equantity of electricity; it kills animals, can was long deemed useless for a very great steam-making purposes, but it has required the lightning melts the siliceous substances in its way, producing the tubes to the American deposits. See Coal. Lignum Vitæ. See Guaiacum.

Ligny (lēn-yē), BATTLE OF, June 16, See Quatre-Bras and Waterloo.

Ligula (lig'ū-la), Lie'ule, in botany, a strap-shaped petal of flowers a strap-shaped petal of flowers of the order Compositæ; also the memorane which occurs at the base of the lamina of a grass leaf, as that of millet.

Liguria (li-gū'ri-ā), one of the larger divisions (compartimenti) of Italy; area, 2037 square miles. It includes the towns of Genoa, Spezzia and St. Remo, and is the most important maritime division. The Roman Liguria was much more extensive. The Republic of Genoa existed as the Ligurian Repubof Genoa existed as the Ligurian Republic, under a democratic constitution granted by Bonaparte, from 1797 to 1805, when it was annexed to France. From 1814 to 1860 it formed part of the Kingdom of Sardinia.

Ligurite (lig'ū-rit), a variety of sphene, a mineral occurring in ob-lique rhombic prisms, of an apple-green color, occasionally speckled externally; so called on account of its being chiefly found in Liguria. Its color, hardness and transparency have caused it to be classed as a gem.

Ligustrum. See Privet.

Li-Hung-Chang, a Chinese statesman, was born in 1823. He was viceroy of China when, with Gen. Gordon, he suppressed the Taiping rebellion, 1860. He held other high posts, made the treaty of peace with Japan after the 1895 war, and in 1898 was denoted from his post of grand changes. Japan after the 1895 war, and in 1898 was deposed from his post of grand chancellor. Twice he visited Europe and was once in the United States, where he attracted much notice. In 1899 he was restored to his former dignity, and died in 1901. He was most frequently looked upon as one of the leading diplomatists of his time. of his time.

Lilac (li'lak; Syringa vulgaris, nat. States she retired to private life. order Oleaceæ), a familiar fra- November 11, 1917. See Havaii, grant-flowered shrub, 8-10 feet high, is a Lille (lel), a town of France, or the state of native of Southeastern Europe and Asia, and is widely planted in the United States, being one of the most familiar and most beautiful of our spring-flowering or-namental shrubs. There are several va-rieties, the most common color of the flowers being lilac, but there are also some white ones

Lilburne (lil'burn). John, a celein 1618; died in 1657. For tracts against the Anglican hierarchy he was whipped and imprisoned in 1637, but the Long Parliament released him in 1640. His friends

got the conviction dectared illegal and tyrannic, and Lilburne received £3000 as indemnity. He then joined the army, and rose to the rank of lieutenant-colonel. He was one of the party known as the Levelers, and for his attacks on Cromwell and others was oftener than once sent to the Tower. Having been condemned to exile, and having returned without leave, he was put in prison and tried for his life, when he was acquitted, but not liberated for some time. Subsequently he became a member of the Society of Friends. Hume describes him as 'the most turbulent, but also the most upright and coura-geous of men.'

Liliaceæ (lil-i-ā'se-ē), the lilies, a large nat. order of endogenous plants. They are stemless herbs, or shrubs with a simple or branched trunk, with bulbous or fascicled roots. They have six hypogynous or perigynous stamens, with usually introrse anthers; a stamens, with usually introrse anthers; a three-celled ovary, each cell being usually many ovuled, an entire style, and a capsular fruit. They are much more abundant in temperate climates than in the tropics, where they chiefly exist in an arborescent state. The lily, fritillary, hyacinth, star of Bethlehem, tulip, dragon-tree, squill, aloe, onion, garlic, etc., belong to this order.

Lilith (lil'ith), according to rabbinical legends, Adam's first wife, mother of giants and demons.

mother of giants and demons.

Lilium (lil'i-um), a genus of bulbous plants. See Lily.

Liliuokalani (lil'i-u-ō-ka-la'ni), Lydia Kamekeha, exqueen of Hawaii, born at Honolulu in 1838. She succeeded King Kalakaua in 1891 and at once sought to abolish the constitution and rule as an absolute monarch. This led to a revolt on the part of the American inhabitants and she was dethroned in 1892 and a provisional government was organized. Following the annexation of Hawaii by the United

Lille (lel), a town of France, capital of the department Nord, and chief fortress of the northeast of France, near the Belgian frontier. It is remarkably well built; has spacious, regular streets, lined with large, massive houses of brick or stone, with the usual public buildings and institutions found in large cities. T Haute and Basse Deule, sluggish streams, traverse the town, and are connected by a canal, while the country around is so flat that for about 114, miles it can be laid under water. Lille is the center of an extensive commerce. The manufacture

of linen and cotton thread and fabrics is

the most important, but fine woolen cloth, There are many species, those best known velvets and carpets are also largely produced; in fact, the factories of Lille cover almost the whole range of textile goods. common white lily (Lilium candidum) is Chemicals, leather, machinery, paper, a native of Syris, Persia, and other east-beet-sugar, etc., are also turned out in ern countries. The finest American specyer-increasing quantities. Lille origicies is the L. superbum, which grows in nally belonged to the counts of Flanders. In 1667 it was taken by Louis XIV, and ing reflexed orange flowers spotted with was fortified by Vauban. It was taken black. A well-known Japanese lily (L. after a siege of several months by Eugene auratum) is one of the noblest flowering and Marlborough in 1708, but was replants in existence, and highly fragrant.

(lil-i-bul-le'ro), the name of an Irish bal-Lillibullero lad, whose refrain was lillibullero bullen a la, popular among the army and supporters of William III in the war in Ireland during the revolution of 1688. The verses were written by Thomas Wharton, who claimed that he had 'sung a king (James

II) out of three kingdoms.

(lil'lo), GEORGE, an English dra-matic writer, born in London in Lillo 1693; died in 1739. Although carrying on the trade of a jeweler, he found time for its small and beautiful to write a number of well-received pieces for the stage. The most successful of these was his domestic drama entitled The is used as a heart stimulant. London Merchant, or the History of Lima George Barnwell, 1731.

Lilly, writer, born about 1553, studied at Oxests; great motor-truck factories, railroad ford and Cambridge. He wrote nine dramatic pieces which are now forgotten. He factories, etc. It has 317 acres of parks, attempted to reform and purify the Englibrary, auditorium and State Hospital. lish language in two fantastic romances Pop. (1910) 30,508; (1920) 41,306. entitled Euphues and his Anatomy of Lima (18ma), the capital of Peru, is situated at the foot of granitic land (1581), which met with great Pacific, on the small river Rimac. It is regularly built and manutacturing intermiters.

Lilly, or Lily (lil'i), William, an English astrologer, born in 1602; died in 1681. He assumed the role of prophet and seer, and the credulity of the age was such that he was consulted and believed in by high and low. In 1644 he first published his Merlinus Anglicus, which he continued annually until his death. He wrote a number of mystic books, which generally met with a ready sale. His autobiography is very entertaining. He not only acquired fame, but also a large fortune.

(lil'i), a genus of plants, nat. or-der Liliaceæ. The root is a scaly Lily bulb; the leaves simple, scattered, or

and Marlborough in 1708, but was replants in existence, and highly fragrant. stored to France by the Peace of Utrecht in 1713. In 1792 it was ineffectually feet. In the middle ages and in modern bombarded by the Austrians. I'op. times the white lily has been the emblem (1911) 217,807.

Lillibullero (lili-bull-lero) the of chastity, hence the Virgin Mary is constituted in the page of the or by her side.

Lilybæum (lil-i-bē'um), the name given by the ancients to Cape Boso, the most western promontory of Sicily. The Carthaginians, about B.C. 350, founded here a town of the same name, which became their principal naval

station in Sicily. See Marsala.

Lily-of-the-valley (Convallaria majalis), a plant of the nat. order Liliacea, distinguished for its small and beautiful bell-shaped flowers of an agreeable odor. It is found in Europe, Asia and North America. It

(ll'ma), a city, county seat of Allen Co., Ohio, 100 miles s. w. LILY, or LYLY, JOHN, an Eng- of Cleveland, on 5 railroads. It has large lish dramatic and miscellaneous oil, agricultural and manufacturing inter-

regularly built, and many of the streets have a stream of water running down the center. The numerous domes and spires give Lima a fine appearance from a distance but the bayes are meeting of protance, but the houses are mostly of un-burnt brick. Among the public buildings and institutions the cathedral, the convent of San Francisco, the exhibition vent of San Francisco, the sandard palace, and the university with its national library and museum, deserve special mention. The city has botanical gardens and a very large bull-ring. The manufactures are unimportant, but there is a considerable import and export trade through the port of Callao. The climate is very agreeable, but the locality is subbulb; the leaves simple, scattered, or is very agreeable, but the locality is surverticillate; the stem herbaceous, simple, ject to earthquakes, the most destructive and bearing at the summit very large and being that of 1746. Lima was founded in elegantly-formed flowers. The flower consists of six petaloid sepals, the calyx and Reves (City of the Kings). In January, corolla being alike in form and color. 1881, during the war with Chile, Lima

capitulated to the Chileans, who occupied light and for facilitating the observation it thereafter for more than two years. Pop. (1913) 143,500.

(lē-ma-söl'), or LIMIS'80, a seaport of Cyprus, on Limasol the south coast, with a considerable trade.

Pop. 8298. Lima-wood, a name sometimes given to the wood of Casalpinia echinata. See Brazil-wood.

See Slug. Limax.

See Gun-carriage. Limber.

Limbourg, or LIMBURG (lim'burg), a province of Belgium, separated by the Mass from Dutch Limburg and D burg; area 942 square miles; pop. (1904) 255,359. Hasselt is the capital.

Limburg, a province of Holland, partly intersected by the Maas; area, 850 square miles; pop. 281,934. Agriculture and cattle-rearing are the chief occupations, and there is a large export trade in butter and cheese. The capital is Maastricht.

Limburg, a town of Prussia in the district of Wiesbaden, on the Lahn, with a fine old cathedral in the Romanesque style, recently Pop. (1905) 9917. restored.

Lime (lim), the oxide of the metal also used as a disinfectant.

Calcium. This oxide, which in a The uses of lime are almost too numcalcium. This oxide, which in a state of combination is one of the most abundant bodies in nature, has been known and used from the remotest an-tiquity. The forms in which it occurs native are very numerous, but it does not exist in a pure state in nature, its affinity for carbonic acid being such that it absorbs it from the atmosphere, when it becomes converted into carbonate of lime. Combined with carbonic, sulphuric, phosphoric and other acids it constitutes large rock masses, and even mountains; it is present in sea and other waters; it is a constituent of most soils and of a great number of minerals; and is essential to plants and animals.

Ordinary lime is obtained with a facility from the carbonate (see Limestone), from which by a strong heat the total and may be expelled. This carbonic acid may be expelled. This process is conducted on a large scale with the different varieties of limestone, which are calcined or burned in order to obtain mon peduncle. The the caustic earth, or quicklime, as it is europæa is a we called. The lime thus obtained, however, ner bark of all is rarely pure enough for chemical purposes. Pure lime is a soft, white substance, of the specific gravity of 2.3. It is The wood is rat quite infusible, but when heated in the oxyhydrogen blowpipe it emits one of the intensest of artificial lights, and it has large and beautificationally been employed for a signal European species. are calcined or burned in order to obtain

light and for facilitating the observation of distant stations in geodetical operations. It is soluble in about 700 parts of cold water. The solubility is diminished by heat. If a little water be sprinkled on new burned lime it is rapidly absorbed, with the evolution of much heat and vapor. This constitutes what is known as slaking. The heat proceeds from the combination of the water with the lime. combination of the water with the lime, forming a hydrate, as the slaked lime is called. This is a compound of 56 parts of lime with 18 of water, or rather more than 3 to 1. The water may be expelled by a red heat. Lime-water is astringent, by a red heat. Lime-water is astringent, and somewhat acrid to the taste. It renders vegetable blues green, and yellows brown; and restores to reddened litmus its usual purple color. Lime, submitted to the action of galvanism in high intensity, afforded Sir H. Davy satisfactory evidence that, in common with the other certise it consists of a metal which he earths, it consists of a metal, which he denominated calcium, and oxygen, the proportions being 72 of calcium and 28 of oxygen. (See Calcium.) Chlorine combines directly with lime, forming the very important substance used in bleaching, called chloride of lime or bleaching-powder. It is formed by passing chlorine gas over slaked lime. Chloride of lime is

erous to mention, for there is hardly any operation in the arts for which lime is not at some part indispensable. In the manufacture of basic Bessemer steel (see Steel) it forms about one-half of what is called 'Thomas slag,' which, when called 'Thomas slag,' which, when ground, makes a cheap and efficient fertilizer; it is employed in the early stages of leather dressing to remove hair, fat, etc., from the hides; it is used in metallurgy as a flux; in soap-boiling to caus-ticize the alkaline liquors; in the manu-facture of washing soda; for neutralizing acids; for making mortars and cements; in agriculture to destroy inert or noxious ants and animals.

Ordinary lime is obtained with most clay soils; and in the materia medica, chiefly as an antacid.

Lime, or LINDEN (Tilia, nat. order Tiliaces), a large tree, with alternate, simple, and cordate leaves, and sweet-scented flowers, disposed on a common peduncle. The common linden (T. europæa) is a well-known tree. The inner bark of all the species is very tenacious; it is called bast, and mats are made of it in Russia in large quantities. The wood is rather soft, close-grained, and much used by turners. The American lime, or bass-wood (T. americans), is a large and beautiful tree, resembling the now extensively cultivated in the south of Europe, the West Indies, and some parts of Southern America. The fruit is of Southern America. The fruit is agreeably acid, and its juice is employed in the production of citric acid, in beverages, etc.

Lime Light. See Oxyhydrogen Light.

Limerick (lim'er-ik), a city of Ire-land, capital of Limerick county, and a county of itself, is situated at the interior extremity of the estuary of the Shannon. It consists of three parts, connected by five bridges, one of which, the Wellesley Bridge, a magnificent structure crossing the harbor, cost 485,000. The principal buildings are the Episcopal and Roman Catholic cathedrals, savings bank, chamber of commerce, exchange, assembly house, linen hall and corn and butter markets. The industries include the curing of bacon, the prepara-tion of butterine, flax cpinning and weav-ing and lace making. There are distilleries, breweries, tanneries, corn mills, a large military clothing establishment, and shipbuilding slips. Limerick is the leading port on the west coast for the shipment of produce. Pop. 38,151.—The county belongs to the province of Mun-ster; area, 1064 square miles. The sur-face is in general flat, or an undulating plain, excepting in the northeast, south and southwest, where it rises into mountains. The principal river is the Shan-

fering considerably in external appearance, structure and composition. It is, if pure, essentially composed of 57 parts of lime and 43 of carbonic acid; but in some rocks the limestone is intermixed with magnesia, alumina, silica, iron, etc. All limestones give readily to the knife. They are infusible: but when impure, by an admixture with a portion of other earths, they vitrify in burning. All limestones effervesce when a drop of strong acid is applied on the surface, and they dissolve entirely in nitric or hydrochloric acid. Limestone is found both in primary and in secondary rocks, but most abundantly in the last. It is also not nice.

Lime (Citrus limetta), a small globu-lar-shaped lemon, the fruit of a is called calcareous tufa. Limestone has shrub about 8 feet high. It is a native of frequently a granular structure; and the India and China, but was introduced into size of the grains is variable, in some de-Europe long before the orange, and is gree corresponding with the relative age now extensively cultivated in the south of of the mineral. Thus limestone which oc-Europe, the West Indies, and some parts curs in beds in gneiss, has usually a coarse texture and large granular concretions; but when its beds exist in mica slate, or argillite, its texture becomes more finely grained, and its color less uniform. Silurian and Devonian limestones have a texture more or less compact; the colors are often variegated; and they often contain fossils. Secondary limestone has a compact texture, a dull fracture, and usually contains shells, and sometimes other organic remains. It is always stratified. The specific gravity of limestone varies from 2.50 to 2.90. Calcareous spar is the purest variety of car-bonate of lime. It is frequently very transparent, and is then strongly doublerefractive, this peculiarity being best seen in the variety known as *Iccland spar*. Among the varieties of limestone are: calcareous spar, granular limestone, foliated limestone, compact limestone, colite or roestone, peastone or pisolite, etc. Compact limestone passes into chalk when the particles are somewhat loosely connected with each other, so that the whole assumes an earthy character. A variety of very fine-grained compact lime-stone is used in lithography, the best be-ing that obtained near Pappenheim and Solenhofen in Bavaria. When sufficiently close in texture to admit of being polished limestone takes the name of marble. As such it is an important building material. cupations are chiefly agricultural; pasturage and dairy farming are most general. Large quantities of farm produce are exported. Pop. 146,098.

Limestone (limeton), a species of mineral comprising numerous varieties of carbonate of lime, differing considerably in external appearance, structure and committee of the constant of the co magnitude, many oceanic islands being built upon a thick basis of this material.

Limit (lim'it), in mathematics, is a determinate quantity to which a variable one continually approaches in value. Thus if a polygon be inscribed in a circle, its area is of course less than that of the circle; but as the inscribed polygon is made to have more and smaller sides its area gets more nearly equal to that of the circle, though it can never quite equal it.

Limited Liability. See Joint-stock Compa-

Limnæa (lim-ne'a), a genus of freshpodous molluses, having a lung sac instead of gills. They have the power cf floating on their back, the foot forming a Lim'ulus. See King-crab. kind of boat. They are found in all parts of the world, and occur fossil, especially in the Wealden.

Limoges (li-mozh), a town of West-ern France, capital of the de-partment of Haute-Vienne, and former capital of Limousin. The most remarkable edifices are the cathedral; the bishop's palace, the finest modern edifice of the town; the town hall; and the public library. The principal industry is the manufacture of artistic porcelain, known as Limoges ware, and employing over 5000 paper mills and extensive shoe and clogmaking establishments. In 1790, and again in 1864, whole quarters of the city were destroyed by fire. Pop. 92,181.

brownish color, occurring in mammillated or botryoidal masses, and is found abun-

France, forming at present the chief part his medical practice for the church. of the departments of Haute-Vienne and of Corrèze. Limoges was the capital.

Limoux Aude, on the Aude dep. River. Pop. 5458.

broad disc-like foot and partly by a glu-tinous secretion. The common limpet (Patella vulgāris) is often found en-sconced in a shallow pit excavated out of the rock, and which it has made or rasped out by the siliceous particles embedded in its foot: From this pit the limpet, when covered by the tide, makes short journeys in quest of its food, which consists of algee, and which it eats by means of a long ribbon-like tongue covered with numerous rows of hard teeth. The limpet is used as bait, and is eaten by the poorer classes of Scotland and Ireland. In tropical seas limpets attain an immense size, one species having a shell about a foot wide.

(lim-pō'po), or CROCODILE Limpopo RIVER, a river of Southern Africa, which rises in the Transvaal not far from Pretoria, flows northwest, then

tance the boundary of the Transvaal, then southeast into the Indian Ocean

(lin-ā'se-ē), the flax fam-ily, a small nat. order of Linaceæ exogenous plants, scattered more or less over most parts of the globe, those in temperate and southern regions being herbs, while the tropical representatives are trees or shrubs. They are principally characterized by their regular flowers, with imbricate glandular sepals having a disc of five glands outside the staminal tube; the ovary is three to five celled, with two ovules in each cell; the albumen hands. It is exported to all parts of the is fleshy; the leaves are simple, usually world. There are also wool and cotton stipulate, rarely opposite. The tenacity spinning mills, cloth factories, foundries, of the fiber and the mucilage of the diuretic seeds of certain species of Linum, such as the common flax (L. usitatissimum), are well known widely, and utilized. See Flax.

Limonite (li'mo-nit), a very portant ore of iron, varieties of which are bog iron ore and brown sician, born at Canterbury about 1460; the side of a died in 1524. After receiving his first his pative town he entered Linacre (lin'a-ker), or LYNACER, THOMAS, an eminent phyor botryoidal masses, and is found abundantly in Europe and America.

Cimousin (li-mö-san), an ancient by Henry VII with the education of province near the center of Prince Arthur. He ultimately abandoned 1518 he founded the College of Physicians, of which he continued president till (li-mö), a town of France, 1524. He made a Latin translation of the works of Galen.

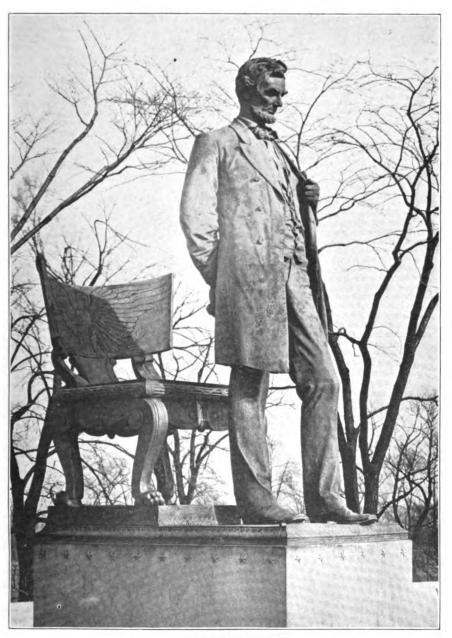
(lin'a-lo), a wood ob-Linaloe-wood Limpet (lim'pet), a gasteropodous tained from tropical mollusc which adheres to America (probably from a species of rocks partly by the suctorial powers of its Amyris), yielding a fragrant oil used in America (probably from a species of perfumery.

Linares (le-nä'rās), a town of Spain, province of Jaen, the chief town in a district rich in lead and copper mines. It has larre smelting works and foundries and manufactories of explosives. Pop. 38,245.

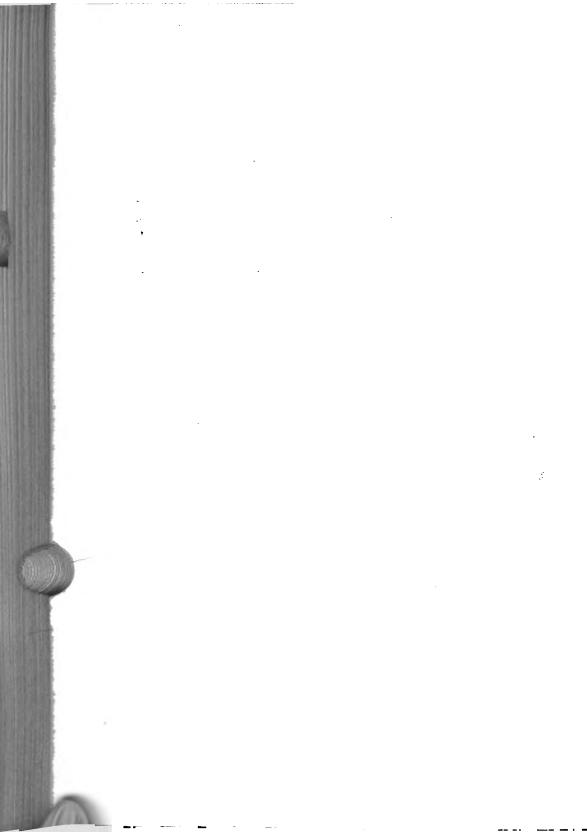
Linares, a city of Mexico, State of Nuevo Leon, 65 miles S. E. of Monterey. Pop. 20,690.

Linares, ar inland province of Chile, area 3942 square miles. It is fertile in the north but arid in the centre and has several volcanic peaks. Pop. 101,858. Linares, its capital city, has about 9000.

Linaria (li-nă'ri-a), a genus of monoplants, of the nat. order Scrophulariacese. Lincoln (ling'kon), a city of England and a county in itself. northeast, forming for a considerable dis- capital of Lincolnshire, 120 miles north



ABRAHAM LINCOLN
From the famous statue in Lincoln Park, Chicago, by Augustus St. Gaudens.



of London, situated on the Witham, and and other institutions for higher learning at the junction of several railways. It (students, 11,000). It is the hub of a has been identified with the Roman Lin-network of railroads and has developed

of London, situated on the Witham, and and other institutions for higher learning at the junction of several railways. It (students, 11,000). It is the hub of a has been identified with the Roman Lin-twock of railroads and has developed dum Colonia, and at the time of William into a great grain and milling city; has the Conqueror was a place of considerable elevators and flour mills. Manufactures elificate is the cathedral, situated on a implements, washing machines, aircraft, height (dating from the eleventh century, cicars, brooms, motor trucks, furniture, and restored since 1862), chiefly in the tick, horness, paints, grain products, etc. and restored since 1862), chiefly in the tick, horness, paints, grain products, etc. and restored since 1862), chiefly in the tick, horness, paints, grain products, etc. and restored since 1862, chiefly in the tick, horness, paints, grain products, etc. and restored since 1862, chiefly in the tick, horness, paints, grain products, etc. and restored since 1862, chiefly in the tick, horness, paints, grain products, etc. and restored since 1862, chiefly in the tick, which a state of the cast in 1610, and the fire old Ruberton and school of linguistic products and the fire old Roman arch spans, and the fire old spa

held at Chicago in Edge, nominated as a candidate for the presidency, and after several ballots he gained Theater, Washington, by an assassing a majority, and was eventually chosen named John Wilkes Booth, and expired on unanimously. In the election of the following day.

Lincoln, Benjamin, Massachusetts, in Hingham, Massachusetts, in the ioined the patriot held at Chicago in May, 1860, he was nominated as a candidate for the presi-The Southern States, exasperated at the army in the Revolution, and in 1776 was defeat of their candidates, and alarmed at made a major-general of militia. He was the aggressive antislavery policy which given the chief command of the Southern the aggressive antislavery policy which many of the leading Republicans had proclaimed their determination to follow, refused to acquiesce in Lincoln's election, and began one after another to announce their secession, and to organize the means of resisting the enforcement of the au-thority of the central government. Be-tween the election of Lincoln in November, 1860, and his assumption of office on March 4, 1861, the secession movement made a rapid growth. Lincoln's intention was to use every means of conciliation consistent with the policy he deemed it essential to the national interest to pursue, but on one point his resolution was steadfast, to maintain the union of the States. Before his assumption of office the secession leaders were as resolutely determined on the other side. On the 4th of February the Southern Confederacy coln's persistence in raising and pouring in fresh troops after every disaster finally enabled the Federal government to subdue memory of Abraham Lincoln in Potomac the secession. The toleration of slavery Park, Washington, D. C., at the river-side States had by their rebellion forfeited all It is to contain a colossal statue of Linclaim to the protection of their peculiar coln, flanked by panels bearing his Gettysinstitution, it w s an easy transition from burg and Second Inaugural Addresses. this view to its withdrawal. The successive stages by which this was effected—

Lind, Jenny (Madame Otto Goldstee Stages by which this was effected—

the emancipation of the slaves of rebels, holm in 1821; died in 1887. She reand the offer of compensation for volunceived part of her musical training under term contains followed by the constitution of the slaves of the succession of the slaves of the sla emancipation without compensationwere only the natural steps by which a native city of Stockholm. She made her change involving consequences of such first appearance in London in 1847, and vast extent was reached. The determinal later came to the United States. Here she tion of the Northern States to pursue the married Herr Goldschmidt in 1851, and war to its conclusion on the original issue subsequently returned to Europe. led to the reflection of Lincoln as president in 1864. The decisive victory of tree. See Lime. dent in 1864. The decisive victory of Grant over Lee on April 2, 1865, speedily followed by the surrender of the latter, had just afforded the prospect of an im-mediate termination of this long struggle. Lindley (lind'li), John, bot an ist born at Catton, Norfolkshira

when, on the 14th of the same month, President Lincoln was shot in Ford's Theater, Washington, by an assassin

department in 1778, and defended Charles-ton against General Prevost in the spring of 1779. In October he, with Count D'Estaing, made an attack on Savannah, which proved unsuccessful. He was subsequently besieged by Sir Henry Clinton in Charleston, and forced to surrender in 1780. He was exchanged in 1781, commanded a division at Yorktown, and was deputed by Washington to receive the sub-mission of Cornwallis and his army as a reparation for his capture at Charleston. He was chosen Secretary of War in 1781, was elected lieutenant-governor of Massachusetts in 1787.

Lincoln Highway, a great national road across the United States, from Atlantic to Pacific, with a length of about 3300 miles. It was projected in 1913, to be surfaced had been constituted, and on the 13th of with concrete where practical, and pro-April the first blow in the Civil war was gress has been made in every state which struck by the capture of Fort Sumter, in it is to traverse. The projectors, the Lin-Charleston harbor, by the Confederates. coln Highway Association, with head-The events of the Civil war during the quarters at Detroit, Michigan, estimate next four years in Lincoln's career belong that the cost will be \$10,000,000. The to the history of the United States. Lin-highway is named after Abraham Lincoln. Lincoln Memorial, a handsome ed-ifice erected in

was always in Lincoln's opinion an unextremity of the axis passing through the happy necessity and when the Southern Capitol and the Washington Monument. States had by their rebellion forfeited all It is to contain a colossal statue of Lin-

tary emancipation, followed by the constitutional amendment and unconditional cess in Berlin in 1845, and subsequently was received with a great ovation in her

See Holy Island.

in 1799; died in 1865. His father was in 1906. He wrote Problems of the Combine of a nursery garden, and he dren, The Beast and the Jungle and The his education at the grammar Rule of Plutocracy in Colorado. school of Norwich. He began at an early age to write on botanical subjects; received the appointment of assistant secretary to the Horticultural Society in 1822, and became professor of botany in London University in 1829. He was editor of the Gardener's Chronicle from 1841 until his death.

Lindsay (lin'ze), a city in the prov-ince of Ontario, Canada, on the Grand Trunk Railway, 70 miles N. E.

the Grand Trunk Railway, 70 miles N. E. of Toronto. It has an extensive trade in lumber and grain and various manufactures. Pop. 1911) 6364.

Lindsay, or Lyndsay (lind'zā), Sir poet, usually described as 'of the Mount,' an estate near Cupar, in Fife, was born about the year 1490; died in 1555. He studied in the University of St. Andrews, and in 1509 became page of honor to James V, then an infant. In 1528 he produced his Dreme, and in the following year presented his Complaynt to the King. year presented his Complaynt to the King. In 1530 he was inaugurated lyon king at-arms, and knighted, and in 1531 sent on a mission to Charles V, on his return from which he married. He soon afterwards published a drama entitled a Satyre of the Three Estatis, followed in 1536 by his Answer to the King's Flyting; and by the History and Testament of Squire Meldrum, in 1538. His last work, The Monarchie, was finished in 1553. For more than two centuries Lindsay was the most converse that the section. popular poet in Scotland. His satirical attacks on the clergy in some degree paved the way for the Reformation.

Lindsey (lind'ze), Benjamin Barr, Jackson, Tennessee, in 1869; studied law and was admitted to the bar in 1894. He interest in the condition of youthful delinquents, endeavored to improve the method of confining them, and won an international reputation as the originator of improved and humanitarian methods of dealing with the criminal and law-defying young. He is the author of the Colorado Juvenile Court Law, and established a system of putting delinquents of this class upon their honor and sentencing them to the Industrial School at Golden, Colo-rado. Out of the hundreds thus dealt with only five broke their trust. He suc-

Line (lin), in military language, the infantry of an army as distinguished from cavalry, artillery, militia, volunteer corps, etc., but in some cases it is also applied to the ordinary cavalry regiments. A ship of the line, in naval nomenclature, is a ship of war large enough to have a place in the line of battle, and was formerly a ship with not less than two decks or two tiers of guns. (lin'en), cloth made of flax, Linen had a very ancient origin and extensive use. On the early monuments of Egypt artistic representations of the various processes of linen manufacture have been found, and the fine linen abric in which the Egyptians wrapped their embalmed dead still gives evidence of the skill which they possessed. The Jews took with them into Canaan a knowledge of the manufacture; Tyre, Sidon and Carthage seem also to have acquired the industry; while at an early period the manufacture of linen appears to have been common in Greece and Rome. In the middle ages linen and woolen were the chief articles of dress in all European countries, and among the Flemings in particular the flax manufacture rose to great importance. The linen manufacsture was known in England, Ireland and Scotland from an early period. As early as the seventh century the Anglo-Saxon women were skilled in the weaving of this fabric, and fine linen was made in Wilts and Sussex in the thirteenth century. Since the extensive introduction of cotton, however, the linen industry has decreased in relative importance. The chief center of the manufacture in England is Leeds and neighborhood. In Ireland the manufacture of linen was well established removed to Denver, Colorado, and since in the seventeenth century; subsequently 1901 has been judge of the County Court it declined; but lately it has again oband the Juvenile Court. He took a warm tained a flourishing position, Belfast being the center of the manufacture. Dun-dee is the chief center in Scotland for linen (especially coarse fabrics) as well as the allied jute manufacture. Dunfermline is celebrated for its table linens. For the Continent, France, Belgium and Germany are the chief centers of linen manufacture. Little has been done in linen weaving in the United States, though some recent progress is being made. The machinery used both in spinning and weaving linen is in general, with the exception of some special adaptations, the same as that used for cutton. (See Cotton Spinning and Wearing, also Flax.) ceeded in having a contributory delin-quency law passed, holding parents, em-ployers, etc., accountable for neglect. He The chief varieties of linen now manu-was candidate for governor of Colorado factured are; lawn, which is of fine quality and mostly produced in Ireland; plain cloths for skirtings, bedding, etc.; damasks, tablecloths, and other ornamental fabrics; and cambric, which is the finest of all linen fabrics.

form of a very slender elongated letter S. Ling (Lota molva), a species of sea-fish allied to the cod family (Gad-idæ), and measuring from 3 to 4 feet in length. It abounds around the British



Ling (Lota molva).

coasts, and is caught with hook and line. in June.

Lingam (lin'gam), among the Hin-dus, the emblem of the male generative power of nature. It is wor-shiped either alone or in conjunction with the your or female generative power.

Lingard (lin'gard), John, an English
historian, born at Winchester in 1771; died at Hornby in 1851. He was educated at the English College, Douai; established a new college at Crook Hall, near Durham, himself being vice-president, in 1794; became a priest in 1800 at Newcastle-on-Tyne; opened Ushaw Roman Catholic College in 1808, and in 1811 retired as priest to Hornby in Lancashire, where he died. He was offered a cardinal's hat by Leo XII; in offered a cardinal's nat by Leo All; in 1839 he accepted a pension of £300 from the queen. His Antiquities of the Anglo-Saxon Church appeared in 1808, and his great work on The History of England from the Invasion of the Romans to the year 1688 was first printed in 1819-25, and reached a fifth edition in 1850. Lingard's History is considered a standard work from the Roman Catholic stand-

(lēn'gwa-glos-sa), a town of Sicily, on the Linguaglossa

northeast slope of Etna. Pop. 13,121.

Lingula (ling'gū-la), a genus of molluses of the class Brach-

molluscs are one of the few examples of pedunculated bivalve shells. The members of the genus inhabit the Indian

Archipelago and the Australasian seas.

Liniment (lin'i-ment), in medicine, a species of soft ointment of all linen fabrics.

Line of Beauty, a term used by some artists for an of a consistence somewhat thinner than an unguent, but thicker than oil. The other stimulating applications for external use.

Link, in land-measuring, a division of of 7.92 inches. The chain is divided into 100 links, and is 66 feet in length. 100, 000 square links constitute an imperial

Linköping (lin-cheup'ing), a town of Sweden, capital of the län of East Gottland, in a fertile district on the Stang, near Lake Roxen. The town has a handsome cathedral, a library rich in rare editions of the Bible, episco-pal castle, etc. Pop. 14,552.

(lin-lith'go), a borough Linlithgow and preserved in immense quantities in a dried state. From the beginning of February to May the ling is in highest perfection; the spawning season commencing bank of Linlithgow Loch. It consists principally of one irregular street, about one mile long, lying east and west. The principal buildings of interest are the palace, now a ruin, where James V and Mary Queen of Scots were born; and the Mary Queen of Scots were born; and the church of St. Michael, an ancient Gothic edifice. It was in the High street of Linlithgow that Hamilton of Bothwellhaugh assassinated the Regent Murray in 1570. Pop. 4279.—The County of LINLITHGOW, or WEST LOTHIAN. is bounded by the Firth of Forth, Edinburghshire, Stirling and Langek; area 120 square miles. This and Lanark; area, 120 square miles. This county is one of the richest in Scotland in minerals, including coal, shales, iron-stone, freestone, limestone. The soils are stone, freestone, limestone. The soils are generally strong and well drained, but in the southwest parts of the county there is a considerable extent of thin, boggy ground. The principal manufacture is that of paraffin-oil, which is carried on at Bathgate, Uphall, and other places. Principal rivers, Almond and Avon. Principal towns, Linlithgow, Bathgate, Borrow-stounness and Queensferry. Pop. 65,708. Linnæa (lin-nō'a), a genus of plants of the nat. order Caprifoliaceæ (honeysuckles). It contains but one species (*L. boredlis*), a creeping evergreen plant found in woods and is mountainous places in Scotland and other porthern countries including North American northern countries, including North America as far south as Maryland, bearing two beautiful drooping fragrant bell-shaped pink flowers on each flower-stalk. iopoda and family Lingulidæ, a family two beautiful drooping fragrant belithat has survived with but little change shaped pink flowers on each flower-stalk. siree the early Silurian period. These The plant was an especial favorite with

Linnæan Society, don in 1788 by Dr. J. E. Smith, and in-corporated in 1802, for the promotion of the study of all departments of botany and zoology. It has an excellent library, a museum, and herbarium, the nucleus of which were formed by the collections of Linnaeus himself. Fellows take the initials F. L. S.

See next article. Linnæus.

Linné (lin'nā), KARL von, commonly called Linnæus, the greatest botanist of his age, was born at Rashult, Sweden, in 1707, and died at Upsala in 1778. He was the son of a clergyman, who had him educated at the grammar school and the gymnasium of Wexiö. He showed an early interest in botany; entered the University of Lund, where his terminal tenta was appeared. garden. Here he made the acquaintance of the botanist Rudbeck, whose assistant he became. Aided by the Academy of Sciences at Upsala, Linne made a journey through Lapland, the result of which was shown in his Flora Lapponica, published 1735. In this year he went to the University of Harderwyk, in Holland, and took an M.D. degree; afterwards visited Leyden, where he published the first mouldings, knife-handles, etc.; and mixed sketch of his Systema Naturæ and Fun-with ground cork and pressed upon candamenta Botanica. In 1736 he visited was it forms floor-cloth. damenta Botanica. In 1736 he visited England, went to Paris in 1738, and afterwards settled in Stockholm as a phyplants on a simple system of sexual relaplants on a simple system of sexual relationship and prepared the way for the more natural and satisfactory classification which has superseded the Linnæan system. The system of naming genera and species devised by him is still in common use. Nor must it be forgotten that

Linnsen Society a society insti-Linnsen Society a society insti-Linnsen Society a society instiis associated with portraiture, but in his later period his fame became identified with landscape, and more especially the scenery of Surrey. His sons, JAMES THOMAS LINNELL and WILLIAM IJNNELL, are also well-known artists.

Linnet (lin'et), a small singing bird of the finch family, Fringilla linota or cannabina. Its general plumage is brownish, the top of the head and breast being reddish in the breeding season. It is one of the commonest of British birds, everywhere frequenting open heaths and commons, and breeding in the furze and other bushes. They are cherful and lively birds, and very sweet and pleasing songsters. Called also provincially interesting the same of the common of the cially Lintie and Lintwhite.

Linoleum (li-no'le-um), a prepara-tion of linseed-oil with botanical tastes were encouraged; and chloride of sulphur, by which it is renremoved to Upsala in 1728, where he dered solid and useful in many ways. undertook the supervision of the botanic When rolled into sheets it is used as a substitute for india-rubber or guttapercha; dissolved it is used as a varnish for waterproof textile fabrics, table-covers, felt carpets, and the like; as a paint it is useful both for iron and wood, and for ships' bottoms; as a cement it possesses some of the qualities of glue; vulcanized or rendered hard by heat it may be carved and polished like wood for

(li'nō-tip), a recently in-Linotype vented printing machine, arterwarus settied in Stockholm as a physician. He became professor of medicine in which types are discarded, and matrices at Upsala in 1741, and then of botany used instead, these being brought to the and natural history; was made a knight proper places by touching corresponding of the Polar Star with the rank of nobility; and died on his estate near Upsala typewriter, the rows of matrices being from apoplexy. The great merit of then automatically filled with molten Linné as a botanist was that he arranged metal so as to produce solid bars or lines plants on a simple system of sayual relate of type and then automatically statumed. of type, and then automatically returned to their places. It has very largely superseded the hand-setting of type, enabled the voluminous newspapers of to-day to be issued and considerably cheapened the price of books.

Linseed-oil (lin'sēd), the oil got from the seeds of flax either by pressure in the cold or by heating to about 200° Fahr. It is of a pale mon use. Nor must it be forgotten that he was eminent not only in botany, but in all the sciences of his time. His chief works besides those already mentioned were: Genera Plantarum 1737, Classes to dark yellow color; may or may not Plantarum (1738), Flora Succica (1745) have a smell; has specific gravity from Fauna Succica (1746) Philosophia 0.928 to 0.94; and remains liquid even Botanica (1751), and the Species Plantarum (1753).

Linnell (lin'el), John, artist, born at London in 1792; died in the arts, for painting, for printer's ink, etc.; and in medicine, especially for burns. Linseed-cake is the solid mass, or 1882. He was a student at the Royal

It is much used as food from flaxseed. for cattle and sheep, and is called also Oil-cake.

Linstock (lin'stok), a pointed staff with a crotch or fork at one end to hold a lighted match, formerly used in firing cannon.

Lint, in surgery, is the scrapings of fine linen, used by surgeons in dressing wounds. Lint made up in oval or orbicular form is called a pledget; if in a cylindrical form, or in shape of a

date or olive stone, it is called a dossil.

Lintel (lin'tel), in architecture, a horizontal piece of timber or stone over a door, window, or other opening, Linton (lin'tun), a city of Greene Co., Indiana, 33 miles s. E. of Terre Haute, in a coal-mining and farming region. Pop. (1920) 5845.

Linum (li'num), the flax genus of plants, which gives its name to the nat. order Linaceæ. There are about three years old; the adult age is reached the nation of the nati eighty species, herbs or rarely small shrubs, chiefly found in the temperate and warmer extra-tropical regions of both hemispheres. Few are of any importance, except the flax plant (L. usitatissimum), from which linen fabrics are made. When scraped, linen forms lint made. (q. v.), from which surgical dressings are Tow is the term given in textile manufacture to the short fibers of flax which are separated in the course of preparation. The seeds of the linum are called linsced; these contain much mucilage, and by compression in the cold or by heating to about 200° Fahr. a valuable cill is preduced much used in the cast of oil is produced, much used in the arts as well as for medicinal purposes (see Linsecd-oil). After the oil is expressed, the and forms the basis of poultices.

Linz (lints), the capital of Upper Austria, situated on the right bank Gujerat.

of the Danube, 117 miles w. of Vienna.

Lipari Islands (lip'a-rē, or lē'pa-rē),

a cluster of volcanic forts extending over a circuit of 9 miles. islands in the Mediterranean, which take It has an old cathedral, a new cathedral,

the end of it. The largest lions are from 8 to 9 feet in length. The period of gestation is five months; one brood is produced annually, with from two to four at a birth, and the mother nourishes the whelps for about a year. The mane of the male lion begins to grow when it is



about six or seven; and the extreme age is about twenty-two, although authorities differ from this estimate. The lion is a native of Africa and parts of Western and Central Asia. It preys chiefly in the night and on live animals, avoiding carrion, unless impelled by intense hun-ger. It approaches his prey with a stealthy pace, crouching when at a proper distance, when it springs upon it with fearful velocity and force. The whole frame is extremely muscular, the fore-parts being particularly so, giving with the large head, flashing eye and copious mane, a noble appearance to the animal, which has led to its being called the 'king of beasts,' and to fancies of its noble and secd-oil). After the oil is expressed, the generous nature which have no real founcake which remains, known as oil-cake dation. Of the African lion there are (q. v.), is much used as food for cattle. several varieties, as the Barbary lion, When powdered it is termed linseed meal Gambian lion, Cape lion. The Asiatic varieties are consulty and long line and consulty are lived and cape lion. rieties are generally smaller and may want the mane, as the maneless lion of

their name from the principal one of the group, about 24 miles from the n. provincial parliament house, castle, town the group, about 24 miles from the nouse, bishop's palace, etc. The manufactures consist chiefly of woolen, linen, silk well cultivated, producing figs, grapes and cotton goods, machinery, hardware, and raisins, sulphur, etc. It is about 15 etc. There is an extensive trade on the miles in circumference, and has a populationable. Pop. (1910) 67,810.

Lion (li'un; Felis leo), a quadruped of the cat genus, the most maiestataining a cathedral: non. 5000. The other Lion of the cat genus, the most majestaining a cathedral; pop. 5000. The other tic of all carnivorous animals, distinsialands are Stromboli, Panaria, Vulcano, guished by its tawny or yellow color, a Salina, Alicudi and Filicudi, with two or full flowing mane in the male, and a three smaller ones. Stromboli is mainly tufted tail with a sort of sharp nail at composed of an incessantly active volcano. Pop. of the group, 20,224.

member of the German Empire, and sends lower temperature attainable by the aid one member to the Bundesrath and one of liquid hydrogen, it becomes a white to the Reichstag. A very large majority solid with a faint blue tint, in this respect of the inhabitants are Protestants. Pop. resembling liquid oxygen. Liquid hydro-

a Coronation of the Virgin, Florence; frescoes on the stories of St. Stephen and John the Baptist in the Duomo of Prato; and the Death of St. Bernard, in the National Gallery, London.—FILIPINO LIPPI, an Italian painter, and the reputed son of the former, was born at Florence about 1457, and died there 1504. Most of his paintings are to be seen in Florence

Lippia (lep'i-a), a genus of plants, nat. order Verbenacew. They are shrubs or herbs numbering about 100 species, found in all warm regions; especially abundant in America.

a palatable spirituous drink composed of water, alcohol, sugar, and an aromatic infusion extracted from fruits, author, born at Pompey, seeds, etc. The best-known liqueurs are absinthe, anisette, chartreuse, curaçoa, maraschino, kümmel and noyau.

Lipsett (lip'set). Louis James Liquidation (li-k wi-d a'shun) indicates the winding up of any business, more especially a joint-stock company. It may apply to insolvent firms that voluntarily wish to close up their business.

Liquid Gases, gases that have been brought into a liquid Gases, gases that have been thereous company. The well-known liqueurs are absinthe, anisette, chartreuse, curaçoa, maraschino, kümmel and noyau.

Liquidation (li-k wi-d a'shun) indicates the winding up of any business, more especially a joint-stock company. It may apply to insolvent firms that voluntarily wish to close up their business.

Liquorice (lik'u-ris), a name for herbs of the genus Glycyr-wisa, belonging to the nat. order Leguminosæ, and growing in S. Europe, Asia pallionaceous stalks and bluish papilionaceous flowers. The well-known liquorice juice, used as a demulcent and expectorant, is extracted from the root as well as from that of others. Indian

Lipetzk (lye'petsk), a town of Russia. in the government of Sia. in the government of Tambov. Pop. 16,353.

Lippe (lip pè), or incorrectly Lippe (lip pè), or incorrectly Lippe (north Germany, bounded chiefly by Rhenish Prussia and Hanover; area, 469 anon-conductor of electricity. When properly protected from material heat, and sulface and subjected to high exhaustion, liquid surface is arable, more than a fourth under wood. There are some valuable saline springs. The principal towns are Detmold, Lemgo and Horn. Lippe is a about 14 mm. is -216° C. At the still member of the German Empire, and sends lower temperature attainable by the aid to the Reichstag. A very large majority solid with a faint blue tint, in this respect of the inhabitants are Protestants. Pop. (1910) 150,479.

Lippi, Fra Filippo, an Italian paintippi, ter, born in Florence about 1412; died at Spoleto in 1469. He was sity being 0.07. Liquid oxygen has a density of 1.14, has a slight bluish color, and is strongly magnetic. Liquid Nitrophaed in a monastery at Florence, where he studied and showed a great capacity for drawing, and where he painted, it is Helium forms likewise a colorless liquid, said, a fresco in one of the cloisters. He boiling at —452° Fahrenheit, with a lift the monastery about 1432, was for some time a slave in Barbary, on being low liquid, of density 1.14. Liquid gascs set at liberty returned to Italy and are used in laboratories for drying painted at Florence, Prato, and finally, Spoleto. His most famous paintings are a Coronation of the Virgin, Florence; used as refrigerants, motive forces, etc. frescoes on the stories of St. Stephen and Liquation (li-kwā'shun), or ELIQUA-TION, the process of sepa-rating by a regulated heat an easily fusible metal from an alloy in which is a metal difficult of fusion. Thus in the

metal aimcuit of rusion. Thus in the refining of tin to remove slag, iron, copper and other metals, the ingots are heated in a reverberatory furnace to a temperature just sufficient to melt the tin, while the impurities are left behind on the hearth.

Liqueur (li-keur'); the French name, a palatable spirituous drink composed of water, alcohol, sugar, and an

liquorice is Abrus precatorius. Abrus.

(le'ra; from the Latin libra, Lira pound) is the name given to an Italian silver coin of the value of about It corresponds to the French 19 cents. franc, and is equal to 100 centesimi.

Liria (le re-a), a town of Spain, in the province and 17 miles northwest by west of Valencia, on the left bank of the Guadalquivir. Pop. 8839. Liriodendron

American trees belonging to the nat. order ing Olisipo. In 1755 it was visited by an Magnoliaceæ,

only one species, the tulip tree (L. tulipifera). See Tulip tree. (liz'-Lisbon bun: Portuguese, Lisboa), the capital and principal seaport of Tagus. about 9 miles above its mouth. It is built on and at the foot

and containing

of a succession of hills, in the form of an amphitheater, and the churches.

convents and houses, of a dazzling white- Lisburn ness, have an imposing effect when viewed The streets of the older from the river. The streets of the older trim and Down, 8 miles southwest from parts in general are steep, narrow, Belfast. It has a cathedral church of the crooked, badly paved and filthy; but united dioceses of Down, Connor and the more modern parts of the town Dromore, which contain a monument to are regular and well built. The chief Jeremy Taylor, who died here in 1667. open space is the Praça do Comflax spinning and weaving, and the manmercio, a large and handsome square, ufacture of thread and muslin, employ the surrounded by public buildings. The greater number of the inhabitants. Pop. western quarter of the city, called Buenos Ayres, is airy and pleasant, and Tisians (liz-veu), a town of France. from the river. Buenos Ayres, is airy and pleasant, and chiefly occupied by foreigners. The town of Belem, still farther to the west, forms the Touques, 27 miles E. S. E. of Caen. a sort of suburb to Lisbon. Above it Its principal edifices are a fine Gothic stands the royal palace of Ajuda, a conspicuous edifice of white marble. Among mer episcopal palace. The manufactures the chief buildings are the castle of St. consist of muslin, broadcloth, flannel, etc. the chief buildings are the castle of St. consist of muslin, broadcloth, flannel, etc. George or citadel, the cathedral, the Pop. (1906) 15,194. church do Coração de Jesus, the custom- Ligkeard (lis-kard'), a municipal house and other government buildings on of architecture of which Lisbon can boast per mines in the vicinity. Pop. 4371. is the aqueduct which conveys water to the city from springs about 10½ miles distant. The scientific and literary institutions comprise the Royal Academy of at the entrance of Loch Linnhe; area, 15

See Sciences, Polytechnic School, National Museum and Picture Gallery, and Pub-bra, lic Library, containing about 400,000 lic Library, containing about 400,000 volumes. The harbor is one of the finest in the world, and the quays extend between 2 and 3 miles along the bank of the river. The exports consist chiefly of wine, oil and fruit; and the principal imports are cotton, cotton tissues, sugar, grain, coal, tobacco, coffee, etc. The manufactures tobacco, coffee, etc. are tobacco, cotton, wool, silk, paper, chemicals, soap, etc. Lisbon is a place (lir-i-o-den'dron), a chemicals, soap, etc. Lisbon is a place genus of North of remote antiquity, its earliest name be-

earthquake, which threw down a considerable portion of the city, and destroyed above 30,000 of its inhabitants. It was taken by the French in 1807, but re-sisted an attack by Masséna in 1809. It was the center of the revolution of 1910, by which Portugal was converted from a monarchy into a republic. Pop. republic. P o p. (1910) 435,359.

(lis'burn), a town of Ireand, in the Counties of Antrim and Down, 8 miles southwest from

Liskeard borough of England, counthe Praca do Commercio, the town hall, ty of Cornwall, 18 miles northwest of etc. But the most remarkable specimen Plymouth. There are tin, lead and cop-



square miles. In ancient times Lismore was the residence of the bishops of

Was the residence of the bishops of Argyle and the Isles, and the remains of their palace are still seen.

Lissa (lis'sà), an island belonging to Austria, in the Adriatic, off the coast of Dalmatia; length, 10 miles; breadth, 5 miles. From 1810 to 1815 it was held by the British, who built some fortifications and defeated all the atfortifications and defeated all the at-tempts of the French to dislodge them. Pop. 9918. The town of Lissa, or San Giorgio, on a bay on the northeastern side of the island, was attacked by the Italian fleet on August 18 and 19, 1806, and on the 20th an engagement took place between the Italian and Austrian fleets, in which the Italians were defeated. Pop. 9918.

Lissa, a town of Prussia, province of and 44 miles s. s. w. of Posen. It has a castle and manufactures woolens, leather and tobacco. Pop. (1906) 16,021. prayer, and it was not until the fifth cen-Lister (lis'ter), JOSEPH, LORD, an tury that litanies came specifically into English surgeon, was born at use. Litanies became afterwards very Lister English surgeon, was born at Upton, Essex, in 1827. From 1860 to 1869 he was professor of surgery in Glas-1869 he was professor of surgery in Glas-gow University; from 1869 to 1877 pro-fessor of clinical surgery in the Univer-sity of Edinburgh; subsequently in King's College, London. His name is more espe-cially connected with the successful ap-plication of the antiseptic treatment in surgery, which inaugurated a new era in this branch of medical science. He re-ceived in consequence numerous honors, was made a baroat in 1883 and a neer lamps etc. Pop. (1920) 6215 this branch of medical science. He re- oil industries, flour mills and manufac-ceived in consequence numerous honors, tures of wind-mills, tanks, mine engines, was made a baronet in 1883 and a peer lamps, etc. Pop. (1920) 6215.

Infirmary there in 1815; delivered lectures on anatomy and surgery, and in 1833 published his *Principles of Surgery*. The following year he removed to London as surgeon to the North London Hospital, and became professor of clinical surgery in University College, an office which he retained till his death. He was one of the most eminent surgeons of his time.

born in Hungary in 1811, and died in 1886. He made his first public appearance in his ninth year; studied in Vienna and Paris; produced an opera in 1825, and became director of the Court Thea-ter at Weimar in 1849. This gave him the opportunity to introduce the music of the opportunity to introduce the music of Wagner, Berlioz, Schumann, and the writers of what is known as 'the music of the future.' In 1861 he took up his residence in Rome, where he joined the priesthood. In 1870 he became director of the Conservatory of Music at Pest. His chief works are the Fauet and Dante symplosium of the writeries. symphonies, and the oratorios St. Elizabeth and Christus.

Litany (lit'a-ni; from the Greek litaneia, supplication), term generally applied to a series of short prayers or supplications together forming one whole. The term was used by the early church to denote any form of common, and every saint of the Roman calendar had his litany. The best-known

Liston (lis'tun), John, comedian, the son of a London watchmaker, born in 1776; died in 1846. He made his first appearance at the Haymarket in 1806, transferring his services to Drury Lane in 1823, and attaching himself to Madame Vestris' company at the Olympic from 1831 to 1837. Among his most famous characters were Mawworm in the Hypocrite and Paul Pry.

Liston, Robert, a Scottish surgeon, born in 1794; died in 1847. He studied at Edinburgh College, became one of the house surgeons at the Royal Infirmary there in 1815; delivered tures on anatomy and the studied anatomy and the officers of the crown, state, and court. proceeded to the parliament, and there, sitting upon the throne (which in the old French language was called lit), caused those commands and orders which the parliament did not approve to be registered in his presence. The last lits de (list), ABBÉ FRANZ, distinguish- justice were held by Louis XVI in 1787 ed pianist and composer: was and 1788.

Literature. See various co

Litharge (lith'arj), the yellow or reddish protoxide of lead partially fused (PbO). It is extensively used in the manufacture of glass, of artificial game of lead place. enamels, of artificial gems, of lead plaster and lead soap, of sugar of lead, white and red lead, and other compounds. See

Lithia (lith'i-a; LisO), the only known oxide of the metal lithium, which was at first found in a mineral called petalite. It is of a white color, very soluble in water, acrid, caustic, and acts on colors like other alkalies. See Uric Acid. Lithic Acid.

(lith'i-um), symbol Li, atomic weight 7, the metal-Lithium lic base of lithia, which base was obtained by Sir H. Davy in the electrolysis of fused lithium chloride. It is of a silver-white luster but quickly tarnishes in the. Lithium may be cut with a knife, but it is scarcely so soft as potassium or sodium; it fuses at 180° C., and takes fire at a somewhat higher temperature. Lithium floats upon rock oil; it is the lightest of all known solid bodies; sp. gr. 0.5936. It forms salts analogous to those of potassium and sodium. Compounds of lithium are used in pyrotechny on ac-count of the splendid red color they im-part to flame. In medicine the carbonate is employed especially as a solvent for uric acid, to prevent the formation of calculi and to remove it from the system in gout. Effervescing lithia water is sometimes used in place of soda or potash water. Citrate of lithia is also employed. Its therapeutic properties are similar to those of the carbonate.

Lithography (li-thog'ra-fi), the art of drawing upon and printing from stone. The facility with which this is accomplished arises from the antagonistic qualities of grease and water. The processes of the art depend on the adhesion to a grained or polished stone of a certain greasy com-position which forms the lines of the drawing, etc.; on the power acquired by those parts penetrated by the greasy composition of attracting and becoming covered with a specially prepared ink; on the interposition of water, which prevents the ink adhering to the parts not vents the link adhering to the parts not artistic character. See Conspirating impregnated with the grease; and on and also Photo-Lithography, under Phopressure, which transfers to paper the greasy tracings or drawings. It is the invention of Alois Senefelder, a native supersede manual labor in driving the of Prague (1771-1834). At first the lithographic press, and afterwards a cylprogress of the art was slow; but latinder machine was introduced, which from terly its developments have been rapid, time to time has been greatly improved.

countries, so that Germany, France and Great Britain vie with each other in the artistic beauty of their lithographic productions. The materials, instruments and methods

of this art are as follows:—
The lithographic stones, first used by Senefelder, have proved to be the most suitable for the purposes of lithography. This stone, which is found in the district of Kellheim, Bavaria, is a species of slaty limestone; its color in the best quality is pale-yellowish drab, and for printing purposes its thickness must be from 11/2 to 4 inches. In preparing stones for the printer they are squared, leveled, ground and polished.

Lithographic ink is made of wax, white soap, tallow, shellac, mastic and lamp-black. What are called chalks are made from much the same materials; these ingredients being subjected to heat until they are fused, poured out on a slab to cool, and then cut into the required sizes.

There are various styles in which drawings on the stone are executed. Drawing on the smooth stone is executed with steel pens and sable-hair brushes. The design, etc., is drawn on the stone in reverse, after which it is slightly etched with dilute acid. In chalk drawing the surface of the stone is roughed or grained, after which the drawing is traced upon the stone. The tinting or shading follows. When completed the drawing is etched, after which it is put into the hands of the printer for printing. In engraving on stone the stone is first prepared with a solution of acid and gum. It is then washed with water, and a dry red or black powder rubbed over it. The drawing is produced by lines scratched through this ground into the stone. These lines are then spread with linesed-oil, and afterwards charged with printing ink, from which impressions are taken. Etching on stone is in most respects similar to etching on copper. The stone is prepared in the same manner, the biting-in is effected with dilute acetic acid, and the lines filled in with printing ink. The method of drawing directly on the stone has been largely superseded by the use of prepared paper, both grained and smooth, on which the drawing is executed, and afterwards transferred to the stone. Tinting and chromo-lithography is much practiced in the reproduction of works of an See Color-printing artistic character.

This machine, running at 500 revolutions are a race of people closely akin to the in the hour, can produce good work, but Letts. They are fair-haired, blue-eyed for printing fine chalk drawings of large and light-skinned; of mild disposition, and size the hand-press is still preferred. The chiefly occupied in agriculture. Their number of good impressions that can be language is akin to the Lettic and Old taken from one drawing or transfer ranges from 500 to 5000; chalk drawings producing few and ink drawings many family of tongues. Their literature concopies. The drawing or writing can also sists chiefly of popular songs and hymns, be preserved good on the stone for any religious works, tales, etc. length of time by rolling it with a special kind of ink and covering it with gum mixed with sugar-candy. For similar purposes zinc has been treated in much the same manner as stone. See Zincography.

Lithophagi (li-thof'a-gi), or LITH-OPHAGIDÆ, a name ap-plied to species of bivalve and univalve mollusca, etc., that penetrate stones and masses of corals.

See Gromwell. Lithospermum.

(lith-ot'o-mi), Lithotomy gery, the technical name for the operation popularly called cutting for the stone. As usually performed it consists in cutting through the perineum in front and to the left of the anus, so as to reach and divide the urethra and neck of the bladder where it is surrounded by the prostate gland. A grooved and curved staff is introduced into the bladder first, and then the incision is made in the perineum to reach the bladder, the groove in the staff serving as a guide to the knife. When thus performed, the operation requires seldom more than three minutes, and in favorable cases the wound heals in the course of a month. (lith-ot'ri-ti), in surgery, the operation of sota, on the Mississippi River, 106 miles crushing a stone in the bladder into frag- N. W. of St. Paul. It has extensive saw Lithotrity ments of such a size that they may be mills, pulp, paper and flour mills, etc. expelled by the urethra. The instrument Pop. 5500. by which the stone is broken up is introduced in the same manner as a catheter or sound into the bladder, and after catching the stone either crushes, bores, or from Utica. The river here passes through hammers it to pieces. The instrument, a narrow gorge and falls 44 feet, yielding which is called a lithorite, has two movable blades at the extremity, which are brought together to crush the stone by and has an important trade in cheese and other dairy products. Pop. (1910) 12.273.

Lithuania (lith-u-ā/ni-a) a region (1900) 12.273.

(lith-u-ā'ni-a), a region Lithuania in Eastern Europe which formed a grand-duchy in the eleventh century; became united to Poland in the fourteenth century; and at the dismemfourteenth century; and at the dismemberment of that kingdom, in 1773-95, was nearly all appropriated by Russia, now become a fashionable sea-bathing resort. forming the governments of Mohilev, Pop. (1911) 8351.

Vitepsk, Minsk, Vilna and Grodno; area about 100.000 square miles, of which 6700 are in Prussia. The Lithuanians bank of the Arkansas, here navigable, 250

l'russian, and forms with these the Lithuanian or Lettic branch of the Aryan family of tongues. Their literature con-

Litmus (lit'mus), or Lacaus, a peculiar coloring matter procured from Roccella tinctoria and some other lichens. Paper tinged blue by lit mus is reddened by the feeblest acids, and hence is used as a test for the presence of acids; and litmus paper which has been reddened by an acid has its blue color restored by an alkali.

(le-ter), LITER, the French standard measure of capacity Litre in the decimal system. The litre is a cubic decimetre; that is, a cube, each of in surical name es; it contains 61.028 English cubic deciting inches; the English imperial gallon is formed it perineum 4.54345797 litres.

Littleborough (lit'tl-bur-ō), a large and populous village of Lancashire, England, 9½ miles N. E. of Rochdale. The inhabitants are chiefly employed in cotton and woolen manufactories, fire-brick works and collieries. Pop. (1911) 11,705.

Little Christians, a sect of Russian dissenters claiming to be the possessors of a special revelation.

Little Falls, a city, county sent of Morrison Co., Minne-

other dairy products. Pop. (1910) 12,273; (1920) 13,029.

(lit'tl-hamp-tun). Littlehampton England, county of Sussex, 18 miles west of Brighton, at the influx of the Arun into the English Channel. It has

miles from its mouth. It stands on a rocky bluff, rising about 50 feet above the river. It has a fine Capitol and various State and educational institutions, including the Arkansas Law and Medical colleges, State schools for the deaf and blind, Little Rock College, Catholic Semi-nary, and many others. The State peni-tentiary, insane asylum, Confederate home, and Camp Pike (a U. S. military training camp) are here. It is an impor-tant shipping point for cotton. has cot-

noted treatise on real property. See Periwinkle. Littorina.

Littré (le-trā), MAXIMILIEN PAUL EMILE, a French philologist, was born at Paris in 1801, and died there in 1881. He originally studied medicine, then took up philosophy and philology, adopted the positive philosophy of M. Comte, and published works con-nected with this subject as well as works nected with this subject, as well as works connected with medicine, including a translation of Hippocrates. In 1862 he brought out his Histoire de la Langue Française. His chief work, a dictionary of the French language, was begun in the following year, and completed with sup-plements in 1877. It is a monument of erudition and industry, and its success was prompt and complete. In 1871 he became a representative in the National Assembly, in 1875 was named senator for life, and next year was admitted a member of the French Academy.

Littrow (lit'tro), JOSEPH JOHANN von, an Austrian astronomer, born in 1781; died in 1840. He became joint-director of the observatory of Ruda, and in 1819 director of the observatory of Vienna. He published numerous books ate and diplomatist, was born at Pavia on astronomy, the best known of which about 920, and died at Cremona about are Die Wunder des Himmels (1834), 372. From being page of King Hugo of and Theoretische und praktische Astronomie (1822-26)

(lit'ur-gi), a special series of prayers, hymns, pieces of Liturgy Scripture, or other devotional matter, arranged and prescribed for use in worship; or in a narrower sense a prescribed service for the celebration of the eucharist; hence in the Roman Catholic Church equivalent to the mass or service contained in the Missal. There are a number of the contained in the Missal. ber of ancient liturgies connected with history of Europe in six books, from 886 various places or names of various per- to 850. These works are the chief hissons, but there seems to have been no torical authority for that period.

written liturgy earlier than the fifth century. The chief liturgical books in the Roman Catholic Church are the Missal and the Breviery (which see), both in Latin. In 1523 Luther drew up a liturgy, or form of prayer and administration of the sacraments, which in many points differed but little from the mass of the Church of Rome. He did not, however, confine his followers to this form, and ferent liturgies were used in different parts of the kingdom. The most cele-brated of these were the Breviary and Missal secundum usum Sarum (that is, as used at Salisbury), compiled by the Bishop of Salisbury about 1080. The English Book of Common Prayer dates from the reign of Edward VI. (See Common Prayer.) It was based on the Roman Breviary. In the portions of Scripture contained in the Prayer Book the authorized version was later adopted, exto Coverdale's Bible. The liturgy of the Episcopal Church in Scotland is the same as that of the Church of England, except that there is a different communion office, which, however, is used only in some of the Scotch churches. The Kirk of Scot-land, or the Scotch Presbyterian Church, land, or the Scotch Fresuyterian Church, has no liturgy, the Directory for the Public Worship of God being only certain general rules for the conduct of public worship. The Book of Common Prayer worship. The Book of Common Prayer of the Protestant Episcopal Church in the United States was adopted in 1789 with some minor deviations from the English. successor, Berengarius. He was then patronized by the Emperor Otto of Germany and appointed Bishop of Cremona. He was employed as an ambassador on several important missions, and had in several important missions, and had in this way an excellent opportunity of studying the events of the period. Be-sides an interesting narrative of a mis-sion to Constantinople, he has left us a History of Otto; and his Antapodosis, a

or LEBADEA, Livadia, a town of of Athens. It was of note in ancient times and flourished in the middle ages and under Turkish rule, but has declined. It is poorly built, and consists of narrow, ill-paved streets. Pop. 6494.

See Oak. Live Oak.

Liver (liv'er), the glandular structure, which secretes the bile. This gland is not confined to the Vertebrate animals, all of which—save the Amphioxus or lancelet—possess a welldeveloped liver, but is found in many Invertebrata. In man the liver is part of the alimentary apparatus, and is sit-uated just below the diaphragm on the right side, extending across the middle line of the body towards the left side. Its front border reaches just below the border of the chest when the posture is sitting or standing; but when the person lies down the liver passes slightly up so as to be completely under cover of the ribs, except a small portion which extends beyond the lower end of the breast-bone. From its position it is extremely liable to compression and injury. It is the largest gland in the body, and weighs from 50 to 60 ounces avoirdupois. In its general form the liver is flat, broad and thick towards the right side, becoming narrow and thin towards the left side. Its upper surface is convex or arched and fits into the concave surface of the diaphragm while its lower surface is irregularly divided into certain 'lobes,' five in number, and separated by clefts or fissures. These lobes are known as the right, left spegelian, caudatus and quadrate lobes.

When microscopically examined the entire mass of the liver is found to consist mainly of large many-sided cells containing granular protoplasm. They are arranged in groups or masses, each little mass being called a lobule, and each lobule slightly mapped off by connective tissue and containing a meshwork of blood-vessels and ducts. These blood-vessels are branches of the portal vein. This vein receives the blood which has circulated in the stomach and intestines and carries it throughout the entire liver by a network of finely subdivided veins. It is from this supply of blood that the bile is se-creted. The blood passes off from the liver by the hepatic vein, formed by the union of small vessels which begin in the center of the lobules. The connective tissue of the liver is supplied with arterial

Livadia (liv-a-de'a), the name given blood by the hepatic artery. This blood, under the Turkish rule to like that which has entered through the portal vein, is drained off into the hepatic vein. There is, however, another set of vessels which ramify through the liver, namely the bile ducts, whose business it is to carry off the bile produced in the gland. These ducts intersect and unite until in the end two channels are formed, one from the right and the other from the left of the liver, which ultimately form one common exit into the small intestine called the common bile duct. Thus, when the bile has been secreted by the livercells, it is transferred by way of this hepatic duct into the small intestine, where it mingles with the food. When this flow of bile ceases, as it does when intestinal digestion is interrupted, the supply which still continues is stored in the gall bladder, which forms a kind of reservoir situated under the liver.

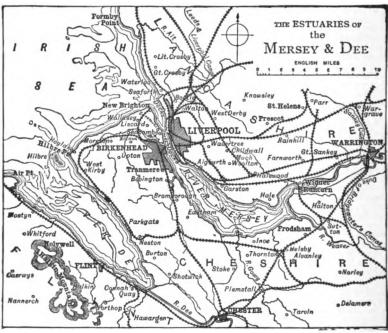
The functions of the liver would seem to be, at least, threefold. It serves (1) to secrete from the blood received from the stomach and intestines that amount of bile which is necessary for the purposes of digestion. The bile, however, contains waste matter, which has been separated from the blood. The liver, therefore, (2) has a direct function in separating and casting forth the waste impurities of the blood. Further, it appears from recent investigation that (3) the liver secretes a substance which is called glycogen or animal starch. The use of this substance, which is readily converted into sugar, would seem to be to supply the tissues with material for their energy and heat. The functions of the liver, however, still form the subject of dispute and investigation among physiologists. See Bile and Gall-bladder.

There are many diseases connected with this important gland. There is congestion of the Weer, which indicates that the structure is surcharged and choked with blood. This arises from various causes; heart disease, disease of the lungs, or even excess in food or drink will produce congestion. The symptoms are excessive weight, fullness, and a tenderness in the organ, which may be proved by a slight push in the region beyond the breast-bone. Inflammation of the liver is frequent in hot countries; is closely connected with dysentery, and its symptoms are similar to those connected with congestion. Cirrhosis of the liver or lrunk-ard's liver is frequently caused by exces-sive spirit-drinking—but not necessarily so, as it has been known to occur in children. The symptoms are many and not easily recognized; and the disease may remain for years before a fatal issue.

Fatty degeneration of the liver occurs when the cells become crowded with globules of oil, and it becomes large and pale. This result usually arises from overfeeding or drinking and want of exercise. See Jaundice.

Liver-fluke. See Distoma.

ticularly during the nineteenth century, its increase in wealth and influence has been immense. It stands partly on flat ground along the margin of the river, but chiefly on the slopes of a series of moderate eminences. The general appearance of the town has been greatly altered in recent years by the formation of new streets and by the widening of many old Liverpool (liv'er-pol), a seaport of streets and by the widening of many old England, County of Lan-ones. In the central districts in particular caster, on the right bank of the Mersey, the densely-peopled courts and narrow un-



cent growth. Camden speaks of 'Lither-poole commonly called Lirpoole' as the place 'where is the most convenient and most frequented passage to Ireland'; and it was the conquest of that country which gave the first impulse to the trade of Liverpool'; and in 1636 it was rated of Liverpool; and in 1050 it was faced towever, in the sixteenth century, so that it was mentioned in Queen Elizabeth's reign as 'her majesty's poor decayed town of Liverpool;' and in 1636 it was rated at £20 for ship-money when Bristol was rated at £1000. In 1709 the first wetach in the kindom was appeted at Liverdock in the kingdom was erected at Liver-

about 4 miles from its confluence with the healthy alleys have been opened or de-lrish Sea, 185 miles northwest from Lon-don. Liverpool has had a rapid and re-cent growth. Camden speaks of 'Lither-buildings, St. George's Hall, exchange, public library and museum, art gallery, Picton reading-room, the Wellington rooms, government offices and law courts. The town hall is a Greek building dating from 1754, but greatly altered and extended since. It contains a fine suite of apartments, and serves as the official residence of the mayor. The municipal offices were completed in 1868, at a cost of £160,000. St. George's Hall, completed in 1854 at a cost of £250,000, is a building in the Grecian style, especially notable for the excellence and beauty of its pool, and from that time, but more par- architecture. The free public library and

merchant, and now maintained out of the public rates—is a handsome building of the Corinthian order. The exchange is and benevolent institutions, such as hospitals and infirmaries, etc., are numerous. The educational institutions include University College (affiliated to the Victoria University, Manchester), Liverpool Col-lege, the Royal Institution, the Liverpool Institute, School of Art and Gallery of Art, etc. The squares and open spaces of the city are not numerous, but it is exceptionally well provided with public parks, and around these many elegant private residences. Sefton Park (400 1801. He removed to Louisiana in 1803, acres) is the largest. Next to London this city is the chief seaport in the United Code for the State. He was Congressman Kingdom. Immense docks lie along both sides of the Mersey, with a length of 8 miles, a quay space of 30 miles, and a pointed lim Secretary of State. Livingston, a city, county seat of Park Co., Montana, on the Yellowstone River. total water area of over 500 acres (in-Livingston, a city, county seat of cluding those of Birkenhead). In connection with the river one of the principal the Yellowstone River. It has an altitude features is the famous floating landing of 4483 feet and is the gateway to Yellow-stage, its length of 2063 feet resting upon stone National Park. It is in a region of Cotton goods form by far the principal export; other exports are machinery, woolens, etc. Manufacturing industries are varied, and include engineering, iron-and brass-founding, chemicals, sugar-refining, brewing, rope-making, etc. Livrefining, brewing, rope-making, etc. Liverpool is the chief port in Britain for the departure of emigrants. There are five departure of emigrants. Inere are niver approaches to the town by railway, and by the opening of the tunnel under the Mersey, the railway facilities have been materially increased. Liverpool is, next to London, the largest town in England, and the third in Great Britain, Glasgow being the second. The city is divided into sixteen wards, each of which returns three councilors. Since 1885 the representatives sent to Parliament have been increased from three to nine, the divisions within the city peing—Kirkdale, Walton, Everton, West Derby, Scotland, Ex-Everton, West Derby, Scotland, Planchange, Abercromby, East Toxteth and West Toxteth. Pop. 746,566.

Liverpool, ROBERT BANKS JENKIN-SON, EARL OF, born in 1770;

died in 1828. He entered Parliament under Pitt's auspices in 1790, and on his father being created Earl of Liverpool in 1796

museum—erected at the sole expense of he became Lord Hawkesbury. As foreign the late Sir William Brown, a Liverpool secretary in the Addington ministry he secretary in the Addington ministry he negotiated the treaty of Amiens, and he became home secretary in 1804. assassination of Percival, in 1812, he bean edifice of great magnitude, consisting came premier, and held that position till of a center and two wings, with a front- 1827. His opposition to all liberal measage of 1500 feet. The provision marures, the severity with which he repressed kets are spacious, air covered buildings, internal disturbances, and his prosecution and are five in number. The charitable of Queen Caroline rendered him extremely of Queen Caroline rendered him extremely unpopular. His father, CHARLES JENK-INSON, first EARL OF LIVERPOOL (1729-1808), held several subordinate offices in the government, and was the author of several political pamphlets, a collection of treaties, etc.

pontoons, which rise and fall with the scenic wonders, big and little game, trout tide. Among the imports cotton holds fishing, and delightful climate. Its industries chief place, followed by provisions and tries comprise agriculture, stock raising, live-stock, cereals, fruits, hides, palm and dairying, metal mining. Pop. (1920) 6311. olive oil, wine and spirits, tobacco, etc. Livingston, Robert R. (1747-1813), Cotton goods form by far the principal export; other exports are machinery, and jurist, born in New York and eduwoolens, etc. Manufacturing industries cated at King's (Columbia) College. He was elected a member of the Continental Congress and served on the committee appointed to draw up the Declaration of Independence. He was a member of the committee which drafted the first constitution of the State of New York in 1777, and upon its adoption became Chancellor of the State of New York, an office which he held for 32 years. He was made secretary of foreign affairs under the Confederation, 1781-83. He was president of the New York Convention of 1788 and used his great influence to secure the ratifica-tion of the Federal Constitution. In 1801 he was appointed resident Minister at the court of Napoleon and successfully negotiated the Louisiana purchase in 1803.

Livingstone (living-stun), DAVID.

missionary and one of missionary and one of the greatest of modern travelers, was born at Blantyre, Lanarkshire, in 1813, and died at Bangweolo, Africa, 1873. Under the auspices of the London Missionary Society he proceeded in 1840 to South Africa, where he joined Robert Moffat in

the missionary field. was in the Bechuana territory, and here his labors for nine years were associated also visited. In 1853-56 he made a great exploring journey, or series of journeys. Starting from Linyanti he ascended the Lecambye (Upper Zambesi), journeyed overland to Lake Dilolo, and thence to St. Paul de Loanda on the west coast. Returning to Linyanti, he struck eastwards from there in 1855, tracing the Zambesi to the Indian Ocean, and reaching Quilimane on the east coast in 1856, having thus crossed the entire continent. The record of this journey is found in his The record of this journey is found in his Missionary Travels and Researches in South Africa (Lond. 1857). After making various journeys and exploring the Lake Nyassa and Zambesi region, Livership in 1965. ingstone set forth in 1865 to set at rest the question of the sources of the Nile. From this time till his death he was engaged in laborious explorations in the lake region of South Africa, especially to the westward of Nyassa and Tanganyika, where he discovered Lakes Bangweolo and Moero, the Upper Congo, etc. For about three years no communication had come from him, and the doubts regarding the traveler's safety were only set at rest when it was known that H. M. Stanley, ingstone at Ujiji, on Lake Tanganyika. They parted in March, 1872, Livingstone going to explore the southern end of Tanganyika, and Stanley proceeding to Zanzibar. After another year's wanderings he was attacked with dysentery near Lake Bangweolo and the southern process of the southern end of Tanganyika, and Stanley proceeding to Zanzibar. After another year's wanderings he was attacked with dysentery near Lake Bangweolo and the southern end of the southern end Lake Bangweolo, and there died. His body was buried in Westminster Abbey, having been conveyed to the coast, rudely preserved in salt, by his faithful fol-

Livingstonia (liv'ing-stöni-a), a mission settlement of the Free Church of Scotland, established of account, not now in use, havin 1875 on Cape MacClear, at the south ing been superseded by the franc. The end of Lake Nyassa, in Southern Africa. livre tournois was worth 20 sous, about Livius (liv'i-us), Titus Patavinus, twenty cents: the livre parisis, 25 sous, often called Livy, a celebrated about twenty-four cents. Roman historian, born at Patavium Livy. See Livius.
(l'adua) in the year 59 B.C. Nothing is known of his life except that he came to Lixuri

Lixuri

(liks-5'rē), a seaport in Cephalonia, one of the Ionian Isl-Rome, secured the favor of Augustus.

His first station and became a person of some conse-erritory, and here quence at court, that he was married, and is were associated had at least two children, and that he died with Mr. Moffat, whose daughter he marin his native town, according to some ried. Having heard from the natives that authorities, in A.D. 11, and to others, in there was a large lake north of the Kala- A.D. 16 or 17. His Roman history behari desert, he proceeded to explore that gins at the landing of Aneas in Italy, region, and discovered the valley of the and comes down to the year of the city Zouga and Lake Ngami. Subsequently 744 (B.C. 9). His whole work consisted he penetrated further northwest until he reached Linyanti, the capital of the Makoremaining only the first ten, and those lolo territory, situated on the Chobe, a from the twenty-first to the forty-fifth, tributary of the Zambesi, which river he or the first, third and fourth decades, and also visited. In 1853-56 he made a great half of the fifth. Of all the books how. lolo territory, situated on the Chobe, a from the twenty-first to the forty-fifth, tributary of the Zambesi, which river he or the first, third and fourth decades, and also visited. In 1853-56 he made a great half of the fifth. Of all the books, however, except two, we possess short epitomes or tables of contents. In the first ten books the history extends from the foundation of Rome in B.C. 753 to the year 294 B.C.; the pertion between the twentyfirst and forty-fifth books contains the account of the second Punic war and the history of the city between B.O. 219 and 201. The fourth and the half of the fifth decade bring down the history to the year B.C. 167. Livy makes no pretensions to the character of a critical historian; his grand purpose was to glorify his country, and he adopted all the legends of the early history without troubling his mind about their authenticity.

(liv'i-us andro-ni'kus), Livius Andronicus the father of Roman poetry, by birth a Greek of Tarentum, and resident in Rome at the beginning of the third cenresident in tury B.C. He introduced upon the Roman stage dramas after the Grecian model, and, besides several epic poems, wrote a translation of the Odyssey in the old Saturnine verse. We have only a few

classes and landed proprietors are chiefly Germans and Russians, while the peasantry are mostly of Finnish and Lettish origin. The inhabitants are almost all Protestants. The capital is Riga. Pop. Protestants. 1,295,231.

(le-vr), an old French money Livre

alonia, one of the Ionian Isl-

ands, a principal depot for wines and When loaded with about a hundredweight

currants. Pop. 5484.
Li Yuan Hung, President of China, was born in 1804, entered the naval service, and afterwards the military, aided in organizing the army, commanded the revolutionary force at Wuchang in 1911, and was elected Vice-President of the new republic unterstanding the process. Yuan Shi-Kai. He opposed the restoration of the empire by the president and after the death of the latter in 1916 suc-

ceeded to the presidency.

Lizard (liz'ard), the popular name

of numerous reptiles forming the order Lacertilia or Sauria, and hav-ing usually two pair of limbs and an elongated body terminating in a tail. The species, accommodating themselves to all conditions except cold, and increasing in size and number in tropical regions. In some the tongue is thick and fleshy and in others it is divided, while in most cases it is protrusible. Some lizards are vegetable feeders, but for the most part they are carnivorous and live upon small birds, are carnivorous and live upon small birds, insects, etc. The eggs are deposited and left to be hatched without care from the parents. The chief families of lizards are the Scincidæ, or Skinks; the Geckotidæ, or Geckos; the Iguanidæ, or Iguanas; and the Chamæleonidæ or Chameleons. Poison glands are wanting in the lizards; the college exemption being the Heledgerge. the only exception being the *Heloderma* of Arizona and Mexico, which is capable of inflicting a poisonous bite.

Lizard Point, a headland of England in Cornwall Cornwall forming the most southern point of Great Britain, 24 miles E. S. E. of Land's End, and having two lighthouses with fixed lights 224 feet above sea-level; lat. 49° 57′ 42″ N.; lon. 5° 12′ W. Used as a re-Llama (la'ma or lya'ma; Auchenia), with water. Between these two seasons an ungulate ruminating quadruped found in South America, closely and ranged by vast herds of cattle and allied to the camel, and included in the family Typlopoda. They differ from the camel in having no hump upon the back, in having a deeper cleft between the toes, the callous pad of the foot is less developed, and the interval between the canine and the back teeth is greater. Situated between the Andes and the Pacanine and the back teeth is greater. Situated between the Andes and the Pacanine and the back teeth is greater. Situated between the Andes and the Pacanine and the back teeth is greater. Situated between the Andes and the Pacanine and the back teeth is greater. Situated between the Andes and the Pacanine and the back teeth is greater. Situated between the Andes and the Pacanine and the back teeth is greater. Situated between the Andes and the Pacanine and the back teeth is greater. Situated between the Andes and the Pacanine and the back teeth is greater. Situated between these two seasons with water. Between these two seasons the water. Between these two seasons the water. Between these two seasons and ranged by vast herds of cattle and paragraphs, and in North America called pampas, and porting station for transatlantic vessels. thick, the llama has the general appearance of a long-necked sheep, standing about 3 feet at the shoulder. Of the four known species the guanaco and the vicufia are found in a wild condition, while the liama and the alpaca have long southeast of Bandajoz. Pop. 7049. been domesticated. The liama is used by the inhabitants of Chile and Peru to carry

Nio, a Spanish his

it can travel some 14 miles a day across the mountain passes. They are gentle and docile creatures.

Llandaff (lan-daf'; Llan Tâf, Church of the Tâf), an ancient city of South Wales, Glamorganshire; now a mere village, situated on the right bank of the Taff, 2 miles northwest of Cardiff. It is the seat of a bishop, its cathedral dating from the twelfth century. Llandeilo-beds (lan-di'lo), in one of the lower Silurian rock groups.

See Geology. Llandudno (lan-dud'no), coast town and fashionable watering place in Carnarvon, Wales, on a peninsula between Orme's Bay and the estuary of the Conway. Pop. 9279.

Llanelly (lä-neth'li), a parliamentary borough of South

tary borough of South Wales, in Carmarthenshire, situated on the Bury, 14 miles south by east of Carmarthen. It is the outlet for the products of extensive collieries, iron-foundries, copper, tin, lead, and silver works, in which a large number of the inhabitants are employed. The trade is facilitated by four commodious docks, from which great quantities of coal are exported. Pop. (1911) 32,077.

Llangollen (Welsh pron. Man-goth'-len), a town of North Wales, county of Denbigh, 21 miles

wates, county of Denbigh, 21 miles southeast of Denbigh, picturesquely situated in a narrow valley on the right bank of Dee. Pop. (1911) 3250.

Llanos (lyä'nōs), the Spanish name given to the vast plains situated in the north part of South America, particularly in Colombia and the basis. particularly in Colombia and the basin of the Orinoco. During the dry season the vegetation is burned up by the sun, while in the rainy period they are flooded

who are mostly Germans; capital, Puerto Mont. Pop. 78,315.

Llerena (lye-rā'nā), a city of Spain, in the propine and 62 miles

been domesticated. The llama is used by Llorente (lyo-ren'tā), JUAN ANTO-the inhabitants of Chile and Peru to carry burdens after the manner of a camel born in 1756; died in 1823. He received

clerical order in 1776, was made a priest in 1779, became vicar-general of Cala-horra in 1781, and chief-secretary to the Inquisition in 1791. When the Inquisilished his Critical History of the Inquisi- vulgāris).

born in Manchester, of Welsh parentage, educated at Llanystymdwy Church School and privately. He studied law and became a solicitor in 1884, was elected to Parliament from Carnarvon in 1890. He opposed the Boer war, championed the cause of labor, and early showed his ability as a conciliator by settling a great cotten of the processes of attracting iron are well as the processes of attracting iron are processes as the processes of attracting iron and processes are processes as the proce ton strike and averting a railway strike. erty which it possesses of at He was president of the Board of Trade to itself. See *Iron Magnet*. 1905-08, and was chancellor of the exchequer in the Asquith cabinet 1908-15. He was Minister of Munitions 1915-16. following the outbreak of the European war. He succeeded the late Earl Kitch-ener as Secretary of War in 1916, and in the same year became Prime Minister and loams in First Lord of the Treasury, with practically unlimited war powers. His skill and Loan energy were everywhere apparent in the trying days of the great conflict; and bringing the war to a triumphant conclusion he was returned to power at the election following the war (1918). Lloyd George's name is associated with old-age pensions, workmen's compensation, increased education grants, and a scheme looking to the nationalization of land. He met the Irish problem with a plan for two parliaments, one for Ulster and one for the rest of Ireland. This plan became a law early in 1921.

Lloyd's (loidz), an incorporated so-ciety of persons engaged in marine insurance in London, or otherwise connected with shipping, having rooms in the London Royal Exchange. Members are admitted by subscription and the affairs of the institution are conducted by a committee. Reports are received daily from all foreign ports, and this information is posted in the common or mer-chants' room. Lloyd's List, containing shipping reports, is published daily, and Lloyd's Register of shipping is issued annually. Originally the London under-writers met at Lloyd's Coffee-house, hence

the name. See Insurance.

Lô, St. (san lô). a town of France, capital of the department of La Manche, on the right bank of the Vire, 158 miles west by north of Paris. Pop. 12.181.

his education at Tarragona, entered the Loach (loch), a small fish (Cobitis clerical order in 1776, was made a priest Loach barbatula inhabiting small clear streams in England, and esteemed horra in 1781, and chief-secretary to the dainty food. A smaller species, the Inquisition in 1791. When the Inquisi-spined loach or groundling (O. tania), tion was suppressed by order of Napoleon also occurs in England. The name is and the Cortes, Llorente received many also given to the eel-pout (Lota valgāris) documents connected with it, and puband the three-bearded rockling (Motella liked his Cortes).

Lloyd George, DAVID (1863-), Load-line (lod-lin), is a line drawn on the side of a ship to indicate that if she is loaded so as to sink

Loam (lom), a soil compounded of various earths, of which the chief are sand, clay and carbonate of lime or chalk, the clay predominating. Decayed vegetable and animal matter, in the form of humus, is often found in loams in considerable quantities, and the soil is fertile in proportion.

(lon), anything lent or given to another on condition of return or payment. In law loans are considered to be of two kinds-mutuum and commodate; the former term being applied to the loan of such articles as are consumed in the use, as provisions or money; the latter to the loan of such articles as must be individually returned to the lender. The acknowledgment of a loan of money may be made by giving a bond, a promissory note, or an I. O. U., the last of which requires no stamp.

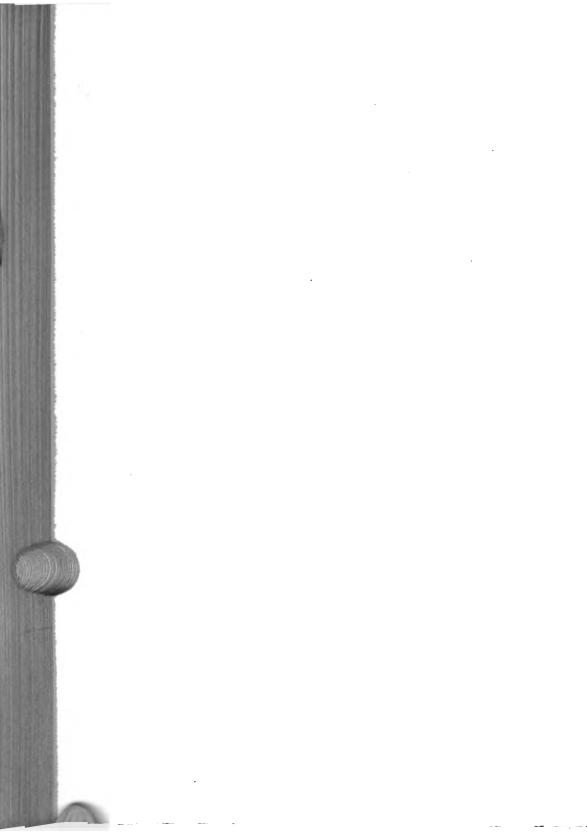
(lo-an'da), St. Paul de, a Loanda seaport town and island in Southwestern Africa. The town is a bishop's sie, and the chief settlement of the Portuguese in this part of Africa. Principal exports, ivory and bees'-wax. Pop. 20,106. The island, opposite the town, and separated from the mainland by a narrow channel, is about 18 miles in length and 2 miles in breadth. It contains seven or eight villages.

Loango (lo-an'go), a maritime country in Africa, stretching northward from the Congo along the Atlantic. The chief products are palmoil. gum, caoutchouc, coffee, cotton, etc. Neither horses, cows, sheep, nor asses thrive. The population is dense, but bar-barous and superstitious. The country now belongs chiefly to France.—LOANGO the chief town, is a collection of huts and factories.



THE RIGHT HON. DAVID LLOYD GEORGE

Who became Prime Minister of England, December 6, 1916. His work during the war was of great importance, first as Chancellor of the Exchequer, and then Minister of Munitions, and after the death of Kitchener as Minister of War.



Lobbyists, a term applied to men who make a business of corruptly influencing legislators, by means of money paid to the members, or by any other method that is considered feasible. Many women engage in this work as well as men. The term lobby, which literally means the ante-rooms of legislative halls, has come to be applied to these people who frequent them, and they are sometimes styled the Third House.

times styled the Third House.

Löbau (lew'bou), a town of Prussia, province of West Prussia. It has considerable manufactures and an active trade. Pop. 10,683. There is a town of the same name in Saxony, 12 miles S. E. of Bautzen, with woolen and linen mills and a pop. of 4451.

Lobelia (lo-be'li-a; named after Matthew Lobel, physician and botanist to James I), a very extensive genus of beautiful herbs, natives of almost all parts of the world, especially of the warmer parts of America, tribe

of the warmer parts of America, tribe Lobeliaceæ, nat. order Campanulaceæ. L. infâts is the Indian tobacco, which is cultivated in North America, and is employed in medicine. The small blue lobelia so popular in gardens is L. Erinus, a Cape species. A brilliantly scarlet-flowered species, L. cardinalis, is the cardinal-flower. L. siphilitica, an American process processes american as American species, possesses emetic, cathartic and diuretic properties. Two species are found wild in Britain.

Lobeliaceæ (lo-be-li-a'se-e), a tribe fering from Campanulaceæ, dif-fering from Campanulaceæ proper in hav-ing irregular flowers, and like the Compositæ syngenesious anthers, but other-

wise resembling them very nearly.

Lobipedidæ (lo-bi-ped'i-de), a family of aquatic grallatorial birds, including the coots and phalaropes.

Loblolly-bay (lob'lol-i), the popular name of Gordonia Lasianthus, nat. order Linacese, an elegant ornamental evergreen tree of the maritime parts of the Southern United States, having large and showy white flowers. It grows to the height of 50 or 60 feet.

tæda), an Loblolly-pine (Pinus tæda), an to the white pine the loftiest in North America. Its leaves are 6 inches long, united by threes or fours. Its timber is of little value.

(löb-nör), a salt lake in Central Asia, in Eastern Lob-Nor which receives the river Turkestan. Tarim.

Lobos

Ocean, off the coast of Peru, lat. 6° 29' s., lon. 80° 53' w. The largest, called Lobos de Tierra, is 10 miles distant from the mainland, and is about 5 miles long, and 2 miles broad at the widest part. Large quantities of guano have been obtained from these islands.

(lob'ster), the common name Lobster of the macrurous (long-tailed), decapodous (ten-footed), stalk-eyed crustaceans, belonging to the genus Homarus. The first pair of ambulatory

limbs bear the well-known and formidable lob-ster-claws. The abdomen has rudimentary limbs on its under side, among which are lodged the newly excluded spawn. The tail consists of several flat shelly plates capable



of being spread The third abdominat seg-like a fan, and ment of the Lobster. t, Dorsal used as a swim-arch; s, Ventral arch of the ming organ. segment; a, Protopodite; b, Ex-Lobsters in-opodite; c, Endopodite. habit the clear-

est water, living in the crevices of a rocky bottom. Lobsters are esteemed a very rich and nourishing aliment, but dangerous unless fresh and in good condition. They are generally in their best season from the middle of October till the beginning of May. The common lobster (H. ning of May. The common looster (H. vulgāris) is found in great abundance on many of the European shores. H. Americānus is found on the coasts of North America, and is largely taken for sale, so largely that its numbers are rapidly diminishing. It is closely allied to H. vulgāris. The fresh-water lobster is the crawfish or crayfish.

(Arenicola piscatorum), a genus of Annelida or Lobworm Worms. It has a round, obtuse head, a body about the size of a large earthworm, and respires through thirteen pairs of gill-tufts. Traces of the lobworm may be found on every sea-beach in the little coils of sand which it leaves when burrowing after the tide has ebbed. It is used for bait in deep-sea fishing. It is called also Lugworm.

Local Option, a term applied to the principle by which a certain majority of the inhabitants of a certain locality may decide as to whether any, or how many, places for the sale (16'bos), or SEAL ISLANDS, any, or how many, places for the sale three islands in the Pacific of intoxicating liquors shall exist in the locality. Many of the States of this country have such laws, which differ in specific details, and through their operation the sale of liquor has been forbidden in a large part of certain States in which no general prohibition law has been passed. Within late years there has been a very active movement in this direction, and while a number of States had adopted complete prohibition, various others have achieved almost state-wide prohibition through the exercise of local option laws. In Illinois, for instance, there are 1500 prohibition towns, and full license exists in only a few counties. Kentucky has 96 prohibition counties, the area open to liquor sale being very small. Other States in which local option prohibition is widespread are Minnesota and Ohio, and it has made much progress in Massachusetts and several other States. Local option and prohibition have made little progress in foreign countries. An effort to pass a licensing bill that dealt severely with liquor interests was made in England in 1908, but was defeated in the House of Lords, party leaders assuming that public opinion was not ready for such a measure. See License and Prohibition Party.

Locarno (lō-kar'nō), a small town of Switzerland, formerly one of the three capitals of the Canton Ticino, in a charming but unhealthy lo-cality on Lago Maggiore. Pop. 3603. cality on Lago Maggiore.

Locative Case (lok'a-tiv), in grammar, is the case expressive of locality. Such a case existed originally in all the Aryan languages; in Sanskrit all nouns and pronouns have a locative case.

Lochaber-axe (loh-a'ber-aks; from Lochaber, a district in Inverness-shire), a weapon, consisting of a pole bearing an axe at its upper end, formerly used by the Highlanders of Scotland.

(losh), a town of France, dep. Loches (10sn), a town of France, dep. of Indre-et-Loire, on the left bank of the Indre, 29 miles southeast of In its castle several kings of France resided, and Louis XI used it as a State prison. Pop. (1906) 3751.

Loch Katrine. See Katrine, Loch.

Loch Leven. See Loven.

See Lomond, Loch. Loch Lomond.

(of firearms). See Musket, Re-Lock

descending, water is let into the lock till it is on a level with the higher water, and thus permits the vessel to enter; the up-per gates of the lock are then closed, and by the lower gates being gradually opened, the water in the lock falls to the level of the lower water, and the vessel passes out. In ascending the operation is reversed, that is, the vessel enters the lock, the lower gates are closed, and water is admitted by the upper gates, which, as it fills the lock, raises the vessel to the height of the higher water.

Lock, an appliance used for fastening doors, chests, drawers, etc. A good lock is the masterpiece in smithery, and requires much art and delicated.

good lock is the masterpiece in smithery, and requires much art and delicacy in contriving and varying the wards, springs, bolts, and other parts of which it is composed, so as to adjust them to places where they are serviceable, and to the various occasions of their use. The principle upon which all locks depend is the application of a lever to an interior bolt, by means of a communication from without, so that by means of the latter without, so that by means of the latter the lever acts upon the bolt, and moves it in such a manner as to secure the door or lid from being opened by any pull or push from without. The security of locks in general, therefore, depends on the number of impediments that can be interposed between the lever (the key), and the bolt which secures the door, and these impediments are known by the name of wards (which slip into corresponding grooves of the key), the number and intricacy of which are supposed to dis-tinguish a reliable lock from one that may be easily picked. The Yale Lock, inbe easily picked. The Yale Lock, invented by Linus Yale, now in very common use, is a distinct step in advance of the tumbler lock, and does away with the idea that a big key is necessary for a safe fastening. It contains pins held down by a spring, and which can be lifted only by a key "tted in contour to meet them. As the combinations of the pina can be greatly varied, the keys may be can be greatly varied, the keys may be similarly diversified. The time-lock is one in which clock-work operates the combinations so that it can be opened only at a particular hour. See also Chubb-lock.

(lok), JOHN, eminent English Locke philosopher, was Wrington, in Somersetshire, in 1632, and died in 1704 at Oates in Essex. He was sent to Westminster School; from there he went to Christ Church, Oxford, and Lock, of frearms. See Musker, noted to colver, Rifle, etc.

Lock, an inclosure in a canal, with applied himself to the study of medicine. In 1666 Locke made the acquaintance of lowering boats as they pass from one level to another. When a vessel is patronage of that nobleman. When, in

1682, his patron was obliged to retire, for political reasons, to Holland, Locke accompanied him in his exile. Owing to the troubled condition of his country, and the continued triumph of the party which he had opposed, Locke continued to reside abroad. He returned to England at the Revolution, and was appointed commissioner of appeals under the new government. So early as 1670 Locke had formed the plan of his famous Essay on



John Locke.

the Human Understanding, a plan which he had carefully elaborated in his exile, and which he published in its completed form in 1690. It was received with much opposition, notably by the University of Oxford, who resolved to discourage it; but despite this it acquired a great reputation throughout Europe, and was translated into French and Latin. Locke was tation throughout Europe, and was trans-Lockwood (lok'whd), Belva Ann, lated into French and Latin. Locke was Lockwood (Mes. lawyer, born at made a commissioner of trade and planta-Royaltown, New York, in 1830. She was tions in 1695, but retired when unable to instrumental in inducing Congress to pass perform its duties, and lived with his a law giving equal pay for equal services friend, Sir F. Masham, until his death. in government offices to women and men. Briefly, it may be stated that the chief She was admitted to the bar in Washing-purpose of Locke's celebrated Essay was ton in 1879, and took part in important to find the original sources and the scope law cases. Was nominee of the Equal of human knowledge. The conclusions he arrived at were that there is no such thing as an 'innate idea'; that the human mind is a sheet of white paper prepared to be written upon; that the knowledge thereon written is supplied by experience; and that 'sensation' and 'reflection' are the two sources of all our ideas. Among other works of Locke are three Letters on Toleration; Thoughts Concerning Education; Reasonableness of Christianity; two Treatises on Government: Notes upon St. Paul's Epistles to the Galatians, Corinthians, Romans and Enhesians; and a Treatise on the Conduct of the Understanding.

Lockhart (lok'härt), John Gibson,

Quarterly Review, was born at Cambus-nethan in 1794, and died at Abbottsford in 1854. He was educated at Glasgow University; gained an exhibition at Baliol College, Oxford; studied for the Scottish bar, but never practised; and began his literary career in 1817 as a contributor to the newly-established Blackwood's Magasine. In 1820 he married the daughter of Sir Walter Scott, and in 1826 succeeded Mr. Gifford as editor of the Querterly Review, a position which he occupied for twenty-seven years. His Life of

Sir Walter Scott is highly esteemed.

Lock Haven (lok-hā'ven), a city, county, Pennsylvania, on the west branch of the Susquehanna River, 25 miles s. w. of Williamsport. It contains a State normal and other academic schools, paper

mill, tannery, planing mills, furniture factory, silk mill and other industries.

Pop. (1920) 8557.

Lockport (lok'port), a city, county seat of Niagara Co., New York, on the State Barge Canal, and on the New York Central and Eric railroads, and the New York Central and Eric railroads, the seat of Niagara Co. 25 miles E. N. E. of Buffalo. It has cheap 20 mies E. N. E. of Bullaio. It has cheap Niagara electric power; abundant power developed locally by surplus canal waters (fall of 65 feet). The National American Musical Festival is held here each September. It has 125 diversified industries, including auto radiator and gear plants, paper mills, steel plant, iron works, fibre plants along buttle works block plant. plants, glass bottle works, block plant, cotton and textile plants, etc. Pop. (1910) 17,970; (1920) 21,308.

ton in 1879, and took part in important law cases. Was nominee of the Equal Rights party for President in 1884 and 1888. Was a delegate to the Arbitration Convention, New York, and the International Peace Congress, London, 1907. She died in 1917.

She died in 1917.

Lockyer (lok'yer), Sir (Joseph)
Norman (1836-1920), an English astronomer and physicist, born at Rugby. He entered the War Office in 1857; became astronomical lecturer at South Kensington, and directed the eclipse expedition to Sicily in 1870, and to India in 1871. His reputation rests upon his discoveries in spectrum analysis and his theory of astronomical evolution and his theory of astronomical evolution. His contributions to literature include Elementary Lessons in Astronomy author, and editor of the (1868), Studies in Spectrum Analysis

(1872), Solar Physics (1874), Star-gazing (1877), the Chemistry of the Sun (1887), and Meteoric Hypothesis (1890), the latter his most notable contribution to science.

Locle (lok'l), a town of Switzerland, in the canton and 10 miles w. N. w. of Neufchâtel. It has important manufactures of clocks and watches, and a school of watchmaking. Pop. 12,626. Steam See Locomotive Engine. Engine Lo-

comotive; also Oil. Locomotor Ataxy (1 o-k u-mo'tor), is a peculiar disease of the nervous system, deriving its name from the fact that the sufferer from it cannot order the movements of his limbs for definite purposes. The patient requires to guide his feet and legs by means of his sight, and even then the feet are jerked out and brought down in a violent way. This difficulty of move-ment is called 'want of coordination of movement.' The causes of this disease are obscure, its progress usually extends Kansas and Colorado. over a number of years, and recovery is Locust, Seventeen-year.

the other on the west, on the north side of the Corinthian Gulf. The Locrians

ing in a plane, and which must preserve etc.



Locust (Locusta migratoria).

Their hind legs are large and powerful, which gives them a great power of walls, may be only a fraction of an inch leaping. Their mandibles and maxille or it may extend to hundreds of feet. are strong, sharp and jagged, and their Lodge (lodj), George Cabot, poet, food consists of the leaves and green the son of Henry Cabot Lodge. He often conveyed by winds whose their case of Henry Cabot Lodge. often conveyed by winds where their own studied at the University of Paris, served

powers of flight could not have carried them. The most celebrated species is the migratory locust (L. migratoria). It is about 2½ inches in length, greenish, with brown wing-covers marked with black. Migratory locusts are most usually found in Asia and Africa, where they frequently swarm in countless numbers, darkening the air in their excursions, and devouring every plade of the vegetation of the land they light on. They are destructive both in the larval, nymph, and perfect condi-tions. The Arabs and others use them as food. When dried in the sun they are pounded up and baked into bread, or fried pounded up and baked into bread, or fried in oil as a delicacy. In the United States locusts are usually known as 'grasshoppers.' There are two specially destructiv species, one of which, Caloptēnus temurrubrum, is found in Northern New England and Canada; and the other, Caloptēnus spretus, breeds abundantly west of the Mississippi. In the summer months occasionally the latter species commits widespread ravages in Texas, Kansas and Colorado. See Ci-

cada. Locris (lo'kris), the name of two portions of ancient Greece, the one on the east opposite the island of Eubea; Leguminose), is found in the Eastern United States, but grows to its best in Kentucky and Tennessee. There it played an unimportant part in Greek his- acquires a girth of 4 feet and a height of tory, but a city established by them in 80 feet. The leaves are pinnate, smooth, Southern Italy, in the Bruttian peninsula prickly at the base; the flowers grow in (or toe of Italy), attained a very flourishing condition.

Producing smooth pods. The wood of the Locus (lo'kus), in geometry, the line locust-tree is highly valued for certain traced out or generated by a purposes, being close-grained, tough, light point which is constrained to move in and elastic in the best variety; it is redaccordance with certain determinate condistortion. ditions; thus, the locus of a point mov- fences, railway sleepers, cabinet-making,

the same uniform distance from a fixed Lodes, or Mineral Veins, are veins point, is a circle. Locust (16'kust), the name of several have been deposited at a later date than insects of the order Orthoptera, of which the genus Locusta is a line a strict geographical sense beds are type, allied to the grasshoppers and crickdistinguished from veins by the fact that the former are of contemporaneous, the contemporaneous that the former are of contemporaneous, the contemporaneous that the former are of contemporaneous, the contemporaneous that the former are of contemporaneous that the former are of contemporaneous, the contemporaneous that the former are of contemporaneous that the former are latter of subsequent, origin to the sur-rounding rocks; but this distinction is not always observed. Most lodes are simply the contents of fissures in the original rock. They may occur in either igneous or sedimentary rocks. The dimensions of the veins vary widely. The breadth, measured at right angles to the

through the Spanish-American war, and afterward was private secretary for his town in Poland. It has extensive trade father till his death in 1909. He published Song of the Wave (1898), Poems and cottons. Pop. (1910) 418,650. (1902), Cain (a drama, 1904), and The Great Adventure (1905). His poetic work was highly reserted.

Warsaw, and next to it the most populous town in Poland. It has extensive trade and cottons. Pop. (1910) 418,650. (leb), JACQUES, a German-American biologist, born in Germany, April 7 1850 is considered the pioneer in

in 1851. In 1880 he was appointed professor of physics at the new University College, Liverpool, and in 1887 was elected a fellow of the Royal Society. His chief studies have been in electricity, in which he has made discoveries of importance. He is a prominent member of the Society for Psychical Research, has been its president, and is deeply interested in its work, being an advocate of the theory of spirit return. Among his works are Modern Views of Electricity, Pioneers of Science, Life and Matter, Electrons and The Ether of Space, The War and After, Raymond, or Life and Death.

Lodge, Thomas, dramatist, was born in Lincolnship. England in

Lodge, THOMAS, Gramatist, was in Lincolnshire, England, in the plague in 1625. He 1555, and died of the plague in 1625. came up to London from Oxford University and entered Lincoln's Inn as a law student in 1584, and after becoming an actor and a soldier he studied medicine and practised in London. He published his tale of Rosalynde, Euphues' Golden Legacie (1590), which was the source of Shakespere's As You Like It; the drama of Marius and Sylla (1594); and in conjunction with Greene he wrote A Looking Glasse for London and England (1594).

Lodi (16'dē), a city of Milan province, Italy, on the Adda, 20 miles s. E. Italy, on the Adda, 20 miles s. E. while sailing, as soon of Milan. Noted for its Parmesan cheese; as it touches the water other products are mainless silk liese; of Milan. Noted for its l'armesan cheese; as it touches the water other products are majolica, silk, linen, it ceases to partake of pottery, etc. Here Napoleon effected the famous passage of the Bridge at Lodi that the ship's motion, so famous passage of the Bridge at Lodi that the ship goes on against the Austrians, May 10, 1796. and leaves it behind, Pop. (commune) 28,032. while the line is un-Lodi.

Lodi, a borough of Bergen Co., New LOC1, a borough of Bergen Co., New would from the red, so Ship's Log.

N.E. of Passaic. It has dyeing and unwound in a given bleaching works, rubber factories, etc. time gives the rate of the ship's sailing. Pop. (1920) 8175.

This is calculated by knots made on the limit of the ship's sailing.

work was highly regarded.

Lodge, Henry Cabot, statesman and author, was born in Boston, Massachusetts, in 1850. He was graduated from Harvard Law School in 1874. Distinguished as a writer on economic financial and commercial subjects; he served as Representative in Congress from Massachusetts from 1887 to 1893, and The Mechanistic Conception of Life and was transferred to the Senate in Harvard Loss), a realign for goology.

the latter year. He has since been prominent in the Senate.

Logs, SIR OLIVER JOSEPH, scientist, to a finely comminuted sand or pulverulent born at Penkhull, England, lent loam of a yellowish color which occurred to the senate of the senate lent loam of a yellowish color which oc-curs in a pleistocene alluvial deposit curs in a pierstocene anuvial deposit chiefly in the valleys of the Rhine, the Danube, the Missouri, and some other rivers. In China it reaches a depth of 1500 or 2000 feet.

Lofoden (lo-fo'den), or Loro'TEN,

Lofoden (10-10'den), or 1.0FO'TEN, a group of islands off the northwest coast of Norway, and stretching southwest to northeast about 175 miles. The chief value of the group is derived from the immense shoals of cod and herring which frequent them. The principal cod-fishery ends in April, when the herring-fishery begins and continues during the summer. Pon. 42.818.

the summer. Pop. 42,818.

Log, a contrivance used to measure the rate of a ship's velocity through the water. In its simplest form it is a piece of thin board, forming the quadrant of a circle of about 6 inches radius and balanced by a small plate of lead nailed on the circular part, so at to float perpendicularly in the water. One end of a line, called the leading is fastened

the log-line, is fastened to the log, while the other is wound round a reel. When the log is thrown out of the ship



Lodz (löz), a city of Poland, formerly line at certain distances, while the time in Russian Poland, govern- is measured by a sand-glass running a ment of Piotrkow, 76 miles southwest of certain number of seconds. The length

between the knots is so proportioned to the time of the glass that the number of knots unwound while the glass runs down shows the number of nautical miles the ship is sailing per hour. The need for a less cumbersome device having arisen, about 1834 Edward Massey, an Englishman, patented a screw or rotary log, whose recordings were read from a set of indicating dials. This with certain modifications was in use until 1861, when again a demand was made for a patent log which could be readily consulted from the In response to this demand Walker, in 1873, introduced the Cherub log, a taffrail type, in which the varying speeds are read from a dial attached to the taffrail. Walker's Neptune log is an amplification of the Cherub form. The two rincipal American taffrail logs are the Negus and Bliss. The former bears a resemblance to the Cherub log, but the dial plate is horizontal, and the log is fitted with a governor.

Logan, John A., statesman and soldier, was born in Jackson county, Illinois, in 1826. In the Mexican war he did good service, and in 1858 and 1860 was elected to Congress. In the Civil war his services were very impor-tant, he being engaged in many battles, and being promoted from colonel to commander of a corps. In 1866 he was reelected to Congress, and was one of the seven members chosen to manage the impeachment of President Johnson. He served until 1871, hen he became Senator. He died in 1886.—His son, MAJOR JOHN A. LOGAN, took part in the Cuban war of 1898 and was slain in the Philippines in 1899.

Logan, SIR WILLIAM EDMOND, a Canadian geologist, born in 1798 at Montreal, educated chiefly in Europe. He devoted himself to the study of the geology of Canada, and was the chief of the Geological Survey of Canada from 1843 to 1871. He assisted also in the geological survey of Britain. He died in 1875 in Wales.

natural gas and oil region. It has foun-

natural gas and oil region. It has foundries, machine shops, furniture and shoe factories, flour mills, etc. Pop. 5493.

Logan, a city, county seat of Cache Co., Utah, 60 miles N. of Ogden, Here are the State Agricultural and Brigham Young colleges. It has saw, flour and knitting mills. Pop 9439.

Loganiaceæ (lō-gan-i-ā'se-ē), a nat. order of tropical dicotyledonous plants,

Logansport, a city, county seat of Cass Co., Indiana, at the junction of the Fel with the Wabash River, 80 miles N. of Indianapolis. It is the second railroad distributing point in the State, and has great railroad shops and numerous manufactures of automobiles, fire

apparatus, radiators, etc. Pop. 21,626.

Logarithms (log'a-rithmz). The common logarithm of a number is the index of the power to a number is the index of the power to which 10 must be raised to be equal to the number. Thus 10^s =1000, so that the logarithm of 1000 (usually written log. 1000) is 3. Now 10^t =10, 10^s =100, 10^s =1000, 10^s =1,000,000, and it is well known that 10^s =1, 10^s =0.1, 10^s =0.01, etc., thus-

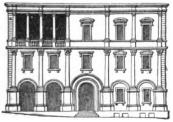
 $\begin{array}{ll} \text{Log. } 0.001 = -3 \\ \text{Log. } 0.01 = -2 \\ \text{Log. } 0.1 = -1 \\ \text{Log. } 1 = -0 \\ \end{array}$ $\begin{array}{c} 10 = 1 \\ 100 = 2 \end{array}$ Log. 1000 = 3Log. 1000 = 3 Log. 10,000 = 4

It is evident that the logarithm of any number greater than 1 and less than 10 is fractional; the logarithm of any number greater than 10 and less than 100 is greater than 1 and less than 2. Again, the logarithm of any number less than 1 the logarithm of any number less than is negative. Suppose we wish to know the logarithm of the number 18.1. In a book of tables we only find the fractional part of the logarithm, it is .257679. Now 18.1 is greater than 10 and less than 100, so that its logarithm is greater than 1 and less than 2; hence log. 18.1=1.257679. The integral part of a logarithm is called its characteristic, the fractional part its mantissa. Logarithms make arithmetical computations more easy, for by means of a table of them the operations of multiplication, division, involution or the finding of powers, and evolution or the finding of roots, are changed to those of addition, subtraction, multiplication and division respectively. For instance, if σ and y are the logarithms of any two numbers, the numbers are 10^x and 10^y ; now the product of these numbers is $10^x + y$, so that the logarithm of the product of two numbers is the sum of the logarithms of the numbers. Again, the quotient of the numbers is $10^x - y$; Logan, a village, county seat of Hock- the quotient of the numbers is 10^{2} ; ing Co., Ohio, on Hocking so that the logarithm of the quotient of River, 50 miles s. E. of Columbus, in a two numbers is the difference of the logarithm of the numbers. Again, 10² rithms of the numbers. Again, 10s raised to the nth power is 10ns; so that the logarithm of the nth power of a number is n times the logarithm of the number. Logarithms of this kind are comber. mon logarithms, and were invented by Briggs; their base, as it is called, is 10. Logarithms were first used by Napier of Merchiston (see Napier, John), and he employed a base which is smaller than 10, namely, the number 2.7182818....., or

the sum of the infinite series $2+\frac{1}{2}+\frac{1$ the sum of the infinite series $2+\frac{1}{2}+\frac{1}{2}$ of reasonings, judgments, etc. In this $+\frac{\pi}{2} \cdot \frac{1}{2} \cdot \frac{1}{2} \cdot \frac{1}{2}$, etc. This base is denoted by σ view the science of logic was merely in mathematical treatises, and the Nadeductive, and the syllogistic process, or pierian logarithm of any number, say 7, the intellectual act performed in deducis loge 7, to distinguish it from log. 7, ing particular truths from general truths which is the common logarithm, whose already given, was the main subject of base is 10. The common logarithm of a the science. It is evident, however, that number is found from the Napierian by in practical research there is another multiplying by 0.43429448. Napierian movement or process of the mind of at logarithms are of great importance in the least equal importance—viz. the process logarithms are of great importance in the higher mathematics.

Log-book, a book kept in ships and into which the direction of the wind, course of the ship, state of the weather at all hours of the day, are daily transcribed at noon, together with every circumstance deserving notice that may happen to the ship or within her cognizance, either at sea or in a harbor, etc.

Loggia (loj'á), a word used in Italian architecture with several significations. First, it is applied to a hall open on two or more sides, where there are pillars to support the roof, such there are pillars to support the roof, such as the Loggia de' Lanzi in Florence. It is also applied to an open colonnade or arcade surrounding a court, or to an open gallery at the height of one or more sto-



Loggia, Palace at Montepulciano.

ries in a building. The name loggia is also given to the large ornamental window, consisting of several parts, which is often seen in old Venetian palaces, and lastly, it is used to designate a small airy hall, usually open on all sides, constructed on the roof of an edifice.

Logic (loj'ik), a department or divis-ion of mental science which has been differently defined by authorities. The older school of logicians agreed on the whole in considering it as mainly treating of reasoning and the operations of mind subsidiary to reasoning; and this definition sufficiently indicates the view of the science held by such logicians whately and Hamilton. According to them logic dealt only with the form of thought, that is, with what is common to all reasonings, independs and connected the series of t all reasonings, judgments, and concepts respectively, and had nothing to do with matter, that is, the subject or content a word used in certain passages of the

of reasonings, judgments, etc. least equal importance,-viz., the process by which the mind reaches general truths from the observation of particulars. This latter is the inductive process, and on it, regarded as the more important element in inference and the ascertainment of truth, John Stuart Mill founded his new system of inductive logic. The nature of scientific evidence, the methods and principles involved in scientific research, are the chief subjects of study in this system of logic. Very different from both of these are the conceptions of logic given by the chief German philosophers. Kant, in declaring that only the matter (not the form) of experience was given to the mind, had recognized thought as the essential factor of cognition, and had initiated a new so-called transcendental logic, which was an analysis of the general conditions under which the objective world became cognizable. Thus the foundation was laid for a view of reality as in its very nature constituted by thought. Thought or the ego is itself the real, and there being no separate reality logic becomes the system of the forms in and through which thought or intelligence is realized. Logic thus appears, as in Hegel, a complete theory of knowledge and a metaphysic. The earliest work on logic is the Organon of ristotle, who practi-cally gave the science the shape it pos-sesses. See Deduction, Induction, Fallacy, Syllogism, etc.

(log-u-mā'ni-a), a dis-Logomania ease of the faculty of language generally associated with organic disease of the nervous structure, as in paralysis. In this disease, while conceptions and ideas remain clear, the power of associating these with the words by which they are expressed is lost, and the patient can either not give any names to his conceptions at all or expresses them erroneously. Sometimes one class of words is lost, and others retained. Thus a patient may forget his own name, or nouns only, and remember all other words.

Scriptures, which has been the source of continual disputes ever since the third century of our era. The passage in the Bible which gives rise to this discussion is the opening of the Gospel of St. John: 'In the beginning was the Word, and the Word was with God, and the Word was God. The same was in the beginning with God. All things were made by him, and without him was not anything made that was made,' etc. In the Greek text the expression here translated Word is logos, and the question is, what are we here to understand by logos, whether a person of the Deity, the creative intellect of God, or the Son, through whom he created, or the divine truth which was to be revealed, or something else?

Logrono (lo-gron'yō), a town of Spain, capital of the province of same name in Old Castile, on the right bank of the Ebro, which is crossed by a new stone and a new iron bridge. It is well built, and has several interesting churches. Pop. 19,237.—The interesting churches, where it borders province, in the morth, where it borders of Brabant, he arrives in a vehicle drawn province, in the north, where it borders the Ebro, is level and fertile, but in the south is generally mountainous and bar-ren. It is rich in minerals, but is quite undeveloped in this respect. Area, 1946

undeveloped in this respect. Area, 1946 square miles; pop. 189,376.

Logwood (log'wud). a popular name for the Hæmatoxylon Campechianum, a tree belonging to the nat. order Leguminosæ, which grows in moist and swampy places in Central America, and particularly round the Bay of Cam-peachy; but is now naturalized in peachy; but is now



chips, or to a coarse powder. The aqueous extract is muddy and of a red-dish-brown color. By acids the red color is made paler; by alkalies it is converted to purple. By mordanting the fabric with iron, black is produced; with alumina, violet and lilac; with copper, blue; and with chromium. a black or green. The with chromium, a black or green. coloring nower of logwood depends chiefly on a crystalline ingredient called hæmatoxylin. It is employed in calico printing to give a black or brown color, and also in the preparation of some lakes. An extract of logwood is used in medicine as

Loheia (lo-hā'yà), a seaport town of Arabia, Yemen, on the Red Sea, 130 miles w. n. w. of Sana. It has a trade in coffee, and a pop. of about 8000.

of Brabant, he arrives in a vehicle drawn by a swan, delivers the princess from captivity, and marries her; accompanies the emperor in a campaign against the Hungarians, and fights against the Saracens. He then returns to his bride at Cologne, but being pressed by her to state his origin he is prevailed upon to tell it, after which he must, in terms of his yow, return home to the Grail. The

legend has been made the subject of a well-known opera by Wagner.

Loir (lwär), a river of N. W. France, rising in dep. Eure-et-Loir, traversing Loir-et-Cher and Sarthe, and falling into the Sarthe a few miles above its junction with the Loire; length, 180

miles, partly navigable.

Loire (lwar; anc. Liger), the largest river of France, which it divides into two nearly equal portions. It rises on the western slope of the Cevennes, in the department of Ardèche, and flows generally N. N. w. and w. till it falls into the Bay of Biscay below Nantes. Its principal affluents on the right are the Arroux, Nièvre, Maine, etc.; on the left the Allier, Vienne, Cher, Indre, etc. Below Nantes, where it first feels the influence of the tide, it is more an estuary than a river, and is studded with islets. Logwood (Hamatonulon Campechianum).

Logwood (Hamatonulon Campechianum).

Logwood (Hamatonulon Campechianum).

It is than a river, and is studded with islets. Above Nantes navigation is much impeded by shallows. Its whole course is about 645 miles, of which about 450 miles and the hard center parts cut into 3-foot-long logs. To obtain the coloring matter it is hewn into much smaller pleces, and ground or rasped to small the Saone, Seine and Vilaine. Its name appears in those of a number of departments.

Loire, a central france; area, 1853 square miles. The department occupies the upper part of the Loire basin, and consists of the fertile plains which extend on both sides of the river, forming its valley, and long ridges of the Cevennes, which hem the valley in on every side. More than the valley in on every side. More than one-half the surface is arable. A good deal of wine is produced, but ranks only as a vin ordinaire of good quality. Coals are raised to a large extent, part of the department being in the coal-field of the loire, the most important in France. Iron is smelted, and extensively manusilk manufacture alone employing about 12,000 workers. The capital and great center of industry is St. Etienne; other towns are Roanne and Montbrison. Pop. (1906) 643,943.

Loire, HAUTE- (öt-lwär; Upper Loire), a department of Southeastern France; area, 1931 square miles. It is traversed by the Loire, is surrounded on all sides by lofty mountains, which belong to the Cevennes, and has the character of a plateau intersected by deep river valleys. The mountains are generally covered with forests, in which wild boars, wolves, foxes, deer, etc., abound, or with verdant pastures, on which herds of cattle are reared. Some wine is produced; but the chief industry is the manufacture of various sorts of lace, largely a home industry. Le Puy is the capital. Pop. (1906) 314,770.

Loire-Inférieure (lwar-an-fa-ri-eur: Lower Loire), a western maritime department of France, intersected by the lower Loire and its estuary; area, 2694 square miles. The surface is flat. The coast is much indented, and is covered with salt marshes which yield a considerable quantity of salt. Lagoons and lakes are very numerous. The largest is Grandlieu, which has an area of 24 square miles. The soil is generally productive, yielding grain, sugar-beet and grapes, from which large quantities of wine are produced. The oak forests pasture great numbers of swine, and bee-keeping is a considerable industry. The fisheries are extensive. Shipbuilding and the allied trades are carried on to a considerable extent. Smelting furnaces, machine-works, sugar refineries, are also in operation. To these may be added tanneries, glassworks, pot-teries, paper-mills, etc. Wine, salt, corn, cattle, etc., are exported. The principal

ports are Nantes and St. Nazaire. Nantes is the capital. Pop. (1900) 666,748.

Loiret (lwā-rā), a central department of France; area, 2629 square miles. The surface is partly flat, partly undulating, with scarcely any hills, and is traversed by the Loire, which divides it into two unequal particips, the porthern it into two unequal portions, the northern of which is the larger, and is fertile and well cultivated, while the southern is bleak and sterile. The Loiret is an unimportant tributary of the Loire. The chief products are grain and wine. Pottery and porcelain are the chief manufactures. Orleans is the chief town. Pop. 364,999. (lwär-è-shār), a cen-Loir-et-Cher tral department of factured into steel and articles of hard-ware, etc., employing 25,000 hands; silk, sists almost entirely of extensive plains, ribbons, velvet, etc., are also made, the traversed by the Loire, Loir and Cher, sists almost entirely of extensive plains, traversed by the Loire, Loir and Cher, all navigable rivers. The soil is generally fertile. More than one-half of the whole is arable, and less than one-eighth waste. Cereals of all kinds, hemp, beetnet for green wine favilge are produced. root for sugar, wine, fruits, are produced, and horses, cattle, and sheep are reared on excellent pastures. The capital is Blois. Pop. (1906) 276,019.

Loja (lo'/ha), a city of Ecuador, in the valley of Casibamba, 230 miles s.

valley of Casinamou, 250 miles s. of Quito, is well built, has a college, some manufactures, and a trade in cinchona bark. Pop. 10,000.

Loja, or Loxa (lo'hà), a town in Spain, Andalusia, in the valley of the Genil, 25 miles w. s. w. of Granada. The streets are steep and very irregular, and the houses mostly of mean appearance. The town with its castle was an impor-

tant military post during the Moorish wars. Pop. 19,143.

Lok, or Loki, in Scandinavian mythology, the evil deity, father of Hel or Hela, goddess of the infernal regions. He is a personification of the principle of evil, described as of handsome appearance, but perpetually engaged in works of wickedness partly directed against the other gods.

Lokeren (loke-ren), a town of Belgium, in the province of East Flanders, on the Durme, has manufactures of cottons, lace, soap, tobacco, etc. Pop. (1904) 21,869. Lokman (lok-man'), a name that figures in the traditions of

the Arabians as that of a sage or prophet. In the Koran there is an account of a Lokman the Wise who lived at a time anterior to that of King David. He is represented as the author of a collection of fables, which, however, are of a later

Lolium (lō'li-um), a genus of grasses of the tribe Hordese. See Darnel and Rye-grass. Lolland. See Laaland.

Lollards (lol'ardz), a name which arose in the Netherlands about the beginning of the fourteenth cen-tury, and was applied as a term of contempt to various sects or fraternities deemed heretical, being probably derived from the Low German lollen, to sing in a low tone. The name became well known in England about the end of the fourteenth century, when it was applied to the followers of Wickliffe, and to others more or less influenced by his teaching. The Wat Tyler revolt of 1381 was directly connected with Lollardism, and latterly the Lollards drew upon themselves the enmity of the civil powers, and numbers of them were put to death, especially dur-ing the reign of Henry V, when appar-ently another revolt was intended.

Lomami (lō-mā'mē), a river of Southern Africa, an important navigable tributary of the Congo, which it enters a little below Stanley Falls, after flowing nearly parallel to its upper course.

Lombard (lom'bard), PETER, or PETRUS LOMBARDUS, one of the most celebrated of the schoolmen, born near Novara, in Lombardy, about the year 1100. He was a scholar of Abelard in the University of Paris, became a teacher of theology, and at last, in 1159, bishop of Paris, where he seems to have died in 1164. His work Sententiarum Libri Quatuor is a classified collection of the opinions of the fathers on points of doctrine, with a statement of the objections made to them, and the answers given by church authorities. Hence he is known as the 'Master of Sentences.'

Lombard Architecture, the form which the Romanesque style of architecture assumed under the hands of the Gothic invaders and colonists of the north of Italy, comprising the buildings erected from about the beginning of the ninth to the beginning of the thirteenth centuries. It forms a connecting link between the Romanized architecture of Italy and the Gothic of more northern countries. The most characteristic feature of the churches built in this style is the general introduction and artistic development of the vault,

have been first employed. The tendency to the prevalence of vertical lines throughout the design, instead of the horizonts lines of the classic architecture, is als. characteristic, as well as the use of the



LOMBARD ARCHITECTURE.

Transept, Apse and Dome of St. Michael, Pavis. dome to surmount the intersection of the choir, nave and transepts. Mr. Fergusson remarks: Generally speaking, the most beautiful part of a Lombard church is its eastern end. The apse with its gallery, the transepts, and, above all, the dome that almost invariably surmounts their intersection with the choir, constitute a group which always has a pleasing effect, and is very often highly artistic and beautiful. As examples of Lombard architecture may be mentioned the church of St. Michael, Pavia; San Zenoni, Ve-rona; and the atrium of San Ambrogio, Milan.

Lombards, LONGOBARD, or LAN-GOBARDI (so called either from the long barte or spear which they carried, or from the long beards), a Germanic or Teutonic people who at the beginning of the Christian era were dwelling on the Lower Elbe. They make little appearance in history till the sixth century, when, under their king, Alboin, they entered Italy in April 568, and, with the help of Saxons and others, conquered the northern portion, which hence received the name of Lombardy. Alboin was assassinated in 573 (see Alboin), and tharis was recognized in 585 as king. He was a warlike and politic ruler, who gained the good-will of the subject Roman that feature which afterwards became population, and instituted a better systhe formative principle of the whole tem of government than had hitherto ex-Gothic style. In the Lombard architecture also pillars consisting of several ish princess, who began the process of shafts arranged round a central mass, and converting the Lombards from Arianism buttresses of small projection, appear to to the orthodox faith. The only king of

note among the successors of her family was Rothari, who in 643 promulgated a system of laws, which, with subsequent additions, became among German jurists the basis of the study of law during the middle ages. From 713 to 744 the Lombards had a powerful king in the person of Liutprant, who extended his sway, at least temporarily, over the whole of Italy. From that time the power of the Lombards gradually declined, and finally Charlemagne captured Pavia after a six months' siege, and put an end to the Lombard Kingdom (773 or 774), the last monarch being Desiderius.

Lombardy (lom'bar-di), the part of Upper Italy which took its name from the Lombards (see Lombards), and which at first extended from the Adriatic to the Savoyan Alps. After the overthrow of the Lombard Empire a the overthrow of the Lombard Empire a brother, ATHANASE LOUIS MARIK, born in number of independent duchies and republics, Mantua, Milan, Venice, Genoa, etc., and was made war minister at the same were gradually formed, originally as fiefs the Holy Roman Empire, but soon retired from office with him, and was practically independent. On the west guillotined May 10, 1794.

side the growth of the house of Savoy Lomond (lo'mund), Loch, a beautiful ultimately absorbed all minor principalities to the line of the Ticino, while the for its scenery, lying within the countries of Stirling and Dumbarton. Its length extension of the Venetian authority dur-ing the sixteenth century over the dis-tricts to the east restricted the use of the name of Lombardy to the country west of the Lago di Garda and the Mincio, a district which passed under the dominion of Austria in 1706, and was ceded by that power to Italy in 1859. Lombardy is now the name of an Italian department (compartimento), embracing eight provinces (Bergamo, Brescia, Como, Cremona, Mantua, Milan, Pavia and Sondrio), containing an area of 9386 square miles and a pop. of 4,334,099.

dian Archipelago. It lies between Bali on the west and Sumbawa on the east, and has an area of about 3136 square miles. Between the two ranges which traverse the island, one of them rising to the height of 11,500 feet, there is a plain fertile in rice, cotton, maize, coffee and tobacco. There are several active volcances. The fauna and flora have strong Anetralasian affinities, Lombok being Australasian affinities, Lombok being east of Wallace's Line. The ruling class are Brahmans, but the mass of the population is Mohammedan. The capital is Mataram on the west coast. Pop. 370,

Lombroso (lom-brō'sō), Cæsar, anthropologist, born at Venice in 1836; died in 1909. He held professorships at Pavia, Pasaro and Turia, and became a noted authority on

insanity and on crime in its relation to the physical organization. Of his works L'Homme Criminel is the most important and unfolds his theory, a congenital ten-dency to crime. In addition to his works on criminology, he wrote two on pellagra,

a disease long prevalent in Italy.

Loménie (lo-mā-nē), E TIENNE
CHARLES DE, COUNT OF BRIENNE, cardinal, archbishop and minister of state in France, born in 1727; died in 1794. At the first breaking out revolutionary discontents of the France, Brienne, then archbishop of Toulouse, was among the most active of the reform agitators, and was ultimately entrusted with the finances, in which he failed ignominiously, and was dismissed in 1788. He was arrested by the revolutionary party, and died in prison.—His brother, ATHANASE LOUIS MARIE, born in 1720

for its scenery, lying within the counties of Stirling and Dumbarton. Its length is about 24 miles; the breadth at the lower or southern end 7 miles, at the upper end considerably under half a mile. The lake is almost entirely surrounded with hills, one of which, Ben Lomond, is 3192 feet high; and its surface is studded with numerous islands. The greatest depth is in the narrower part of the lake, where in some parts it reaches 600 feet. Fish, including salmon, trout, pike, etc., are abundant.

Lomza (lom'zha), a town of Russian Poland, capital of the govern-Lombok (lom-bok'), an island belongment of the same name, on the Nareff, 80 ing to the Dutch, in the Inmiles N. E. of Warsaw. Pop. 22,428. dian Archipelago. It lies between Bali The government of Lomza covers an area of 4666 square miles, mostly of a flat and fertile soil. Pop. 653,100.

(lun'dun), the capital of the British Empire and the London largest city in the world, is situated in the southeast of England on both sides of the River Thames, which winds through it from west to east. The river is crossed by numerous bridges, and is deep enough to allow large vessels to come up to London Bridge (the lowest of them except the movable Tower Bridge), the stream here being 266 yards wide. It is difficult to assign any exact limits to London on account of its straggling form and numerous suburban extensions; but it may be said to stretch from east to west about 14 miles, from north to south about 10 Its area may be stated at 117 square miles.

population within this area was 3,816,483 in 1881, 4,536,541 in 1901, and 4,522,961 in 1911. If we consider what is known as Greater London, embracing the City of London Police District, the area is 693 square miles and the population in 1911 was 7,252,963.

General Features.—The greater portion

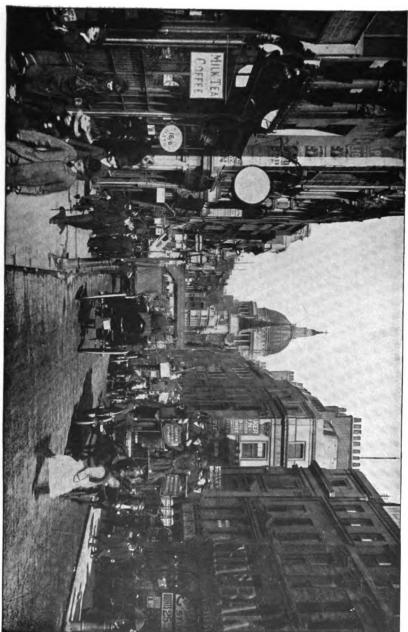
of London lies on the north side of the Thames, in the counties of Middlesex and Essex, mainly the former, on a site gradually rising from the river, and marked by several inequalities of no great height; on the opposite bank, in the County of Surrey and partly in Kent, the more densely built parts cover an extensive and nearly uniform flat. The city proper, or City of London aside from its surrounding boroughs, is a separate municipality, having a civic corporation of its own, at its head being the Lord-mayor of London. It occupies little over one square mile, and has a resident population of 26,923. Westminster, associated with the sovereigns and parliaments for over 800 years, borders with the city on the west: while across the river from the city lies the encient quarter of Southwark, or 'The Borough. Besides these, London consists of a great number of quarters or districts, the most important of which now form Parliamentary constituencies, separate though there are many other minor dis-tricts, the names of which are also perfectly familiar to the outside world, such as Whitechapel, Spitalfields, Clerkenwell, Pimlico, Bloomsbury, Bermondsey, etc. Another rough division of London is into the West End or fashionable quarter, the residence of the wealthy, and the East End, the great seat of trade and manufactures.

London, on the whole, may be called a well-built city, brick being the material generally employed, though many public and other edifices are built of stone. In some streets the brick fronts are made to imitate stone by being coated with cement. The streets are generally well kept and well paved and lighted, but, except in some of the more recent quarters, the general appearance of London is not at-tractive, much of the effect of the fine buildings being lost by overcrowding and the want of fitting sites. What generally most strikes a stranger to London is its immense size, which can only be grasped by actually traveling about, or by obtaining a view from some elevation, as Primrose Hill in the northwest, or the dome of St. Paul's Cathedral near the center, the most conspicuous building in the metropolis. Other striking and also attractive features of London are the parks, especially Hyde Park and Regent's Park,

so valuable as breathing spaces; and the handsome and massive stone embankments along the Thames, forming wide roadways and promenades bordered by trees for long distances. As the capital of the British Empire London is from time to time the residence of the sovereign and court. It contains the buildings for the accommodation of Parliament and all the great government departments. It is the chief intellectual center of Britain, if not of the world, and is equally great as a center of commerce, banking and finance generally. Many of the institutions and objects of interest noticed in the following paragraphs are also treated in separate

articles.

Main Streets, Bridges, etc.—Although in the different districts of London, with the exception of the parts most recently built, there are numerous narrow and crooked streets, yet the whole extent of the metropolis is well united by trunk lines of streets in the principal directions, which render it comparatively easy for a stranger to find his way from one district to another. Piccadilly and Pall Mall; the Strand and its continuation, Fleet street: Oxford street and its continuations, Holborn, Holborn Viaduct and Cheapside, are among noteworthy streets running east and west: while of those running north and south, Regent Street, with its fine shops; and the newer Kingsway and Aldwych (opened in 1905) are the chief. The Thames embankment on the north or Middlesex side, known as the north or Middlesex side, known as the Victoria Embankment, also forms a magnificent thoroughfare, adorned by important buildings, and at different points with ornamental grounds and statues. A number of magnificent bridges cross the Thames. The lowest is the Tower Bridge, a 'bascule' bridge opening by machine pass through machinery so as to let ships pass through. The others most remarkable in upward The others most remarkable in upward order (exclusive of railway bridges) are London Bridge, 900 feet long, and built of Aberdeen granite; Southwark Bridge, and Blackfriars' Bridge, all connecting the city with Southwark; Waterloo Bridge, 1380 feet long, consisting of nine elliptical arches of Aberdeen granite; Westminster Bridge, an elegant structure of iron, 1200 feet long, crossing the river from Westminster to Lambeth; the Lambeth and Vauxhall bridges, the Chelsea Suspension Bridge, and the Albert Bridge. The two banks of the river are also The two banks of the river are also united by the Thames Tunnel, a tunnel under the river 2 miles below London Bridge, opened in 1843, and intended for pedestrians, but now traversed by a rail-way. Of later date are the Blackwall and several other tunnels.



ST. PAUL'S CATHEDRAL, LONDON View from Fleet Street.



are in the western portion of the metropolis, the largest being Hyde Park and Regent's Park, which, together with St. James' Park and the Green Park, are royal parks. The most fashionable is Hyde Park, containing about 400 acres. It is surrounded by a carriage-drive 2½ miles long, has some fine old trees, large stretches of grass, and contains a hand-some sheet of water sadly misnamed the Serpentine River. Kensington Gardens (360 acres), with which Hyde Park communicates at several points. municates at several points, are well wooded and finely laid out. St. James' Park, 83 acres, and the Green Park, 71 acres in extent, adjoin Hyde Park on the southeast. Regent's Park, in the north- and handsome buildings. Adjoining the west of London, north of Hyde Park, concity on the east is the Tower, the ancient taining the gardens of the Zoölogical Socitadel of London, which occupies an area ciety and those of the Royal Botanic Society, covers an area of 470 acres. The Zoölogical Gardens contain the largest collection in the world. There are, besides, Victoria Park in the northeast of London, Battersea Park in the southwest, West Ham Park in the extreme east, Greenwich Park at Greenwich, etc. Of the squares the most central and noteworthy is Trafalgar Square, with Charing Cross adjoining. Some of the squares are planted with fine trees.

Monuments .- Among the public monuments are 'The Monument' on Fish Middle Ter Street Hill, London Bridge, a fluted Doric Inn); etc. column 202 feet high, erected in 1677 in Churches uments are The Monument on Fish Street Hill, London Bridge, a fluted Doric Inn); etc. column 202 feet high, erected in 1677 in commemoration of the great fire of London; the York Column, in Waterloo Place, in 1710 by Sir Christopher Wren. It is 124 feet high; the Guards' Memorial (those who fell in the Crimea), same place; the Nelson Column, in Trafalgar 510 feet in length, with a dome 400 feet square, 176½ feet high, with four colossal lions by Sir E. Landseer at its base; the national memorial to Prince Albert in Hyde Park, probably one of the finest monuments in Europe, being a Gothic structure 176 feet high, with a colossal long, including Henry VII's chapel, and statue of the prince seated under a lofty 203 feet wide at the transepts. Here the canopy; Cleopatra's Needle on the kings and queens of England have been Thames Embankment; the 1920 Cenotaph war memorial; and numerous statues of George V. In the south transept are the tombs and monuments of great poets.

Parks and Squares.—The chief parks Houses of Parliament, a magnificent e in the western portion of the mestructure in the Tudor Gothic style, with two lofty towers. The buildings cover about eight acres, and cost £3,000,000. Westminster Hall, adjacent to the Houses of Parliament, a noble old pile built by William Rufus, was formerly the place in which the Supreme Courts of Justice sat, but is now merely a promenade for members of Parliament. In and near Whitehall in the same quarter are the government offices, comprising the Foreign, Home, Colonial and India Offices, the Horse Guards and Admiralty. Some erset House, which contains some of the public offices, is in the Strand. The postoffice in the city occupies two spacious city on the east is the Tower, the ancient citadel of London, which occupies an area of 12 acres on the banks of the Thames. The most ancient part is the White Tower, erected about 1078 for William the Conqueror. One of the most important of modern public buildings is the Law Courts, a Gothic building at the junction of the Strand and Fleet street. Other noteworthy buildings are the Bank. Other noteworthy buildings are the Bank of England; the Royal Exchange; the Mansion House, the official residence of the Lord-mayor; the Guildhall, the seat of the municipal government of the city; the four Inns of Court (Inner and Middle Temple, Loncoln's Inn, Gray's

Thames Embankment; the 1920 Charles of George V. In the south transept are the tombs and monuments of great poets public men, Public Buildings.—Among the royal from Chaucer downwards, whence it is palaces are St. James', a brick building erected by Henry VIII; Buckingham parts are numerous sculptured monupalace, the King's London residence, built by George IV; Marlborough House, built by George IV; Marlborough House, philosophers, divines, patriots and emitter esidence of the Prince and Princess nent individuals generally, many of whom of Wales; Kensington Palace, a plain brick building, the birthplace of Queen others of the old churches are St. Barvictoria. These are all in the west of London. Lambeth Palace, the residence of the Archbishops of Canterbury, is situated on the Surrey side of the river. On Margaret's, Westminster; St. Stephen's, the north bank of the Thames stand the London London

ster and Southwark may also be mentioned.

Places of Amusement.—These are naturally exceedingly numerous. The prinurally exceedingly numerous. The principal theaters are: Covent Garden and Her Majesty's Theater, the homes of opera; Drury Lane and the Lyceum, identified with the higher drama; the Strand, Criterion, Gaiety and Toole's, well known for farce and burlesque; the Haymarket, Vaudeville, St. James' and Court for comedy; the Adelphi, Princess', and Olympic for melodrama; the Savoy, Avenue. and Comedy for opera-bouffe. Avenue, and Comedy for opera-bouffe. The chief musical entertainments are given in St. James' Hall and the Concert Hall at the Sydenham Crystal Palace (see Crystal Palace). The Albert Hall, Kensington, capable of holding an audience of 8000 persons, is also used for concerts etc.

for concerts, etc.

Museums, etc.—Among museums and galleries the principal is the British Museum, the great national collection, in a very central position as regards the rest of the metropolis. It contains an im-mense collection of books, manuscripts, engravings, drawings, sculptures, coins, etc. (See British Museum.) The South Kensington Museum is a capacious series of buildings containing valuable collec-tions in science and the fine and decorative arts, and there is a branch museum from it in Bethnal Green, in the East End. (See Kensington Museum.) The natural history department of the British Museum occupies a fine Romanesque building at South Kensington. The India and the Patent Museums are also at South Kensington, and here also are the buildings of the Imperial Institute, where the products of the Empire are displayed. The Sloane Museum contains many valuable objects of art, etc. The chief picture-galleries are the National Gallery, in Trafalgar Square, one of the great gal-leries of the world (see National Gal-lery), the collection in South Kensington Museum, and the National Portrait Gallery. Other museums are the United Service, the Geological, the College of Surgeons, etc. The chief libraries are the British Museum, Lambeth Palace library, the Guildhall library, Sion College library, the London Library, London Institution library besides have stitution library, besides large circulating libraries. Many free libraries have recently been established.

Educational and Scientific Institutions. The chief educational institutions are the University of London, an examining and degree-conferring body only (see London, University of); and University

Church, St. Bride's in Fleet street. The College and King's College, the students Roman Catholic Cathedral in Westmin- of which take their degrees at London University, since London has no university that both teaches and confers degrees. Other institutions are denominational colleges for theology (in some combined with general education); institutions for professional education, as the Royal Naval College, Greenwich; the Royal Naval College, Greenwich: the Royal Military Academy, Woolwich; the Royal School of Mines; the Royal College of Physicians and the Royal College of Surgeons, which grant medical diplomae after examination; the medical schools attached to the various hospitals (see below); Royal Academy of Painting, etc.; Royal Academy of Music; Royal College of Music; Trinity College, chiefly for music; several colleges for women: City music; several colleges for women; City and Guilds Institute for Technical Education; the Art Training School, South Kensington. An institution of a unique kind ig the Pacilla Pales for Mark Views kind is the People's Palace for East London, opened in 1887, and designed partly for educational and partly for recreative purposes. Of the numerous societies for the promotion of science, art, learning, etc., we need only mention the Royal Society, the oldest, incorporated by Charles II in 1663.

Hospitals, etc.—Among hospitals and

charitable institutions the chief are the three great endowed hospitals, St. Bartholomew's Hospital, in West Smithfield; Guy's Hospital, Southwark; and St. Thomas, Hospital, Lambeth, on the Thomas' Thames Embankment opposite the Houses of Parliament. Other hospitals are St. George's Hospital, Middlesex Hospital, Westminster Hospital, Charing Cross Hospital, King's College Hospital, University College Hospital, St. Mary's Hospital. There are medical schools attached pital. There are medical schools attached to all the above institutions. Bethlehem Hospital (Bedlam), in St. George's Fields, south of the river, is the chief hospital or asylum for lunatics. The Foundling Hospital, Chelsea Hospital, and Greenwich Hospital are institutions

by themselves.

Communications, Trade, etc.-London is supplied with a vast network of surface railways, in addition to a host of cabs and omnibuses, and with underground railways, known as the Metropolitan and Metropolitan District railways, with several lines of electric trackage. Numerous small steamers ply on the Thames, touching at all important points on both sides of the river. All the great railways have termini in London, and their stations correspond with the magnitude of the traffic. The principal markets are Billingsgate for fish; Covent Garden for vegetables, flowers, etc.; Leadenhall for poultry,

game, etc.; Smithfield for dead meat, poultry and fish; the Borough market, Southwark. The manufacturing industries of London, though not to be compared with its commercial importance, are extensive. It contains the largest breweries and distilleries in the kingdom; and sugar refining, manufactures in metal, including plate, jewelry, watches, etc., the making of clothes and of boots and shoes, are extensively carried on. There are large engineering and chemical works. Printing, publishing and journalism have their chief seat here. London has long been the greatest center of commerce in the world, though some other cities, as New York, Liverpool and Hamburg, have come into close competition with it. A most extensive trade by sea is carried on be-tween Britain and the Continent, the East Indies and China, Africa, America and Australia, and there is an immense of A.D.) the southern part of Britain was coasting trade. The docks are very extensive, comprising numerous basins and their accompanying accommodation on Constantine, about 306, the Romans fortiboth sides of the river below London if fied and walled it, and it eventually be Bridge, and having a total water area of came a great commercial city. After the over 600 acres. London is inferior to withdrawal of the Roman legions, London is the related its events but depended on the Roman legions, London is the related in t Liverpool in the value of its exports, but otherwise considerably surpasses it in trade.

Sanitary Condition, etc.—London is one of the healthiest of the large cities of the world, the annual death rate per 1000 being in recent years about 20.5. The sewerage system is necessarily gigantic, there being altogether about 250 miles of sewers. There is no single system of water supply, the water being furnished by several companies from the Thames, the Lea, and other sources. The chief supply is that brought by the New River Company, established in the time of James I, and obtaining its supplies partly from springs and artesian wells, but mainly from the River Lea at Hertford. These from the River Lea at Hertford. These companies have a total capital of about £14,000,000. The water supply at present is barely sufficient, and the quality of the Lea and Thames water is defective. The gas is also supplied by several companies, their capital amounting to about £13,000,000.

Civic Administration.—The City of London proper is governed by a lord-mayor, chosen annually, and by twenty-five aldermen, four sheriffs and two hundred and thirty-two common councilmen. The lord-mayor is elected by the members of the city guilds or companies, known as the liverymen, and numbering about 7000. He receives an allowance of £10,-000 a year, which does not usually, however, meet the expenses he incurs. The

governed. A body known as the Metropolitan Board of Works, created in 1855, took charge of all general improvements, and had the management of all public works in which the taxpayers of the metropolis had a common interest up to 1880, when it was superseded by the London County Council under the Local Government Act of 1888. The administrative County of London comprehends the whole of the metropolitan Parliamentary boroughs, which elect 118 county councilors; there being also 10 aldermen (or a number not to exceed one-sixth of the councilors). The City of London is unafcilors). The City of London is unaffected by this change, except that its sheriffs are no longer sheriffs of Middlesex, and the right of appointing certain judicial officers is transferred from the

corporation to the crown.

History.—In the reign of Claudius (41. don remained for a considerable time in possession of the Britons, but was at length taken by the Saxon invaders, became the capital of the East Saxons, and under Eghert of Wessex (828-837) had the position of capital for all England south of the Forth. In 851 it was taken by the Danes, but was regained by Alfred in 884. Under Cnut and his son Harold many Danish colonists settled in London, contributed largely to the development of its commerce, and practically made it the capital of England. At the Conquest London submitted to William, and received from him a charter, which is still preserved. It also obtained charters from Henry I, Stephen, Richard I and John. The first mayor was Henry Fitz Alwin, 1189-1212. In 1218 the forest of Middlesex was cleared, and that portion of London north of the city began to be built. In 1285, London having outgrown its water supply, leaden pipes were laid to convey water from Tyburn Brook. In 1349 and 1361 London was visited by the plague. In 1381 much damage was done during Wat Tyler's insurrection. In the fifteenth century some of the principal streets were paved; the plague or sweating sickness raged in several years of this century. In the sixteenth century West-minster was connected with the city by a row of noblemen's mansions along the river, the last of which. Northumberland 000 a year, which does not usually, how-House, recently made way for the Grand ever, meet the expenses he incurs. The Hotel. St. Bartholomew's Hospital and other districts of London are variously St. Thomas' Hospital were now founded.

metropolis was greatly extended. New River was completed, and many houses were supplied with water; sewers were dug; pavements were laid down for passengers; and hackney-coaches came into general use. But the streets were so narrow and dirty, and the houses in so filthy a state, that the city was scarcely ever exempt from the plague, which somenames of streets marked at the corners. 1819 Southwark Bridge. In 1831 new London Bridge was opened. In 1834 the old Houses of Parliament were burned

and theaters began to be an important ings, among which are the city hall, feature. In the seventeenth century the courthouses, Western University, Normal metropolis was greatly extended. The School, and other colleges. There are manufactures of stoves and cigars, brass works, iron foundries, chemical works, and other industries. It is the center of a rich agricultural region with an active trade in agricultural produce. (1913) 55,028.

London, Jack, novelist, was born at San Francisco in 1876. He ever exempt from the plague, which sometimes committed great ravages, the great plague, which lasted from December, tamped through the United States and 1664, to January, 1666, carrying off about Canada for sociological study in 1894; 69,000 persons. In 1666 the great fire served as journalist and lecturer, and was broke out, and spread over 336 acres, destroying 13,200 houses, ninety churches, nesse war. His books and stories have and many public buildings. Population been numerous and are strikingly original and trade now rapidly increased, partly in style, dealing with the primitive pasform the immigration of French Protessions and conditions. Among them are tants driven from their country by the revocation of the Edict of Nantes. In Abyss, The Call of the Wild, White Fang, the eighteenth century the metropolis Before Adam and The Iron Heel. He steadily advanced in extent, prosperity died Sept. 1, 1916, at Glen Ellen, Calif. and splendor. After the accession of London, University, In the middle of the century the popula- and having power to examine and grant

In the middle of the century the popula- and having power to examine and grant tion was about 600,000. In 1759 the degrees, another to a teaching body occu-British Museum, founded on Sir Hans pying the original premises at Gower Sloane's collections purchased by the gov-street, which took the name of University ernment, was opened. About this time College, and now prepares students for the houses began to be numbered and the obtaining the degrees conferred by the university. New and supplementary charters were granted in 1858, 1863 and 1878, In 1781 the Gordon riots took place, when ters were granted in 1858, 1863 and 1878, the mob was in possession of London for the last admitting women to all degrees two days, and committed great havoc. In and prizes granted by the university. The 1807 gaslight was introduced in the university admits as candidates for examistreets. In 1812 the extension of the nation any person who is above sixteen metropolis about Regent's Park com- years of age, and confers degrees in all metropolis about Regent's Park com- years of age, and confers degrees in all menced, and an act for the formation of departments of knowledge except theology. Regent street was obtained in 1813. In Provincial examinations are held in a 1817 Waterloo Bridge was opened; in number of different towns.

London Clay, the most important of the Eocene tertiary formations of Great Britain, largely dedown: the present buildings were begun veloped in the valley of the Thames under in 1840. In 1851 the great international and around the metropolis. This forma-exhibition was held in Hyde Park, and led tion consists of a bluish or brownish clay to numerous exhibitions of a similar kind. containing layers of argillaceous nodular Since then the history of London has been limestone. The shells, fruits, etc., found a story of continued growth and progress, in the London clay mostly belong to the most notable improvements being the genera now inhabiting warmer seas than

the most notable improvements being the formation of the Thames Embankments, and the Holborn Viaduct.

TREATY OF LONDON. See Balkan War.

London, a town of Canada, the capital of Middlesex county, Ontario, on the Thames and the Grand Trunk and Canada Pacific railways, 121 miles west of Toronto. It was first laid out in 1825, and is well and regularly dral, and still retains its old walls, built, with some handsome public build-

which gives courses in arts and theology, the latter specially adapted for Presby-terian students. The harbor is commo-dious, and vessels of large tonnage can discharge at the town. An extensive trade is carried on, linen is manufactured, and there are shirt factories, timber and there are shift factories, timber mills, grain mills, foundries, distilleries, etc. Derry took origin in a monastic establishment erected by Columba in 546. The corporation of London, which obtained a grant of the town from James I, fortified it, and gave it the name of Londonderry. Here the Protestants of Ulster took refuse at the Proposition, and made donderry. Here the Protestants of Ulster took refuge at the Revolution, and made a famous defense against the forces of the Egyptian army; chief of staff to James II, the siege lasting from April 21 till August 1, 1689. Pop. 40,799. United States in 1877 and was admid—The County is bounded on the north by Lough Foyle and the Atlantic Ocean elsewhere by Tyrone, Lough Neagh and Antrim; area, 816 square miles. It is very diversified in surface, consisting partly of wild and bleak tracts of mountain and moor, partly of flat alluvial lands. The fisheries are important. The Danielsonville, Georgia, educated Franklin College (now the Universit nell. Pop. 144,404.

Londonderry, ROBERT STEWART, SECOND MARQUIS OF, a British statesman, born in County Down in 1769. In 1796 he became Lord Castlereagh, and, being a member of the Irish Parliament, next year he was made keeper of the privy-seal for that kingdom, and the year after chief secretary to the lord-lieutenant. After the Union he sat in Parliament as member for Down, and in 1802 was made president of the Board of Control. In 1805 he was appointed secretary of war and the colonies; but on the death of Pitt he retired until the dissolution of the brief administration of 1806 restored him to the same situation in 1807; and he held his office until the failure of the expedition to Walcheren, advocated by him, and his duel with his colleague, Canning, produced his resigna-tion. In 1812 he became foreign secretary, and he was a member of the Congress of Vienna in 1814. He became very unpopular through his conduct on this occasion and his support of the Holy Alliance: and the responsibilities which he had to assume as virtual prime minister for the protection of order, and the fatigues of an arduous session. seem to Long, WILLIAM JOSEPH, clergyman. born at North Attleboro, Mas

yond them. There is also a handsome have unhinged his mind, leading him to Roman Catholic cathedral. The chief ed-commit suicide in 1822. He had succeeded his father the year before as Marquis of Londonderry.

London Pride (Saxifraga umbrosa), a perennial evergreen plant of the saxifrage order common in Britain. It has flower-stems 6 to 12 inches high, with small spotted 1 ink flowers.

an arsenical pow-London Purple, der used as an insecticide in plant life.

Long, CHABLES CHAILLÉ, soldier, born at Princess Anne. Maryland, in 1842. He served in the Civil war, attaining the rank of captain. In 1869 he was made a lieutenant-colonel in the Egyptian army; chief of staff to General Gordon in 1874; returned to the United States in 1877; and was admitted to the bar; was appointed consul-general in Corea in 1887; special commissioner to the Paris Exposition in 1900. He is the author of various works of travel, in Africa and other works.

Long, Crawford W. (1815-78), an American physician, born at Danielsonvilla.

яt staple manufacture is linen. A great Franklin College (now the University of part of the county belongs to several London livery companies, having been granted to them by James I in 1609, after the Ga. He was probably the first to use flight of the Earls of Tyrone and O'Donether anæsthesia in surgery, in March, 1842, but he failed to publish appearance. Ga. He was probably the first to use ether anæsthesia in surgery, in March, 1842; but he failed to publicly announce the results at the time, and Dr. W. T. G. Morton (q. v.), in Boston, meanwhile publicly demonstrated the efficacy of vaporized ether as an anæsthetic.

Long, GEORGE, an English scholar, born in 1800; died in 1879. He was educated at Cambridge, became professor of ancient languages in the Univerfessor of ancient languages in the University of Virginia in 1824; professor of Greek in the University of London in 1828, but resigned in 1831; professor of Latin at University College in 1842-46; classical lecturer at Brighton College 1849-71. He was one of the founders of the Boyal Goographical Society, and did the Royal Geographical Society, and did much work in connection with the Society for the Diffusion of Useful Knowledge, including the editing of the Penny Cyclopædia. He contributed largely to Smith's Dictionaries of Greek and Roman Antiquities, Biography and Geography. Among his works are a translation of Select Lives from Plutarch (1844), a Classical Atlas (1854). The Decline of the Roman Republic (1864-74). also general editor of the Bibliothèra Classica, to which he contributed a valua-

sachusetts, in 1867. He was ordained to the Congregational ministry in 1899, and is a lecturer and writer on nature and animal life. His books include Ways of Wood Folk, Secrets of the Woods, A Live tile Brother to the Bear, etc. His descriptions of animal life have en severely criticised by John Burroughs and others.

Long, Loch, a narrow, picturesque arm of the sea, in Scotland, stretching with a slight curve north and northeast from the Firth of Clyde for about 16 miles between the counties of

Argyle and Dumbarton.

an evergate (Nephelium Longan (longan), an evergreen Eastern tree (Nephelium Longanum), a native of the south of China, yielding a delicious fruit. It is of the same genus with the litchi, but its fruit is brown and smaller, being about 11/4 inches in diameter. It is grown to 11/4 inches in diameter. It is grove some extent in European hothouses.

San Francisco.

vessel.

permanent population is 13,521, but during summer is sometimes increased by 60,000 or more.

(lon-jev'i-ti), Longevity (lon-jev'i-ti), a term which is used both for average or probable duration of life in a community, or for great length of life reached by particular individuals. Sta-tistics gathered by life insurance companies indicate that a person at the age of nies indicate that a person at the age of in 1854, and subsequently received the degree of LLD. and D.C.L. from the unifiving 48.36 years longer; at 20 years versities of Cambridge and Oxford. His 41.49 years longer; at 30 years 34.43 poems are equally popular on both sides years longer; at 40 years 27.28 years of the Atlantic. longer; at 50 years 20.18 years longer; at 70 years County of Ireland, in the 8.54 years longer; at 80 years 4.78 years longer. by the Shannon and Lough Ree; area, When the sexes are considered separately 421 square miles. The surface is mostly the average duration of life is somewhat flat and hors are numerous and extensive and hors are numerous and extensive flat, and hors are numerous and extensive flat, and hors are numerous and extensive interest. Ordinary observation leads to all kinds of grain and green crops. Grasthe conclusion that a comparatively small ing and dairy farming are the principal number of men reach the age of 70, a very pursuits. By means of the Royal Canal much diminished number attain to 80, and the Shannon the county has water

while 90 is rare. There are, however, well-authenticated cases of persons who have reached 100 years, and even a few years more; but such cases as that of Thomas Parr, said to have been 152 years oid, and Henry Jenkins, said to have been 169, rest on mere unreliable assertion.

(long'fel-lo), HENBY WADSWORTH, an Ameri-Longfellow can poet, was born at Portland, Maine, in 1807; died in 1882. He entered Bowdoin College at fourteen years of age (1821) and was graduated in 1825. While at college he distinguished himself in the study of modern languages, and published some short neems among which was the some short poems, among which was the Hymn to the Moravian Nuns. In 1826 Hymn to the Moravian Nuns. In 1826 he accepted the professorship of modern languages at Bowdoin, being allowed three years to prepare himself for the post by study and travel in Europe. In 1833 Some extent in European hothouses.

Long Beach, a city, port, and resort from Coplas de Manrique, with an essay California, 20 miles s. of Los Angeles. On, on the Moral and Devotional Poetry of California, 20 miles s. of Los Angeles. Spain; in 1835 appeared Outre Mer, a There is here the largest drydock south of volume of prose sketches, and in the same Its industries include year he was elected to the chair of mod-ing (fish, olives, fruits ern languages and literature in Harvard san francisco. Its industries include year he was elected to the chair of mod-shipbuilding, canning (fish, olives, fruits ern languages and literature in Harvard and vegetables), and woolen mills. Pop. University. After spending another year (1910) 17,809; (1920) 55,593. in Europe, studying Scandinavian lan-tongboat, formerly the largest boat guages and literature, he entered on his carried by a merchant professorship in 1836. In 1839 he pubprofessorship in 1836. In 1839 he published Hyperion, a Romance, and Voices of the Night, a series of poems. Ballads Long Branch, a fashionable water of the Night, a series of poems. Ballads ing place on the coast and other Poems and a small volume of of New Jersey, 32 miles south of New Poems on Slavery appeared in 1842; the York. It has wide avenues with numerous Spanish Student, a drama in three acts, hotels, boarding houses and cottages. The in 1843; the Belity of Bruges in 1846; Poems on Slavery appeared in 1842; the Spanish Student, a drama in three acts, in 1843; the Belfry of Bruges in 1846; Evangeline in 1847. In 1845 he published a volume—The Poets and Poetry of Europe, containing translations by him-self and others, with much valuable information respecting the writers. Among the best-known of his later works are The Golden Legend, Hiawatha, Courtship of Miles Standish and Tales of a Wayside Inn. He resigned his chair at Harvard in 1854, and subsequently received the degree of LLD. and D.C.L. from the universities of Cambridge and Oxford. His

tion of the extreme limit to which human west, but a great portion of the south life may possibly attain is also of great consists of rich soil suitable for growing interest. Ordinary observation leads to all kinds of grain and green crops. Great number of men reach the age of 70, a very much diminished and the south suitable for growing interest.

Chief towns, Longford, Granard and connected with Manhattan Island by sev-Ardagh. Pop. 46,672.—The county town, eral large suspension bridges across East Longford, stands on the left bank of the River and by tunnels under this river. Camlin, 70 miles northwest of Dublin. Long Island Sound separates it from Con-It contains a county courthouse, prison, barracks, corn mills, tan yards, etc. Pop. 3747.

Longicorn Beetles (lon'ji-korn), a family of Coleoptera, including a vast number of



Longicorn Beetle (Cerambyx heros).

20 miles wide. It is connected with New York Bay by the strait called East River. See East River, Hell Gate.

Longitude (lon'ji-tùd) in geography, the distance of a place distance of a place west from a meridian taken females deposit their eggs beneath the bark of trees by means of a long, tubular, horny ovipositor and the larvæ are very destructive to wood. destructive to wood.

Longinus (lon-ji'nus), Dionysius, or Cassius, a Greek writer, born about A.D. 213, according to some at Athens, according to others at Emesa or l'almyra. He taught criticism, Emesa of l'aimyra. He taugut criticion, rhetoric and grammar at Athens, visited the East, and became counselor to Zenobia, queen of Palmyra, whom he encouraged to throw off the Roman yoke, for which, after the reconquest of Palmyra, he was put to death by the Emperor Aurelian A.D. 273. Of the many writings of Longinus the treatise many writings of Longinus the treatise

many writings of Longinus the treatise On the Sublime is the only one extant.

Longirostres (lon'ji-ros-trez; L. longus, long, and rostrum, a beak), a group of wading birds (Grallatores), characterized by the possession of long, slender, soft bills, mostly frequenting marshy districts, moors, fens, etc. This group comprises the snipes, woodcock, sandpipers, curlews, ruff, godwit, turnstone, avoset, etc.

woodcock, sandpipers, curiews, run, god-wit, turnstone, avoset, etc.

Long Island, an island belonging to the State of New Vork, extending 118 miles in length, and varying from 12 to 23 miles in breadth; area, 1682 square miles. A considerable section of the eastern portion of it, in-cluding the large city of Brooklyn, is now

communication with Dublin and Limerick. included in New York city, while it is eral lárge suspension bridges across East River and by tunnels under this river. Long Island Sound separates it from Connecticut. The most fertile portions of the island are carefully cultivated and much produce raised for the New York market. There are many seaside resorts along the coast, Island. including the popular Coney

Long Island, a name sometimes given to the whole of the Outer Hebrides.

Long Island City, in the Borough of Queens, Greater New York, on Long Island, and separated from Brooklyn by Newtown Creek. It has become an automobile manufacturing center, and has also a large gas plant, large biscuit factory, etc. Long Island Sound, sea between Long Island and the State of Connecticut. Long Island and the State of Connecticut, about 115 miles long and generally about



between the meridian plane of one place and some fixed meridian plane. Longiand some fixed meridian plane. Longitudes are generally reckoned from the meridian of Greenwich; the meridians of Paris, Ferro and Washington have been also employed. That of Paris was abandoned in 1911 in favor of the Greenwich meridian. (See Meridian) Since the

tude which are 69 1/2 statute miles long at the equator, get shorter towards the poles, at which they finally cease to exist. As the earth makes one revolution on its meridian of any place at a particular (1906) 10,648.

time it will be on the meridian of another place 15° west of the first in one hour. Thus 15° of longitude represent of islands in the Pacific, between land hours and between land betwee one hour of difference in time, and hence longitude may be easily determined by the use of the chronometer set to Greenwich time, which is the method commonly employed at sea. Longitude is reckoned to 180° eastward or westward

etc. Pop. 5848.

Longstreet (long'stret), GENERAL JAMES, an American soldier, born in South Carolina in 1821. He was graduated at the Military Academy in 1842; saw much service on the Mexican frontier, and took a prominent part on the Confederate side during the Civil war, chiefly in connection with General Lee's army. Promoted lieutenant-general, he commanded a corps at the battle of Gettysburg. He was severely wounded in the battle of the Wilderness. After the war he occupied several important positions, including those of Minister to Turkey and U. S. Marshal for Georgia. In 1897, he was made a commissioner of 1897 he was made a commissioner of railroads, and died in 1904.

Longton (long tun), a municipal borough of England, in Staffordshire, 5 miles S. E. of Stoke-upon-Trent. It is a seat of china and earthenware manufacture, and has breweries, malt kilns, brick-works, and in the vicinity collieries and iron mines. Pop. 37,481. ity collieries and iron mines. Pop. 37,481.

Longus (lon'gus), a Greek novelist, ern Reserve College; in 1844 Prof. of probably of the third century Natural Philosophy in the University of after Christ. He is the author of the pastoral romance of Daphnis and Chloe. Natural Philosophy and Astronomy in Longview, a city, capital of Gregg Yale College. His text-books on the sub-year of Marshall. It has saw and planing mills, plow and bottling works, cotton-seed oil mills, etc. Pop. (1920) 5848.

Longworth (long'wurth), Nicholas, horticulturist, was born in Newark, New Jersey, in 1782. In 1803 he removed to Cincinnati. He devoted himself to the cultivation of the grape and strawberry. Kindly but eccentric, he gave much money to those called

tric, he gave much money to those called

parallels of latitude get smaller towards by him the 'devil's poor.' His property the poles, at which all the meridians converge, it is evident that degrees of longimillion dollars. He died in 1863. Lonice'ra. See Honeysuckle.

Lons-le-Saunier (lon-le-sō-nyā), a town of France, axis, that is, turns through 360° of longicapital of the department of the Jura, tude from west to east, in twenty-four 45 miles s. w. of Besancon. It has manuhours, if the sun or a star is on the factures of spectacles, textiles, etc. Pop.

and Formosa, and between lat. 24° 10' and 28° 40' N.; but the name is sometimes extended also to the group further north, properly known as the Linschoten Islands. The largest island is Okinaw, or Great Loo-Choo (area about 500 sq. miles). Oshime the island next in size of the fixed meridian.

Longmont, a city of Boulder Co., has an area of 300 sq. miles. The climate Colon, 42 miles N. of is healthy, temperate and favorable for Denver. Has flour mills, sugar refineries, agriculture. The chief products are rice, when the chief products are rice, when the chief products are rice, when the chief products are rice. wheat, maize and batatas; the sugar-cane, cotton, sago, tobacco, indigo, the fig and the banana are also grown. The inhabitants are mainly of race akin to the Japanese, but their manners and civ-ilization are chiefly those of the Chinese. Since 1874 the archipelago has belonged to the Japanese empire. Confucianism is the prevailing religion, but Buddhism has a considerable number of adherents. Pop. 453,550.

Loomis (18'mis), CHARLES BATTELL, author, born at Brooklyn, New York, in 1861. He became a prolific writer for periodicals, and is the In author of numerous sketches, and is the of them humorous. Of them may be mentioned The Four-masted Catboat, I've Been Thinking, Poe's 'Raven' in an Elevator, A Holiday Touch, Little Maude, the died in 1911.

Loomis, Elias, physicist, was born in willington, Connecticut, in the contraction of the contraction.

1811. In 1838 he became Prof. of Mathematics and Natural Philosophy in Western Reserve College; in 1844 Prof. of Natural Philosophy in the University of the City of New York; in 1860 Prof. of Natural Philosophy and Astronomy in Yale College. His text-books on the sub-

Lopez, Francisco Solano, President of Paraguay, born at Asuncion

in 1827, son of Don Carlos Antonio Lo-pez, then president. His early education ens, leather, soap and earthenware, and was neglected during the dictatorship of Francia. In his eighteenth year his father fourteen days. In the vicinity are lead made him a brigadier-general in the war against Rosas, the dictator of Buenos Ayres, but he took no actual part in the struggle. He afterwards filled some of the pull after the European model, but rigged principal offices of state and was sent like a Chinese junk struggle. He atterwards filled some of the principal offices of state, and was sent to Europe in 1853, accredited to the chief courts there. In 1855 he returned to Paraguay, became minister of war, and on the death of his father, in 1862, President for ten years. He had long been aiming at the foundation of a great inland ampire and as his military preparations. empire, and as his military preparations were now complete, and his army superior to that of any of the South American States, he took opportunity in 1864 to commence hostilities against Brazil. The Argentine Republic and Uruguay allied themselves with Brazil, and after five years' conflict Lopez was reduced to exyears' connect Lopez was reduced to ex-tremities, and was finally surprised on the banks of the Aquidaban by a troop of Brazilian cavalry and slain, March 1, 1870. The latter part of his career had been stained by many cruelties and wan-

ton murders. See Angler-Fish.

Lophobranchii (lof-o-brank'i-i), the suborder of Teleostean fishes, including the peculiar 'seahorses' and the 'pipe-fishes.' See Pipe-fishes and Hippocampus.

Loquat (lo'kwat; Eriobotrya Japon-loca), a Japanese fruit-tree of the nat. order Rosaceæ, and closely allied to the medlars. The fruit is about the size of a large goospherry of a fine vellow

of a large gooseberry, of a fine yellow color. The tree is a beautiful evergreen, whose white flowers have a fragrance like that of hawthorn blossom. It attains a height of from 20 to 30 feet, but when cultivated it is not allowed to exceed 12 feet. It thrives well in Australia.

Lorain (lo-rān'), a city of Lorain Co., Ohio, on Lake Erie, 25 miles w. of Cleveland. It has a splendid harbor: ore and coal docks handling an immense tonnage; great steel works and shipyards; automobile and rubber plants, etc. Pop. (1910) 28,883; (1920) 37,295. Loranthaceæ (lor-an-thasee), a nat. order of exogenous plants, of which the mistletoe is

the type, the perianth being often brilliantly colored, all in one piece, or formed

of many sepals.

Lorca (lorka), a town of Eastern Spain, in the province and 42 miles southwest of Murcia, consists of an old Moorish town on a slope crowned by a castle, and a lower modern town. There

like a Chinese junk.

Lord (Anglo-Saxon hlaford, for hlafweard, that is bread-keeper), a different title of honor or dignity, used in different senses. In the feudal times a lord was the grantor or proprietor of land, who retained the dominium or ultimate property of the land or fee, the use only being granted to the tenant. A person who has the fee of a manor, and consequently the homage of his tenants, is called the lord of the manor. Loosely all who are noble by birth or creation, as the peers of Britain, may be called lords. The lords temporal, in contradistinction to the lords spiritual, are the eers who sit together in the House of Lords, as opposed to the bishops who have seats in the house. Lord is sometimes only an official title, as lord advocate, lord mayor, etc. It is also applied, but only by courtesy, to the sons of dukes and marquises, and to the eldest of dukes and marquises, and to the eldest sons of earls. (See Address, Forms of.) In Scotland the judges of the Court of Session prefix the title 'lord' to their surname, or to some territorial designation assumed by themselves. Judges, when on the bench, are addressed as 'My lord' throughout the three kingdoms.

Lord Mayor, the title given to the London, Dublin and York, during the year for which they hold office.

Lord-Mayor's-Day, the 9th of Nowhich a great procession accompanying the newly-elected Lord Mayor of London, from Westminster to Guildhall, takes place. The procession, formerly famous for its historical and allegorical devices, has now much dwindled.

Lords, House of. also Britain. See Parliament;

Lord's Prayer, a formula of prayer enunciated by Christ on two different occasions, for which see Matt. vi, 5-13, Luke xi, 1-4. Among the earliest Christians it was accepted as the standard form of prayer, and its use in the liturgy is frequently mentioned by the early fathers. The concluding clause of the prayer, known as the doxology, 'For Thine is the kingdom,' etc., is not found in St. Luke's gospel, and even in that of St. Matthew it is only found in some of the later manuscripts, in which it is generally held to be an interpolation.

It is generally retained by Protestants, but is discarded by Roman Catholics.

Lord's Supper, one of the sacraments of the Christin religion: so named because it was instituted by our Saviour when he took his last meal with his disciples, on the occasion of celebrating the Passover. It has also the names of eucharist and communion, and among the Catholics that of the mass or sacrifice of the mass. It has undoubtedly been celebrated, with certain differences, since its institution, and still is celebrated by all sects of Christians except the Quakers, however much their views may differ as to its nature and virtue. The chief controversies regarding the nature of the rite have been chiefly on the question of the 'real presence' of Christ's body and blood and the doctrine of transubstantia-tion. The doctrine of transubstantiation, first started by Paschasius Radbertus in the ninth century, was soon generally received, and at last was officially approved by the Council of Rome in 1079, and by the Council of Rome in 1079, and solemnly confirmed in 1215 by the fourth Lateran Council. According to this doctrine the whole substance of the bread and wine is changed into the body and blood of Christ, only the appearance of bread and wine remaining; and the Roman Catholic Church further maintains that Chief is given whelly and entirely that Christ is given wholly and entirely both under the form of the bread and under that of the wine. From the doctrine of transubstantiation sprang the adoration of the host (or sacred bread), as well as the custom of refusing the cup in the communion to the laity and nonofficiating priests, a practice first authoritatively sanctioned at the Council of Constance, 1415. At the Reformation both the German and Swiss reformers agreed in rejecting the doctrine of transubstan-tiation and the mass, and maintaining that the Lord's supper ought to be cele-brated before the whole congregation, and with the administration of both bread and wine. In explaining the words by which the supper was instituted Luther and Zwingli differed, and their different opinions on this subject formed the principal subject of dissension between the Lutheran and Calvinistic churches. Luther took the words, 'This is my body,' etc., in their literal sense, and thought that the body and blood of Jesus Christ are united in a mysterious way, with the bread and wine, which, however, remain unchanged, so that the communicant receives, in, with, and under the bread and wine, the real body and blood of the deemer. Zwingli, on the other side, and forming the genus Trichoglossus, re-understood the words in a figurative sense, markable for their extensible tongue, fur-

and maintained that the Lord's supper was a mere commemoration of the death of Christ, and a profession of belonging to his church. This view is in substance adopted by the Socinians, Arminians and some others. The opinion advanced by Calvin, by which a spiritual presence of the body and blood of Christ is supposed in the communion, by partaking of which the faithful receiver is brought into union with Christ, through the medium of the Holy Ghost, though it came nearer to the Lutheran doctrine than that of Zuinglius did, yet was essentially different. The Greek Church has not adopted the doctrine of transubstantiation in its whole extent; yet her doctrine, which was defined and sanctioned by the Synod of Jerusalem in 1672, comes nearer to this dogma than to that of the Reformed Church. The Anglican Confessions incline more to the view of Zwingli. The 28th Article of the Church of England attach, that 'the body of Christ is given, taken, and eaten in the supper only after an and eaten in the supper only after an and entering manner.' The heavenly and spiritual manner.' The doctrine adopted by the Presbyterian Church of Scotland in the main agrees

with that propounded by Calvin.

Lorelei (lo're-li), a precipitous cliff on the Rhine, about 450 feet high, half a mile above St. Goar. Legend gives it as the abode of a siren, who by her singing enticed boatmen thither to their destruction.

Lorenzo Marques. Delagoa Bay. Loretto, or Lore'to (lo-ra'to), a city of Italy, in the province of Ancona, about 3 miles from the sea. Pop. 7845. The city is a famous resort of pilgrims, who come to visit the Casa Santa or Holy House of Loretto, which is said to have been the house of the Holy Family at Nazareth, and to have been miraculously conveyed by the angels first to Fiume in Dalmatia, and afterwards to Loretto. This Holy House, which is in the center of a church built by Majano and Bramante (1464-1587) is covered.

the center of a church built by Majano and Bramante (1464-1587), is covered externally with white marble, is 30 feet long, 15 wide and 18 feet high, and richly ornamented. The number of pilgrims amounts to 50,000 yearly.

Lorient, or L'Orient (lo-ri-an), a fortified seaport of France, in the department of Morbihan, at the mouth of the Scorf. It is well built, and has a capacious harbor and extensive

nished with a pencil at its extremity, was annexed to Germany (see Alsaceby which they are enabled to suck up Lorraine). By the treaty of 1919 (see the nectar of flowers.

Loris (10'ris), a genus of quadrumanous mammals allied to the lemurs. Loris-Melikoff (16'ris-mel'i-kof), MI-CHAEL TARIELOVITCH TAINOFF, COUNT, a Russian general, born in 1826 at Tiflis; died in 1888. He entered the army in 1843; distinguished himself in the Caucasus in 1847, and at the siege of Kars in 1854; was made lieutenant-general in 1863; commander of the army in Armenia in 1878, and took Kars. In 1878 he was made a count; in 1879 governor-general of Charkow, in which post he suppressed the Nihilistic conspiracies with much vigor. In 1880 he was ap-pointed minister of the interior, in which post he showed a tendency towards measures of a wide remedial kind, and had persuaded the czar, Alexander II, to call a kind of national representative assemby, when the assassination of the latter occurred, March, 1881. On the accession of Alexander III, Loris-Melikoff's position became untenable, and he resigned in 1881.

Lorne (lorn), John George Douglas Sutherland Campbell, Marquis of, and Duke of Argil since 1900, was born in 1845, and educated at Eton, St. Andrews University and Cambridge. He represented Argyllshire in the Liberal interest (1868-78), married the Princess Louise, a daughter of Queen Victoria, in 1871, and was governor-general of Canada from 1878 to 1883. He has written several of the control of the co eral books, tales, etc., among which we may mention The Book of Pealms, literally rendered in verse; A Trip to the Tropics; Guido and Lita, a Tale of the Riviera (in verse); Memoirs of Canada and Scotland.

Lorraine (lo'ran'; German, Loth-ringen; anc. Lotharingia). a territory of France, in the department of Moselle, was originally so named as olives, grain, petroleum, and varied munu-being the kingdom of Lothaire II. It factures. It has over 2700 manufacturing was afterwards divided into two parts, Upper and Lower Lorraine. The latter, Upper and Lower Lorraine.

Upper and Lower Lorraine.

between the Rhine, Meuse and Scheldt, became the duchy of Brabant, and ultimately a part of Belgium. Upper Lorraine, between the Rhine, Saone and tain water a distance of 250 miles. Its Meuse, was for long an independent delightful climate, beautiful location and duchy, but was ceded to France in 1736. The inhabitants, though of German origin, aneak the French language, except those the seat of University of Southern California (3000 students), State Normal School and other institutions. Pop. (1890) ges, which was on that account called German Lorraine. At the end of the war between France and Germany, in 1870-71, a considerable portion of Lorraine, including the fortresses of Metz and Thionville,

Treaty) it was restored to France.

Lorraine, CLAUDE. See Claude Lor-



Purple-capped Lory (Lorius domicellus).

soft plumage, the colors of which are brilliant. They are found in the Eastern Archipelago, also in New Guinea, Borneo and the South Sea Islands. The collared

Los Angeles (los an'jel-es, or ang'geles), a city, port, and
county seat of Los Angeles Co., California;

Southern the commercial metropolis of Southern California, first city in population on the Pacific coast, and tenth in the United States. It is situated on the Los Angeles River and with the consolidation of the harbor towns of San Pedro and Wilmington the city now embraces about 15 miles of territory from the ocean up the Los Angeles River. It is 345 miles s. E. of San Francisco; has a fine harbor; steamer communication with northern ports; and is served by 6 transcontinental lines. The principal articles of export are fruits, vegetables, wool, honey, canned goods, plants, representing a value of a half billion dollars. It is the headquarters of the motion-picture film industry. The greatest aqueduct in the world, built in 1908-13, costing \$23,000,000, brings moun-tain water a distance of 250 miles. Its School and other institutions. Pop. (1890) 50,395; (1900) 102,479; (1910) 319,198; (1920) 576,673.

Lost Property, strays and waifs excepted, may be re-

proper means have been taken to advertise it; and if it cannot be conveniently preserved without hazard he may dispose of it if not claimed. If, however, the loser can identify his property he has Lotions (lo'shunz), liquid remedies, a right to restitution, and a third party purchasing lost property from the finder tilled soft water, holding in solution varimust restore it to the owner if called ous medical substances, and applie upon. There are certain cases in which ternally. Lotions are cooling, stin a jury will construe the retention of lost in, astringent, soothing, or sedative. property into larceny. The finder is not Totonhaci (lo-tof'a-ji), or obliged to incur expense in advertising for the owner. In Britain in cases of treasure-trove, i. c., the finding of valuables deposited in the earth, the finder must, under a penalty, give notice to the crown, in which the ownership of all treasure-trove is vested.

Lot (10), a department in the south of France; area, 2017 sq. miles. The arable land, amounting to a half of the whole, has deep alluvial soils, adapted to wheat, maize, hemp and tobacco; and lighter soils, more suitable for barley, rye and root crops. Vines, the mulberry for silkworms, and plums are extensively grown. Sheep-rearing is an important industry. Corn and other agricultural industry. Corn and other agricultural relations are largely exported. The capital is Cahors. Pop. (1908) 216,611.—
The river Lor, which gives name to the department, is one of the largest tributaries of the Garonne. Total course, about 250 miles, of which 180 miles are

ment is arable, producing crops of wheat, maize, rye, etc. Other important crops are tobacco and hemp. Prunes and

emperors. See Louis I.

Lothian. East. See Haddington.

MID. See Edinburgh. Lothian.

Lothian, West. See Linlithgow.

tained by the finder with impunity, after producing vivid and charming pictures of nature, which brought him membership in the French Academy in 1891. Among his books are Le Marriage de Loti, Madame Crysanthème and Le Desert.

ous medical substances, and applied externally. Lotions are cooling, stimulat-

Lotophagi (lo-tof'a-ji), legends, the name of a people on the north coast of Africa who lived on the fruit of the lotus tree. According to Homer they received Ulysses and his followers hospitably, and the sweetness of the fruit induced such happy languor that the Greeks forgot their native land.

Lötschberg Tunnel (leutch' berh), railway tunnel, over nine miles long, extending from Kandersteg in the Bernese Oberland to Goppenstein, 17 miles from Brigue. The work of cutting was begun in 1906 and completed in 1911. Difficulties arose because of water and subterrangen heat but the tunnel was

about 250 miles, or which 180 miles are chance, the plan being generally to have a certain number of prizes and a greater number of France; area, 2079 sq. originated in Italy, from whence they miles. It is intersected by the Garonne and its tributary the Lot, hence the for private, and, in many instances, most name. More than a half of the depart-fraudulent lotteries, was at its height in the close of the contract of the depart of the standard of the depart of the contract of the standard of the contract of the standard of the standard of the contract of the standard England, and towards the close of the year an existing act of Parliament was put in force for the suppression of such are tobacco and hemp. Prunes and put in force for the suppression of such chestnuts are largely exported, and the lotteries as public nuisances. Govern-cork-oak is abundant. There is an active ment lotteries still continued, however, Cork-oak is abundant. Infere is an active trade in wine, brandy, meal, hemp, resin. and large sums of money were raised by Capital, Agen. Pop. (1906) 274,610.

Lothaire (lo-thair'), a name of old abolished in Britain, except in the case German origin, borne by of art unions, which are permitted from kings of the Franks and early German their supposed good effects in encouraging art. In France the demoralizing influence of lotteries caused their suppression in 1836, with the effect of largely increasing in the following year the deposits in the savings-banks. Lotteries were early the savings-banks. Lotteries were early instituted in the American colonies and became very popular in the eighteenth Loti (lo-te), Pierre, pen name of Louis century, being commonly resorted to for Marie Viaud, born at Rochefort, the purpose of assisting colleges or other France, in 1850. He entered the navy, public institutions. Efforts to abolish France, in 1850. He entered the navy, public institutions. Efforts to abolish but his descriptions of the conduct of the french soldiers at Hué in 1883 led to his century, and they were prohibited in a dismissal. He became an active writer, number of the States before the middle

of the century. The last stronghold of the lottery in this country was in Louis-iana, and the charter for this expired in 1893. In 1890 Congress passed a law forbidding the use of the mails for lottery purposes. Lotteries still exist in

Lotus (lo'tus), a name applied to a number of plants different from agreeable berry of the Natrata tradentata, still greatly prized by the Berbers. The name lotus was also given to several species of water-lily, as the blue water-lily (Nymphæ cæruléa), the Egyptian water-lily (N. Lotus), and to the ne-lumbo (Nelumbium speciosum), which grow in stagnant or slowly running waters. Nymphæa cæruléa and N. Lotus are often found figured on Egyptian buildings, columns, etc., and the nelumbo, or Hindu and Chinese lotus, bears a prom-inent part in the mythology of these coun-tries. The name is also given to a genus of plants, nat. order Leguminosæ, consisting of creeping herbs and undershrubs, chiefly natives of temperate regions throughout the world.

Lotze (lot'se), RUDOLPH HERMANN, a German philosopher and physi-otogist, born at Bautzen in 1817; studied philosophy and medicine at Leipzig; was appointed professor of philosophy at Götappointed professor of pincosophy at Cot-tingen in 1844, and was called in 1881 to Berlin, where he died the same year. As a philosopher the standpoint of his sys-tem may be described as a teleological idealism, according to which the sufficient ground for all being, and for all that takes place in the universe, is found in the idea of the Good. Among his works are Metaphysik (1841), Universal Pathology (1842), Logik (1843), On the Idea of Beauty (1846), Medical Psychology (1852), Microcosmus, Ideas for a History

of Nature and Humanity (1856), and System of Philosophy (1874-84).

Loubet (18-be), EMILE, a French statesman, born at Marsanne in 1839. He became a lawyer and in 1876 Loubet (18-bē), EMILE, a French oped. See France. Germany.

1839. He became a lawyer and in 1876

was made a member of the French Chamber. He was ejected to the Senate in 1137. He joined the second crusade to 1885, became premier of France in 1893, Palestine in 1147, but returned two years

was later president of the Senate, and in 1899, on the death of President Faure, was elected President of the French Re-1893. In 1890 Congress passed a law public. He held this position until 1906, forbidding the use of the mails for lotteries still exist in some parts of Europe, generally in aid of State finances.

Lotus (lo'tus), a name applied to a author of numerous works, the principal of which are the encyclopadies of Garant from Lotus (10'tus), a name applied to a author of numerous works, the principal number of plants different from the lotus famous in Greek legend. One dening (1822), Of Agriculture (1824), of these is the Zizyphus Lotus, a native and Of Plants (1829). He edited the of Northern Africa and Southern Europe, Gardener's Magazine from 1828 to 1843 belonging to the nat. order Rhamnaceæ. and Loudon's Magazine of Natural Histis a shrub 2 or 3 feet high, bearing a tory from 1828 to 1836. The work fruit, the jujube, which is a drupe of the which he intended to be his greatest, the size of a wild plum. Some think this was the food of the Lotophagi (see Lotophagi), though others consider Homer's own expense, involved him in a debt of lotus to have been the date, or the berry of the Rhamnus Lotus, a North African was also the author of several popular shrub, while others again refer it to the botanical works, such as British Wild agreeable berry of the Nitraria tridentata, Flowers (1846), and Botany for Ladies them. was also the author of several popular botanical works, such as British Wild Flowers (1846), and Botany for Ladies (1849). She died in 1858.

Loughborough (luf'bur-o), a town of England, in the county and 10½ miles N. N. W. of Leicester. It is neatly built, and has a thriving

ter. It is neatly built, and has a thriving appearance. The principal manufacture consists of hosiery. There are also a famous bell foundry, dyeworks, brickworks, etc. Pop. (1911) 22,992.

Louis I (16'is; Fr. pron. 18-8') or as a German name Ludwig, surnamed Le Débonnaire, or the Pious, the son of Charlemagne, born in 778, succeeded his father in 814 as King of the Franks and Emperor of the West. In \$17 he divided his dominions among his 817 he divided his dominions among his three sons, Lothaire, Pepin and Louis. His nephew Bernard, king of Italy, revolted at this division, but was allured by Louis to Chalons, where he was put to death. In 829, in consequence of the urgent solicitations of his second wife, Judith of Bavaria, who had borne him a son, he made a new division of the empire. The result was that the elder brothers revolted and commenced a war, which, with various fortune to the parties chiefly concerned, lasted till the death of the emperor in 840. He was succeeded as emperor by his son Lothaire I; by the treaty of Verdun in 843 his son Charles the Bald obtained the territories from which France as a separate nationality developed; while another son, Louis the German, obtained territories from which the distinctive German nationality devel-

afterwards, having suffered many disasters, and lost most of his men. His divorced wife Eleanor married Henry II of England, who thus acquired Guienne and Poitou. He died in 1180, and was succeeded by his son Philip Augustus.

Louis IX (St. Louis), King of France, eldest son of Louis VIII, born in 1215, succeeded to the throne in

1226, but remained some time under the regency of his mother. In the year 1244, when sick of a dangerous disorder, he made a vow to undertake a crusade to Palestine; and in August, 1248, sailed with his wife, his brothers, and 80,000 men to Cyprus, and in the following year men to Cyprus, and in the lonowing your proceeded to Egypt. Landing at Damietta, in 1249, he took this city, and afterwards twice defeated the Sultan of Egypt, famine and contagious disorders soon compelled him to retreat; his army was almost entirely destroyed by the Saracens, and himself and his followers were carried into captivity. Not until the year 1254 did Louis return to France, where he employed himself in improving the condition of the people by wise laws. In 1270 he determined to undertake another crusade. He sailed to Africa, besieged Tunis, and took its citadel. But a contagious disorder broke out, to which he himself (1270), together with a great part of his army, fell a sacrifice. In 1297 he was canonized by Boniface VIII.

Louis XI, King of France, eldest son of Charles VII, was born in 1423, and on his father's death in 1461 he assumed the crown. His unscrupulous ambition soon gave rise to a league against him, headed by the dukes of Burgundy, Lorraine and others, but his craft and the promises of concessions which he made, brought about the dissolution of the league. After the death of Charles the Bold of Burgundy before Nancy in 1477, Louis took possession by force of a considerable part of his dominions as vacant fiefs of France, on account of which a war arose between him and Maximilian of Austria, who had married Mary, the daughter of the deceased duke. It was eventually agreed that the dauphin should marry Margaret, daughter of Maximilian, and receive the counties of Artois and Burgundy. In 1481 Louis, who had been twice affected by apoplexy, haunted by the fear of death, shut himself up in his castle of Plessis-les-Tours, and gave himself over to superstitious and ascetic practices. He died in 1483. The great practices. He died in 1483. The great object of Louis was the consolidation of France, the establishment of the royal power, and the overthrow of that of the power, and the overthrow of that of the Great, son of Louis XIII and Anne of great vassals, and in achieving this end Austria, was born at St. Germain-

he was very successful, although by most unscrupulous means. He encouraged manufactures and trade, and did much for the good of his kingdom, but was cold-hearted, cruel and suspicious. Louis XI was the first French monarch, who as-

was the first French monarch, who assumed the title of Most Christian King, given him by the pope 1469.

Louis XII, King of France from 1498 to 1515, called by his subjects le Père du Peuple, was born in 1462. He was the son of Charles, duke of Orleans, grandson of Charles V. He divorced his first wife Jeanne, daughter of Charles VIII, thus uniting the Duchy of Brittany with the crown. In Italy he conquered the Duchy of Milan, took possession of Genoa, and fought with Ferdinand the Catholic for the Kingdom of Cambray against the Venetians, whom he Cambray against the Venetians, whom he defeated at Agnadello in 1509. In 1510, however, he had to face the Holy League formed against him by Julius II, Venice, Spain, England and the Swiss; was beaten at Novara by the Swiss in 1513, and by the English at Guinegate, and had to retreat out of Italy. At the age of fifty-three he married a second wife of fifty-three he married a second wife, Mary, the sister of Henry VIII of England, and died about three months after-

wards (1515) without male issue. He was succeeded by Francis I.

Louis XIII, king of France, surton of Henry IV, born in 1601. He ascended the throne (1610) after the murder of his father, his mother (Maria de' Medici) being made guardian of her son Medici) being made guardian of her son and regent of the kingdom. In 1614 Louis was declared of age, and married the year following Anne, daughter of Philip III of Spain. His mother was now exiled from court, and excited a civil war, during which the Huguenots also rose in arms against the king. Louis gave himself up to the guidance of Cardinal Richelieu. A peace was concluded in 1623, but it was not of long contin-uance. Eventually Rochelle, the headquarters of the Huguenots, was captured (1628), and the revolt, headed by the queen-mother, was broken by the defeat of the insurgents at Castelnaudary (1632). Louis was now induced by Richelieu to take part in the Thirty Years' war, and obtained frequent successes over Austrians and Spaniards, adding

Roussillon, Alsace and the Duchy of Bar to France. He died in 1643.

Louis XIV, King of France, known as Louis the

Laye in 1638, and succeeded his father in 1643. His minority was occupied by the continuation of the wars against Austria; by the victories of Condé—victories crowned by the Treaty of Westphalia; by the struggles of the Parliament against the regent and Mazarin; by the bloody troubles of the Fronde faction; the revolt of Condé, etc. In 1659 peace was con-



Louis XIV.

cluded with Spain, and Louis married Maria Theresa, daughter of Philip IV of Spain. On the death of Mazarin, in 1861, Louis resolved to rule without a minister. He reformed the administration and the taxes, and made the famous Colbert superintendent, who accomplished a series of financial reforms, created the Company of the Indies made roads can Company of the Indies, made roads, canals, and founded manufactures. In 1662 he purchased Dunkirk for 5,000,000 livres from the needy Charles II. On the death of his father-in-law he claimed Franche-Comté and Flanders, and invaded those territories, Turenne and Condé leading his armies, in 1667. In 1672 he declared war armies, in 1667. In 1672 he declared war with Holland, and in a few weeks he had conquered three provinces; but the formation of the Grande Alliance between the Emperor, William of Orange, Spain, Denmark, etc., checked his ambition. Still the Treaty of Nimeguen (1678) left Louis in possession of Franche-Comté and a part of Flanders. Louis was now at the beight of his glory and the splender of height of his glory, and the splender of his court, adorned by whole groups of great generals, poets, philosophers and notable men, far outshone that of other European courts. Maria Theresa having

the revocation of the Edict of Nantes, the revocation of the Edict of Nantes, which drove so many industrious Protestants into exile. (See Nantes.) The League of Augsburg was now formed against Louis by Spain, Holland, England, Sweden, etc. A general war continued with frequent and severe losses to the French till the Peace of Ryswick (1697), by which Louis was required to restore all his recent conquests and most of the acquisitions made since the Peace of the acquisitions made since the Peace of Nimeguen. The question of the Span-ish Succession once more brought Louis into conflict with a united Europe. The into conflict with a united Europe. The principal episodes of the war were the victories of Blenheim, Ramillies and Malplaquet, gained by Marlborough and Prince Eugène. Hostilities were terminated by the Peace of Utrecht in 1713, without altering the relative position of the combatants. Louis died on September 1, 1715, and was succeeded by his great-grandson Louis XV. While the reign of Louis was brilliant in many particulars, it left France impoverished and most of her industries in a languishing condition. ing condition.

Louis XV, the great-grandson of Louis XIV, was born in 1710; commenced his reign in 1715, but in 1710; commenced his reign in 1715, but did not actually assume the government himself till 1723. In the interval the country was under the regency of the Duke of Orleans (see Orleans), by whose folly, and by the rash financial schemes of John Law (see Law), it was brought to the verge of ruin. In 1726 Louis placed his tutor, Cardinal Fleury, at the head of the administration. In 1725 he had married Maria, daughter of Stanishad married Maria, daughter of Stanislaus Leczynski, the dethroned king of Poland, and in 1733 became involved in a war in support of his father-in-law's claims. After two campaigns he acquired for Stanislaus the Duchy of Lorraine. After the death of Charles VI, in 1740, the war of the Austrian Succession broke out, in which the victories of Count Mau-rice of Saxony gave new splendor to the French arms; and by the Peace of Aix-la-Chapelle, in 1748, France regained her lost colonies. Louis now began to sink into the grossest indolence and sensuality, abandoning the management of state affairs to Madame de Pompadour, who recklessly squandered the public money. From 1769 he was controlled by Madame du Barry, who is said to have cost the royal treasury in five years 180,000,000 livres. The Seven Years' war (1756-63). notable men, far outshone that of other in which France was involved, brought European courts. Maria Theresa having severe losses and humiliations to the died in 1683, he secretly married Madame country, and transferred to Great Britain de Maintenon about 1684 or 1685. She Canada, Cape Breton, and other territois said to have had a considerable part in ries. Under the auspices of the Duke de

Choiseul the Jesuits were expelled from in 1755, and died in 1824. At the acces-France in 1764. In 1771 a quarrel besion of his brother Louis XVI in 1774 he France in 1764. In 1771 a quarrel between the new prime minister, the Duke d'Aiguillon, and the Parliament induced the king to banish the members of the Parliament from Paris, and soon after to Parliament from Paris, and soon after to abolish parliaments entirely. Louis died in 1774 of smallpox, leaving a debt of \$800,000,000 and a demoralized kingdom.

Louis XVI, King of France, grandson in 1754, and in 1770 married Marie Antoinette of Austria. He ascended the throne in 1774. His moral character was far superior to that of the previous king. far superior to that of the previous king; far superior to that of the previous king; but his weakness and want of decision made him very unfit for wielding the scepter of a great country, especially at such a critical period. He could not comprehend the situation of affairs indeed, and had no thought of checking his pernon were on a scale of lavish magnifi-cence. At last, in 1789, all the griev-ances and discontents which had been gathering during a long period of misrule found vent; the populace attacked and destroyed the Bastille; and the revolution was accomplished. In June, 1791, the position of the king had become so perilous that he attempted to escape, but was intercepted at Varennes and forced to return. Among the events which followed were the attack of the populace of Paris on the royal palace, June 20, 1792; the king's arrest in the National Assembly, to which he had fled for refuge; finally, his trial before the convention, where he royaled to the charge 121. where he replied to the charges with dig-nity and presence of mind. (See France.) On January 16, 1793, he was declared guilty of a conspiracy against the freedom of the nation, by a vote of 690 out of 719; on the 17th he was condemned to death,

by a majority of only five in 721, and on the 21st he was guillotined.

Louis XVII, titular King of France, second son of Louis XVII, was born in 1785. On the death of his elder brother, in 1789, he became dauphin, was proclaimed king by the royalists on the death of Louis XVI was alists on the death of Louis XVI. alists on the death of Louis XVI, was soon after separated from his mother, sis-ter and aunt, and delivered (1793) to a shoemaker named Simon, a fierce Jacobin. who, with his wife, treated the young Capet with the most unfeeling barbarity. He survived this treatment only till June

received the title of Monsieur. He favored the Revolution in its first stages, and secured the extended representation of the Third Estate. He lost his popu-larity, however, fled from Paris the same larity, however, fled from Paris the same night as the king, and by taking another route reached the frontier in safety. After the death of Louis XVI, Monsieur proclaimed his nephew King of France as Louis XVII, and in 1795 he was himself proclaimed by the emigrants King of France and of Navarre. For many years he led a wandering life, supported by foreign courts and by some friends of the house of Bourbon. He at last took refuge house of Bourbon. He at last took refuge in England in 1807, and lived there till the fall of Napoleon opened the way for him to the French throne. He entered Paris in May, 1814, had to flee on Naposonal extravagance; while the queen also leon's escape from Elba, but was replaced gave herself up to her love of gaiety, and on the throne by the Allies after Water-the festivals of Versailles and Petit Tria-loo. He was weak in character, but gained considerable esteem and affection. Louisburg (lö'is-burg), a seaport of Cape Breton, province of Nova Scotia, Canada, on the s. E. side of the island. It was strongly fortified under the French; but was taken by the British in 1763, who demolished the fortifications, after which the town fell into ruin. It has a fine harbor with a lighthouse on the east head, and is a coal shipping port. The chief industries are fishing and shipping. Pop. 1588.

fishing and shipping. Pop. 1588.

Louis d'Or (lö-ē dor; Fr., 'a Louis of gold'), or simply

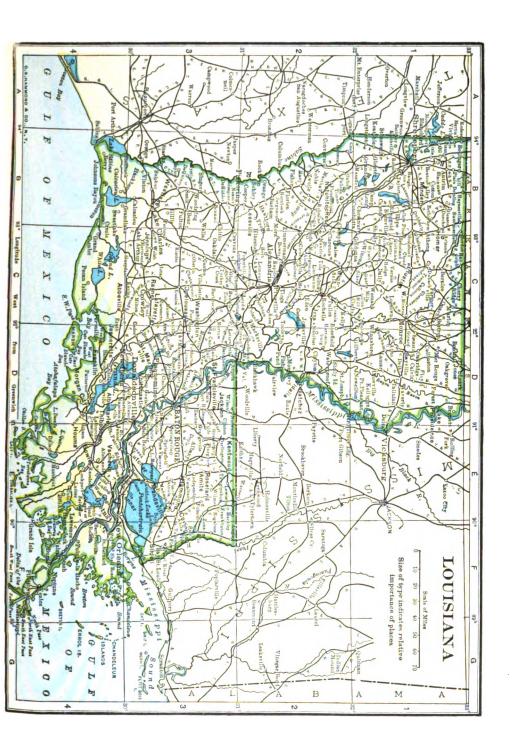
Louis, a gold coin of France, first struck in 1640, in the reign of Louis XIII, and continuing to be coined till 1795. It ranged in value from about \$4.00 to \$4.50. In 1810 the louis d'or was replaced by the napoleon of 20 francs, and when the coin was again struck under the restora-tion the same value (20 francs) was

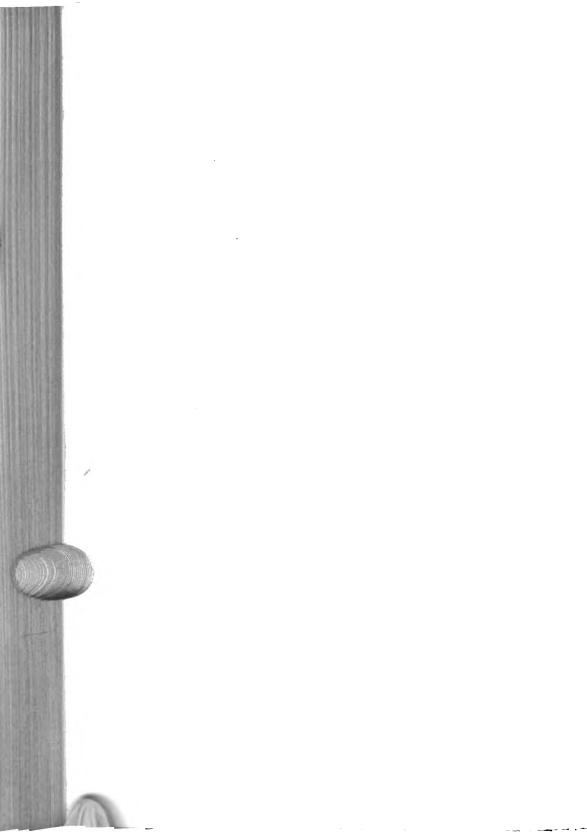
retained.

Louisiade Archipelago (18;6-20), a group of three small islands and a number of islets off the s. E. extremity of New Guinea. They became a British possession in 1885.

(lö-ē-zi-an'a), one of the Louisiana Southern States of the American Union, bounded north Arkansas, northeast and east by Mississippi, from which it is partly separated by the river of that name, southeast and south by the Gulf of Mexico, and west by R. 1795. when he died at the age of ten years and two months.

Louis XVIII, King of France, square miles. The surface is generally third son of the flat and low; the delta of the Mississippi, dauphin, the son of Louis XV, was born and the land along that river, having to





be protected from inundation by levées andria, Lake Charles and Monroe are or artificial embankments. The coast is among the other large cities. Pop. (1900) a low swampy region producing large 1,381,625; (1910) 1,656,388; (1920) quantities of rice and sugar-cane; to-1,798,509. wards the north and northwest, where the highest elevation is reached, the land is Louisiana State University, less productive, but bears valuable timber. The chief rivers are the Mississippi, College, a State coeducational institution which runs for about 600 miles along the at Baton Rouge, La. Its first home was border of and through the State: the Red at Alexandria, where it was founded. which runs for about 600 miles along the at Baton Rouge, La. Its first home was border of and through the State; the Red at Alexandria, where it was founded, River, which crosses the State diagonally 1855, as the Louisiana State Seminary; and forms an important avenue of inland removed to Baton Rouge in 1870 and the commerce; the Washita, Sabine, Pearl, name changed to Louisiana State Univeretc., all navigable. There are numerous sity. The Agricultural and Mechanical bayous or secondary outlets of the riveres of much importance for both navigation and drainage purposes, the chief of which are the Atchafayala with its series of lakes, the Bayou Teche, Bayou de Large, Bayou La Fourche and Bayou land, in 1850. He was the eldest son of Bœuf. Numerous lakes and lagoons are Duke Louis Philippe Joseph of Orleans, scattered over the State, mostly land-surnamed Egalité (see Orleans), and durscattered over the State, mostly land-surnamed Egalité (see Orleans), and durlocked bays and expansions of rivers. The ing his father's lifetime he was known as total length of navigable waters is 3782 Duke of Chartres. He entered the army miles, Louisiana surpassing all other in 1791, and favoring the popular cause States in length of navigable streams. In the Revolution he took part in the There are extensive areas, estimated at battles of Valuy and Jemappes. In 1793 16,000,000 acres, of densely wooded forest, he left the army and went to England; pine being the most important lumber and from 1796 to 1800 lived in the United tree. The climate is semitropical, and the States. In 1814 he returned to France, tree. The climate is semitropical, and the States. In 1814 he returned to France, rainfall heavy along the coast. Coal, and was reinstated in his rank and propiron, petroleum, sulphur and rock salt are erty. At the Revolution of July, 1830, he found. The petroleum production in 1918 was made lieutenant-general of the kingwas 16,042,600 barrels. Immense quantities of sulphur are produced at Sulphur, French. He reigned for eighteen years Calsalieu Parish. There are great deposits (see France), when the Revolution of of rock sand, notably on Petit Anse and 1848 drove him to England.

Weeks islands. The chief agricultural standards are cotton, sugar, rice and corn.**

Louis-Quatorze Style (lö-ē-k astaples are cotton, sugar, rice and corn.** Weeks islands. The chief agricultural staples are cotton, sugar, rice and corn. Perique tobacco is grown only in this name given to a style of architecture and State. It has extensive cattle and other internal ornamentation prevalent in livestock interets. Its fisheries, notably France in the reign of Louis XIV, speoysters, are important. The institutions cially applied to palfor higher learning include the Louisiana aces and large man-State University and Agricultural and Mechanical College (q.v.), Tulane Uniforms are classical, versity, at New Orleans (organized 1884; freely treated, and students 2600), which includes the New-rustication is much restry, at New Orieans (organized 1994; students 2800), which includes the Newcomb Memorial College, the women's department of the university; Southern University, at New Orleans (for colored students), Industrial Institute at Lafayette; and other establishments. Louisiana was colonized by the French in 1699, and was ceded in 1717 to a chartered company, one of the schemes of the notorious John e rally an effort at Law (see Mississippi Scheme). In 1720 sumptuous elegance. it was resumed by the crown; in 1763 it The palace of Verwes ceded by France to Spain; in 1800 sailles and the east re-ceded to France; and in 1803 was purchased with other territory from France by the United States for about \$15,000,- ples of the style. The 000. It was admitted into the Union in most characteristic Quaturse Style.

1812. The capital is Baton Rouge; large features of the Louisest city, New Orleans. Shreveport, Alex-Quatorze style, however, are seen in the

freely treated, and rustication is much employed; the windows are larger and the rooms more lofty and spacious than in buildings of the period immediately preceding, and there is generally an effort at



Panel in the Louis-

internal ornamental decoration, the great number of attractive parks; also race medium of which was gilt stucco-work, tracks, the home of the 'Kentucky Derby.' and its most striking characteristics are Pop. (1900) 204,731; (1910) 223,928; an infinite play of light and shade, and a (1920) 234,891. an infinite play of light and shade, and a certain disregard of symmetry of parts and of symmetrical arrangement. The characteristic details are the scroll and of Faro. It has the ruins of a Moorish the elements of the Cinque capto for the sale wall. Pop. 22,478.

Panel in the Louis-Quin**se** style.

Cinque cento, from which the Louis-Quatorze proceeded, are admitted under peculiar treatment, or as accessories; the panels are formed by chains of scrolls, the concave and convex alternately; some clothed with an acanthus foliation, others plain. The name Louis-Quinze (18-6kanz) is given to the variety of this style which prevailed in France during the reign of Louis XV. In it the want of symmetry in the de-

tails, and of symmetrical arrangement, which characterize the Louis XIV style, are carried to an extreme. It is crowded with meaningless parts devoid of beauty and expression.

Louisville (lö'ë-vil or lö'is-vil), a city, county seat of Jefferson county, Kentucky, and the principal city of the State, situated on the south bank of the Obio, impediately the seath of the Obio, impediately the obio of the Ohio, immediately above the falls. It has a river frontage of 8 miles, and is connected with the towns of New Albany and Jeffersonville on the opposite bank of the river, in the State of Indiana, by bridges. A canal carries the traffic around the falls. In addition to the large river traffic to points on the Ohio and Missistral, the Chesapeake & Ohio, and others. It is the largest loose-leaf tobacco market in the world, and has a large trade in wheat, corn, livestock, pork, iron, etc. The manufactures are very extensive and others. varied, tobacco manufacture and machine-

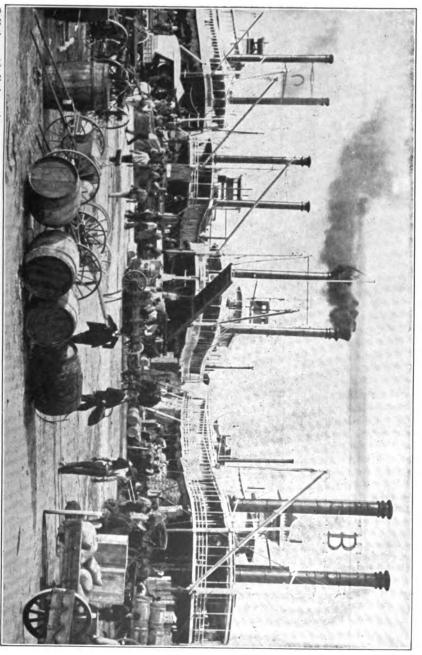
Lourdes (lord), a French town, dep. of Hautes-Pyrénées, on the Gave de Pau. In 1858 a peasant girl declared that she had been favored with visions of the Virgin Mary in a cave in the neighborhood. Since then pilgrims have flocked to Lourdes, and a church, convent, and other buildings have been erected in connection with the cave. Pop. (1906) 7228.

Lourenco Marquez. See Delagoa Bay.

Louse (lous), the common name of a genus (Pedioŭlus) of apterous insects, parasitic on man and other animals. The common louse is furnished with a simple eye or ocellus, on each side of a distinctly differentiated head, the under surface of which bears a suctorial mouth. There is little distinction between the thorax and abdomen, but the segments of the former carry three pairs of legs.
The legs are short, with short claws or
with two opposing hooks, affording a very
firm hold. The body is flattened and nearly transparent, composed of eleven or twelve distinct segments. The young pass through no metamorphosis, and their multiplication is extremely rapid. Most, if not all, varieties of mammals are infested by lice, each having generally its own peculiar species, and sometimes having two or three. Three species are said to belong to man, viz. P. vestimenti (body louse), P. capitis (head louse), and P. pubis (crab louse).

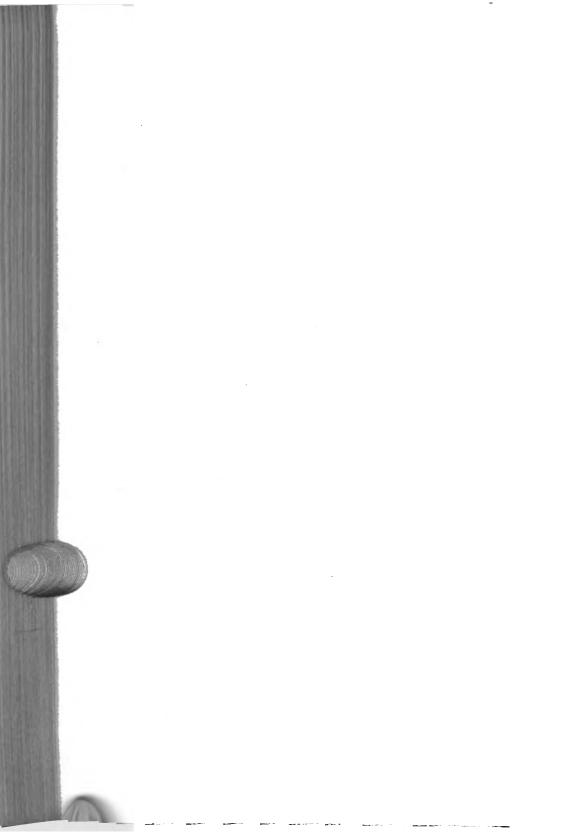
Louth (louth), a municipal borough of England, in Lincolnshire, on sippi, an enormous trade is carried on by the Lud, 27 miles E. N. E. of Lincoln, givrail, many lines serving the city, as the ing name to a parliamentary division. Baltimore & Ohio, the Southern, the Carpets, soap and candles, agricultural Louisville & Nashville, the Illinois Cenimplements, and oil-cake are manufactral, the Chesapeake & Ohio, and others. tured. A canal extends to the Humber.

of Armagh, Monaghan and shop products leading. It has a city hall, length, 28 miles; breadth, 18 miles; comsalop products leading. It has a city half, length, 28 miles; breadth, 18 miles; comcourthouse, armory, and other notable prising 316 square miles. In its coastbuildings; as well as a great number of line are Carlingford Lough. Dundalk
literary, medical, theological and other institutions of learning, notably the Univerthe north it is rugged and mountainous,
sity of Louisville, Louisville College of but in all other parts level or undulating.
Dentistry, Jefferson School of Law, State The soil is generally fertile, excepting on
University (colored), etc. There are a the elevated tracts. Linen is manu-



O Underwood & Underwood.

THE BUSY RIVER FRONT AT LOUISVILLE Louisville, with a population of a quarter of a million, is the largest city of Kentucky and the center of a vast distributing and export trade, with exceptional facilities by river and railroad.



Loutherbourg (10 ter-pois,, more correctly, LUTHERBURG, PHILIP JAMES, a painter and engraver, born at Strasburg in 1740; died near London in 1812. In 1771 he settled in London, and in 1782 he was an Academician. As a landscape-painter he had deserved celebrity, and he excelled in battle pieces. highly esteemed. His etchings were also

Louvain (15-van; Flemish, Leuven; German, Löwen), a town of Belgium, in the province of Brabant, on the Dyle, 15 miles east by north of Brussels. It forms all the state of th Brussels. It forms almost a perfect circle; diameter nearly 2 miles. It lay in the path of the German advance in the early days of the European war (1914) and because of a shot or two fired preand because of a snot or two nred pre-sumably by some of the inhabitants, the splendid old city was destroyed with a wantonness that bestowed on the invaders the appellation 'Hun.' Over a thousand houses were utterly demolished with bomb and fire, and only the Hotel de Ville, of all the beautiful buildings in the city, was spared. The splendid Church of St. Pierre, the University buildings, the library and the scientific establishments were delivered to the flames. Louvain was the intellectual metropolis of the Low Countries. Pop. 45,000. Louverture. See Toussaint-Louver-

ture. Louviers (18-vi-a), a town in France, in the department of Eure, 17 miles south of Rouen. The staple residence in the reign of Dagobert, in 628.

version of the office of secretary of war held by his father, and became sole min-ister of war in 1666. He effected quite a revolution in the art of disciplining, disa revolution in the art of disciplining, dis-tributing, equipping and provisioning armies, and his administration was brilliant. It was partly by his advice that the Edict of Nantes was revoked in 1685, and the Palatinate was devastated in 1689. His arrogance had long rendered him odious to Louis, and his death was regarded as a relief by his master. Louvois' organization of the army lasted till the Empire; but he also undid the work of Colbert, and destroyed the commerce of France.

factured, and there is also some cottonspinning. The fisheries are important.

Drogheda and Dundalk (the county other apartment, formerly open at the town) are the principal towns. Pop. sides, but now generally glazed. Louvres 65,820.

Loutherbourg (18'ter-borg), or more correctly, kindled in the middle of the room. Lourre was sided in the middle of the room. Lourre was similarly in the middle of the room. Lourre county is sided in the middle of the room. Lourre was simple to window in the middle of the room. window is the name given to a window in a church tower, partially closed by slabs or sloping boards or bars called lowers



Louvre, Abbot's Kitchen, Glastonbury.

boards (corrupted into luffer or lever boards), which are placed across to ex-clude the rain, while allowing the sound of the bell to pass.

manufacture is woolen goods and woolen yarn. Pop. (1906) 9449.

LOUVOIS (1ö-vwa), FRANÇOIS MICHEL LETELLIER, MARQUIS DE, adorned by successive kings, particularly minister of war to Louis XIV, son of the Louis XIV. The new Louver, begun by Chancellor Letellier, born at Paris in Napoleon I, was completed by Napoleon 1641; died in 1691. He obtained the re- III in 1857. The whole group of buildings is distinguished by its great extent, and by its elegant and sumptuous architecture. It contains museums of paintings, drawings, engravings, bronze antiques, sculptures, ancient and modern, to-gether with special collections of antiquities, and an ethnographical collection. It was greatly injured by the Communists in May, 1871, the Richelieu pavilion, containing the imperial library of 90,000 volumes and many precious MSS., having

Lovage (luv'ij), a herbaceous, perennial, umbelliferous plant, genus Liqueticum, widely distributed throughout temperate regions. L. officimile, common lovage, is sometimes used as diminutive species, found in America, an aromatic stimulant. L. scoticum, Africa and Australia. They receive their an aromatic stimulant. L. scoticum, found on the sea-coasts of Scotland, is

occasionally used as a pot-herb. Lovat (luv'at), SIMON Lovat FRAZER. Frazer of Beaufort, afterwards twelfth Lord Lovat; born in 1667, beheaded at Tower Hill, London, in 1747. In 1699, on the death of his father, he assumed the title of Lord Lovat, to which on the death of the eleventh Lord Lovat his father had acquired a disputed claim. To secure the estates he effected a forced marriage with the Dowager Lady Lovat, for which he was outlawed and forced to take refuge in France. After a varied life of in-triguing, first on the Hanoverian side and next on the Stuart, and a long imprison-ment, his title, which had been objected to in various elections, was decided in his favor by the Court of Session in 1730. On the outbreak of the rebellion of 1745, Lovat acted with his usual duplicity. with a seed with his usual duplicity, sending his son to fight for the Pretender, wright, born at Woolwich, Kent. He while he himself remained at home, protesting his loyalty to the Hanoverian Soldier, a tragedy. house. This conduct brought him to trial for treason, and resulted in his execution.

Love, Alfred Henry, reformer, born at Philadelphia in 1830. He betiful Estes Park. It is in a rich agricultum merchent organized the American tural district. Hes compart plant will attend the compart plant will district. came a merchant, organized the American tural district. Has cement plant, milk Literary Union, was vice-president of the condensery, plaster mill, etc. Excellent Pennsylvania Prison Society, and in 1866 climate. Pop. (1920) 5065.
one of the founders of the Universal Lover, SAMUEL (1797-1868), an Irish Peace Union and became and long remained its president. He wrote much on best-known works are Rory O'More, Hadda Andre Tracestre. national peace. For many years he was also a painter, and wrote many ballads, an official visitor to prisons. Died in 1913, notably 'Molly Bawn,' 'Rory O'More,' Love Apple. See Tomato. 'The Low-Backed Car.' Love Apple.



Swindern's Love-bird (Psittacula Swinderniana).

name from the great attachment shown to each other by the male and female birds. Swindern's love-bird is barely 6 inches in length.

See Agape. Love-feast.

Lovejoy, ELIJAH PARISH (1802-37), an American abolitionist, born in Maine. He entered the Presbyterian ministry (studied at Princeton Semi-nary), and founded at St. Louis the Observer, a Presbyterian organ. Because of his anti-slavery views he was obliged to remove to Alton, Illinois. Here he pub-lished the Observer, with its strong anti-slavery articles. His office was burned several times. He was killed Nov. 7, 1837, while attempting to defend his plant.—His brother, Owen Lovejoy (1811-64), was a Congregational minister and abolitionist. Lovelace,

RICHARD (1618-58). a

Cavalier poet and playwright, born at Woolwich, Kent. He
wrote The Scholar, a comedy; and The

came a merchant, organized the American tural district. Has cement plant, milk

reform subjects and in advocacy of inter- Handy Andy, Treasure Trove. He was

SETH (1850-1916), an American Low, Love-bird, a name given to a genus of birds (Agapornis or in Brooklyn, N. Y., graduated from Columbia College (now University) in 1870. He was mayor of Brooklyn 1882-86, became president of Columbia College in 1890 and areasted there the Law Magnetial 1890 and erected there the Low Memorial Library, costing over \$1,000,000. In 1901 he was elected mayor of New York on the fusion anti-Tammany ticket.

Low Church, a name given to a section of the Church of England whose opinions are opposed to those of the High Church party, and are especially hostile to ritualism and accordatism. See High Church.

Low Countries. See Netherlands.

Lowe (10), SIR HUDSON, lieutenantborn at Galway in 1769; died in 1844. Psittacula) of the parrot family. They are a beautiful group, consisting of very was attached to the army of Blücher, and he took part in the invasion of France of Cambridge, besides being elected rector the following year. On the fall of Napo- of St. Andrew's University. Besides his leon he was appointed governor of St. poems, of which numerous editions have Helena, and entrusted with the care of been published, and the Biglow Papers. the ex-emperor. He incurred the aversion of Napoleon, and many charges of Conversations on some of the Old Poets; include accountly were brought except to the conversations on some of the Old Poets; when Study Windows. undue severity were brought against him. Among my Books; My Study Windows; Sir Hudson was allowed to die in poverty. His Letters and Journals were published in 1852.

Lowe, ROBERT. See Sherbrooke, Vis-

Lowell, a city of Middlesex county, Massachusetts, at the confluence of the Merrimac and Concord rivers, on the Boston and Maine and the New York, New Haven and Hartford railroads, 25 miles north from Boston. Lowell is known as one of the largest producers of cotton goods in the United States; and has besides its cotton mills extensive bleacheries, machine shops, foundrics, shoe shops, medicine plants, and rubber works. The Lowell Textile School is located here. Lowell Textile School is located here. cated here. Lowell was founded in 1822,

and chartered as a city in 1837. Pop. (1910) 106,294; (1920) 112,759.

Lowell (lotel), Abbott Lawrence, college president, born at Boston, Massachusetts, in 1856. He studied law and practiced at Boston 1820.97 was a locturer 1897.99 professor 1880-97, was a lecturer 1897-99, professor

1880-97, was a lecturer 1897-99, professor of the science of government at Harvard University 1900-03, an Eaton professor 1903-09. On the resignation of President Eliot of Harvard, in 1909, he was elected to succeed him. He is the author of various works, including Colonial Civil Poems was privately printed after her Service, The Government, etc.

Lowell, James Russell Lowell

Democracy, and other Addresses, etc. He died in 1891. His first wife, Maria Eliot of Harvard, in 1909, he was elected to succeed him. He is the author of considerable merit; a volume of her various works, including Colonial Civil poems was privately printed after her Service, The Government, etc.

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Comocracy, and other Addresses, etc. He died in 1891. His first wife, Maria is the control of considerable merit; a volume of her poems was privately printed after her death.

Lowell (1821-1853), was a poet of considerable merit; a volume of her poems was privately printed after her death.

Lower California, a peninsula on the Pacific coast of North America, extending about 750 miles; pop. 42,245. It belongs to Mexico and, with the exception of a few spots, is published a small volume of poems entitled a sterile and unproductive region. Chief A Year's Life, and became a regular contributor to various journals, including the Rosario.

Rosaton Courier, in which appeared the Lowestoft (lô'stoft), a seaport, municipal borough, and Boston Courier, in which appeared the Lowestoft first series of the Biglow Papers, mainly a satire on slavery and the Mexican war. In 1851 he traveled in Europe, and in folk, occupying the most easterly point of 1855 succeeded Longfellow as professor the kingdom. Since the construction of a of modern languages and belies-lettres at harbor, piers and docks, Lowestoft has Harvard. From 1857 to 1862 he wrote risen to be a thriving and important town, many essays for the Atlantic Monthly, and a chief seat of the fishing industry. many essays for the Atlantic Monthly, and a chief seat of the fishing industry. founded by Holmes, Longfellow, Emerson and himself, and of which he was the first feet long. Lowestoft is much frequented editor. He was joint-editor of the North for sea-bathing. Pop. (1911) 33,780.

American Review from 1863 to 1872. In Lowth (lowth), Robert, an English 1877 he was appointed American minister at Madrid, and in 1880 he was transferred to London, whence he was recalled and Oxford University, he was chosen in 1885. He was very popular in Britain, was made D.C.L. of Oxford and LL.D. In 1744 he was appointed rector of Oving-



James Russell Lowell

(lo'stoft), a seaport, municipal borough, and watering place of England, county of Suf-

ton in Hampshire. In 1753 he published he formed the first nucleus of the society his lectures on The Sacred Poetry of the which afterwards became so famous, Hebrews, and became famous as one of François Xavier, professor of philosophy, the first Biblical critics of his age. Preferments flowed rapidly upon him; and he became successively Bishop of Limerick, prebend of Durham, Bishop of St. David's, of Oxford, and of London. In 1778 he published Isaiah, a New Translation, with a preliminary dissertation and notes, which contributed to extend his

Lowther Hills (lou'ther), a range of Scottish hills extending across the south of Lanarkshire and north of Dumfriesshire to the southern borders of Peebles and Selkirk shires, the highest summits being Green Low-ther (2403 feet) and Lowther Hill (2377 feet).

(lok-su-drom'-Loxodromic Curve of a ship when her course is directed constantly towards the same point of the compass, in a direction oblique to the

Pacific Ocean, immediately east of New Caledonia, of which French colony they are appendages. They consist of the islands Uwea, Lifu and Mari, with many small islands. Total area, 841 square go.

They consist of the interior of Southern Africa forming a tributary of the Upper Consiles. Pop. about 20,000.

Guipuscoa, in 1491; died in 1556. was attached in his youth as a page to the court of Ferdinand and Isabella, and trained up in all the vices and frivolities peculiar to his position. When still a young man he entered the army, and dur-ing the defense of Pampeluna in 1521 against the French he was severely wounded, and a long and tedious confine-ment was the result. The only books he found to relieve its tedium were books of devotion and the lives of saints. This course of reading induced a fit of mystical devotion in which he renounced the world, made a formal visit to the shrine of the Virgin at Montserrat, and vowed himself her knight (1522). After his ded-Jerusalem, and from 1524 to 1527 attended the schools and universities of Barcelona, Alcala and Salamanca. In constituent of the German Empire, stands 1528 he went to Paris, where he went on a low ridge at the confluence of the through a seven years' course of general Wackenitz with the Trave, 38 miles from the constituent of the German Empire, stands 1528 he went to Paris, where he went on a low ridge at the confluence of the through a seven years' course of general Wackenitz with the Trave, 38 miles 1528 he went to Paris, where he went on a low ridge at the confluence of the through a seven years' course of general Wackenitz with the Trave, 38 miles and theological training. Here in 1534 northeast of Hamburg, and 12 miles from

Lainez, and others having in conjunction with Loyola bound themselves together to devote themselves to the care of the church and the conversion of infidels. Rome ultimately became their headquarters, when Loyola submitted the plans of his new order to Paul III, who, under certain limitations, confirmed it in 1540. (See Jesuits.) Loyola continued to reside in Rome and govern the society he had constituted till his death. He was beatified in 1607 by Paul V, and canonized in 1622 by Gregory XV.

Lozère (lo-zàr), a department of Southern France, bounded by Haute-Loire, Cantal, Ardèche, Gard and Aveyron; area, 1996 square miles. The a department department is generally mountainous; highest peak, Mount Lozère, rising 4884 feet. The general character of the department is pastoral, immense numbers of sheep and goats being reared. The rivers Allier, Lot and Tarn rise within the deequator, so as to cut all the meridians at Allier, Lot and Tarn rise within the deequal angles. Mariners usually speak of partment, which belongs to the basins of lines of this kind as *rhumbs*.

the Loire, the Rhône and the Garonne. (loi'al-ti), a group Neither manufactures nor trade have of islands in the made much progress. The capital is

miles. Pop. about 20,000.

Loyola (loi-o'la), Ignatius, original name Inigo Lopez de Research to the founder of the order of the father's banking business in 1848. He engesuits, was descended of a noble Bisteray family, born at the castle of Loyola, Guipuscoa, in 1491; died in 1556. He London University. He hearms a received to the control of the co London University. He became a recognized authority on financial and educational questions, and his name was associated with several important public measures, such as the Bank Holiday and Ancient Monuments Acts. He was also distinguished as a man of science, being author of Prehistoric Times; Origin of Civilization; Origin and Metamorphoses of Insects; Monograph on the Thysanura and Collembola; British Wild Flowers in their Relation to Insects. He was raised to the peerage as BARON AVEBURY, 1900. His father, SIR JOHN WILLIAM, born in 1803; died in 1865; was a well-known banker, and published several scientific works of considerable value in their day, which we relating to astronomy.

chiefly relating to astronomy.

Lübeck (lübek), one of the free towns of Germany, and a

the Gulf of Lübeck, a bay of the Baltic. It was formerly surrounded by walls and bastions, which have been leveled down and converted into pleasant walks; but it is still entered by four gates, and furnishes striking specimens of the architecture of the fifteenth and sixteenth centuries. Among the buildings are the cathedral, a structure of red brick, begun in 1173, surmounted by two spires 416 feet high, and containing a choir-screen re-garded as one of the finest specimens of garded as one of the finest specimens of wood-carving in existence; the Marien-kirche (St. Mary's Church), a fine specimen of early Gothic; the Ægidlenkirche (St. Giles' Church), and the Petrikirche (St. Peter's Church); the town or senate house, an ancient Gothic building; the Hospital of the Holy Ghost (thirteenth century); the Holstein Gate, with its two lofty towers, etc. There is a public library of about 100,000 vols. The manufactures are comparatively unimportant, library of about 100,000 vols. The manufactures are comparatively unimportant, but the trade is extensive, especially with Hamburg, the Baltic ports, and the interior of Germany. Lübeck possesses a teer in 1828; succeeded his father 1839; territory of 116 square miles, and includes the port of Travemunde, and several iso-lated portions in Holstein and Lauenburg. It has a senate of 14 members and a council of burgesses of 120 members. It became an imperial free city in 1226, and about thirty years later it also became the

head of the Hanseatic League. (See Hanse Towns.) Pop. (1910) 116,500.

Lübke (lüb'kė), WILHELM, art historian, born at Dortmund in Westphalia in 1826; professor of architecture at Berlin in 1857; of art history to the state of at Zurich in 1861, at Stuttgart in 1866; called to a similar post at Karlsruhe in 1885. He was the author of a History of Art, History of Soulpture, etc. He died in 1893.

ple or variously compounded, are the substances used.

Luca Giordano (also called Luca Fa Presto). See Giordano.

Lucan (lö'kan), in full, Marcus Anneus Lucanus, a Roman poet, nephew of the philosopher Seneca, born at Corduba, in Spain, about An. 38. Lucan went to Rome when a child, and having obtained celebrity at an early age by his talents, excited the jealousy of Nero, who himself aspired to literary honors, and was forbidden by the tyrant to recite in public. This induced Lucan to join the conspiracy of Piso. The plot was discovered, and Lucan died by having his veins opened (A.D. 65). Of his poems only his *Pharsalia*, an unfinished description of the civil war between Casar and tion of the civil war between Cæsar and Pompey, has come down to us. It possesses the highest poetical excellencies disfigured by great faults, which are easily explained by the youth of the author, and the fact that it probably did not receive his final revision.

was elected an Irish representative peer was elected an Irish representative peer in 1840; was commander of a cavalry division in the Crimea, and wounded before Sebastopol. His name is conspicuously associated with the Balaklava charge of the Light Brigade. He was lieutenant-general in 1858; general in 1865; and was also made field-marshal in 1887.

Lucania (lö-kā'ni-a), an ancient division of S. Italy, which extended across from the Tyrrhenian Sea to the Gulf of Tarentum. The Lucanians were a branch of the Samnite nation, and were subdued by the Romans in B.C. 272. Lucania comprised the modern province of Basilicata, the greater part of Principato Citeriore, and the north part

called to a summer of Art, History of Sculpture, etc. died in 1893.

Lublin (lyö'blyen), a town of Russian Poland, capital of the government of Lublin, 60 miles southeast of Warsaw. It is well built, has manufactures of cloth, candles, soap, etc., and a large trade. Among its notable buildings are the cathedral, dating from the thirteenth century, and the town hall. Pop. 65,870.—The government of Lubin has an area of 6499 square miles. Pop. 1,362,500.

Lubricant (lö'bri-kant), any substance applied to surfaces stance applied to surfaces of the stance applied to surface applied gurian town, Lucca afterwards became a Roman colony. It subsequently was an-nexed to the Frankish and German empires, and early in the twelfth century, along with its territory, became a republic. During the middle ages its history is intimately connected with that of Flor-

ence and Pisa. It was occupied by the French in 1799, and together with Piombino was formed into a principality in 1805, and given by Napoleon to his sister The Congress of Vienna in 1814 erected it into a duchy, and gave it to the Infanta Maria Louisa, duchess of Parma, whose son ceded it to Tuscany. In 1860 it became part of the Kingdom of Italy. The province of Lucca is bounded N. by Massa e Carrara and Modena, E. by Firenze, S. by Pisa, w. by the Mediterranean; area, 577 square miles. It is mountainous in the north, but, on the whole, is better cultivated than most parts of Italy. Silk, oil, corn and fruits are the chief productions. Pag. 210 192 are the chief productions. Pop. 319,123. Lucena (15-thā'nà), a city of Spain, in Andalusia, in the province and 30 miles s. s. z. of Cordova. Pop. 21,284.

Lucera (lö-chā'rā; ancient Luceria), a town of South Italy, prov-ince of Foggia, 11 miles w. N. w. of Foggia. The principal edifices are a cathedral, once a mosque, the castle, an interesting example of a mediæval strong-hold, etc. Pop. 17.515.

(lö-ser-nā'ri-a; Lucernaria the Meduside or jelly-fishes. The most while the foot is formed by the Bay of familiar member is the Lucernaria auribucula, a little organism somewhat bell-shaped, and which is frequently found nach to Küssnacht at the extremities of adhering by the smaller end to sea-weeds, the arms about 14 miles; width from 1 etc. In the center of the bell-shaped end to 3 miles; greatest depth 510 feet. is an opening into the cavity of the body, which is the stomach. It can detach itself at will and swim freely about by contracting and expanding the bell-shaped disc or 'umbrella,' as it is technically called.

Lucerne, Luzern', lö-tsern', lo-tsern', lo-t Swiss Diet, has an important grain mar- very unhealthy and infested with venom-

ket and manufactures of silk and cotton fabrics and of carriages. Pop. 41,500. The canton is bounded by the cantons of Aargau, Zug, Schwyz, Unterwalden and Bern; area, 587 square miles. The surface is very much broken by ramifications of the Bernese Alps, but none rise above the line of perpetual snow. The Tomlishorn, the culminating point of Mount Pilatus, and of the canton, is 7116 feet above sea-level. The chief rivers are the Reuss, the Aa, Suren, Wigger, etc. Lu-cerne is well supplied with lakes. Within its own boundaries it has those of Sempach and Baldegg, with many more of smaller size; with Zug it shares the Lake of Zug, and with Unterwalden and Schwyz the Lake of Lucerne. The soil generally is fertile. The pastures are exgenerally is fertile. The pastures are extensive and excellent. German is the language spoken, and the greater part of the inhabitants profess the Roman Catholic religion. Pop. 146,519.

Lucerne, IAKE OF, VIERWALDSTATTER-SEE, OF LAKE OF THE FOUR FOREST CANTONS, a Swiss lake bounded by the cautons of Uri, Schwyz, Unterwalden and Lucerne, and poted for

Unterwalden and Lucerne, and noted for Latin, its magnificent scenery and historical astucerna; a lampl, the sociations. It is nearly cruciform in typical example of the Lucernaride, an shape, the bays of Lucerne, Küssnacht, order of the Hydrozoa, nearly allied to and Alpnach forming the head and arms the Meduside or jelly-fishes. The most while the foot is formed by the Bay of familiar member is the Lucernaria auri-

(Medicago), a genus of leguminous plants contain-Lucerne ing at least ninety species. The purple medick (M. sativa) is a valuable pasture and forage plant extensively cultivated in some of the chalky districts of England

ons serpents and insects. The chief ex- now an arsenal and store-houses; the ports are sugar, rum, and cocoa. Castries, the capital, has 7910 inhabitants. Pop. 50,934, of whom about 1000 are white.

Lucian (lö'she-an), a Greek satirist and humorist, who was born at Samosata, on the banks of the Euphrates, and lived between A.D. 120 and 200. Little is known of his life, but he is said to have made money as a rhetorician or a lawyer, to have spent rhetorician or a lawyer, to have spent much time in traveling, and to have lived for long intervals in Athens. His works are of a witty and satirical character, the most popular being those known as the Dialogues, in which he ridicules the popular mythology and the philosophical sects, particularly his Dialogues of the Gods and Dialogues of the Dead. He may be regarded as the first of the great humorists.

Lucilus (18-sil'i-us), CAIUS En-NIUS, a Roman knight, grand-uncle to Pompey the Great; born at Suessa B.C. 148; died at Naples about 103 B.C. He is considered the inventor of the Roman satire, because he first gave it the form under which this kind of poetry was carried to perfection by Horace, Juvenal and Persius. Of thirty

satires which he wrote only some frag-ments have been preserved.

Luckenwalde (luk'en-vål-dé), a town of Prussia, 31

Lucknow (luk-now); more correctly Larenway), a city of Hindustan, capital of Oude, 610 miles w. N. w. of Calcutta, on both banks of the Gumti, here crossed by four bridges, two of which were built by native rulers, and two by the British since 1856. It ranks fourth in size among British Indian cities, being next after Calcutta, Madras and Bombay. It presents a picturesque view from a distance, and has some good streets and interesting edifices. Among the most notable buildings are the Kaisarhagh, a palace built by King Wajid Ali valuable library and works of art, which in 1850 at a cost of \$4,000,000, now were freely opened to the curious and occupied as government offices; the Imam-learned, among whom was his friend barra or mausoleum of Asoof ud Dowlah, Cicero.

great mosque called the Jama Masjid, now a jail; and the Hoseinabad or Small Imambarra, with the mausoleum of Mohammed Ali. Lucknow was one of the chief scenes of the Sepoy mutiny. At the chief scenes of the Sepoy mutiny. At the beginning of the mutiny the Residency was fortified by Sir Henry Lawrence, and after his death (July 4, 1857) it was closely besieged by the rebels till relief was brought by Havelock and Outram. The relieving force was only a small one, however, and the British were again besieged, partly in the Residency, partly in a walled garden called the Alambágh. In the middle of October Sir Colin Campwe middle of October Sir Colin Campbell gained possession of the place after severe fighting; but as it seemed impossible to hold it with the troops at his disposal he left Sir James Outram to defend the Alambágh, and removed the civilians, women and children to Cawnphoros, both meaning lightplanet Venus as the morning star. The term is used figuratively by Isaiah (xiv. 12) and applied to the Babylonian king, but it was mistaken by the commentators for a reference to Satan.

Lucifer—match. See Matches.

by Sextus, son of Tarquinius Superbus, king of Rome. She stabbed herself, and her death was the signal for a revolution,

her death was the signal for a revolution, by which the Tarquins were expelled from Rome and a republic formed.

Lucretius (lö-krë'she-us), CABUS, Titus, a Roman philosophic poet, born about 98 B.C.; died in 55 B.C. He is said to have died by his own hand, but about his life almost nothing is known. He is admitted to be only ing is known. He is admitted to be one of the greatest of Roman poets for descriptive beauty and elevated sentiment. We possess of his composition a didactic town of Prussia, 31 poem, in six books, De Rerum Natura miles south of Berlin. It has cloth manufactories and numerous other industrial he exhibits the cosmical principles of the establishments. Pop. (1905) 22,283.

Lucknow (luk-now'); more coredition of Lucretius is that of H. A. J.

Munro, with translation. Lucullus (16'kul-us) (lo'kul-us), Lucius CINIUS, a distinguished Roman naval and military commander, born about B.C. 115; died in B.C. 56. He distinguished himself greatly in his various victorious campaigns against Mithridates, king of Pontus, from the time of Sulla to B.C. 66, when he was supplanted by Pompey. He thenceforward lived in hypurious retirement on the goest of Campana. luxurious retirement on the coast of Campania. His house was enriched with a valuable library and works of art, which

ntroduction or machinery. During these years the above counties were in a perpetual state of disturbance, and much damage to machinery was done by the rioters. They took their name from Ned Ludd, a half-witted lad who made himself notorious by destroying stocking frames. After the peace, with the return of prosperity, the riots ceased.

(lü'den-shīt), a town Lüdenscheid of Prussia, province of Westphalia, 21 miles southwest of Arnsberg, with extensive manufactures of metal goods and hardware. Pop. 28,921. Ludhiana (lud-hi-ä'na), a town of India, province of Punjab, Sutlej: a great central grain mart.

Ludington son county, on Lake Michigan, at mouth of Père Marquette River. It has a good harbor and a large export trade in lumber, also salt works, canning industries, wood-working shops, game board and work-b-case factories, etc. Pop. (1920) 8810.

Ludlow (lud'lo), a town in Shrop-shire, England, on Teme River. Has an ancient castle. Pop. 5926. Ludlow, a town of Hampden Co., Mass., 7 miles N. E. of Springfield. Its products are twine, yarn, webbing and bagging. Pop. (1920) 7470.

Ludlow, EDMUND, the eldest son of Sir Henry Ludlow, was born about 1620. He served with distinction in the perliamentary army and a town of Hampden Co., tinction in the parliamentary army, and succeeded Ireton in the government of Ireland in 1651. He opposed Cromwell's assumption of the protectorate, and agitated in favor of a republic. On the approach of the Restoration he retired to Switzerland, and died in exile 1693. He is the author of valuable Memoirs.

Ludlow Rocks, in geology, a por-Silurian rocks, characteristically veloped at Ludlow in Shropshire.

Ludwig, the German form of the name Ludwigs, Lewis, Louis. See Louis.

Ludwigsburg (lud'vihs-burh), a town of Germany, in Würtemberg, 8 miles north of Stuttgart. It is the second royal residence of the kingdom, and has a large royal palace. Pop. (1905) 23,093.

Ludwigshafen (lud'vihs-hä-vn). a town of Rhenish Bavaria, on the left bank of the Rhine, opposite Manheim, with which it commu-

Luddites (lud'Itz), a name given to ferry. It was founded in 1843 by Louis shire, Lancashire and Nottingham, who attributed the prevailing distress to the introduction of machinery. During these Lufiji. See Rufiji. Lufiji.

Lugano (18-ga'nō), a town of Switzerland, in the canton town of of Ticino, beautifully situated on the north shore of the lake of same name, 15 miles northwest of Como. Pop. 9394.— The Lake of Lugano, partly in canton Ticino and partly in Italy, between Lakes Como and Maggiore, into the latter of which it discharges itself; is about 20 miles long by 1½ miles broad. Its scenery is of a wild and romantic description.

Lugansk (lö-gansk'), a Russian town, government of Ekatown, government of Ekaterinoslav, on the Lugan, a branch of the Donetz, 300 miles N. N. w. of Taganrog. It is the chief center of an important coal

(lud'ing-ton), a city of and iron district. Pop. 34,175.

Michigan, seat of MaLagger (lug'er), a vessel having either
two or three masts and a run-



Lugger.

one or two lug-sails. There are also two

or three jibs.

Lugo (logo), a town of Northern Spain, capital of province of same name, on left bank of the Miño, 46 miles west by south of Santiago. It is surrounded by ancient walls, which now south of Santiago. serve as a promenade; has a Gothic a cathedral of the twelfth century, several old churches, an episcopal palace, etc. Pop. 26,959.

Lugo, a town of Italy, province of Ra-thas an important annual fair, and a trade in flax. wine, brandy, etc. Pop. (commune) 27,410.

Lugos (18'gosh), a Hungarian town on the Temes, 32 miles E. S. E. of nicates by a railway bridge and steam Temesvar. It is the seat of Greek and

Latin bishops, and has an active trade. Pop. 16,126.

Lug-sail, a quadrilateral sail bent upon a yard which hangs obliquely to the mast.

Lugworm. See Lobworm.

Luini (lu-e'ne), BERNARDINO, a painter of the Lombard school, and the most distinguished pupil of Leonardo da Vinci, was born at Luino, a village on Lake Maggiore, about 1475; died perhaps about 1540. His works both in oil and fresco are much admired. Of the latter, one of the most important is a Crucifizion of great size and with various supplementary scenes, on the wall of a chapel at Lugano. He has also some merit as a poet, and is said to have written a treatise on painting. Two of his sons, Evangelista and Aurelio, and a brother of which named Ambrogio had a reputation as inventor. painters.

Luitprand. See Liutprand.

Luke (lök), Sr., the evangelist, author of the Gospel which bears his name and of the Acts of the Apostles. He was probably born at Antioch in Syria; was taught the science of medicine, but the tradition that he was also a painter is doubtful. The date of his conversion is uncertain; he is supposed to have been one of the seventy disciples, and also one of the two who journeyed to Emmaus with the risen Saviour. He was for several years a companion of the apostle Paul in his travels, so that in the Acts of the Apostles he relates what he himself had seen and participated in. (See Acts of the Apostles.) Luke is apparently mentioned three times in the New Testament: Col. iv, 14; 2 Tim. iv, 11; Philem. 24. He lived to an advanced age, but whether he suffered martyrdom or died a natural death it is impossible to or died a natural death it is impossible to determine. The Gospel of St. Luke was written probably about 58-60. It is addressed to a certain Theophilus, and records various facts connected with the early life of Jesus which were probably records various facts connected with the records various facts connected with the records various facts connected with the read of the carly life of Jesus which were probably Lumber (lumber), the common term furnished to the writer by Mary herself.

Lumber (lumber), the common term in the United States for time sawn up for market, including laths, Justin Martyr and the author of the deals, planks, shingles, etc. The lumber Clementine Homilies, and at the time of industry is fourth among the great industry in the great lumber are rapidly pushing the great lumbering centers toward the present form was fully accepted. Gospel.

Luke of Leyden (Lucas van Leyden), a Dutch painter and engraver, born at Leyden in years about 40 billion board feet of lum-1494; died in 1533. He was an intimate ber are produced, valued at about \$700, friend of Albert Dürer, and executed 000,000. As a result the great pineries of many paintings in oil, water-colors, and the Lake States have been almost elimi-

ings, which spread his fame widely. The fullest and most beautiful collection of engravings by this master is in the library at Vienna. His paintings are to be met with in many galleries; the principal in Leyden, Vienna, Dresden, Munich and Florence.

Lully (lu-le), JEAN BAPTISTE, musical Lully (10-16), JEAN BAPTISTE, musical composer, born at Florence in 1633; died at Paris in 1687. At ten yeart of age he became page to Mlle. de Montpensier, niece of Louis XIV. In course of time he became court musician and leader of the king's band. In 1672 he had the direction of the Royal Academy of Music, from which times dates the foundation of the grand opera. He wrote numerous operas, motets, and other comnumerous operas, motets, and other com-positions, but his fame now chiefly rests on his overtures, a species of composition of which he is said to have been the

Lully (1878), RAYMOND (Doctor Ilully (1878), a distinguished scholastic philosopher, born in Majorca about 1235; died in Algeria in 1315. When about 30 years of age he renounced the world and devoted himself to philosophy and religion Engouraged by visions ophy and religion. Encouraged by visions, he undertook the task of studying the eastern languages in order to convert the Moslems. For this purpose he made several journeys into Northern Africa, during one of which he was stoned to death. He was canonized in 1419. The number of his works is usually estimated at 300. They include treatises on logic, metaphysics, grammar, theology, casuistry, geometry, astronomy, medicine, etc., and the so-called 'Lullian art.' The Ars Lulliana, once extensively taught throughout Europe, consists mainly in categorizing ideas and combining them mechanically, by which means Lully thought to exhaust their possible combinations.

the great lumbering centers toward the South and West, the East and center being largely worked out. In normal years about 40 billion board feet of lumon glass: likewise a multitude of engrav- nated, and great inroads are being made

to meet the enormous demand, especially under the wasteful methods still largely used, and a general system of conserva-tion is imperatively necessary. The railroads make an annual drain on our forest Her worship is said to have been intro-resources of 112,000,000 cords, equivalent duced among the Romans in the time of to 3% billion board feet; 2½ billion feet Romulus. are used for mine timber, paper manufacture consumes about 3,500,000 cords, and Among the efforts made to stop this drain is the utilization of the formerly waste products of lumber and the earnest efforts to prevent the frightfully destructive forest fires. In the salvage processes even such material as sawdust is utilized, French cabinet makers having succeeded in converting this, by aid of the hydraulic press and high heat, into a solid substance that may be molded into any shape and receive a high pelish.

(lö-min-if'e-Luminiferous Ether pothetical medium of extreme tenuity and elasticity, supposed to be diffused throughout all space, as well as among the molecules of which solid bodies are composed, and to be the medium of the transmission of light, heat, and other forms of energy. tions which it serves to propagate are not such as can be propagated by fluids. Its elastic properties are rather those of a solid; and its waves are analogous to the Lunar Theory, pulses which travel along the wires of a pulses which travel along the wires of a principle of the sion and compression by which sound is the attraction of the sun, the earth and propagated through air. Much yet needs the planets. See Moon. to be learned, however, about its true characteristics. See Undulatory Theory.

Luminosity. See Flame and Phospho-Luminosity. See Flame and Phospho-Luminosity. The seemen autreatment of insane persons. Some are treatment of insane persons. Some are stablished by law. others by the endowners, Mass., in 1850, and graduated at ments of charitable donors, while others llarvard in 1881. After some newspaper are private establishements. Until near

Ilarvard in 1881. After some newspaper work in Ohio, he walked across the continent to Los Angeles. He devoted years to the study of Indian languages and cusinclude Some Strange Corners of Our in asylums were in a still worse case.

Country, The Spanish Pioneers, The Enchanted Burro, Mexico Today, etc.

dark dungeons were among the ordinary

on the supply of timber in all parts of the country. At present the far west State of Washington leads in production, gious fish, so named from the clumsiness followed by Louisiana, Texas, Mississippi, of its form. The back is arched and Wisconsin and Arkansas. The forest sharp, the belly flat, the body covered Wisconsin and Arkansas. The rotes with numerous bony tubercies, the ventual lands of the United States are estimated with numerous bony tubercies, the ventual to cover 600,000,000 acres. Yet, great fins modified into a sucker. Before the spawning season it is of brilliant criminal in the property of the state of the spawning season it is of brilliant criminal purple and blue, but afterson, orange, purple and blue, but afterwards changes to a dull blue or lead color, Luna (lona), the Latir name for the moon, among the Greeks Selene.

(18'na-si), in law. 'A luna-tic,' says Blackstone, 'is Lunacy the many other uses of lumber account one that hath had understanding, but by for the remainder of the annual drain. disease, griei, or other accident hath lost disease, griei, or other accident hath lost the use of his reason.' In the United States the legislature exercises a protective authority over idiots and lunatics. The statutes of the different States provide that such persons may be put under guardianship; and if a competent judicature have found the fact of lunacy in the prescribed mode, and have appointed a guardian, the fact of lunacy is held to be conclusively proved. Until the contrary has been shown, every person is supposed to be of sound mind. In criminal cases lunatics are not chargeable for their own acts, if committed when laboring under defect of understanding. By the common law, if a man in his lucid mentality com-mits a capital offense, and before arraignment for it becomes mad, he ought not to be arraigned for it, because he is not able From the extreme facility with which to plead with that caution which he ought bodies move about in this medium it to possess. But in general, partial unmight be called a fluid; but the undula- soundness will form no defense. See Lunatio Asylums.

nitrate of silver. Lunar Caustic, See Silver. the mathematical treatment of per-

are private establishments. Until near the close of the eighteenth century many luntics were allowed to wander at large. Until near exposed to all the arbitrary cruelty to toms and founded the Southwest Arch-which their defenceless condition made æological Institute of America. Ilis books them liable, while those who were confined

discipline of these establishments. reformation of this unnatural system was begun in France by Philippe Pinel, a benevolent physician; and in England a parliamentary inquiry in 1815 into the barbarities hitherto practiced in lunatic asylums led to a slow but gradual improvement. Lunatic asylums, whether public or private, are now under the control of officers appointed under special statutes, and lunatics must be visited at least once a year by medical and legal visitors. The general conduct of lunatic visitors. The general conduct of lunatic asylums is now brought more into harmony with humanity and common sense, and with very beneficial results. Violence and undue coercion have been generally abandoned.

Lund (18nd), a town of Sweden, län of Malmö, about 8 miles from the Sound and 24 miles E. of Copenhagen. It is the see of an archbishop, has an ancient cathedral and a university possessed of a library of more than 120,000 volumes. Pop. 16,621.

Lundy Island, a granitic island be-longing to England, County Devon, at the entrance of the Bristol Channel, 2½ miles long and 1 broad; area, about 1000 acres, mostly in pasturage. On it is a lighthouse visible for 30 miles.

Lüneburg (lü'ne-burh), a town of Prussia, province of Hanover, on the Ilmenau, 28 miles southeast of Hamburg. There are various interesting buildings, including the townhouse, a structure dating in part from the thirteenth century. Near the town are extensive gypsum and lime quarries and a salt mine. Pop. (1910) 27,790.

Lunel (lil-nel), a town of France, de-Lunel (10-nel), a town of France, department of Hérault, 15 miles E. N. E. Montpellier. Pop. 6712.

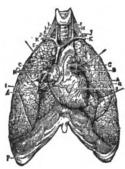
Lunette (16'net), in the art of fortification, a detached outwork having two faces and two flanks. It is often used in field fortifications, or before the classic of a comparation of the classic of the comparation of the classic of the

the glacis of a permanent fortress to pro-

tect a weak point.

Lunéville (lii-nā-vēl), a town of Eastern France, department of Meurthe-et-Moselle, near the junction of the Vezouse with the Meurthe, 15 miles E. S. E. Nancy. It has generally straight streets, a palace, built by Leopo'd, duke of Lorraine, and now partly serving as cavalry barracks; manufactures of gloves, pottery, etc. The treaty of peace in 1801, by which, as a consequence of the battle of Marengo, the Rhine became the French frontier, was signed here. Pop. 25.587. that on one side lines the ribs and part of Lungs, birds, mammals, and in part of surrounds the lung. Pleurisy arises from amphibians (frogs. newts, etc.). the latter inflammation of this membrane. The

forms breathing in early life by branchise or gills, and afterwards partly or entirely by lungs. The essential idea of a lung is that of a sac communicating with the atmosphere by means of a tube, the trachea or windpipe, through which air is admitted to the organ, and through struc-tural peculiarities to its intimate parts,



HUMAN LUNGS, HEART AND GREAT VESSELS. A, Lungs with the anterior edges turned back to show the heart and bronchi. B, Heart. c. Aorts. p, Pulmonary artery. E, Ascending vena cava. P, Trachea. GG, Bronchi. HH, Carotid arteries. II, Jugular veins. JJ, Subclavian arteries. KK, Subclavian veins. PP, Costal cartilages. Q, Anterior cardiac artery. E, Right auricle.

the air serving to supply oxygen to the blood and to remove carbonic acid. In the mammalia, including man, the lungs are confined to and freely suspended in the cavity of the thorax or chest, which is completely separated from the abdominal cavity by the muscular diaphragm or midriff. In man the lungs are made up of honeycomb-like cells which receive their supply of air through the bronchial tubes. If a bronchial tube is traced it is found to lead into a passage which divides and subdivides, leading off into air-cells. The walls of these air-cells consist of thin, elastic, connective tissue, through which run small blood-vessels in connection with the pulmonary artery and veins. By this arrangement the blood is brought into contact with, and becomes purified by means of the air. The impure blood enters at the root of the lung through the pulmonary artery at the right side of the heart, and passes out purified through the pulmonary veins towards the left side of the heart. Both lungs are inclosed in a delicate membrane called the pleura, which forms a kind of double sac

lungs are situated one on each side of the heart, the upper part of each fits into the upper corner of the chest, about an inch above the collar-bone, while the base of each rests upon the diaphragm. The right lung is shorter and broader than the left, which extends downwards further by the breadth of a rib. Each lung exhibits a broad division into an upper and lower portion or lobe, the division being marked by a deep cleft which runs downwards obliquely to the front of the organ; and in the case of the right lung there is a further division at right angles to the main cleft. Thus the left lung has two, while the right lung has three lobes. These again are divided into lobules These again are divided into bottles which measure from ½ to ½ inch in diameter, and consist of air-cells, blood-vessels, nerves, lymphatic vessels, and the tissue by which the lobules themselves are bound together. The elasticity of the lungs by which they expand and expel the air is due to the contractile tissues found in the bronchial tubes and air-cells, this elacticity being aided by a delicate, elastic, surface tissue. (See Respiration.) The lungs are popularly termed 'lights,' because they are the lightest organs in the body, and float when placed in water, except when they are diseased; a characteristic this which is applied in redical acteristic this which is applied in medical jurisprudence as a test whether an infant Lurgan (lur'gan), a market town of has respired or not. Among the diseases which affect this organ are pleurisy, pneumonia, pleuro-pneumonia, consumption, southwest of Belfast. It contains a handmonia, pleuro-pneumonia, consumption, etc. See those terms.

(lung'wurt), Pulmonaria officinālis, nat. order Bo-Lungwort raginaceze, a common garden flower, having red and purple tubular blossoms, and leaves speckled like diseased lungs, hence an old-fashioned remedy in pulmonary diseases. A kind of hawk-week (Hiera-cium pulmonarium) and a lichen (Sticta pulmonaria) receive the same name.

Lupercalia (lö-per-ka'li-a), a Roman festival celebrated annually in honor of Lupercus, an ancient pastoral god, afterwards identified with the Arcadian Pan. It was celebrated on February 15, at the Lupercal, a grotto in the Palatine Hill at Rome. Goats were sacrificed, and two youths were arrayed in the skins. With thongs in their hands they ran through the streets of the city striking all persons they met, par-ticularly women, who believed that a blow from the thong prevented sterility.

See Lupercalia. Lupercus.

Lupine (lo'pin; Lupinus), a very extensive genus of hardy annual, frontier of India, lying along the south-perennial, and half-shrubby plants, some ern side of the Assam district of Cachar, of which are cultivated in gardens for the the east side of the Bengal district of

sake of their gaily-colored flowers. They Lupulin (18"pū-lin), the fine yellow powder of hops, which contains the bitter principle. It consists of little round glands, which are found upon the stipules and fruit, and is obtained by drying, besting, and then sifting the hops. drying, heating, and then sifting the hops.

It is largely used in medicine.

Lupus (18 pus), in medicine, non-contagious tubercular skin affection, occurring especially about the face, and commonly ending in ragged ulcerations of the nose, cheeks, forehead, eyelids and lips. It is also called *Noti* me tangere.

Luray Cavern (lö'rā), a remarkable cavern in the State of Virginia, in the Blue Ridge Mountains, near the village of Luray. It contains many chambers, some of them of striking aspect, and is exceeding rich in stalactite formations. Pop. of Luray village, 1147.

Lurcher (lur'cher), a dog that lies in wait for game, as hares, rabbits, partridges, etc., drives them into nets, runs them down, or seizes them. This species of dog is said to be descended from the shepherd's dog and the grey-hound, and is more used by poachers than sportsmen.

some Episcopal church, a Roman Catholic church, and several other places of wor-ship; a nunnery, a town hall, courthouse, institute, tobacco factory, mechanics' breweries, linen factories, etc. 11,782.

Luristan (18-ris-tăn'). a mountainous province of Western Persia, with an area of about 20,000 sq. miles. It is named after the Luri, a race divided into many tribes, all migratory and war-like. The only town is Khorramabad. situated in a fruitful plain south of Hamadan.

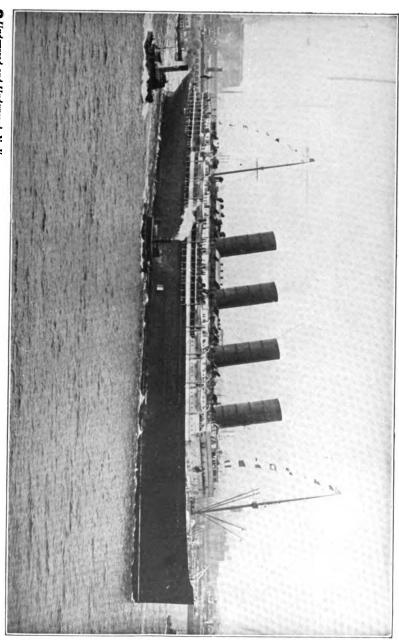
Lurlei. See Lorelei.

(18-sā'she-a, in German Lau-Lusatia Germany, now included partly in Prussia, partly in the kingdom of Saxony.

(lus-sin'i-a), a genus of in-Luscinia sessorial birds of the thrush

family (Turdidæ), to which the nightingale (L. philomela) belongs.

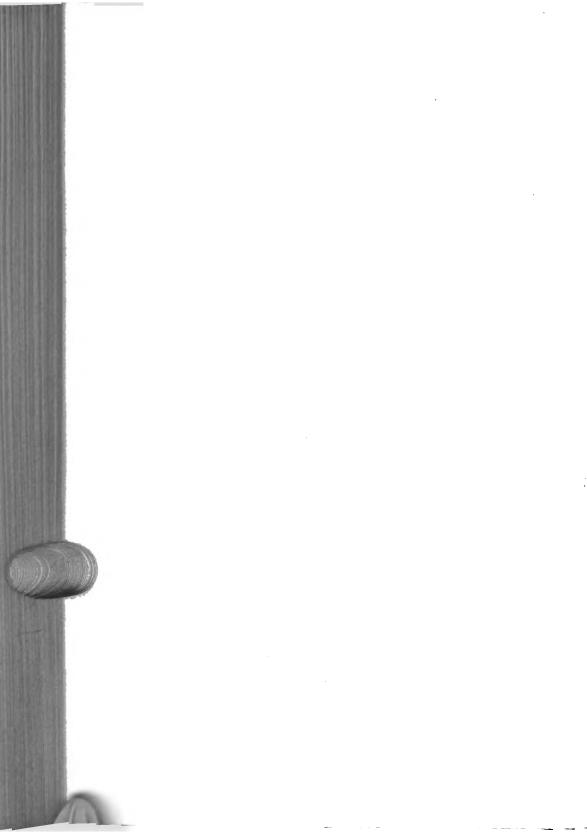
Lushai Hills (lö'shā), a wild district on the northeast



O Underwood and Underwood, N. Y.

THE LUSITANIA

The sinking of this great liner by a German submarine, with the loss of more than a thousand lives, caused a thrill of horror throughout all neutral nations and crystallized public opinion in the United States into a fierce resentment of German barbarism which indirectly led to the entry into the World War



Chittagong, and extending on the east monastery of the Augustines at Erfurt in into Burmah. This territory is occupied 1505. In 1507 he was consecrated priest, by numerous nomadic tribes called Lu- and in 1508, by the influence of his shais or Kukis, who, since the expedition patron, Staupitz, who was provincial of of 1871, have been submissive to British the order, he was made professor of rule. They bring down to the markets on philosophy in the new University of Wither plains ivery raw cotton, bees was tenberg. In 1510 he visited the court of shais or Kukis, who, since the expedition of 1871, have been submissive to British rule. They bring down to the markets on the plains, ivory, raw cotton, bees'-wax and caoottchouc.

Lusiads. See Camoena.

Lusitania the Iberian peninsula, comprising part of large audiences. At that time he had Portugal and part of Spain. The inhabitants were named Lusitani.

Lusitania, a British trans-Atlantic U-boat off the coast of Ireland on May 7, 1915, with a loss of 1154 lives, of whom 102 were Americans. It was this act and the refusal of the Imperial German Government to disavow it that eventually brought the United States into the European war (q. v.).

Lute (18t), a stringed musical instru-ment of the guitar kind, formerly very popular in Europe. It consists of four parts, viz., the table or belly with a large sound-hole in the middle; the body, ribbed like a melon, having nine or ten ribs or divisions; the neck, which has nine or ten stops or frets which divide the

Luther (1ö'ther; Ger. pron. 1ö'ter), MARTIN, the great religious teacher of Germany, was born at Eisleben in 1483; and died there in 1546. His

tenberg. In 1510 he visited the court of Pope Leo X at Rome on business connected with the order. Returning to Wittenberg he was made a Doctor of The-(lū-si-tā'ni-a), the ancient ology in 1512, and here his profound name of a large district in learning and powerful eloquence drew



Martin Luther

no controversy with the pope or the church, but the arrival in 1517 of John Tetzel in Wittenberg dispensing indulgences roused the ferry energy of Luther, strings into semitones; and the head or church, but the arrival in 1517 of John cross, in which are fitted the pegs or Tetzel in Wittenberg dispensing induscrews for tuning the strings, of which gences roused the ferry energy of Luther, there are five or six pairs, each pair tuned and caused him to draw up his famous in octaves or unisons. The strings are protest in ninety-five propositions, which struck by the fingers of the right hand he mailed to the church door in Wittenberg the first by the second to the church door in which struck by the fingers of the right hand he mailed to the church door in Wittenberg the first by the second the first by the second the second to the church door in which are the first by the second to the church door in which are the first by the second to the second t and stopped on the frets by those of the berg. In consequence preaching of induleft.

T.nther (lö'ther; Ger. pron. lö'ter), ligious commotion spread rapidly through Germany. Germany. Luther was summoned to Rome to explain his heretical proceedings, but refused to go; nor were the efforts of in 1483; and died there in 1546. His but refused to go; nor were the efforts of father, a miner in humble circumstances, Cardinal Cajetan able to effect a reconsoon after his birth removed with his famciliation between him and the pope. His ily to Mansfeld, where young Martin was dispute with Dr. Eck at Leipzig in 1519, brought up, piously but with some sein which he denounced indulgences, and verity. At the age of fourteen he was sent to school at Magdeburg, whence he followed in 1520 by a bull of anathema—was sent in 1499 to Eisenach. At school a document which Luther straightway he made rapid progress in Latin and burned publicly in Wittenberg. This open other studies. In 1501 he entered the defiance of Rome required him to vindi-University of Erfurt; and in 1505 recate his conduct, which he did in a pamceived the degree of Master. About this phlet addressed to the Christian nobles of University of Erfurt: and in 1505 received the degree of Master. About this phlet addressed to the Christian nobles of time, as he afterwards alleged, he discovered in the library a Latin Bible, and the mightest rallied to his aid. When found, to his delight, that it contained summoned to appear before the German more than the excerpts in common use. emperor, Charles V, at the Diet of Worms He was destined by his father to the law, (1521), Luther appeared, acknowledged but his more intimate acquaintance with his writings, made an eloquent defense, the Bible induced him to turn his attenbut refused to recent. When he retired tion to the study of divinity, with the view of entering monastic life. Contrary friendly troop of soldiers belonging to to the wishes of his father he entered the

conveyed him to the castle of Wartburg, where he lay in concealment for nearly a year. Here he employed his time in translating the New Testament into Gertranslating the New Testament into German, but when he heard that disturbances had been excited in Wittenberg on the question of images, he could no longer bear the restraint of inaction. Returning suddenly, and at great danger to himself, Luther succeeded in quieting the people by means of a wise and patient modera-tion. In 1524 he laid aside his cowl as a priest of the Roman Catholic Church, and in 1525 married Catharina von Bora, one the river Lea. It has large manufactories of nine nuns who had renounced their of straw hats and bonnets, it being the religious vows under his teaching. The chi f seat of the straw-plaiting industry wisdom of this marriage was doubted by in England. Pop. (1911) 50,000. wisdom of this marriage was doubted by his friends, but his home life and the birth of six children, contributed greatly to the happiness of the reformer. From the year 1521 Luther had been busy translating the Bible into German with the aid of Melanchthon and others, and the great task was completed in 1534. This importan work, taken in connection with the Protestant Confession made at Augsburg in 1530, served to establish the reformer's doctrines in Germany, and closed the important part of his public life. He continued, however, till the end his private work of teaching, preaching and writing. The massive character of the German reformer lay along simple lines, and found its full and direct expression in his work. He lacked the learning of Calvin, and the balanced judgment of Melanchthon, but a vivid practical insight enabled him to mark the path that would lead to the success of his movement for the reforms he sought. Behind all the reformer's zeal he had much lowly human sympathy, humor, tenderness and a love of homely humor, tenderness and a love of homely Montmorency-Bouteville, Duke or, things. This side of his character is most Marshal of France, born in 1628; died clearly seen in his Letters and Table-Talk. His German writings were varied and extensive.

Lutherans (18'ther-anz), the adher-ents of Luther, a term now applied to one of the great sections into which the Protestant Church on the continent of Europe is divided, the other being known as the Reformed or Calvin-The doctrinal system of the Lutheran Church is contained in the Augsburg Confession (which see), and other documents, including the two catechisms of Luther. The fundamental doctrine is that we are justified before God, not through any merits of our own, but through faith in His Son. The ordinances of Baptism and the Lord's Supper are fruits are cultivated on a large scale, held by Lutherans to be not mere signs or Luxemburg has extensive deposits of iron, memorials, but channels of grace. They copper, lead and antimony, but only the believe that 'in the Holy Supper there iron mines had been exploited up till the are present with the elements and are rebeginning of the European war in 1914.

ceived sacramentally and supernaturally the body and blood of the Lord Jesus Christ,' but reject transubstantiation and consubstantiation. They observe the various festivals of the Christian year, and have a liturgical form of worship. The Lutheran is the established religion of Sweden, Norway and Denmark. There are over 76,000,000 Lutherans in the world, and in the United States over 2,-000,000 confirmed members.

Luton (lö'tun), a municipal borough of England, County of Bedford, on

Lüttringhausen (lut'ring-hou-zn), a town of Rhenish Prussia, in the government of Düssel-

dorf, with manufactures of woolens, cottons, etc. Pop. (1905) 11,829.

Lützen (lut'zn), a small town of Prussian Saxony, in the government of Merseburg. Pop. 3981. Two important battles have been fought in its projection. Important battles have been fought in its neighborhood. The first took place on November 16, 1632, between the Swedish army under Gustavus Adolphus, and the imperialists under Wallenstein, the former being victorious. The second was fought May 2, 1813, between the allied Russian and Prussian armies and the French under Napoleon, who maintained his position, though at a loss of 12,000 men, against 10,000 of the allies.

(luks-a'shun), in surgery. Luxation the displacement of a bone, a dislocation.

(luk-san-bör), Fran-Luxembourg COIS HENRI DE in 1605. In the war of France against England, Holland, Spain and Germany he won the three great battles of Fleurus (July 1, 1690), Steenkerken (August 3, 1692), and Neerwinden (July 29, 1693). Luxemburg, an independent grandbounded north and east by Rhenish Prussia, south by France and German Lorraine, and west by Belgium; greatest length, north to south, 55 miles; greatest breadth, 34 miles; area, 998 square miles. It forms part of the plateau of the Ardennes and its drainage belongs almost entirely to the basin of the Moselle. Grain and other crops are raised; cattle and horses are exported; and grapes and other

speech of the Luxemburgers is a mixture of bad French and still worse German. The people are for the most part Roman Catholics. The law of the land is the Code Napoleon. Luxemburg has changed hands many times. It formed one of the principalities of the Holy Roman Empire of the Germans. In 1354 it was raised to a duchy. It fell to Burgundy in 1443 and came into the hands of Spain. Australia of the state tria was given control by the Peace of Utrecht in 1713. In 1797 it was ceded to France, and in 1815 it was converted into a grand-duchy and placed under the sovereignty of the King of Holland, the control in the cont though included in the German Zollverein. It was garrisoned by Prussian troops till 1867, when an international conference at

Luxor (luks'or), a village of Upper Egypt, on the right bank of the Nile, about 2 miles south of Karnak.

cient Thebes.

Luynes (lû-ēn), Charles d'Albert, Duke de, favorite and premier of Louis XIII and Constable of France, born in 1578. He caused the exile of the king's mother, and for a short time had absolute control in the government. He died in 1621, without having experienced any visible loss of favor or influence. influence.

Luzon (16-thon'), formerly a Spannish island, the largest of the Greeks at a very early period, and its hisPhilippines. Its greatest length is about torical inhabitants were Greeks, though
540 miles; its greatest breadth about 125
miles; area estimated at 57,500 square
miles. Two great mountain chains, the
Sierra Madre and Cordillera de Caravalles run north and south, and rise to a los, run north and south, and rise to a they are edible.

Lycophron

Chalcis, in Eubœa, a many disastrous eruptions have taken

Crecian poet and grammarian, the author

Vegetation is luxuriant, and the vast forests contain ebony, cedar, and other valuable treets this, the German armies crossed abundant crops of rice, sugar-cane, Manila her protest of the Grand Duchess, Marie-Adelaide. The army of the grand-duchy consisted of but 430 men, and physical resistance was out of the question. The inhabitants are mostly of German origin, aboriginal Negritos, and of Malays, Chibut the official language is French. The speech of the Luxemburgers is a mixture of bad French and still manipulation of the still manipulation of the still manipulation consists of the speech of the Luxemburgers is a mixture of bad French and still manipulation consists of the speech of the Luxemburgers is a mixture of bad French and still manipulation consists of the speech of the Luxemburgers is a mixture of bad French and still manipulation consists of the speech of the Luxemburgers is a mixture of bad French and still manipulation consists of the speech of the Luxemburgers is a mixture of bad French and still manipulation consists of the speech of the Luxemburgers is a mixture of bad French and still manipulation consists of the speech of the Luxemburgers is a mixture of bad French and still manipulation consists of the speech of the Luxemburgers is a mixture of bad French and still manipulation consists of the speech of the Luxemburgers is a mixture of bad French and still manipulation consists of the speech of the s reared. The population consists of the aboriginal Negritos, and of Malays, Chinese, Spaniards, Americans, etc., the whole amounting to 3,708,350. The capital is Manila. Luzon, with the other Philippine Islands, was transferred to the United States by the peace with Spain of 1898. It is rapidly developing under American rule.

Lycanthropy (II-kan'thrō-pi; Greek lycanthropy (II-kan'thrō-pi; Greek lykos, a wolf, and anthrōpos, a man), a kind of erratic melancholy or madness in which the patient imagines himself to be a wolf and acts in conformity with his delusion. Great numbers were attacked with this disease in the Jura in 1600. They herded together, and emulated the habits of the wolf.

wolf.

Lycaonia (II-ka-o'ni-a), a small district in Asia Minor, sit-London established Luxemburg as a neu-tral independent state. Pop. 259,899. The capital is Luxemburg. Pop. 20,848. Iconium. It was visited by Paul and Isauria, of which the capital was Iconium. It was visited by Paul and Barnabas in their earliest missionary journey, as described in Acts, xiv.

the Nile, about 2 miles south of Barnan. It contains a splendid ancient temple, and is the headquarters from which visitors explained his philosophy. In modern the extensive remains of antimes the name of lyceum has been given the contained to prepare young (lī-sē'um), an academy at Athens in which Aristotle to the schools intended to prepare young men for the universities.

See Lich-gate. Lych-gate.

(lik'nis), a genus of usually erect, annual, biennial, and Lychnis perennial herbs, belonging to the nat. or-der Caryophyllaceæ, or pinks. Some of them bear beautiful flowers. The scarlet lychnis, ragged robin, rose campion and corn-cockle are well known.

Luzerne (1ö-zurn'), a borough in Luzerne County, Pennsylvania, 5 miles N. of Wilkes-Barre. It has drill factories, flour and feed mills, etc.

Lycia (lish'e-a), an ancient maritime province in the south of Asia Minor, bounded by Caria on the Pop. (1920) 5998.

West, Pamphylia on the east, and Pisidia on the population of the control o

of several tragedies, who lived at Alexandria, 280 B.c. Of his writings there remains only a dramatic monologue called Cassandra.

Lycopodium (II-ku-pōd'i-um), a genus of plants of the nat. order Lycopodiaces (see Lycopods). The seeds of L. clava-



tum, or common clubmoss, are very minute and resemble an impalpable yellow pow-der, which burns explosively, and is used for producing theatri-cal lightning. L. com-planatum, the ground pine is a trailing evergreen, found com-Lycopodium Selago.

a. Leaf; b. Sporangium in the axil of bract; c. Spores—magnified.

Woods and shady places throughout the United States.

Lycopods (ll'ku-pôds), Lycopopiaceæ, the club-moss
tribe; a nat. order of vascular acrogens, chiefly inhabiting boggy heaths,
moors and woods. They are intermediate
in their general appearance between the mosses and the ferns, and are in some respects allied to the Coniferse. The lycopods occur in all parts of the globe, but grow most luxuriantly in tropical or mild climates. In the carboniferous era they attained a very large size, rivaling trees in their height and the thickness of their stems, as in the case of the Lepidodendron.

Lycurgus (II-kur'gus), the great leg-islator of the Lacedsmo-nians, was the son of Eunomus, king of Sparta. His history commences with of sparts. This misory commences with the year 898 B.C., when he might have usurped the throne on the death of his brother, but preferring to guard the kingdom for the unborn child of the latter, he devoted himself to the study of legislation. On his nephew becoming of age, Lycurgus traveled into Crete, Egypt and Asia, and thus prepared himself to give Sparta the laws which have rendered his name immortal. His object was to regulate the manners as well as the government, and to form a warrior nation, in which no private interest should prevail over the public good. It is said that Lycurgus persuaded the Spartans to swear that they would observe these laws till his return from another journey, and that he the departed, and they never heard of him more. One account states that he starved himself to death, but it is more probable that he retired to private life, and died naturally, as Lucian records, at the age of eighty-five.

Lyddite, a high explosive, its name derived from Lydde in Kent, Eng., where it was first made. It is chemically Pieric acid (G₅ H₂ (N O₂))s (OH) obtained by the reaction of carbolic and nitric acids, and forming the basis of most of the high explosives now in usc. Lyddite is a crystalline solid, hight vellow in color and hitter in teste. bright yellow in color and bitter in taste.

It is a stable compound under changes in temperature, is difficult to detonate and can be melted and poured into shells. It yields suffocating fumes in bursting and is supposed to kill by shock or suffocation. It was extensively used in the Boer War.

(lid'i-a), in ancient geography, a large and fertile country of Lydia a large and fertile country of Asia Minor, divided from Persia by the river Halys (now Kizil Irmak). It attained its highest prosperity under the Mermnadæ dynasty, beginning with the half mythological Gyges (716 B.C.), and ending with Crossus (546 B.C.), who was conquered by the Persians under Cyrus. The Lydians are credited with the invention of cartein musical instructhe invention of certain musical instru-ments, the art of dyeing wool, also the art of smelting and working ore. Sardis was the capital.

Lye (II), water impregnated with alkaline salt imbibed from the ashes of wood, or any solution of an alkali used for cleaning purposes, as for types after printing, ink-rollers, for making soap, neutralizing acids, etc.

Lyell (le'el), Sie Charles, geologist, born at Kinnordy, Forfarshire,



Sir Charles Lyell.

in 1797; died in London in 1875. He was educated at Oxford, began to study law, but afterwards resolved to devote

his time and fortune to geological re-by which the chyle is absorbed from the search. For this purpose he visited the small intestine and elaborated in the continent of Europe and the United lymphatic glands of the mesentery to be States. His first important work was the afterwards poured into the thoracic duct. Principles of Geology (1830-33), in which he demonstrated that the geological development of the earth was the result of ordinary causes, not of phenomenal paroxysms. A portion of this book afterwards formed the basis of the Elements wards formed the basis of the Elements table, highly elaborated, ramined network of Geology. Another important work was of fine channels and spaces, and are subthe Antiquity of Man (1863), in which he ject to special diseases, summarized the evidence in favor of the Lynchburg (linch'burg), a city of theory that the race of man was much older than was currently believed. Lyell River, 100 miles (direct) w. of Richmond. was knighted in 1848, and made a baronet Aside from its beautiful residential section it is a great industrial center, with extensive bark extract and overall plants. lished in 1881.

or LILLY, JOHN. See Lilly. Lyly,

Lyme-grass
One species, Elymus arenarius, is a native of Britain. They are all coarse grasses.

Cotton and glass plants. Also noted as a great tobacco market. Seat of Randolph Macon Woman's College, Lynchburg, and Sweetbrier colleges. Pop. 29,956. the practice of punishing men for crimes or

(lim'ing-tun), a sea-Lymington port and watering place of England, in the county of Hants, at the mouth of the Boldre, 12 miles southwest of Southampton. Pop. 4165.

Lymph (limf), in physiology, the fluid resulting primarily from

the assimilation of food, and also obtained from the blood and tissues, and which is contained within a system of vessels called lymphatics and lacteals. The clearest and simplest view of the lymphatic system is to consider these vessels as the media through which matters are absorbed from the alimentary canal on the one hand, and from the blood and tissues on the other. The matters so absorbed are elaborated and converted in the lymphatic glands into lymph, a fluid which presents the essential features of the more highly elaborated blood, and which is ultimately poured into the blood, mainly through the thoracio duct. Through this system the continual loss which the blood and body suffer is made good. The lymph as it exists in the lymphatic vessels is a colorless, transparent fluid, destitute of smell. The lymphatic glands are highly important structures, for it is only after passing through them that the lymph is fully elaborated and ready to enter the blood. Their average size is that of a small almond, and they are generally arranged in groups. As distinguished from

This duct pours its contents into a large results of the neck. Lymphatic vessels and glands are numerous throughout the body, especially in the subcutaneous tissue, where they form a veritable, highly elaborated, ramified network of fine channels and spaces, and are subject to appoint disease.

extensive bark extract and overall plants, shoe factories, and cast-iron pipe, plow,

Lyme Regis, a municipal borough offences by private unauthorized persons and seaport of Engwithout a legal trial. The origin of the without a legal trial. The origin of the without a legal trial. The origin of the phrase, used chiefly in America, has been chester, intersected by the Lyme. Pop. (1911) 2772. Lynch, who adopted a rough and ready mode of punishing offenders. The system has grown in use until now it is a serious evil and one difficult to eradicate.

(lind'hurst), John Sin-Lyndhurst an eminent lawyer and statesman, was an eminent lawyer and statesman, was born of Irish parentage at Boston, United States in 1772, and died in 1863. Intended by his father, J. S. Copley, the artist, to be a painter, he studied for some time under Reynolds and Barry, then entered the University of Cambridge in 1701 took his M.A. degree in 1797. in 1791, took his M.A. degree in 1797, became a fellow of Trinity College, and was called to the bar at Lincoln's Inn in 1804. In 1817 he ably defended Watson and Thistlewood for high treason, was appointed chief-justice for Chester, and in 1818 entered Parliament. In 1819 he became solicitor-general in the Liverpool administration, in 1824 attorney-general, and in 1826 master of the rolls. He was raised to the peerage as Baron Lyndhurst, and became lord-chancellor in 1827, a post he retained till 1830. During the ministry of Earl Grey (1830-34) he held the position of chief baron of the ex-chequer. He was a formidable opponent of the reform bill. He was again chancellor in 1834, and a third time when the Conservatives returned to power in 1841. His eloquence was much appreciated by ranged in groups. As distinguished from the Tory party, especially in the House of the lymphatics the lacteals are the vessels Lords, where he continued to take an interest in foreign politics down to the year 1859, when he vigorously attacked the policy of Napoleon III.

Lyon - king - at -(or of-)arms, in Scotland, a heraldic officer who takes

See Lindsay. Lyndsay.

Lynedoch (lin'dok), Thomas Gra-HAM, LORD, a British gen-eral, was born at Balgowan, England, in 1750, and died in 1843. Until 1792 he lived as a country gentleman, but when his wife died he entered the army as a volunteer, and greatly distinguished him-self at the siege of Toulon. He afterself at the siege of Toulon. He after-who use arms which are not matriculated. wards took part with Sir John Moore in Called also Lord Lyon.

the expedition to Sweden and the retreat Lyonnais (lê-on-nā), an ancient provto Coruña; and was engaged in the Lyons was the capital. It now forms the command of the forces besieged by the command of the forces besieged by the French at Cadiz, he gained the victory Loire and Puy-de-Dôme. of Barosa in 1811. He next joined Wellington's army and shared in the Peninsular war, taking part in the bat-partment of the Rhône, 240 miles S. S. E. bastian. In 1814. after the unsuccessful of Paris, and 170 miles north of the Meditle of Vittoria and the siege of St. Se-bastian. In 1814, after the unsuccessful siege of Bergen-op-Zoom, he was created Baron Lynedoch.

cipal buildings are St. Margaret's, and All Saints' churches, St. Nicholas' chapel, the guildhall, athenæum, custom house, corn exchange, etc. The harbor is commodious, and there are two docks. Shipbuilding is carried on and the trade is considerable. Pop. (1911) 20,205.

Lynx (links), the popular me of several species of feline carniv-

ora, resembling the common cat, but picture-gallery and other collections. The with ears longer and tufted with a pencil chief educational establishments are a of hair, and tail shorter. The lynxcs have university college, a Catholic college, a been long famed for their sharp sight, which character they probably owe to their habit of prowling about at night, and their brilliant eyes. The European lynx is the Felis lynx, the Canadian lynx is the F. canadensis. In Asia lynxes are tamed for hunting

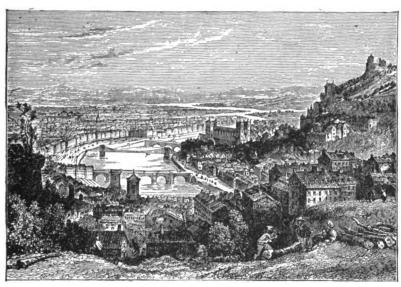
in Scotland, a heraldic officer who takes his title of Lyon from the armorial bear-ings of the Scottish kings, the lion ram-pant. The officers serving under him are pant. The officers serving under him are heralds, pursuivants and messengers. The jurisdiction given to him empowers him to inspect the arms and ensigns-armorial of all the noblemen and gentled in the bingdom to give proper arms men in the kingdom, to give proper arms to such as deserve them, and to fine those who use arms which are not matriculated.

of Paris, and 170 miles north of the Medi-terranean. The town is built partly on a peninsula between the Saone and the Lynn (lin), a city and seaport of Rhône, and partly on the opposite banks Essex county, Massachusetts, of the rivers on either side. The rivers on an arm of the Massachusetts Bay, are crossed by about a score of bridges, about 10 miles northeast from Boston. and the city is surrounded by eighteen The town has some fine public buildings, detached forts, which form a circuit of including the city hall, public library, sixteen miles. Parts of the city are old, Odd Fellows' hall, etc. It has a large squalid and unhealthy, but as a whole it park, more than 2000 acres in area, has a stately and imposing appearance, known as Lynn Woods, and a famous and is finely seen from the Fourvières, Shore Drive. Its chief industries are the an eminence on the right bank of the Shore Drive. Its chief industries are the an eminence on the right bank of the Shore Drive. Its chief industries are the an eminence on the right bank of the manufacture of boots and shoes, of which Saone, crowned by the church of Notre upwards of 15.000.000 pairs are annually Dame, where a magnificent view extendmade. Other industries include the manuing to the Alps may be had. Among the facture of electrical appliances, leather chief buildings are the cathedral, mostly goods, patent medicines, machinery, etc. of the thirteenth century; the church of Pop. (1910) 89,336; (1920) 99,148.

Lynn-Regis, or King's Lynn, a ported by ancient Roman columns and a crypt believed to be of the ninth cenland, County of Norfolk, on the Wash, tury; the church of St. Nizier, a fine 38 miles w. n. w. of Norwich. The prinexample of flamboyant Gothic; the Hôtel cipal buildings are St. Margaret's, and de Ville, Palais de Justice. etc. In the ported by ancient Roman columns and a crypt believed to be of the ninth century; the church of St. Nizier, a fine example of flamboyant Gothic; the Hôtel de Ville, Palais de Justice, etc. In the archiepiscopal palace, situated near the cathedral, 1000 Protestants were butchered in 1572 as a sequel to St. Bartholomew. The Hôtel de Ville is considered one of the finest edifices of the kind in France. The public library has over France. The public library has over 200,000 volumes and is rich in MSS. The Palace des Arts or museum contains a chief educational establishments are a university college, a Catholic college, a lyceum, a normal school, la Martinière, a school of industrial arts, etc. Lyons carries on various industries, but its chief glory is that of being the greatest center of the silk manufacture in the world, giving employment in the town or surrounding neighborhood to 240,000 people. A

great many of the weavers work in their consisting of a body with two horn-like own dwellings, not in factories. There is pieces rising from it, and a cross-piece own dwellings, not in factories. There is pieces rising from it, and a cross-piece also a large trade by railway, river and between the horns, from which to the canal. The origin of Lyons cannot be lower part the strings were stretched. It traced. When Cæsar invaded Gaul it had was used by the Egyptians, Assyrians become a place of some importance. To- and Greeks. It is said to have had origi-

wards the end of the second century it nally only three strings, but the number numbered thousands of Christians among was afterwards increased to seven, then its inhabitants. It was sacked by the to eleven, and finally to sixteen. It was



General View of Lyons.

Huns and Visigoths, and in the eighth century fell for a time into the hands of an army of Saracens from Spain, but recovered its prosperity under Charlemagne, on the dissolution of whose empire it became the capital of the Kingdom of Provence. In 1312, during the reign of Provence. In 1312, during the reign of Philip the Fair, Lyons was annexed to the crown of France. During the revolution the city suffered severely by the paralysis of its industry, and by the mur-derous excesses of the emissaries of the Paris Convention, whom the citizens had defied, the chief buildings being destroyed and many of the inhabitants butchered. Pop. (1911) 523,796.

Lyons, Gulf of (in French, Golfe du Lion), a bay of the Mediterranean, on the southeastern coast of France. The principal ports on this gulf are Tou-lon, Marseilles and Cette.

stringed instruments of music, class of poetry in which are expressed the

played with the plectrum or lyre-stick of ivory or polished wood, also with the fingers, and was used chiefly as an accom-paniment to the voice. The body of the lyre was hollow, to increase the sound. A musical instrument of similar construction is still to be met with in the hands of the shepherds of Greece and among cer-tain tribes of Africa.

Lyre-bird (Menura superba), an in-sessorial bird of New South Wales, somewhat smaller than a pheasant. The tail of the male is remarkable for the three sorts of feathers that compose it, which by their shape and arrangement resemble the form of an ancient Greek lyre. It has a pleasing song, and is said to be capable of imitating the voices of other birds.

Lyric Poetry (lir'ik), originally, seilles and Cette. poetry sung to or (lir), one of the most ancient suited for the lyre; in modern usage, that poet's own thoughts and feelings, or the emotions attributed to another, as op-posed to epic or dramatic poetry, to

enters the Scheldt at Ghent; length, 100 miles.

Lysander appointed to the command of the Spartan fleet off the coasts of Asia Minor in 407 s.c., during the Peloponnesian war. In agreeably situated in a sheltered position



Various forms of Egyptian, Assyrian and Greek Lyres.

philosophy and eloquence Thurii in Magna Græcia, and was there employed in the government. On the defeat of the Athenians in Sicily he returned to Athens in 412, but was banished by the thirty tyrants. When the city recovered its freedom he returned in 403,

Primulacese. Four species occur in the

donia 360 B.C., and at the death of the thought he committed suicide.

emperor and the division of the empire he hecame king of Thrace. During the lat
Lytton (lit'un). EDWARD GEORGE EARLE LYTTON BULWER-LYT-

ter years of his reign he was instigated by his wife to kill his son Agathocles. posed to epic or dramatic poetry, to which action is essential.

Lys (les), a river which rises in achus was defeated and slain at the batters the Scheldt at Ghant: length 100 to epic or dramatic poetry, to This murder caused his subjects to rebel, and in the war which followed Lysim-the scheme through Belgium, and the of Corus in B.C. 281.

(li-sip'us), a Greek sculp-tor who flourished in (lē-san'dėr), an ancient Sicyon about 330 B.C., in the time of Greek general who was Alexander the Great Lysippus

(lith'am), a watering place in Lancashire, England, Lytham Lancashire, in on the north shore of the estuary of the Ribble. Pop. (1911) 9464.

(lī-thrā'se-ē), the loose-Lythraceæ strife tribe, a nat. order of polypetalous exogens, containing about thirty genera of herbs, trees and shrubs, of various habit, often with square branches; the leaves usually are opposite or whorled, entire, and shortly petiolate; the flowers being often large and showy. Henna and tulipwood belong to the order. (lith'rum), a genus of plants, the type of the or-Lythrum der Lythraceæ (which see). L. salicaria, purple loosestrife, is a tall and handsome plant.

(lit'l-tun), a seaport in Lyttelton the district of Canterbury, New Zealand, connected with Christchurch—of which it is the port—by a railway 8 miles long. There is a fairly good harbor, improved by a break-405 B.C. he defeated and captured the water, etc., a graving dock, and a considathenian fleet off Ægospotamos, and thus put an end to the war. He was killed in a battle with the Thebans 395 B.C.

Six Thomas I with the topont was borned. (lish'e-as), an Athenian ora(lish'e-as), an Athenian orator, born about 458 s.c. He in 1709, and died in 1773. He entered
(shilosophy and eloquence at Parliament in 1730, and joined the opposiMagna Græcia, and was there tion led by Pitt and Pulteney. In 1756
in the government. On the dethe Athenians in Sicily he reterms of intimacy with Pope, and the Athens in 412, but was banished patron of Fielding and Thomson. His

Miscellangies in process and concer

Miscellangies in proces Miscellanies in prose and verse had once a reputation, but are now forgotten. In recovered its freedom he returned in 493, a reputation, but are now forgotten. In and gave instruction in eloquence, also his latter years he wrote his Dialogues writing speeches for others to deliver. of the Dead and a History of Henry II. He died in 378. Only about thirty of His son, Thomas, Lord Lyttelton, born his numerous orations have been preserved.

Lysimachia (lis-i-mā'ki-a), a genus of herbs, nat. order pated habits soon estranged him from his father and covered him from his right him the father and covered him from his right. father and separated him from his wife. United States, known by the name of Such, however, was his literary reputaloosestrife, and one (L. longifolia) is called Prairie money-wort.

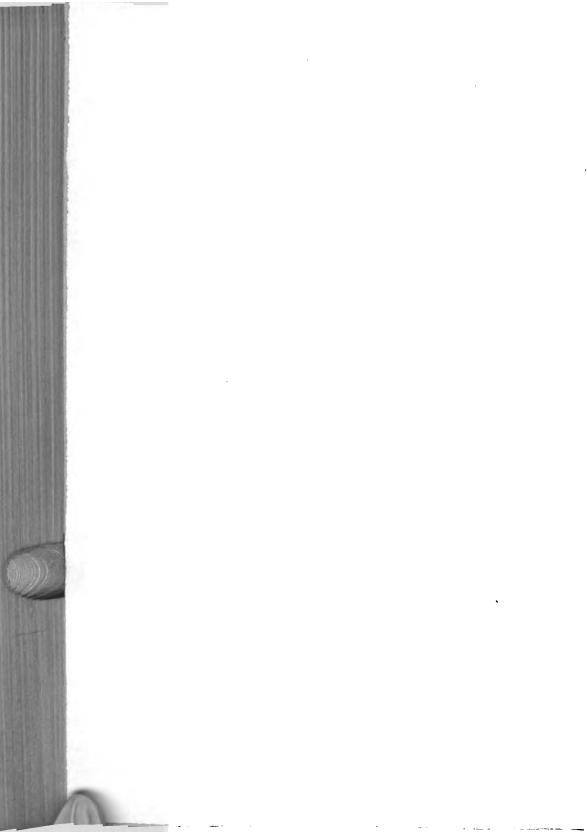
Lysimachus (li-sim'a-kus), a genloosestrife, and one (L. longifolia) is claimed at one time as the writer of the
Lysimachus (li-sim'a-kus), a genloosestrife, and some loosestrife, and some have days before it occurred, and some have thought be compilted suicide.

GEORGE

TON, BABON, youngest son of General Bul-wer, of Woodalling, and Elizabeth Barbara Lytton, of Knebworth, was born in 1805; died in 1873. He entered Trinity Hall, Cambridge, was graduated B.A. in 1826, M. A. in 1835, and gained the chancellor's prize medal for his English of poetry. chancellor's prize medal for his Linglish poem on Sculpture. He published poetry at an early age, but first gained reputation by the novels Pelham and the Discound (1828), Devereux (1829), and Paul Clifford (1830). These were followed with the popular romances of Eugene the Pilinging of the Phine The Aram, the Pilgrims of the Rhine, The Last Days of Pompeii, Rienzi and Ernest Maltravers, with its sequel, Alice. In connection with Macready's management at Covent Garden Bulwer-Lytton produced his Duchess de la Vallière, which proved a failure, but this was retrieved by the instant success of the Lady of Lyons, Richelièus and Money. When he had the shown his quick adaptability of telent he shown his quick adaptability of talent he returned to novel writing, and published in steady succession—Night and Morn-ing, Zanoni, The Last of the Barons, Luand What Will He Do With It? In 1845 he published a poetical satire coled The New Timon, in which he attacked Tennyson, who replied more vigorously tra and other Poems, Lucile, Tannhäuser, than had probably been expected. He entered Parliament for St. Ives in 1831, and Song and Glenaveril, besides prose works: supported the Reform Bill as a Whig; He also published the life and letters of but he changed his opinions and latterly his father. He was appointed ambassasupported the Conservatives. Under Lord dor to Paris in 1888. He died in 1891.

Derby's ministry he was colonial secretary, and in 1866 entered the House of Lords as Baron Lytton. He was elected Lords as Baron Lytton. He was elected rector of Glasgow University in 1856. His later literary works were The Coming Race, published anonymously (1871), The Parisians (1872), and Kenelm Chilingly (1873). Among his poetic works were the epic King Arthur; the Lost Tales of Miletus; Brutus, a drama, etc. As an author he is usually known under the name of Bulwer.

Lytton, The Right Hon. Edward Robert Bulwer-Lytton, ROBERT BULWER-LYTON. Lytton, EARL OF, G.C.B., son of the novel st and politician, was born in 1831; educated at Harrow and Bonn; entered the diplomatic service in 1849 as attaché at Washington, and successively served in the embassies of Florence, Paris, The Hague, St. Petersburg, Constantinople, Copenhagen and Lisbon. He was appointed Viceroy of India by the government of Mr. Disraeli in 1876, and it was during his administration that the queen was proclaimed Empress of India. This post he resigned in 1890 being then control as resigned in 1880, being then created an earl. He early attained a certain repu-tation as a poet, under the pen name of Owen Meredith; and published Clytemnes-



Lane, FRANKLIN KNIGHT, American cabinet officer, secretary of the interior in President Wilson's cabinet, 1913-20, died at Rochester, Minn., May

land dates back to Ben Jonson, who in 1617 was appointed poet to the royal household. The first poet to receive the title of 'poet laureate' by letters patent was John Dryden, in 1670. It was not till the year 1921 that the idea of a poet laureate in the New World spread to the United States. Nebraska was the first state to give official recognition to an American poet the honor of 'poet an American poet, the honor of 'poet laureate of Nebraska' being conferred upon John G. Neihardt (q.v.) by joint resolution of the Senate and House of Representatives.

League of Nations. The second assembly of the League of Nations met at Geneva from September 5 to October 5, 1921, 46 nations being represented. The activities of the league during the year included settlement of the disputes concerning Silesia (q.v.), partitioned between Poland and Germany; and the Aland Islands (q.v.), awarded to Finland, under certain guarantees of autonomy. Permanent Court of International Jusremanent Court of International Jus-tice was officially established, September 16, 1921, through the election of eleven judges and four deputy judges by the Council and Assembly of the league. There were 51 members in the league in November, 1921. The Council consists of four permanent members (France, Great Britain, Italy and Japan) and four non-permanent members (Belgium, Brazil, China and Spain).

Lloyd George, DAVID, Premier of Great Britain, made the year 1921 memorable by his discussions with the representatives of Ireland which resulted in the establishment of

London, the capital of Great Britain and of the British Empire, had a population of 4.483.249 in 1921, nau a population of 4.485,249 in 1921, nemorrhage, all the more dangerous beaccording to the preliminary report on cause it is not seen. The operation is
the census taken in June. In 1911 the
by no means free from risk; there may
population was 4.521,685; in 1901 it was
be severe lacerations of ligaments, mus4.536,267. These are the figures for Loncles, blood vessels, and nerves; and shock,
don proper, i. e. the administrative county and even death may result. Dr. Lorenz
of London and the city of London. It visited the U. S. and England in 1902;
comprises the metropolitan boroughs of and visited the U. S. again in 1921. comprises the metropolitan boroughs of and visited the U.S. again in 1921.

FRANKLIN KNIGHT, American Battersea, Bermondsey, Bethnal Green, cabinet officer, secretary of the Camberwell, Chelsea, Deptford, Finsbury, Fulham, Greenwich, Hackney, Hammersmith, Hampstead, Holborn, 1913-20, died at Rochester, Minn., May Hammersmith, Hampstead, Holborn, 18, 1921.

Laureate, Poet. The idea of a poet ham, Paddington, Poplar, St. Maryle-land dates back to Ben Jonson, who in wark, Stepney, Stoke Newington, Wands-1617 was appointed poet to the royal worth, City of Westminster, and Woolhousehold. The first poet to receive the wich, together with the small district title of 'poet laureate' by letters patent called the City of London. Of these was John Dryden, in 1670. It was not boroughs, Woolwich showed the largest till the year 1921 that the idea of a increase. There were decreases in many poet laureate in the New World spread of the horoughs the total percentage of of the boroughs, the total percentage of decrease being 0.9 per cent. London proper covers an area of 74,850 acres (land and inland water). Including the immediately surrounding areas conveniently designated the 'Outer Ring,' 7,476,-168 persons were enumerated, a gain over 1911, when the census showed 7.251,358 persons. The area included in the Outer Ring' and London proper is 443,449 acres. (For population of Great Britain see England, Walcs.)

Lorenz (lö'rents), Abolf, an Austrian orthopedic surgeon, was born in a small town in North Austria in 1854; he graduated in medicine from the

1854; he graduated in medicine from the University of Vienna in 1880, and began to devote himself specially to the pursuit of surgery. He became clinical assistant to Professor Albert, and later was appointed to the professorship of surgery in the University of Vienna. Lorenz gave up the practice of general surgery for that of orthopedic surgery, and he is best known by his so-called 'bloodless oper-ation' for congenital dislocation of the hip; this consists of special manipulation (without the use of the knife), followed by proper bandaging and after treatment which has to be continued for months and even for years. A similar method is used to straighten club-foot and in cases of contraction of the limbs caused by paralysis or inflammations. His operation for congenital dislocation of the hip the Irish Free State. (See Ireland.) Beis only available for very young patients,
cause of the crucial nature of the Irish
and is only possible in carefully selected
question he was prevented from being cases; the older the patient, the greater
present at the Armaments Limitation is the danger. The public seems to be
conference in Washington.

Obsessed by the term 'bloodless'; true, there is no escape of blood externally, but the operation may cause quite extensive hemorrhage, all the more dangerous be-

States annually exported, roughly, three and one-half billion board feet of lumber and saw logs, exclusive of railroad ties. staves, and other wood products. This export was made up of southern yellow pine, Douglas fir, white oak, redwood, white pine, yellow poplar, cypress, walnut, hickory, ash, basswood, and a few others of the more valuable softwoods and hardwoods. Of the total export the softwoods formed about 79 per cent and the hardwoods 21 per cent. Nearly half of the entire export of lumber was southern yellow pine. The export trade takes about ten per cent of the entire lumber cut. An important factor in the foreign trade is the export of high-grade hardwoods. In normal years more than ten per cent of the yearly cut of oak, or about 300 million board feet (mostly white oak), is exported, in addition to 41 million feet in the form of staves. Seven per cent of the annual cut of yellow poplar, or 35 million feet, is exported, and nearly 50 per cent of the yearly cut of black walnut, or about 25 million board feet. Considerable quantities of hickory, ash, and other high-grade woods for vehicle parts, agricultural implements, etc., are also exported. About 37 per cent of the lumber exports are shipped to Europe, 30 per cent to North America (chiefly Canada and Mexico), and 16 per cent to South America. The foreign lumber trade fell off to a marked degree during the war, chantable timber in the United States particularly lumber exports to Europe.

The total exports in 1918 and 1919 were but one-third of the quantities of lumber ranks fifth among American industries.

Lumber Exports. Before the war and logs exported in 1913. The foreign the United trade in hardwoods showed the least decline, and in 1919-20 was but little less than in pre-war years. It is expected that the development of Central and South America, parts of Africa, China, Australia, and New Zealand will naturally result in a gradual increase in lumber exports to those countries. Central and South America, while containing large South America, while containing large hardwood forests, are now dependent upon imports from the United States, Canada, and Sweden for the bulk of their softwoods, the chief staple in international timber trade. Several of these regions may in time develop forest industries sufficient to supply their own needs, and new sources of international lumber supply may be developed in regions like Siberia (which has enormous timber resources, undeveloped); nevertheless, the United States, in the opinion of the Forester, U. S. Department of Agriculture, must applicate a gradual but culture, must anticipate a gradual but culture, must anticipate a gradual but material increase in the demand for its lumber products from these parts of the world for some time to come. This de-mand will comprise mainly lumber of relatively high grade. It will, however, probably run to less specialized and high quality products than the European trade and will consist chiefly of the better grades of softwood building and construction lumber, with considerable quantities of railroad ties. It is estimated that there are about 2,767,000,000,000 feet of merchantable timber in the United States. and the annual cut totals 117 billion feet. The value of the annual lumber product

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represents a labial and nasal articulation, the compression of the lips being accom-panied with the fall of the uvula so as to allow the voice to form a humming sound through the nose, which constitutes the difference between this letter and b.

Maartens, MAARTEN, pen name of J. M. M. VAN DER POORTIN SCHWARTZ, a Dutch author, born at Amsterdam in 1858. He spent part of his boyhood in England and writes in English. Some of his best known novels being The Sin of Joost Avelingh, God's Fool, The Greater Glory and My Lady Nobody.

Maas. See Mcuse.

Maastricht. See Maestricht.

a mythical personage often rep-Mab, resented as queen of the fairies. (mā'bē), Hamilton Wright, Mabie American author, was born at Cold Spring, N. Y., in 1846 and graduated from Williams College in 1867, and from the Law School of Columbia University in 1869. He contributed a number of essays to current periodicals, and in 1879 joined the editorial staff of the Christian Union, afterward the Outlook, Christian Union, afterward the Outlook, of which he became associate editor with Lyman Abbott. He acquired much fame as a lecturer on books, ethics and religion. Among his published books are: Norse Stories Retold from the Eddas, Nature in New England, My Study Fire, Short Studies in Literature, Under the Trees and Elsewhere, Essays in Literary Interpretation, Nature and Culture, etc.

Macalester College, a co-educational institution of learning in St. Paul, Minn., founded in 1884. In 1917 there were 350 students enrolled; the faculty numbered 40. The buildings and grounds are valued at \$380,000. The college is non-sectarian in its teachings, but is under Presbyterian control.

(ma-kä'o, or ma-kou'), a sea-Macao port town and Portuguese settlement in China, on a peninsula at the

M is the thirteenth letter and tenth conmouth of the Canton River, about 40 sonant of the English alphabet. It miles from Hong-Kong, considered the represents a labial and nasal articulation, healthiest residence in Southeast Asia. The settlement has an area of about 21 sq. miles, and its principal export is tea. Its commerce has greatly declined since the rise of Hong-Kong and the Chinese treaty ports. It was in 1575 that the Portuguese first obtained permission to form a settlement and to trade at Macao. and in 1844 it was declared a free port. Pop. 78,627.

Macaroni, MACCABONI (mak-a-ro'-ni), a preparation of wheaten flour, used as food, usually simply boiled and served up with grated cheese, or in soups, etc. Macaroni is generally made in tubular pieces resembling a long pipe-stalk, by pressing it through holes in a metal plate. Vermicelli is a similar presentation. celli is a similar preparation, but is more thread-like. Macaroni is a wholesome food, made best in the neighborhood of Naples, and considered a national dish of the Italians.-Macaroni was used as a term of contempt for a coxcomb or swaggerer about 1770-75.

(mak-a-ron'ik). Macaronic Poems a kind of facetious Latin poems, in which are interspersed words from other languages, with Latin inflections. They were first written (at least with the above designation) by Teofilo Folengi, 1484-1544, and were introduced into England in the reign of Jenry VII. Drummond of Hawthornden is credited with a macaronic poem, Pole-mo-Middinia, published in 1691. There is good reason, however, to believe that it is later than Drummond's time, and 1881 it is the work of Dr. Pitcairne (1652-1713).

(mak'a-rön), a favorite kind of biscuit, made of Macaroon the meat of sweet almonds instead of ordinary flour.

(ma-kas'ar), a town on the island of Celebes, capi-Macassar tal of the Dutch government of Celebes. It has an excellent harbor, and carries on a considerable trade in rice, spices, ebony, sandal-wood, etc. Pop. 17,925. See Celebes. Macassar, Straits of, between Celebes and Borneo, about 350 miles long, and from 110 to 140 wide, ex-STRAITS OF, between Celecept at the north entrance, where it is contracted to 50 miles. Navigation is difficult because of the numerous shoals and small islands.

Macaulay (ma-ka'le), Thomas Bab-ington, Lord, historian, essayist and politician, was born in 1800 at Rothley Temple, Leicestershire, and died at Kensington in 1859. His father, Zachary Macaulay, who had been a West Indian merchant, was a well-known philanthropist, while his mother was Selina Mills, the daughter of a Bristol Quaker. Their son Thomas was severely educated



Lord Macaulay.

in the rigid Calvinism of what was known as the 'Clapham sect.' In 1818 he entered Trinity College, Cambridge, where he obtained the Chancellor's medal for a poem on Pompeii, and a second time for a poem on Evening; received a fellow-ship, and took his M.A. degree in 1825. Before this he began to contribute to Knight's Quarterly Magazine, in which appeared his poems of the Armada, Ivry, and the Battle of the League; and in 1825 he inaugurated his brilliant career in the Edinburgh Review by his article on Milton. He was called to the bar at Lincoln's Inn in 1826. He entered parliament in 1830 as member for Calne, and made his first speech in support of freedom for the Jews in England. He also spoke in favor of the antislavery legis-lation, and delivered several speeches in favor of the Reform Bill of 1832. He afterwards became member for Leeds, but resigned his seat and proceeded to Calcutta as legal member of the supreme council of India, in which position he prepared a new penal code that was not

adopted because of its liberal dealing with adopted because of its liberal dealing with the native races. Returning from India he was elected a member of parliament for Edinburgh, was made secretary of war in the Melbourne ministry (1839-41); and when the Whigs returned to power in 1846 he was appointed paymaster of the forces. At the election of the same year his Edinburgh constituency refused to reëlect him, but their attitude was reversed in 1852, he being returned, although he had not presented himself as a candidate. During his political career Macaulay had continued his literary labors. In 1842 he published his literal career Macaulay had continued his literary labors. In 1842 he published his Lays of Ancient Rome; and in 1848 appeared the first two of the five volumes of his History of England, which covers the period between the accession of James II and the death of William III. This brilliant spheroical expression although brilliant rhetorical exposition, although touched with partisanship and with a tendency to paradox, has attained the posi-tion of an English classic. He was created a peer in 1857, and at his death The Life and Letters of Macaulay has been published by his nephew, Sir George (Otto Trevelyan (1876).

Macaw (ma-ka'), a genus (Macrocercus) of beautiful birds of the

parrot tribe. The macaws are magnificent birds, distin-guished by having their cheeks destitute of feathers, and their tail-feathers long (hence their generic name). They are all natives of the tropical regions of South America. The largest and most splendid in regard to color is the

Red and BlueMacaw (Macrocercus Aracanga.)

great scarlet or red and blue macaw (M. Aracanga or macao). The great green macaw (M. militaris) and the blue-and-yellow macaw (M. ararauna) are somewhat smaller.

Macaw-tree, the name given to several species of trees of the genus Acrocomia, natives of tropical America, as A. fusiformis and A. sclero-carpa, the fruit of which last yields an oil of a yellowish color of the consistence of butter, with a sweetish taste and a odor of violets, used by the natives of the West Indies as an emollient in painful affections of the joints, and largely im- in the English Apocrypha, and are acported into Britain, where it is some counted canonical by the Roman and times sold as palm-oil, to be used in the manufacture of toilet soaps.

MacCarthy (ma-kar'thi), Denis

Maça'yo. See Maceio.

Macbeth (mak-beth'), MACBEDA, or MACBETHAD, son of Finnor laech, a king of Scotland who reigned from 1040 to 1057. The facts of his life, so far as they are known, are these: During the reign of Duncan he was 'mormaer' of Moray by inheritance, and by his marriage with Gruoch, grand-durbten of Korneth IV. This Durant daughter of Kenneth IV. This Duncan, in his attempt to subdue the independent chiefs of the north, was slain by Macbeth at 'Bothgowan,' which is supposed to be near Elgin. By this means Macbeth became king, and, according to all accounts, his reign was fairly successful. In 1050 he is said to have gone on a pilgrimage to Rome. At the death of their father the sons of Duncan had taken refuge with their Uncle Siward, earl of Northumberland, and with his aid they invaded Scotland in 1054; a battle was fought at Dunsinane, but it was not until 1057 that Macbeth was finally defeated and slain at Lumphanan in Aberdeen. The legends which gradually gathered round the name of Macbeth were collected by John of Fordun and Hector Boece, and reproduced by Holinshed in his Chronicle, and there found, as is supposed, by Shakespere, who has made such splendid use of them.

Maccabees (mak'a-bez), a dynasty of ruling Jewish priests of whom the first who came into prominence was Mattathias. During the persecutions of Antiochus Epiphanes he slew a Jew who came to the altar to renounce his faith, and then fled to the mountains with his five sons—Johannes, Simon, Judas, Eleazar and Jonathan. Being joined by numerous patriotic Jews they were able to make successful resistance. to the national foe and reëstablish the ancient religion. When Mattathias died (166 B.C.) his sons Judas and Jonathan (166 B.C.) his sous sugas and solutions became successively leaders of the national movement. The last remaining member of the family was Simon, who now carried forward the national cause to a triumphant issue, reduced the to a triumphant issue, reduced 'the tower' of Jerusalem, and established the power of the new state. Under his rule trade and agriculture flourished, until (in 135 B.C.) he was treacherously murdered by Ptolemy, his own son-in-law.

Maccabees, Books or, treat of the Jewish history under the

Maccabees, Jewish history under the was forced to retire from his lines in Maccabean princes; they are five in num-front of Richmond. During the second ber, the first two of which are included battle of Bull Run, he was recalled to

MacCarthy (ma-kar'thi), DENIS FLORENCE, poet, born in Ireland about 1820; died in 1882. His ballads, poems and lyrics were published in 1850. He translated six of Calderon's dramas; wrote a volume on Shelley's Early Life in 1872, and contributed an ode to the Moore Centenary in 1879. A collected edition of his poems was published in 1884.

MacCarthy, JUSTIN, novelist, historian and politician, was born at Cork in 1830; became connected with the Liverpool press in 1853; joined the staff of the Morning Star in 1860. and ultimately became its chief editor in 1864. He afterwards traveled for three 1864. He afterwards traveled for three years in the United States; contributed to various English and American magazines, and was connected with the *Daily News*, 1870-85. His historical writing, which are much esteemed, include *His*tory of Our Times, 1837-80, History of the Four Georges, etc. In addition he wrote a number of highly popular novels. He represented Longford in parliament from 1879 as a Home Ruler. He died in 1912.—His son, JUSTIN HUNTLEY MAC-CARTHY (born in 1859), is an M.P. of the same party, and is favorably known in literature, his works including England Under Gladatone. Ireland Since the Union, The French Revolution, etc.

Macchiavelli. See Machiavelli.

MacClellan (ma-klel'an), GEORGE BRINTON, an American general, born at Philadelphia in 1826; died in 1885. He was trained at the West Point Military School; served in the Mexican war; joined the Red River expedition as engineer; and in 1855 was appointed to the commission which re-ported on the condition of European armies, and watched the military operations during the Crimean war. At the outbreak of the Civil war in the States outbreak of the Civil war in the States he was victorious in West Virginia, superseded McDowell after the first battle of Bull Run, and became commander-in-chief on November 1, 1861. In this capacity he organized the raw levies of the North and advanced against Richmond the following spring, but was relieved from his supreme command by President Lincoln in 1869. mand by President Lincoln in 1862, remaining in command of the army before Richmond. Here he was defeated in a series of battles lasting seven days, and

Washington, and when Lee advanced into Maryland, MacClellan pursued and fought the battles of South Mountain and Antietam (September 14-17, 1862). The result was the withdrawal of Lee across the Potomac, MacClellan following so deliberately that the authorities at Washington grew dissatisfied with his apparent slackness in following the enemy, and he was relieved from his command and retired from the army. In 1864 he was nominated for the presidency, but was overwhelmingly defeated by Abraham Lincoln.

Macclesfield (mak'lz-fēld), a town of England, Cheshire, 17½ miles south by east of Manchester, on the Bollin. It is pleasantly situated, and the principal buildings are the church of St. Michael, an ancient structure, founded

navy in 1831; became a lieutenant in 1845; and in 1848 joined the expedition cal and geological survey of Scotland sent out by the British government in 1826, a task which was completed in search of Sir John Franklin, the Arctic 1832. As the result of his labor he explorer. In 1852 he was instrumental in rescuing MacClure and his companions. In 1857, as commander of the Fox, a vessel equipped by Lady Franklin, he discovered evidence of the death of Franklin. He was knighted in 1859 and made statistician, born in Wigtonshire in 1789; vice-admiral in 1877. Died in 1907.

MacClure (ma-klur). Sir Robert Scotland: A geological survey of Scotland search of Sir John Franklin, he discovered evidence of the death of Frankl

MacClure (ma-klur'), SIR ROBERT JOHN LE MESURIER, born in 1807; died in 1873. He entered the navy in 1824; joined an Arctic expedition in 1836; accompanied Sir John Ross into the same region in 1848; and himself took command of an Arctic expedition in 1850. He penetrated as far north as Melville Sound, and was the first to make the northwest passage between the Atlantic and Pacific, this being done partly by sledging over the ice, his ship being abandoned.

MacCosh (ma-kosh'), JAMES, was born in Ayrshire in 1811; became a minister of the Church of Scotland first at Arbroath, then at Brechin; joined the Free Church after the disruption movement; was appointed professor of logic and metaphysics in Queen's College, Belfast, 1851; was president of Princeton College, New Jersey, from 1868 to 1888, when he resigned. He wrote vari-

ous works on philosophy and psychology, among them the History of Scottish Philosophy (1874); the Development Hypothesis (1876); The Emotions (1880); I'sychology (1886) etc. He died in 1894.

MacCulloch (ma-kul'lo), HORATIO, one of the most distinguished of Scottish landscape painters, was born in Glasgow in 1806; died near Edinburgh in 1867. His paintings are nearly all of Scotch scenery. Among them are the Cuchulin Mountains, A Dream of the Highlands, Highland Loch,

and Mist on the Mountains.

MacCulloch, Hugh, financier, born at Kennebunk, Maine, in 1808; died in 1895. He was made comptroller of the currency in 1863 and secretary of the treasury in 1865, and was remarkably successful in raising by Eleanor, queen of Edward I, in 1278; was remarkably successful in raising St. Peter's and St. Paul's; a spacious funds for the expenses of the Civil war.

St. Peter's and St. Paul's; a spacious funds for the expenses of the Civil war. town-hall, subscription library, theater, He was secretary of the treasury again, etc. The staple manufacture is silk, and the cotton manufacture has also made of Half a Century.

Some progress. In the vicinity are extensive coal-pits and stone and slate quarries. Pop. (1911) 34.804.

MacClintock (ma-klin'tok), Sir for the medical profession, he became Francis Leopold, assistant surgeon in the army, and ultiborn at Dundalk in 1819; entered the mately practiced privately at Blackheath. navy in 1831; became a lieutenant in He undertook a government mineralogists, and in 1845 joined the expedition cal and geological survey of Scotland

Scotsman newspaper and contributed largely to the Edinburgh Review. In 1828 he was appointed professor of political economy in London University, became comptroller of the stationery office in 1838, and retired on a pension of £200 a year. Among his numerous works are The Principles of Political Economy (1825); Historical Sketch of the Bank of England (1831); Dictionary of Com-merce (1832): Geographical Dictionary (1841), and The Literature of Political Economy (1845).

Macdonald (mak-don'ald). FLORA, born on South Uist, one of the Hebrides, in 1720; died in 1790. She became celebrated in 1746 for the part she took in assisting Prince Edward Charles to escape the government pur-suit, when she conveyed him from South Uist to Skye, disguised and in an open hoat. For this cause she was imprisoned for several months in London and then

She married, settled in America, but afterwards returned to and died in Skye.

and became successively a member of Roman province. Macedonia long formed the executive council, receiver-general, a part of Turkey in Europe, being inhab-commissioner of crown lands, and attorney-general. He became premier in 1869, disappeared from the map of Europe. a position which he held until 1873 when he resigned on account of the Pacific Railway charges, but resumed the office in goas, on the Atlantic, lat. 9° 39' s. Chief 1878, and retained it until his death, exports: cotton, rum, and sugar. Pop. June 6, 1891. He was an active promo-1908 est. 33,000. ter of the Canadian Pacific Railway and the Canadian confederation movement, and was a recognized leader of conservative party.

EDWARD MacDowell, Paris conservatory and at Frankfort. For provincial palace and theater, all situated eight years he was professor of music at in a large public square, various churches Columbia University. A complete ner- and convents, a college, museum, etc. vous break-down in 1905 put an end to Pop. 22,473.—The province, bounded all work. His compositions include sonanorth by Ancona, west by Umbria, south tas, two orchestral suites, and a number by Ascoli, and east by the Adriatic, has an area of 1056 square miles produces

teenth century. It consisted of a staff 259,429. about 5 feet long, with a heavy man 250,429. about 5 feet long, with a heavy metal Macfarren (mak-far'en), SIR GEORGE head, which assumed a variety of forms,

cient geography, a territory lying to the north of Greece, which
first became powerful under King Philip,
the father of Alexander the Great, and

cient geography, a terriKing David (1883). He also wrote sevtory lying to the north of Greece, which
eral musical treatises.

(m a -gil'ikud-i), a

conqueror of Greece. Alexander the Macdonald, Sie John Alexander, a petty province mistress of half the was born in Scotland in 1815. Being divided; dominion over Greece was lost; taken to Canada, he was educated at and the result of the battles of Cynos-Kingston; admitted to the bar in 1835; cephalæ (197 B.C.) and Pydna (168 B.C.) entered parliament for Kingston in 1844; was to reduce the ancient kingdom and became successively a member of Parliament was considered to the constant of the successively a member of Parliament was constant. entered parliament for Kingston in 1844; was to reduce the ancient kingdom to a and became successively a member of Roman province. Macedonia long formed the executive council, receiver-general, a part of Turkey in Europe, being inhab-

Maceo (ma'se-ō), Antonio, a Cuban patriot, born at Santiago de Cuba in 1843. He was a prominent leader in the rebellion of 1868-78, was banished, but returned again in 1895 and MacDonald, George, novelist and banished, but returned again in 1895 and banished, but returned again in 1895 and took an active part in the insurrection of Huntly, Scotland, in 1824; educated at that year. He was killed in a skirmish king's College, Aberdeen; became an Independent minister, but soon adopted literature as a profession. Among his insurrections named, and was also killed numerous novels are David Elginbrod, Robert Falconer, Malcolm, Castle Werlock, etc. He died in 1906.

Macerata (må-chā-rā'tā), a town in lock, etc. He died in 1906.

Macerata (ma-chā-rā'tā), a town in Italy, capital of the prov-ALEXANDER, ince of the same name, on a lofty emi-MacDowell, American composer nence midway between the Apennines and and pianist, born in New York City in the sea, 21 miles south of Ancona. The Mace (mas), a weapon of war in use much corn, fruit and hemp, and rears in Europe as late as the six-great numbers of sheep and cattle. Pop.

but was frequently in the form of a poser, born at London in 1813; died in spiked ball. Another kind of mace is a 1887. He was educated at the Royal sort of heavy ornamental staff used as Academy of Music; became a member of an emblem of authority in universities, the board of the academy, and ultimately an emblem of authority in universities, the board of the academy, and ultimately courts of law, parliament, etc.

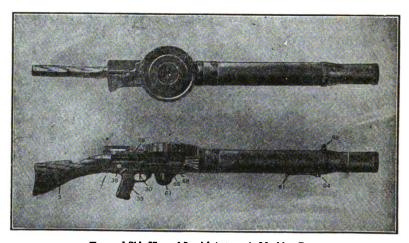
Mace, a spice, the dried aril or coverescent of music, Cambridge University (1875); and was knighted by the queen (Myristica fragrans). It is aromatic and in 1883. His chief operas are The Devil's Opera (1838), Don Quiwote (1846), and Macedo (ma'sē-dō), Joaquim Man-Robin Hood (1860). He also essayed the Ual, Brazilian poet and cantata in Lenore (1852), and The Lady novelist, born in 1820; died in 1882. The of the Lake (1870): while his oratorios Brazilians regard him as their best poet. are St. John the Baptist (1873), The Macedonia (mass-do'ni-a), in an Resurrection (1876), Joseph (1877), and cient geography, a terri-King David (1883). He also wrote sev-

picturesque mountain range of Ireland, in the county of Kerry, extending for 131/2 miles from the lakes of Killarney on the east to Lough Carra on the west. It is the loftiest mountain range in Ireland; Carrantual, the highest peak, rises 3404 feet above sea-level

Machette (ma-chā'tā), an implement of steel with a wooden handle, originally manufactured for the cutting of sugar-cane, but adopted by the Cubans as a weapon in their en-counters with the Spanish troops. The blade is about two feet in length, slightly curved, resembling a pruning-hook on a larger scale. Being exceedingly sharp and heavy in proportion to its size, it formed a terrible weapon.

Casciano. Here he devoted himself to literary labor, the chief results of which are found in his History of Florence, embracing the period between 1215 and 1492; Discourses on Livy; The Prince, by which he is best known; a military treatise entitled Dcll' Arte della Guerra; and the comedies of La Mandragola and La Clizia. The name of Machiavelli was for long synonymous with all that is tortuous and treacherous in state affairs, due to the advice he gave to sovereigns in The Prince, but he did no more than advocate the political measures common in his day.

Machine Gun (ma-shēn'), the type of weapon known as the machine gun is an important and ex-



Top and Side View of Lewis' Automatic Machine Gun.

Machiavelli (mak-ya-vel'le), NIC-Florence in 1469; died in 1527. He became prominent in public affairs in 1498, when he was appointed secretary to the Ten at Florence. For more than the Horentine Republic, and Jealously conserved the rights and liberties of his native city. When the Medici returned to power in 1512 by aid of Pope Julius II, Machiavelli was deprived of his office, and imprisoned for his supposed com-plicity in a plot to overturn the new authority; but being released after a time he retired to his country house of San

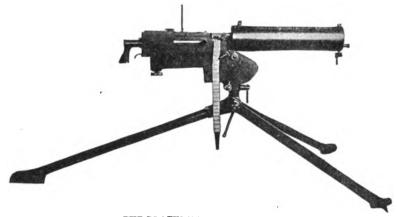
tensively used factor in modern warfare. Machiaveiii Colo, a distinguished By this term is meant a gun using small Italian statesman and historian, born at arms ammunition, the loading, firing and extraction of the empty shell being done by machinery. There are two main types, those operated by hand and the so-called For more than automatic machine guns in which a small fourteen years he guided the destinies of portion of the gas generated by the firing the Florentine Republic, undertook emonths of each cartridge, or the recoil from the firing is used to operate the mechanism.

In the European war, which began in 1914, the Lewis air-cooled machine rifle, the improved Vickers light automatic rifle-calibered gun, the Maxim automatic, and other types of rapid-fire guns were extensively employed.

The United States, on entering the war. was handicapped by lack of machine guns, midst of experiments with several different makes then on the market. Dropping these experiments, the army experts set about devising a new weapon and the Browning light and heavy machine guns are the result. In their first public tests on February 27, 1018, they were pronounced not only the simplest but the most deadly and the most serviceable of

the ordnance departments being in the mechanism for ejecting the empty shell, inserting and firing the next cartridge, is accomplished by the gas pressure created by the explosion, a small portion of which is taken off to operate the gun. As an automatic, it will fire 20 shots in 21/2 seconds. It may be fired either from the shoulder like an ordinary rifle or from the hip.

The Browning heavy machine gun is of



THE BROWNING MACHINE GUN Copyright by Committee on Public Information. From Underwood & Underwood, N.Y.

any machine gun in the world. The light the water-cooled, belt-feed design and is used as an automatic or semi-automatic. ried in boxes on either side of the gun.

Browning is practically an automatic rifle operated by means of the power created weighing but 15 pounds and shooting the by the recoil action. This gun is mounted regulation army rifle cartridge carried in on a tripod which permits it to be fired detachable magazines containing either 20 at almost any angle. The cartridge belts or 40 cartridges. This weapon may be contain 250 cartridges each and are car-That is to say, it can be made to fire con- The ammunition is the same as that used



THE BROWNING AUTOMATIC RIFLE Copyright by Committee on Public Information. From Underwood & Underwood, N. Y.

change is made by moving a conveniently any in the world. located lever. This gun is of the air cooled gas operated design, in which the

tinuously until the magazine is emptied in the United States rifle, model of 1918. simply by holding back the trigger or it the Springfield rifle, and in the light can be employed as a self-loading and self- Browning gun. It is claimed that this cocking rifle, in which case the rifleman heavy duty machine gun, in simplicity, pulls the trigger for each shot. This convenience and power, is the superior of

JOHN W., born at Dublin, Ireland, in 1831. In 1860, after a miner's life in success till 1878. He more than once California, he went to Nevada, and in declined the honor of knighthood. He

Pilgrims (1903), Fenris the Wolf (1905), Sanctuary: A Bird Masque (1913), A Saint Louis: A Civic Masque (1914), A Thousand Years Ago (1914), and he has also published poems and edited the work of Chaucer.

Mackensen (mak'en-sen), August tenant to colonel. He was aide-de-camp in attendance on the Kaiser in 1898, was raised to the nobility in 1809, made majorgeneral in 1900, lieutenant-general in 1903 and in 1908 commanding-general of the Eleventh Army Corps. In 1914 he was commander-in-chief on the Central Eastern front, and led the drive through Poland, past Warsaw and to Dvinsk. He was made Field-Marshal in 1915, and in 1916 was chief in command in the campaign by which Rumania was overrun.

Mackenzie (ma-ken'zē), Sir Alex-Ander, a Canadian explorer, born at Inverness, Scotland, in 1755; died in 1820. In the employment of the Northwest Fur Company he explored the great river named after him from the western end of Great Slave Lake to the Arctic Ocean (1789). He made another expedition to the western coast (1792), and was the first white man to cross the Rocky Mountains and reach the Pacific coast. He returned to Britain in 1801, and was knighted.

Mackenzie, ALEXANDER, a Canadian statesman, born in Logierait, Perthshire, Scotland, in 1822. Originally a stone mason, he emigrated to Kingston, Canada, in 1842, and began business as a builder and contractor. In 1852 he was editor of a Liberal newspaper, and he entered parliament in 1861, becoming leader of the Liberal party in 1873. On the resignation of Sir John Macdonald that same year he became Nova Scotia to Ca premier, and retained office with much not much esteemed.

California, he went to Nevada, and in 1872 he was one of the discoverers of the Bonanza mines, of which he owned two-fifths. In 1884, in partnership with James Gordon Bennett, he laid two cables across the Atlantic. He died in 1902.

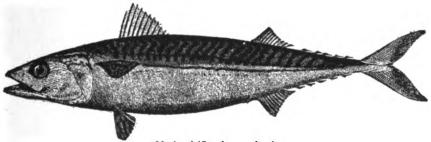
Mackaye (ma-ki'), PERCY, an American dramatist and poet, born in New York, March 16, 1875. He graduated at Harvard, studied further at the University of Leipzig, traveled, and taught. Since 1904 he has been engaged almost wholly in dramatic work, and his plays more than those of any other American dramatist of the time are poetic in spirit. His plays include The Canterbury lege, Paris and Vienna; obtained the Ison of the Bordon Medical College, Paris and Vienna; obtained the Ison of the London Hospital, Sanctuary: A Bird Masque (1913), A became physician to the London Hospital. and lecturer on diseases of the throat. In 1887-88 he was associated with the specialists of Berlin and Vienna in the treatment of the laryngeal disease of the Emperor Frederick of Germany. He was the author of a treatise on Diseases of the Throat and Nose and several other works. He died in 1892.

Mackenzie, ROBERT SHELTON, writer and journalist, born in County Limerick, Ireland, in 1809; died in 1881. After doing editorial work on the Liverpool Journal and other papers, he settled in the United States in 1852, and became the literary and foreign editor of the Philadelphia Press. He wrote Lays of Palestine; Tressilian, or the Story Tellers; Life of Dickens and other works. Mackenzie River, a large river the Northwest Territories of Canada, which flows out of Great Slave Lake, first west, then north, finally northwest; and after a course of about 1200 miles falls into the Arctic Ocean by numerous mouths. Its principal affluents, including the feeders of Great Slave Lake, are the Athabasca, the Peace, the Liard and the Peel, and it is navigable throughout its course. It was discovered by Alexander Mackenzie in 1789.

(mak'e-rel; Scomber scom-Mackerel brus), one of the spiny finned fishes (Acanthopteri), a well-known and excellent table fish, which in-habits almost the whole of the European seas and as far south as the Canary Islands, and from Greenland to Cape Cod, on the American coast. The American mackerel is also known as S. verntilis Mackerel like howing as S. verntilis. alis. Mackerel, like herring, are caught only when they approach the shore to spawn, nets being chiefly used. The Spanish mackerel S. colias, is found from Nova Scotia to Cape Hatteras, but is

Mackintosh (mak'in-tosh), SIR MacLean, SARAH PRATT, novelist, JAMES, a Scottish historian and philosophical writer, born in 1765; died in 1832. He was educated at 1887. Her novel of Cape Cod Folks was Abarden and Ediphurch; became a play a strikingly realistic that suit was Aberdeen and Edinburgh; became a physician; published his Vindicia Gallica in answer to Burke's Reflections on the French Revolution; he afterwards quitted the medical profession and was called to the medical profession and was called to the English bar in 1795. By reason of his brilliant lectures on the Law of Nature who wrote also under his own name. and Nations, and his defense of Peltier, Fiona Macleod being regarded as the real who was prosecuted for a libel on Napo-

so strikingly realistic that suit was brought against her by some of the Cape Cod people for libel. She wrote also Some Other Folks, Towhead, etc.



Mackerel (Scomber scombrus).

leon Bonaparte, he acquired fame at the bar, and received the honor of knighthood, The Mountain Lovers, and in 1804 was appointed recorder of Pharais, etc.

Bombay. After an honorable career in Maclise (ma-klez'), Daniel, a celebrated painter of Scottish parliament for Nairn, and afterwards descent, born at Cork in 1811; died in for Naresborough; became professor of 1870. He became a student at the Royal wat Haileybury College (1818-24), a Academy in 1828, and began to exhibit in 1829, but it was not until the year 1833 that he established his reputation

Macle (mak'l), in mineralogy, a term applied to twin-crystals, which are united in various ways. Macle is also used as a name for chiastolite or crossstone.

MacLean, or Maclean (mak'-John, statesman and jurist, was born in Morris Co., New Jersey, in 1785; died in 1861. He was admitted to the bar of Ohio in 1807; was elected to Congress in 1812 and again in 1814; was a judge of the Supreme Court of Ohio, 1816-22, and became Postmaster-General in 1823. He became Postmaster-General in 1823. He filled this office with much ability until 1829, when he declined a place in the cabinet of President Jackson and was appointed a judge of the Supreme Court of the United States. In 1857 he dissented from the decision of the court in the Dred Scott case. He was one of the Roubliege condidates for the president. Republican candidates for the presiden-tial nomination in 1856, and received Macmahon (mak-mā-ōn), Marie 196 votes.

Macmahon (mak-mā-ōn), Marie

1833 that he established his reputation with his picture of Snap Apple Night.

Three years after he was elected an associate, and in 1840 he became a full member of the Royal Academy. Maclise was commissioned to paint for the new Houses of Pacliament, and produced The Spirit of Chivalry, The Spirit of Religion, and the two great paintings of The Meeting of Wellington and Blücher after Waterloo and The Peath of Nelson (1858-64). Among his best-known pictures are Merry Christmas in the Baron's Hall, The Ordeal of Touch, The Marriage of Strongbow and Eva, the Play Scene in Hamlet, the Banquet Scene in Macbeth, etc. His sketches, book illustrations, humorous drawings, and outline portraits were very numerous. He declined the presidency of the Academy in 1866. The works of Maclise show great fertility of invention, skill in composition, and excellence in drawing, but are not distinguished for color.

Macmahon (mak-mā-ōp), Marie ciate, and in 1840 he became a full mem-

RICE DE. Duke of Magenta and Marshal of France, born in 1808; educated at the military college of St. Cyr; served with distinction in Algeria; became brigadiergeneral in 1848; received command of a division during the Crimean war, and assisted in storming the Malakoff; took part in the campaign of 1859 against Austria, and won the battle of Magenta by his prompt handling of the left wing; and after the war becam; governor general of Algeria. At the outbreak of war between France and Germany (1870) Macmahon was placed in command of the First Army Corps, which was defeated at Weissenburg, Wörth, and finally fell back upon Châlons. Here he rallied his forces, and proceeded northeastward to relieve Bazaine, who was besieged in Metz, but he was pursued by the Germans, shut up by their encircling armies in the town of Sedan, and wounded in the battle before the final surrender. After the armistice with Germany he was employed by the Versailles government in putting down the commune, and in 1873 was president of the republic. He died in 1893.

MacMonnies (mak-mon'ez), FRED-ERICK, sculptor, born at Brooklyn, New York, in 1863. His first figure, Diana, was exhibited in the Paris Salon of 1889, and in 1896 he was given the French decoration of the Legion of Honor. He made the notable fountains for the Chicago Exposition of 1893, the bronze doors for the Library of 1893, the bronze doors for the Library of Congress, and other highly creditable works.

Macomb (ma-köm'), a city, capital of McDonough Co., Illinois, 59 miles N. E. of Quincy. It has manusewer pipe, factures of earthenware. drain tiles, electrical insulators, etc., and a State normal school. Pop. 6714.

born in 1738, and died in 1796. He York. studied at Aberdeen and Edinburgh; beMacrobius (ma-krō'bi-us), AMBROSIUS AURELIUS THEODOcame a school teacher, and afterwards a

of this venture enabled Macpherson to issue the so called poems of Ossian in the form of Fingal, an ancient epic poem in six books (1762, 4to), and Temora and other Poems (1763, 4to). The genuineness of these poetical writings was severely questioned (see Ossian), but the 'editor' maintained his position without maintained his position without editor maintained his position without submitting the necessary proofs. Macpherson was afterwards agent to the Nabob of Arcot; had a seat in the House of Commons from 1780 to 1790, and was interred in Westminster Abbey. He was the author of a prose translation of Homer's Iliad, and of some other works. MacPherson, JAMES BIRDSEYE, general, born in Sandusky Co., Ohio, in 1828. He was graduated at

Co., Ohio, in 1828. He was graduated at West Point in 1849, was engaged in the engineer corps, was chief engineer under Grant at Donelson and Shiloh, and in May, 1862, was made brigadier general of volunteers, and major-general in October. He did splendid service at Vicksburg and under Sherman, forced General Johnston

under Sherman, forced General Johnston to abandon a strong position near Atlanta in July, 1864, and was killed in the battles around Atlanta, July 22, 1864.

Macready (ma-krē'di), WILLIAM CHARLES, English tragedian, born at London in 1793; died at Cheltenham in 1873. His father, the lessee and manager of several provincial theaters, sent him to Rugby and Oxford to be educated, but his circumstances beto be educated, but his circumstances became embarrassed, and the youth had to join his father's company at Birmingham in 1810. Afterwards he played in the provinces with considerable success, and appeared at Covent Garden in 1816. In 1826 he made his first visit to America, and in 1828 played in Paris, with great success in both countries. He undertook the management of Covent Garden in 1837, and Drury Lane in 1842, but al-Macon (ma'kon), a city, county seat though he did much to reform the stage of Bibb Co., Georgia, on the and cultivate the public taste for Shakes-Ocmulgee River, 78 miles s. E. of Atlanta, perean drama in both theaters (he himon the Southern, Central of Georgia and other railroads. It is the market and mill pere's plays), his pecuniary losses recenter of the cotton belt. It has cotton mills, canneries, packing plants, founding an expense of returned to England: gave a savies of returned to England: gave a savies of returned to England: other railroads. It is the market and mill peres piays), his pecuniary iosses recenter of the cotton belt. It has cotton quired him to retire from managership, mills, canneries, packing plants, foundations, railroad shops, greenhouses, etc. He revisited the United States in 1849; dries, railroad shops, greenhouses, etc. returned to England; gave a series of Seat of Mercer University (Baptist), Pio farewell performances, and finally remails School, and an academy for blind, niscences appeared in 1851. His Reminals School, and an academy for blind, niscences appeared in 1875. While he Pop. (1910) 40.665; (1920) 52.995.

Macpherson (mak-fer'son), JAMES, tween him and Edwin Forrest led to a Scottish author, was serious riot in the streets of New born in 1738. and died in 1796. He

tutor; and in 1760 published Fragments SiUs, a Latin author in the reigns of the of Ancient Poetry, translated from the emperors Honorius and Theodosius (end Gaelic or Erse language. The success of fourth and beginning of fifth century

He was the author of a work entitled Saturnalia, valuable for the light it throws upon the manners and customs of antiquity.

Macrocystis (ma-krō-sis'tus), a genus of marine plants, belonging to the nat. order Algæ. The M. pyrijėra exceeds all other vegetable productions in the length of its fronds, some of which have been estimated on reasonable grounds to attain a length of reasonable grounds to attain a length of 700 feet. It is found in the southern temperate zone, and in the Pacific as far north as the Arctic regions.

Macropiper (mak'ro-pi-per), a genus Macropus of plants. See Ava-ava.

Macropus (mak'ro-pus; Gr. makros, long, pous, a foot), the generic name of the kangaroos, applied to them in allusion to their elongated hind feet. See Kangaroo and Marsupialia.

Macrura (ma-kru'ra; Gr. makros, long, oura, a tail), a family

of stalk-eyed decapod crustaceans, includ-

ing the lobster, prawn, shrimp.

Mactra (mak'tra), a genus of lamellibranchiate molluscs. They live in the sand, and are universally diffused. The genus includes many rare and beautiful species.

MacVeagh (mak'vā), WAYNE, statesman, was born at Phoenixville, Pennsylvania, in 1833. He entered the legal profession, was sent to Turkey as United States minister in 1870, and in 1891 was appointed by Parish 1891. Turkey as United States minister in 1870, and in 1881 was appointed by President Garfield Attorney-General of the United States, but resigned on the accession of President Arthur. He was ambassador to Italy, 1893-97, and chief counsel for the United States in the Venezuela arbitration before The Hague tribunal in 1903.—His brother, FRANKLIN MACVEACH, was graduated in law in 1864, but ill health induced him to abandon practice. ill health induced him to abandon practice in favor of a mercantile business. He was in favor of a mercantile business. He was nominated by the Democratic party for senator from Illinois in 1894, but was defeated in the legislature. He became vice-president of the American Civic Federation and a member of the executive board of the National Civic Federation, and in 1909 was appointed by President Taft Secretary of the Treasury of the United States. He died Jan. 11. 1917. MacVickar (mak-vik'ar), WILLIAM NELSON, bishop, was born at New York in 1843. He became a pastor in the Episcopal Church, was rector of Holy Trinity, New York, 1868-75, and of Holy Trinity, Philadelphia, 1875-98, when he was appointed coadjutor bishop of Rhode Island; succeeded as bishop in 1903. He was a very popular orator and preacher, and died in 1910.

Madagascar (m a d - a - g a s' kar), a large island in the Indian Ocean, 230 miles distant from the east coast of Africa, from which it is separated by Mozambique Channel; length, 975 miles; average breadth, 250 miles; area, about 228,500 square miles; population, about 3,000,000. Madagascar may be described as an elevated region, with an average height of 3000 to 5000 feet, overlooked by mountains rising in some cases to nearly 9000 feet. The coast exhibits a number of indentations, mostly small, and few of them good har-bors, it being in great part rock, though in some places low and sandy. On some parts of the coast are numerous lagoons. The rivers are numerous, yet few of them The rivers are numerous, yet few of them offer even to a moderate extent the advantages of internal navigation. The climate is oppressively hot on the coast, but temperate on the highlands of the interior. The island is unhealthy for Europeans only in the neighborhood of lagoons or marshes. The rainy season continues from December to April. The most striking feature in the vegetation is a belt of dense forest, with an average breadth of 15 to 20 miles, passing round the whole island. It is found at all levels from 6000 feet to the water's edge, and the trees include palms, ebony, maand the trees include palms, ebony, ma-hogany, fig. cocoanut, and the ravinala or traveler's tree (*Urania speciosa*), which when pierced yields a refreshing liquid. The vegetable products grown for food include rice, manioc or cassava, sweet potatoes, groundnuts and yams. Ginger, pepper and indigo grow wild in the woods; cotton, sugar-cane, coffee, tobacco and hemp are cultivated. Indiarubber, gum copal and dyewoods are exported. Humped cattle are found in immense hereds, and form a large part of the wealth of the inhabitants, as also sheep, goats, swine and horses. The most characteristic of the mammals are the lemurs. The birds are numerous; snakes lemurs. The birds are numerous; snakes are rare; crocodiles, lizards, chameleons abound. The inhabitants, called Malagasy, belong to the Malayo-Polynesian stock and speak a Malayan language. They appear to form a single race, though they are divided into numerous tribes, each having a distinctive name and customs. The Hovas are the ruling tribe, they having extended their sway over nearly the whole island, while the other chief tribes are the Betsimassraka. the chief tribes are the Betsimasaraka, the Betsileo and the Sakalava. In the coast districts the houses of the better class are built of framed timber with lofty roofs; the dwellings of the lower classes are con-structed of bamboo or rushes, or even of clay. The Malagasy show much aptitude

as silversmiths, gunsmiths, carpenters, and with rude looms make handsome cloths. The religion of the great bulk of the people is a kind of fetishism or worship of charms. Many of their superstiship of charms. Many of their supersu-tious customs have been abolished and Christianity adopted, chiefly by the Ho-vas, but polygamy and infanticide are still practiced. The island has been held by France since 1895. Imports and ex-ports are valued at £4.000,000 annually. The capital is Antananarivo, in the elevated central region, the towns next in importance being Mojanga, a port on the west, and Tamatave, a port on the east coast.—Madagascar was known to the Greek geographers and the Arabians, and to Marco Polo at the end of the thirteenth century, and in 1506 was visited by the Portuguese, who gave it the name of St. Lorenzo. Towards the end of the seventeenth and during the most of the eighteenth century the French established themselves in the island, but they were only able after a hard struggle to retain the islands of Ste. Marie on the east coast and Nossi-be on the northwest. In the year 1810 Radama I became king of the Hovas, and with his approval Christian missionaries began to teach in the capital in 1820, many converts were made, the Bible was translated into the Malagasy tongue, the language was first reduced to a systematic written form, and printing was introduced. In 1828 he was succeeded by his chief wife, Ranavalona, a woman of cruel disposition, who persecuted the Christians and closed the island to Europeans. She was succeeded in 1861 by her son, Radama II, who re-opened it to the missionaries and emancipated the African slaves. He also granted extensive territories and privi-leges to France, an act which offended his chiefs and led to his assassination in 1863. His wife_occupied the throne five years, and on Ranavalona II becoming queen in 1868, the French brought forward their claims on the Malagasy ter-ritory, which, being refused, led to war. This resulted in a treaty (1885) by which the French received Diego Suarez Bay for a naval station, an indemnity of \$4,000,000, and the control of foreign re-

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of MSS. in the British Museum, and in 1837 head keeper. He was knighted by William IV. He edited a large number of early English works and MSS.

Madder (mad'er), a dye plant, Rubia tinctorum, nat. order Rubia-

ceæ. It is a climbing perennial, with whorls of dark green

leaves, and small yellowish cross-shaped flowers. The prepared root is used as a red dye-stuff.
It yields colors of
the greatest permanence, and is employed for dye in g
both linen and cotton. Two kinds of it are fixed upon cotton; one is simply called madder-red. and the other, which



and the other, which possesses a much higher degree of luster and fixity, is Madder Plant. called Turkey or Adrianople red, because it was for a long time obtained entirely from the Levant, where it was called alizara. The coloring principle of madder is termed alizarine, and as this can now be obtained artificially from coal tar, the use of madder in dwains is almost arr. the use of madder in dyeing is almost en-tirely superseded by that of artificial alizarine (which see).

Madeira (må-dő'rå), a Portuguese island in the North Atlantic, 360 miles from the coast of Africa, 530 miles from Lisbon, 1215 from Plymouth; length, 30 miles; breadth, 13 miles; area, about 313 square miles. The island is traversed by a central mountainridge, the highest point of which reaches 6000 feet; from this great spurs descend to the coast, forming lofty precipices; and in the bays formed between these volcanic cliffs are situated the villages of Madeira. Adjacent to Madeira is Porto Santo, a small island, and the Desertas, which, with Madeira itself, compose the group of the Madeiras. The stable products of Madeira are wine and sugar: coffee and arrow-root are also grown and a variety of tropical fruits. The wine of Madeira \$4,000,000, and the control of foreign relationships. By the Anglo-French agreement of August 5, 1890, the protectorate
ment of August 5, 1890, the protectorate
of France over Madagascar was recognized by Great Britain. A rebellion led
to the French conquest of the island in
1895.

Madden (mad'en). Sir Frederick, the island is considered an excellent sanaborn at Portsmouth in 1801;
died in London in 1873. He early gave
himself up to antiquarian pursuits; in
Madeiras were known to the Romans,
1828 he was appointed assistant keeper the Portuguese government in 1431. Pop. 169,777.

Madeira, South America, a tributary of the Amazon, about 800 miles long, formed by the united streams Beni, Mamore, and Guapore on the frontiers of Brazil and Bolivia.

LECIO, President of Mexico, Madness. See Insanity. public notice as a leader of the independ-

in October, 1911; but revolts threatened land in the west, supposed to be America. His position. He was forced to resign, and was assassinated Feb. 23, 1913.

Madison, a borough of Morris Co., N. J., 17 miles w. of Newport.

Ark. Seat of Drew Theological Seminary.

It is a residential town. Pop. (1920) 5523.

Madison, a city of Indiana, county to Madam. It is given specifically to the Madison, seat of Jefferson Co., on the Virgin Mary, like Our Lady in English, Ohio River, 88 miles below Cincinnati. It and hence pictures representing the Virgin are generally called madonnas. Ohio River, 88 miles below Cincinnati. It and hence pictures representing the viris a tobacco market and a manufacturing gin are generally called madonnas. city, producing steamboats, engines, boilers, flour, cotton and woolen goods, catsup, etc. Pop. (1920) 6711.

Madison, a city, capital of the State about as large as a good-sized hare, and of Wisconsin, is situated on with very slender legs.

an isthmus between lakes Mendota and Monona, 82 miles w. of Milwaukee. It contains a handsome capital and the Unit.

1776; became a member of the council of state; took his seat in the Continental Congress in 1780, and was there made chairman of the Committee of Foreign Affairs. He was especially active in the Constitutional Convention of 1787, keeping notes of its proceedings which afterwards became very valuable. He strongly advocated the acceptance of the Constitution by Virginia, and was one of the able writers of *The Federalist*. Under the administration of Jefferson he became Secretary of State, and in 1808 he was

government in 1431. Pop. elected President, serving for two terms. During his administration war was declared with Great Britain, and was prosecuted for three years with alternate deceated, about 800 miles long, united streams Beni, Manore on the frontiers of sized in 1814. Medison retired into signed in 1814. Madison retired into private life in 1817.

Madeley (mad'e-li), a town of England in Shropshire, on the Nevern. Pop. (1911) 8859.

Madero (ma-dā'rō), Francisco Indamero (ma-dā'rō), President of Mayica Madero (madero), President of Mayica (madero

Madoc (ma'dok), according to a
Welsh tradition, son of Owen ont voters of his native state, Coahuila.

Welsh tradition, son of Owen Organizing an uprising in 1910, he forced Gwynned, a Welsh prince, who, in 1170, Diaz to resign. He was chosen president put to sea with ten shins, and discovered in October, 1911; but revolts threatened land in the west, supposed to be America.

Monona, 82 miles w. of Milwaukee. It contains a handsome capitol and the University of Wisconsin. Here are also the Coromandel coast. It is ill situated for Wisconsin Academy of Science, Arts and commerce, standing on an open surf-Letters, the Washburn Observatory, the Coromandel coast. It is ill situated for commerce, standing on an open surf-Letters, the Washburn Observatory, the broken shore with no proper harbor, carriage shops, agricultural implement an extensive commerce, being the terminus of railways from Bombay and the ous others. The city was settled in 1837. south, while it is also the headquarters of all the presidency departments. The two Madison, the United States, 1809-17, site being flat and there being no handwas born in Virginia in 1751; died in 1836. He was educated at Princeton; buildings. Altogether the municipality covers an area of 27 square miles, the na-1776; became a member of the council of tive and business part being called the tive and business part being called the Black Town. The chief objects of in-terest are the citadel of Fort St. George, built in 1639, the cathedral of St. George, Scotch church, government house, senate house, revenue buildings, college, etc. There are no manufactures to speak of, but the export and import trade is large. Madras was founded in 1639 by the English, and soon became their chief settlement on the coast. Pop. 562,191.

Madras, PRESIDENCY OF, includes with its dependencies and the state

every side except the north by the sea, on which side it is bounded by Orissa, the Central Provinces, the territory of Hyder-abad and Mysore. The three chief rivers, Godavari, Krishna and Kaveri, rise in the Western Ghats and enter the Bay of Bengal. The climate is varied: in the Nilgiri Hills it is temperate, on the Malabar coast the monsoon brings an excessive rainfall, while in the central tableland the rainfall is low, and the heat almost unendurable. The soil is sandy along the coast, but there are many fertile dis-tricts; while iron, copper, lead and coal are found in considerable quantities. There are extensive forests in the presidency, yielding teak, ebony, and other valuable timber trees. The principal vegetable products are rice, wheat, bar-ley, maize, and other grains; sugar-cane, areca, yam, plantain, tamarind, jack-fruit, mango, melons, cocoanuts, ginger, turmeric, pepper, tobacco, oil seeds, cof-fee and cotton. The wild animals met with are the elephant, tiger, chetah, jackal, wild hog, etc. The Madras administrative authority is vested in a governor, with a council of three members appointed by the queen, and of whom one is the commander-in-chief. For legone is the commander-in-chief. For legislative purposes the council is increased by nominations of the governor. The chief educational institution is the Madras University, an examining body granting degrees in arts, law, medicine and engineering. The population is 41,693,882, and the native protected states have in addition a population of 4,188,088. The chief languages spoken are the Dravidian, namely, Tamil, Telugu (which are spoken by the great majority of the inhabitants), Canarese and Malayalan, while Hindustani is the language spoken by the Mohammedans.

Madrepore (mad'r e-por), a coral-building polyp of the ge-nus Madrepora, the type of the family Madreporidæ, forming coral of stony Madreporidæ, forming coral of stony the curer names of the term is also hardness and of a spreading or branching Carew and Suckling.—The term is also form, hence called tree-coral. Madrepore applied to an elaborate vocal composition coral is of a white color wrinkled on the surface and full of little cavities, in each new commonly of two or more movements, and in five or six parts. The much which an individual polyp is lodged. These polyps raise up walls and reefs of but afterwards was suited to an instrument of the composition of the composition.

of Mysore the entire south of the peninsula. Situated upon a high plateau, miles, breadth 450 miles; area, 141,726 2450 feet above the sea, windswept from square miles, the native states included the snowy Guadarrama, with unhealthy covering 9969 more. It is surrounded on extremes of temperature, the city has no the snowy Guadarrama, with unhealthy extremes of temperature, the city has no advantages except the fanciful geographical merit of being the center of Spain. The principal streets are broad, long and airy; but the squares are generally irregularly built and deficient in decorative monuments. The royal palace, a combination of Ionic and Doric architecture, is one of the most magnificent in the world, being 470 feet each way, and 100 feet high. It contains a small but splendid Corinthian chapel, a library of nearly 100 000 volumes and 65 as 2012 this 100,000 volumes, and a fine collection of ancient armor and coins. Madrid has no cathedral, being only a suffragan bishopric of Toledo, and the churches are few and uninteresting. The bull fights take place in the Plaza de Toros (bull ring), a building which is about 1100 feet in circumference, and capable of containing 12,000 spectators. The Prado, nearly two miles long, a boulevard on the east of the city, forms the popular promenade, and beyond it is the park. The Royal Mubeyond it is the park. The Royal Museum of Painting and Sculpture, in the Prado, contains more than 2000 pictures. The National Library, founded by Philip V, contains 230,000 volumes. The University has an average attendance of 5000 students, and there are numerous colleges and schools, medical, military, law, etc. The manufactures are of small importance. Madrid only began to be a place of importance under Charles V, and in 1560 Philip II declared it to be the capital. It has not increased much since the reign of Philip VI. Pop. 571,539. Madrigal (mad'ri-gal), a short amor-ous poem, consisting of not

Madrigal (mad'ri-gal), a short amorous poem, consisting of not less than three or four stanzas or strophes, and containing some tender and delicate, though simple thought, suitably expressed. The madrigal was first cultivated in Italy, and those of Tasso are among the finest specimens of Italian poetry. Several English poets of the time of Elizabeth and the Charleses wrote madrigals of notable grace and elegance, the chief names being Lodge, Withers, Carew and Suckling.—The term is also applied to an elaborate vocal composition now commonly of two or more movecoral rocks with astonishing rapidity in mental accompaniment. There are a tropical climates. The term is often apnumber of famous English composers of

plied also to other branching corals.

Madrid (ma-drid'), the capital of Spain, in New Castile, in the province of Madrid, on the Manhen's egg, which is kept by some super-

Madura (ma-do'ra), a district of India for ming part of the Madras presidency, mostly a plain away, and to engulf small vessels which drained by the Vaigai River; skirted on the southwest by the Travancore Hills; Macotis. See Azof, Sea of.

The capital of the same name control. area, 8701 square miles; pop. 2,831,280. The capital of the same name contains the vast palace of the ancient rajahs, now going to decay, and the Great Temple, one of the most remarkable monuments of Hindu architecture. The chief buildings of Madura are connected with the name of Tirumala Nayak, who reigned from 1623 to 1659. Near the town is a remarkable eminence. Near the town is a remarkable eminence, called, from its shape, the Elephant Rock. The town has been much improved under

Madura, and seen much improved under British rule. Pop. (1911) 184,130.

Madura, an island of the Indian Archipelago, N. E. of Java, and separated from it by the Strait of Madura; 105 miles long, and 30 miles broad; and belonging to the Dutch. The island is not very fertile. The inhabitants, mostly Mohammedan, are governed by neitye princes. Cattle rearing is the by native princes. Cattle rearing is the chief industry, while the chief products

chief industry, while the chief products are maize, cocoanuts, tobacco, Jamaica pepper and tamarinds. The principal town is Sumanap. Pop. 1,652,580.

Madvig (mad'vig), Johan Nikolai, born in 1804; died in 1886; long professor of Latin in the University of Copenhagen. He is best known by his excellent Latin grammar translated into most European tongues. tongues.

Mæander (mē-an'der), now MEINwhich enters the Ægean. It was celebrated among the ancients for its winding course, and has given us the verb to meander.

Mæcenas (mē-sē'nas), CAIUS CII-NIUS, a distinguished Ro-man, born between 73 and 63 B.C.; died in 8 B.C. He was the companion of the Emperor Augustus in nearly all his campaigns, and his most trustworthy counselor in political matters. For the three years 18-15 B.C. he was invested with the government of Italy. His great glory, however, was as a patron of learning, and the friend of Virgil and Horace.

Maelar (melar), a beautiful lake of Sweden, length about 75 miles; average breadth 12 miles; irregularly formed and dotted with innumerable Stockholm is situated at its exit to the Baltic.

Maelstrom (māl'strom), a celebrated the Imper-whirlpool off the coast Pop. 6000.

stitious people of the United States with of Norway, near the island of Moskoe, the belief that it will absorb snake one of the Lofoden Islands. When a venom and cure hydrophobia.

Maestoso (ma-es-tō'sō), an Italian musical term meaning in a majestic or lofty style.

Maestricht, or Maastricht (mäs-triht; Latin, Trajectus ad Mosam), a town of Holland, capital of the province of Limburg, on the left bank of the Maas. It lies on the Belgian frontier, 56 miles east of Brussels, and 52 miles west by south of Cologne 52 miles west by south of Cologne. Among the chief buildings are the church of St. Servass, dating from the tenth century; another old church, and the town hall (Stadhuis). Maesthricht was once one of the strongest fortresses in

Europe. Pop. (1910) 38,611.

Maeterlinck (mā'ter-link), Mau-RICE, a Belgian dramatist, born at Ghent in 1864. He has been called the 'Belgian Shakespere,' and won reputation by La Princesse Maleine, The Blue Bird, The Life of the Bee, and

other essays, plays and poems.

Maffia (ma'fi-a), La, a secret society originating in Sicily, having for its aim the substitution of its own laws for that of the state. Branches have been formed in the United States, where their members are suspected of fomenting atrocious crimes. The chief of police of New Orleans, La., was murdered by the Maffia in 1890. On the acquittal of the accused, a mob broke into the jail and lynched eleven of them, an outrage which led to a diplomatic controversy with Italy.

Mafra (mä'fra), a town of Portugal, province of Estremadura, 1? miles northwest of Lisbon, and near the coast. It is noticeable only for the magnificent building, erected here by John V in 1717, in imitation of the Escurial of Spain, which forms a quadrangle, measuring east to west 760 feet, and north to south 670 feet, and includes a church, a royal palace, a college with a library of about 50,000 volumes, and a monastery with 300 cells. Pop. 4769.

Magadoxo (ma-ga-do'shō), Mogdisha or Mogdishu, a seaport on the east coast of Africa, lat. 2° N., on the east coast of Africa, lat. 2° N., with a considerable trade. Magadoxo is subject to the Sultan of Zanzibar, but its administration has been handed over to the Imperial British East African Co.

Magalhaens (m a - g a l - ya'ens), or M a G E LLAN (ma-jel'an), FERNANDO DE, a Portuguese naviga-tor, who conducted the first expedition round the world. Born about 1470 he served under Albuquerque in the East Indies; distinguished himself at the tak-ing of Malacca in 1511; in 1519 received the command of a fleet of five ships from Charles V of Spain, with which he sailed westward; entered the strait since called after his name, and discovered the Pacific Ocean. Crossing this ocean, he was killed in a skirmish with the natives on one of the Philippines, but one of his vessels was brought to Spain by Juan Sebastian del Cano, thus completing the circumnavigation.

Magazines. See Periodicals.

Magazine Guns, a term applied to that class of small arms which carry extra cartridges. These have come into general use within These are two hollow hemispheres of coprecent years for sportsmen and soldiers, and include various inventions for feeding the extra cartridges and ejecting the empty shells.

Magdala (mäg'da-lä), a town and fortress of Abyssinia, nearly 9000 feet above the level of the sea, about 120 miles southeast of Gondar. Magdala acquired importance from having been stormed April 12, 1868, by the British troops. See Abyssinia.

Magdalen (mag'da-len), or Magdale

Mary of Magdăla, a woman mentioned in the New Testament as having had seven devils cast out of her, as watching the crucifixion, and as having come early to the sepulcher on the resurrection morning. She was erroneously identified as the 'woman who was a sinner' (Luke, vii, 37), and hence the term Magdalen came to be equivalent to a penitent fallen

Magdalena (mag-da-lē'na), a large river of South America which rises in the central Cordillera of the Andes, in Ecuador; flows generally north through Colombia, and falls into the Caribbean Sea by several mouths; length 970 miles. The Magdalena is navigable as far as Honda, 435 miles from its embouchure.

Magdalen Institutions $\begin{pmatrix} \sec Mag - d & a & l & e & n \end{pmatrix}$

chiefly on the left bank of the river, which here divides into three arms. The chief buildings are the Dom or cathedral, erected in the thirteenth and fourteenth centuries, and repaired in recent times; the town house, government buildings, exchange, central railway station and theater. The industries are very varied, embracing machinery, castings, armor plates, chemicals, spirits, pottery, sugar, beer, cottons, ribbons, leather, etc. The trade is extensive both by rail and giver; for sugar Magdeburg is the chief center in Germany. Magdeburg is a place of great antiquity, being a trading center in the ninth century. It early distinguished the chief in the Deformation During the the ninth century. It early distinguished itself in the Reformation. During the Thirty Years' war the town was besieged, stormed, and sacked by Tilly, when 20,000 persons are said to have been murdered. Pop. (1910) 279,685.

Magdeburg Hemispheres.

per or brass, fitting accurately, and arranged so that the air can be withdrawn from them and a vacuum formed within. When thus exhausted they cling together

South America from Tierra del Fuego, 300 miles long; varies in breadth from 5 to 50 miles, and forms communication between the South Atlantic and South Pacific oceans. The number of obstructing islands makes the channel difficult of navigation. The strait was discovered in navigation. The strait was discovered in 1520 by Fernando de Magalhaens, or Magellan, during his celebrated voyage.

Magellanic Clouds (ma-jel-lan'-ik), two oval-shaped cloud-like masses of light in the southern havigaphare page the relations.

southern hemisphere near the pole, consisting of swarms of stars, clusters and nebulæ of every description. They cover spaces in the heavens of 42 and 10 square degrees respectively.

Magendie (må-zhan-dē), François, a French physiologist, born in 1783; died in 1855. Educated for the medical profession in Paris, he was made demonstrator of anatomy by Boyer; are intended to afford a retreat to penitent prostitutes, and the first was established in London, in 1758.

Magdeburg (mah'de-burh), the capital of Prussian Saxony, and a fortress of the first class, on the Elbe, 76 miles w. s. w. of Berlin, made demonstrator of anatomy by Boyer; became physician to the Hôtel-Dieu; was in 1819; and in 1831 received the anatomy professorship in the College of France. By his extensive use of vivisection he made important discoveries in physiology, and he published important works.

Magenta (ma-jen'ta), a small town produce surprising effects. It includes of North Italy, 14 miles the art of performing tricks and exhibiteast from Milan, on the high road to ing illusions by means of apparatus, the Novara. On June 4, 1859, Magenta was performances of automaton figures, etc. the scene of a decisive victory won by See Legerdemain. the scene of a decisive victory won by the French and Sardinians over the Aus-trians, and it, in consequence, gave the title of Duke of Magenta to Marshal Macmahon. Pop. 8012.

Magenta, a brilliant blue-red color-ing substance derived from

aniline.

Maggiore, LAKE. See Lago Mag-

Magi (ma'ji), the hereditary priests among the Medes and Persians, set apart to manage the sacred rites, and preserve and propagate the sacred traditions, acting also as diviners and astrologers. They possessed great influence both in public and private affairs, conducted the education of the princes, etc. Their order was reformed by Zoroaster. (See Zoroaster.) The name came also to be applied to holy men or sages in the placed (at c) vari-East. ous slips of glass, Macric (maj'ik), the art or pretended with transparent

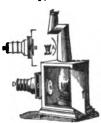
Magic (maj'ik), the art or pretended waste art or practice of producing wonderful effects by the aid of superhuman beings or of departed spirits or the occult powers of nature. The word is used to include a mass of beliefs and practices which bear on matters beyond the ordinary known actions of cause and effect. A large proportion of magical rites are connected with the religious beliefs of those using them, their efficacy being ascribed to supernatural beings. There is, however, a non-spiritual element in magic which depends on certain imagined powers and correspondences in nature, that can be utilized in various ways. (See Alchemy, Astrology, Charm, Divination, Witchcraft.) In savage countries the native magician is often sor-cerer and priest, and sometimes chief of the tribe. Among the ancient Egyptians magic was worked into an elaborate system and ritual, and it was regularly practiced among the Babylonians and Assyrians, as well as in Greece and Rome. Alexandria, from the second to the total century, became the headquarters of theurgic magic, in which invocations, sacrifices, diagrams, talismans, etc., were sacrifices, diagrams, talismans, etc., were men of these squares is here given.

There are also Magic Circles, Magic Alexandria, from the second to the fourth systematically employed. This system, influenced by Jewish magical speculation, systematically employed. This system, men of these squares is here given. influenced by Jewish magical speculation, There are also Magic Circles, Magic had a strong hold in mediæval Europe, Cubes, Magic Cylinders, Magic Spheres, and many distinguished names are found among its students and professors. The brought about by various arrangements magic which holds a place still among the illiterate and ignorant classes has come down by tradition in popular folk-lore.

Magilp (ma-gilp'), a gelatinous compound produced by mixing linseed oil and mastic varnish together, to the art of applying natural causes to used by artists as a vehicle in oil naint. to the art of applying natural causes to used by artists as a vehicle in oil paint

Magic Lantern, a kind of lantern invented by Kircher, a German Jesuit (1604-80), by means of which small pictures or figures are represented on the wall of a dark room or on a white sheet, magnified to any size at pleasure. It consists of a closed lantern or box, in which are placed a lamp and a concave mirror (as at A), which reflects the light of the lamp through the small hole of a tube in the side of the lantern, which is made to draw out. At the end of this tube, next to the lamp, is fixed a

plano-convex lens (B), and at the other a double-convex lens (D). Be-tween the two lenses are successively paintings, represent-ing various subjects, which are thrown in a magnified form on the wall or screen opposite to the lantern and spectators.



Magic Lantern.

It has been vastly improved of late, and the substitution of the oxyhydrogen and electric lights for the oil lamp has added much to the effectiveness of its displays; while photography applied to the production of objects has almost indefinitely increased its resources.

Magic Square, is a term applied to a series of numbers in arithmetical progression, arranged in

2	7	6
9	5	1
4	8	8

equal and parallel rows and columns, in such a manner that the vertical, horizontal and diagonal columns when added shall give the same sums. The question of magic squares is in itself of no use, yet it possesses a curious in-

Maginn (ma-gin'), William, born at Cork in 1794; died at Walton-on-Thames in 1842. He was educated at Trinity College, Dublin, and established himself as a literary man in London. He was for long a regular con-London. He was for long a regular contributor to Blackwood's Magazine, and was successively editor of the Standard, of Frazer's Magazine, and other publications. Notwithstanding his splendid scholarship and talent for popular writing, his irregular habits brought him to bankruptcy and a debtor's prison. His Homeric Ballads, Shakespere Papers, etc., were collected and published after his death.

Magione (mā-ji-ō'nā), a town of Central Italy, 8 miles w. s. w. of Perugia. Pop. 6080.

Magistrate (maj'is-trāt), a public civil officer invested with the executive government or some branch of it. In this sense a king is the highest or first magistrate in a monarchy, the word is more particularly applied to subordinate officers, to whom the executive power of the law is committed, either wholly or in part, as governors, in-tendants, prefects, mayors, justices of the peace, and the like.

Magna Charta Libertatum.

the Great Charter of Liberties, a docu-ment forming part of the English constitution, and regarded as one of the main-stays of English liberty, extorted from King John by the confederated barons in 1215. Its most important articles are those which provide that no freeman shall be taken, or imprisoned, or proceeded against except by the lawful judgment of against except by the lawful judgment of his peers or by the law of the land; and that no scutage or aid shall be imposed in the kingdom (except certain feudal dues from tenants of the crown), unless by the common council of the kingdom. The remaining and greater part of the charter is directed against shuges of the charter is directed against abuses of the king's power as feudal superior. It origi-nally contained sixty-three clauses; subsequent confirmations altered the number of these till 1225, when it took its final and accepted form with thirty-seven clauses. The most accurate and complete copy of the original charter is that preserved in Lincoln Cathedral. The board of commissioners on the public records ordered a facsimile of it to be en-

The proportions vary according to given to the Greek cities and settlements work. It is thinned with turpentine. in Southern Italy mostly founded in the ginn (ma-gin'), WILLIAM, born at eighth century B.C. by different Greek Cork in 1794; died at Walpoples. The Chalcidians founded Rhepon-Thames in 1842. He was edudat Trinity College, Dublin, and Croton, Sybaris, Tarentum, etc., were blished himself as a literary man in founded. These colonies and their official. He was for long a regular consuccessively editor of the Standard, and power in the seventh and sixth censuccessively editor of the Standard, turies B.C. Mutual discord, however, ware made and talent for popular writtents. Notwithstanding his splendid dependent existence came to an end in larship and talent for popular writtents irregular habits brought him to conquered by the Romans.

Magnesia (mag-ne'shi-a), the name

Magnesia (mag-ne'shi-a), the name of two ancient cities of Asia Minor: (1) A city of Ionia on the river Lethæus, a tributary of the Mæander. (2) A town of Lydia on the southern bank of the Hermus. See Manisa.

Magnesia, a white tasteless earthy substance, possessing alkaline properties, and having a specific gravity of 2.3. It is absorbent, antacid, mildly cathartic, and almost insoluble. It is found native in the state of hydrate as is the president in a republic. But and carbonate, and exists as a component part of several minerals. In commerce, part of several minerals. In commerce, pure magnesia is generally distinguished by the term calcined magnesia, and is readily obtained by exposing its hydrated carbonate to a red heat. The hydrated carbonate goes by the name of magnesia or magnesia alba. The chief use of magnesia nesia and its carbonate is in medicine. See Magnesium.

Magnesian Limestone shi-an), a yellowish rock composed of earbonates of lime and magnesia, the latter amounting in some cases to nearly a half. There are several varieties, more or less useful for building or ornamental purposes, which are included under the generic name dolomite. The same name is also given to the whole Permian formation, from this rock being very largely developed in it. veloped in it.

Magnesium, the metallic base of magnesia; chemical symbol Mg, atomic weight 24.5. It may be obtained by decomposing chloride of magnesium by means of potassium. It is of a white color like silver; its luster is metallic and brilliant; it is very malleable, and fuses at a red heat. Heated to redness in oxygen gas, it burns with brilliancy, and combining with oxygen becomes magnesia, or the oxide of magnesium (MgO). The magnesium light is rich in chemical rays, and is now graved, and it has been frequently trans-lated from its original Latin into English. The chief salts are the carbonate, the Magna Græcia (mag'na grë'sha), chloride, the sulphate (Epsom salt), the the collective name phosphates and the silicates, among

erful artificial magnets. These are adapted to form part of a traveling crane, strong magnets, energized by powerful currents of electricity, being employed. These will lift and carry iron masses of considerable weight, consisting of detached parts, yet all lifted together by the magnetic force. They can be dropped at any desired point by breaking the current, when the magnetic power ordinary way. A notable example was given in the case of a sunken ship at New Orleans laden with kegs of nails. These were lifted from a considerable depth of water by the use of a magnet, the nails coming up in a coherent mass in instances where the kegs had been broken.

Magnetism (mag'net-izm), the science which treats of the phenomena exhibited by magnets—phenomena due to one of the phenomena due to one of th which, like electricity and heat, are known only by their effects. The phe-nomena of magnetism were first observed in the loadstone or magnet (so named from Magnesia in Asia Minor). The loadstone is a kind of iron ore (magnetic iron ore), and is found in many parts of the world, especially in the Scandinavian peninsula and in Siberia. It has the power of attracting small pieces of iron or steel, and when suspended in such a way as to be able to move freely, such a way as to be able to move treely, always points to what are called the magnetic poles of the earth, that is, nearly north and south. A piece of loadstone forms a natural magnet, and has the further remarkable power of giving all its own properties to hard iron or steel when these bedging are ruphbed by it. when these bodies are rubbed by it. bar or mass of iron or steel to which the peculiar properties of a natural magnet have been imparted by friction from other magnets or by electric induction is called an artificial magnet. When freely suspended, all magnets, natural and artificial, rest with their lengths in a northrely and southerly direction, and this of the particles which make up the magproperty is utilized in the well-known net, Ampere having advanced the theory compass. They attract iron and other that every atom is a natural magnet and magnetics substances with a force inthat when these act in unison the whole creasing from the middle of the magnet mass displays magnetic force.

Terrestrial magnetism, which pervades soles. The magnetism at the two poles the whole earth, is extremely complicated.

which are such minerals as chrysolite, is different, that pole which points to the which are such minerais as carysolite, is different, that pole which points to the meerschaum, soapstone and serpentine.

Magnet. See Magnetism.

Magnetic Lift, an arrangement now much used for or boreal pole, or by the sign plus (+); that which points to the south as the south or south-seeking or boreal pole, or by the sign minus lifting heavy weights by the aid of powerful artificial magnets. These are nation repel each other, while those of adapted to form part of a traveling different papers have mutual attraction. different names have mutual attraction, thus resembling the two electricities, positive and negative. The intensity of this attraction and repulsion varies inversely as the square of the distance, a law which also governs electrified bodies. Magnetism pervades the earth as electricity does the atmosphere. It assumes a totally different form in different subceases. Thus work can be quickly done stances; the metals iron, nickel and co-which would require considerable time balt being strongly attracted by the mag-and labor in loading and carrying in the net; others such as bismuth, copper, silnet; others such as bismuth, copper, silver, gold, etc., being repelled. (See Diamagnetic.) Whether or not this is an actual repulsion, however, is in doubt, as it may be due to the superior magnetic power of oxygen, which in its response to magnetism may force these feebler substances away. The space in the neighborhood of a magnet is called the magnetic field; a piece of soft iron brought into this space becomes mag-netic, but it loses its magnetism as rapidly on removal from the field. (See Induction, Magnetic.) Steel has coercive force, in virtue of which it requires time for magnetization, and retains its magnetism on removal from the field. Hard steel may be made magnetic by rubbing it several times in the same direction with a powerful magnet, and hence it is easy to multiply magnets. The most powerful permanent magnets are produced by rubbing bars of steel on electro-magnets (see *Electro-magnetism*), or by moving them backwards and forwards along the axis of a coil of wire in which an electric current is passing. A bar is magnetized to saturation when its magnetism is as great as it can retain with-out future sensible loss. When a magnet is broken into a number of pieces each piece is found to be magnetic, and its north pole is found to have been directed towards the north pole of the unbroken magnet. When these pieces are put tosether again poles placed in contact nul-lify each other, and the original magnet is reproduced. From this fact it has been suggested that magnetism is an affection

the magnetic needle, varying with time and place over the earth. One pole of the needle points towards the north, the other towards the south. There are, however, only two lines on the surface of the earth on which it points directly north and south, and where the magnetic and geographical meridians appear to coincide. Elsewhere the needle deviates more This is or less from the true north. termed the declination of the needle, and varies from place to place, and in the course of time at the same place. (See Isogonic.) When a needle is balanced on a horizontal axis so that it can turn in a vertical plane, the extremity attracted by the nearer magnetic pole of the earth points more or less downwards. (See Dipping-needle.) The angle thus made is called the dip or inclination, and the lines marking equal inclinations on a map are called isoclinal lines. They intersect the isogonal lines, and the dip increases towards the perpendicular as the magnetic poles are neared. These magnetic poles do not coincide with the geographical poles, the northern being in 70° 5′ N. and 96° 43′ W. The southern was located by the Shackleton expedition of 1908, in lat. 72° 23' s. and lon. 154° E. There are two foci of maximum force in the northern hemisphere and two in the southern. In the northern hemisphere the stronger focus is assumed to be in 52° N. and 90° W., and the weaker in 70° N. and 115° E. In the southern hemisphere the stronger focus is assumed to be in 65° s. and 140° E., and the weaker probably in 50° s. and 130° E. The earth's magnetism is subject to vast unaccountable commotions or storms of immense extent, which occur at irregular intervals and are of short duration. They are often connected with manifestations of electrical phenomena, such as the aurora borealis, or thunder storms. These regular motions of the magnetic needle. The various phenomena connected with terrestrial magnetism are now automatically recorded, and systematized in the interests of meteorology. The magnetic equator or line of no dip crosses the terrestrial equator in several places, extending alternately on each side, but never deviating more than 12° from it. ANIMAL. See Mesmer-Magnetism,

It becomes manifest by its influence on

ism. (mag'ne-tō), Magneto-electricity

(which see) treats of magnetization produced by currents.

Magneto-electric Machines.

In magneto-electric machines an electromagnet of compact form called the armature is caused to rotate near the poles of a powerful fixed magnet, in such a manner that the core of the armature becomes magnetized first in one direction and then in the opposite, by the inductive action of the poles of the fixed magnet. Every change in the magnetization of the core induces a current in the coil wound upon Hence currents in alternately oppoit. site directions are excited in this coil, their strength increasing with the speed of rotation. It is now usual in powerful machines of this class to employ electromagnets as the fixed magnets, and the current which feeds these fixed magnets (called the field magnets) is often the current generated by the machine itself. The machines in this case are called dynamo machines. This name was originally applied to machine which thus nally confined to machines which thus supply the current for their own field magnets; but it is now applied to any machine in which the field magnets are electro-magnets. Such machines, of which there is an enormous variety, driven by steam engines or other powerful motors, are now almost universally employed when electric currents are required on a large scale, as in electric lighting. See the articles Dynamo, Electric Light, Electro-magnet, Electro-magnetism, Electro-motors.

Magnetometer (magnet-om'e-ter), an instrument employed for observing the magnetic declination, and also for other absolute magnetic measurements. They are of various forms and are usually self-recording. See Declinometer, Dipping-needle.

Magnificat (mag-nif'i-kat), the song of the Virgin Mary, disturbances are made manifest by ir- Luke, i, 46-55; so called because it commences with this word in the Latin Vulgate. It is sung throughout the Western Church at vespers or evensong.

Magnifying-glass, a convex glass. (mag-nō'li-a), a genus of Magnolia trees and shrubs, type of the nat. order Magnoliacem; named from Pierre Magnol, a French botanist of the seventeenth century. The species, which chiefly inhabit North America, Northern India, China, Japan, and other parts of Magneto-electricity treats of the Asia, are trees much admired on account currents of electricity produced in a conductor when its position is changed relatively to a magnetic field (see *Induced* dens. In their native countries some of Current), whereas electro-magnetism them attain great height, and have flow-

ers 10 inches across. root of M. glauca, or the beaver tree, is to be known by an educated Hindu. an important tonic. M. tripetala, or umbrella tree, has also tonic properties. The Mahadeva (ma-ha-da'va; Skr.; brella tree, has also tonic properties. The cones of M. acuminata yield a spirituous name of Siva, one of the Indian deities, liquor, employed in Virginia in rheumatic affections. M. grandiflora, or big-laurel, to have sprung.

and M. conspicua or Yulan, the yulan or Chinese magnolia. grow well in the same affections. M. grandspora, or Dig-laures, to have sprung.

and M. conspicus or Yulan, the yulan or Chinese magnolia, grow well in the south of England, and are splendid ornamental in 1839; educated in Germany and lattrees, being notable from flowering in terly at Trinity College, Dublin, where spring before the leaves expand. The became a fellow in 1864, and was ap-

trees, being notable from flowering in spring before the leaves expand. The present flowered magnolia, or laurel bay, is a fine evergreen tree, 70 feet high, found in America, and bearing large, fragrant and beautiful flowers.

Magog. See Gog and Magog.

Magot. See Barbary Ape.

Magot. Gee Barbary Ape.

Magot. Gee Barbary Ape.

Magot. See Barbary Ape.

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Magot. See Barbary Ape.

Magot. See Barbary Ape.

Magot. Greek Literature; Problems of Greek History, etc.

Mahan (ma-han'), Alfred Thayer, naval officer and author, was born at West Point, New York, September 27, 1840. Graduating from the Naval Academy in 1859, he served through the plumage is black and white, the black glossed with green and purple; the bill is plumage is black and white, the black glossed with green and purple; the bill is notable work, The Influence of Sea Power and was followed by other works of great importance in naval history. In 1906 he continue in pairs throughout the year, and prey on a variety of food, chiefly animal. They are determined robbers of other birds' nests, destroying the eggs and wife in Captivity they are celearticles.

Magyars (ma-jarz'), the Hungarians. See Hungary.

western Provinces. Pop. 6182.

Mahâbhârata (ma-ha-bâ'ra-ta; literally, the great history of the descendants of Bharata), an ancient Indian epic of about 220,000 phia, 13 miles N.N.E. of Pottsville, in lines, divided into eight books, the leading story of which narrates the history of the war between the 100 sons of Dhritarāshtra and their cousins, the five sons of Pāndu, for the possession of the ancient kingdom of Bharata, which is said to have comprised the greater part of Indian. With its numerous extensive digressions and episodes, it forms a cyclopadia of Hindu mythology, legendary history of the descendants of Bharata, which is said the middle of a rich anthracite coal district. It has iron and other industries.

Mahanoy City (mā-ha-noi'), a city of Schuylkill Co., Pennsylvania, 80 miles from Philadelphia, 13 miles N.N.E. of Pottsville, in the middle of a rich anthracite coal district. It has iron and other industries.

Maharajah (ma-ha-ra'ja; literally, a great king), a title to have comprised the greater part of British have recognized these Maharajahs.

Indian This word signifies in S an sk r it one. It is used by the to nave comprised the greater part of British have recognized these Maharajahs. India. With its numerous extensive digressions and episodes, it forms a cyclopædia of Hindu mythology, legendary history and philosophy. The authorship is Brahmans to designate a sage who has attributed to Vyāsa, 'the arranger,' but this simply means that the materials of lightenment, and is in consequence poswhich the poem consists were at some time or other welded together with a certain order and sequence so as to form

British have recognized these Maharajahs. (ma-hât'ma). This word signifies in Sanskrit one.' It is used by the lightenment, and is in consequence poswhich the poem consists were at some time or other welded together with a certain order and sequence so as to form

The bark of the one work, containing all that was needed

young birds. In captivity they are cele-priver in Southern Hindustan which flows brated for their crafty instincts, their through the Central Provinces and Orissa, power of imitating words, and their pro-pensity to purloin and secrete glittering of Bengal, after a course of 520 miles. It has several large tributaries, and in connection with it is an extensive canal system. The Mahanadi itself nas an esti-Mahaban (ma-ha-ban'), a decayed mated drainage area of 43,800 square pilgrimage, in Muttra district, Northwestern Provinces. Pop. 6182.

some of the successors of Mohammed, particularly applied to the twelfth imam. the lineal descendant of Mohammed, born A.D. 868. He mysteriously disappeared, being probably murdered by a rival, and the belief was that he would remain hidden until the last days, when he would reappear, and at the head of the faithful spread Mohammedanism over the world. Many professed Mahdis have appeared from time to time in Africa as well as Asia, the latest being Mohammed Ahmed, the leader of the Soudanese insurrection (1883-85). (1883-85). He was born at Dongola in 1843; died in 1885. He studied Mohammedan theology at Khartoum and Berber, and at 25 years of age he retired to the island of Aba in the White Nile, where he lived in solitude for fifteen years. At the age of forty he took up the prophetic rôle, and his short victorious career began. He was succeeded by Khalifa Abdulla, whose army was completely de-feated by General Kitchener in 1898, and the Mahdist rule in the Soudan brought

Mahé (mä-hā'), an island in the Seychelles or Mahé Archipelago, in the Indian Ocean, about 17 miles long and 4 miles broad. It contains Port Victoria, the capital and headquarters of the British East African squadron.

Mahé, a French settlement, Southern India, within the limits of Malabar district, Madras presidency, 40 miles N. N. w. of Calicut, at the mouth of a small river of the same name. Formerly a place of considerable importance and trade. Pop. 10,298.

Mahmud (mä'mud), Sultan of Ghazna, the founder of the Mohammedan Empire in India, born at Ghazna about 970; died in 1030. His father, Sabaktagin, governor of Ghazna, owed a nominal allegiance to Persia, but was really independent. On his death Mah mud put aside his elder harther, formed an alliance against the brother; formed an alliance against the Persian monarch, overthrew his kingdom and laid the foundation of an extensive empire in Central Asia (999). He then turned his attention to India, and in a series of twelve invasions secured a great amount of treasure, and vastly extended his power. He was a patron of literature, and brought many men of learning about his court, among whom was the poet Firdusi (which see). He established large educational institutions at Ghazna, and spent vast sums on public Mahon works. See Ghaznavides.

Mahmud I, Sultan of Turkey, born in Mahon. See Port Mahon.

—Mahmud II, Sultan of Turkey, born in Mahon.

Mahon.

Mahon.

Mahon.

(ma-hō'ni), Frapcis, known as 'Father Prout,' born at

by the Janizaries after the murder of his predecessor, in 1808. The chief events of his reign are the war with Russia from 1808 to 1812, which cost him Bessarabia and the provinces of Servia, Moldavia and Wallachia, as settled by the treaty of Bucharest; the war of Greek independence, which ended in the separation of that country, and the destruction of the Turkish fleet at Navarino, 1820-28; the extermination of the Janizaries, 1826; the treaty of Adrianople with the Russians, who were on the point of entering Constantinople, 1829; the independence of Egypt under Mehemet Ali, and the new treaty of Unkiar-Skelessi with the Russians, 1832-33.

Mahogany (ma-hog'a-ni), the wood of the Swietenia mahogoni, a lofty and beautiful tree, indigenous to Central America and the West Indies,

belonging to the nat. order Cedrelaceme. It grows most abundantly, and attains its greatest develop-ment between 10° N. lat. and the Tropic of Cancer. It reaches maturity in about 200 years, and grows to a height of 40 to 50 feet, diameter 6 to 12 feet. The wood is hard, compact, reddishbrown, and susceptible of a brilliant polish. It is one of mahogoni).

Mahogany (Swistenia mahogoni).

best and most ornamental woods known,



and is widely used in the making of fur-niture. It is imported chiefly from Mex-ico and British Honduras. That which is imported from the West Indies is called 'Spanish' mahogany, and is the most valued. African mahogany is the wood of Swietenia senegalensis, and is brought from Sierra Leone. Indian mahogany is the wood of S. febrifuga and S. chloroxylon, two large trees found in mountain-ous districts of India. Ceylon mahogany is the Artocarpus integrifolia, widely cultivated throughout the warm parts of Asia. Australian mahogany is the red gum (Eucalyptus margenata). Mahomet. See Mohammed.

(mã'on), LORD. Stan hope, Philip Henry, Earl. See Port Mahon.

was educated at a Jesuit seminary at ments of the orations of Cicero and writ-Amiens, studied theology at Paris, re-ceived clerical ordination, and officiated rendered valuable services to the cause for a short time at the chapel of the Bavarian Legation, London. About 1834

Maia (mā'ya), in Greek mythology, one of the Pleiades, the daughter series of articles known as the Prout Papers to Fraser's Magazine. In 1846 cury). he became Roman correspondent to the Design Roman correspondent to the Daily News, his letters being afterwards republished under the title of Facts and Figures from Italy. For the last twelve or fifteen years of his life he was Paris correspondent for the Globe. Reliques of Father Prout was published in 1836 and 1860, and Final Reliques in 1876.

migrated from Northern India, who in the reign of Shah Jehan occupied a large tract of Central and Western India. weakness of the Moguls and the wars of Maidenhead (mā-den-hed), a muAurungzebe, extended his conquests in various directions, had himself crowned king in 1674, and established the Mah
N. E. from Reading, near the right bank ratta Empire. After his death long minorities and the incompetency of the sovereigns caused the powers of the state to fall into the han s of the Peishwa or prime minister, who became the acknowledged head of a Mahratta confederacy. This confederacy held together till 1795, but subsequent wars and disturbances reduced the Peishwa to the position of a Brtiish dependant, and Scindia, Holkar and the Rajah of Berar were able to take the position of independent sovereigns. became dependent princes under British protection.

Mahsir, or MAHSUR (ma'sur), the principal game fish of India, a barbel (Barbus mosal), notable for its large scales. It is often over 100 pounds weight. It lives in the hill streams of the north, and is valued both for its gamey qualities and its delicate flesh.

Mai (mi), Angelo, Cardinal, an Italian scholar, born in 1782; died in 1854. In 1799 he entered the novitiate of the Society of Jesus, afterwards became a priest, and in 1808 obtained the post of librarian at the Ambrosian Library of Milan. In 1819 he became chief librarian of the Vatican, held the effice of secretary of the Propaganda (1833-38), was created cardinal, and vicinity held several high offices in the church. on in Tarough his labors in the decipherment 35,477.

Cork in 1804; died at Paris in 1866. He of palimpsests he recovered some frag-

Maia (mā'ya), in Greek mythology, one of the Pleiades, the daughter of Atlas and mother of Hermes (Mer-

Maidenhair (mā'den-hār), the name given to the Adiantum Capillus-venëris, an elegant fern with a creeping scaly rhizome, and bipinnate fronds, the leaflets of which are between rhomboidal and wedge-shaped, margined with oblong sori, and more or less deeply lobed. It is found in the United States lobed. It is found in the United States Mahrattas (ma-rat'as), a native and throughout the Eastern hemisphere, Hindu race, said to have and possesses demulcent and mucilaginous properties.

Maidenhair-tree, the Salisburia a diantifolia. a They came into prominence about the deciduous tree of the yew family, a namiddle of the sevententh century, when tive of Japan, so called from the likeness

N. E. from Reading, near the right bank of the Thames. Its first charter dates from the reign of Edward III. Pop. (1911) 15,218.

Maiden-plum, the name of two West Indian plants, Comocladia integrifolia and C. dentata. belonging to the nat. order Anacardiacese. They yield a milky juice which, on exposure to air, becomes an indelible black dye.

Maid of Norway, Margaret, the The confederacy came to a final end in Eric, king of Norway, and Margaret, the 1818, and Scindia, Holkar, the Guicowar daughter of Alexander III of Scotland, of Baroda and the Rajah of Kolapore On the death of Alexander she was daughter of Alexander III of Scotland. On the death of Alexander she was acknowledged queen of Scotland, and was betrothed to Edward, son of Edward I of England, but died on her passage to Eng-land in 1290.

Maid of Orleans. See Joan of Arc. Maids of Honor. See Honor, Maids

of. (mād'stun), a municipal Maidstone ough of England, county of Kent, 32 miles S. S. E. from London, on the banks of the Medway, here crossed by a handsome bridge completed in 1879. There is a fine old church, one of the largest parochial buildings in the kingdom, supposed to be of the fourteenth century. Paper is largely manufactured in the vicinity, and an extensive trade is carried. and parliamentary borvicinity, and an extensive trade is carried on in fruit and hops. Pop. (1911)

Maigre (mā'gèr), an acanthopter- tion for a distance of 300 miles and ygious fish of the genus joins the Rhine a little above the town Sciana; more particularly the S. aquila, of Mainz. It is navigable for about 200 much sought after as a food fish. It is common in the Mediterranean and the Eastern Atlantic, and is a strong, powerful fish, often measuring 6 feet in length. It is remarkable for making a sort of whirring noise as it moves through the water.

Mail. COAT OF. See Arms and Armor.

See Coach. Mail-coaches.

Mailed Cheeks, a name given to the Sclerogenide or Triglidæ, a family of acanthopterygious fishes, from their having certain bones of the head and gill-covers enlarged to form a defense for the checks. Gurnards and bullheads are members of this family.

MAIMATCHIN (mi-ma-Maimachin, of Mongolia, adjoining the Russian em-

porium of Kiachta.

Maimansingh (m I - m u n-sing'), a British district in the Dacca division, Bengal; area, 6287 square miles. It is for the most part level and open, and is well cultivated. Rice and jute are among the chief agri-cultural products. The Jumna and the Brahmaputra are the chief rivers, and the administrative headquarters are at Nasirabad.

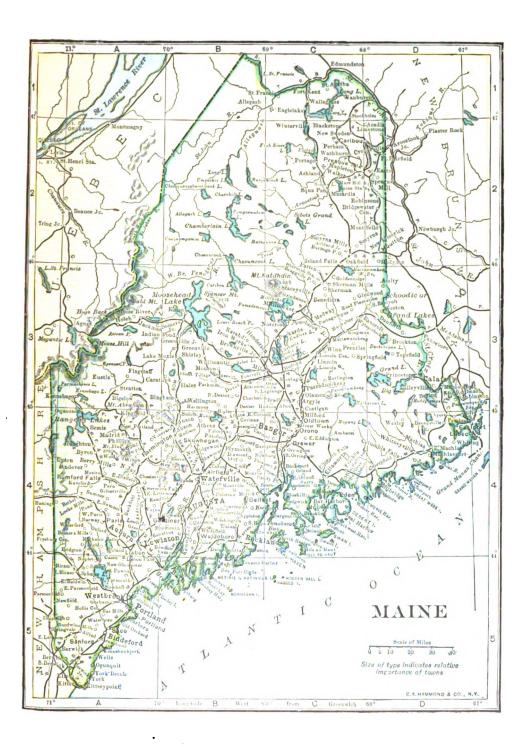
(mī-mon'i-dēz), prop-Maimonides erly Moses Ben Maiture and Greek philosophy, attended the lectures of the Arabic philosophers, and made himself acquainted with the heal-

birge, flows in a generally westerly direct of learning, among them being the Uni-

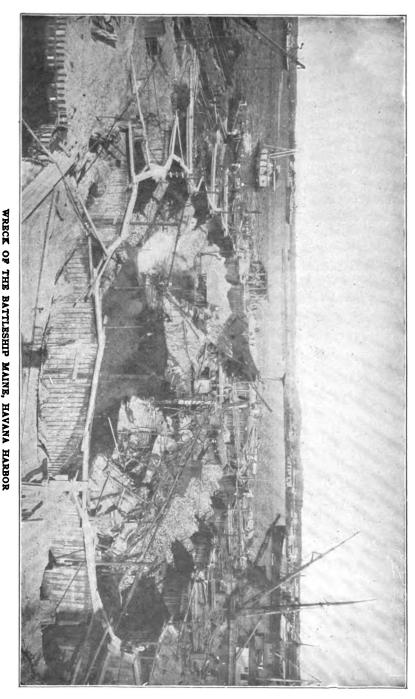
miles, and has recently been improved so as to admit the largest Rhine ste mers to Frankfort. By means of King Ludwig's canal it affords through naviration to the Danube. The chief tributaries are the Regnitz and Tauber on the left bank, the Regnitz and Tauber on the left bank, and the Franconian Saale on the right.

Maine (man), one of the eastern and maritime States of the United States, bounded on the east and northeast by New Brunswick, north and northwest by Quebec, west by New Fampshire, and south by the Atlantic Osean; area, 33,040 square miles. It is nostly an elevated country, but hilly nather than mountainous. The highest peak, Mount Katahdin, has an elevation of 5200 feet. The State is almost completely traversed by navigable rivers, the pletely traversed by navigable rivers, the pletely traversed by navigable rivers, the principal of which are the Penobscot and Kennebec; and in the interior are numerous lakes. The coast abounds with islands, the largest of which is Mount Desert, 15 miles long and 12 miles broad; and is indented with numerous bays and inlets, the principal of which are Penobscot, Casco and Passamaquoddy. Grass lands are extensive, and Indian corn, potatoes, wheat, barley, rye, flax and hay are the chief crops. Many thousands of cases of sweet corn are packed yearly, and oats of superior quality are grown. Many horses and cattle are kept, and the wool-clip is large and of good quality. mon Ben Joseph, a Jewish scholar, born The leading industry is the production of at Cordova about 1131-39; died about lumber. Not long ago the forests cov1201-09. He received an excellent education, studied Jewish and Arabic litera. State, but they are rapidly diminishing. The white pine, once the most important lumber product, has largely vanished, but the woodlands which still cover ing art. Driven from Spain by persecuso per cent. of the area of the State, are
tion, he ulti-nately settled at Old Cairo, being carefully managed, and yield a
where he attained the highest place in large product. The manufacture of paper the estimation of his co-religionists; be- and pulp is important. Slate, limestone came physician to the Sultan of Egypt and clay are abundant. Iron ore, lead, and superintendent of the Jewish com- copper and gold are found in small and superintendent of the Jewish courcilland and superintendent of the Jewish courcilland and superintendent of the Jewish tradition, and demonstrated the principles on which Judaism fisheries give employment to a large porish based. His books were widely circution of the population; and other industrials are activation; and other industrials are activated to manufacture. is based. His books were widely circution of the population; and other induslated in Europe by means of Latin transtries are shipbuilding, the manufacture lations. His best writings in Arabic are of cotton and woolen fabrics, leather, the Guide of the Erring, an exposition of boots and shoes, farm implements, etc. Judaism; a Compendium of Logic; a There are about 2300 miles of railroad Commentary on the Mishna; an Exposition of the 613 Laws of Moses, etc. He notably from Portland, which has a fine wrote in Hebrew a complete system of harbor. Maine's liquor-prohibition laws the Talmudic Judaism.

Main (mān), a river of Germany, amendment to the State constitution was which rises in the Fichtelge-passed in 1885. It has many institutions hirse flows in a generally westerly director of learning, among them being the Unitered to the state of the state constitutions birse flows in a generally westerly director of learning.

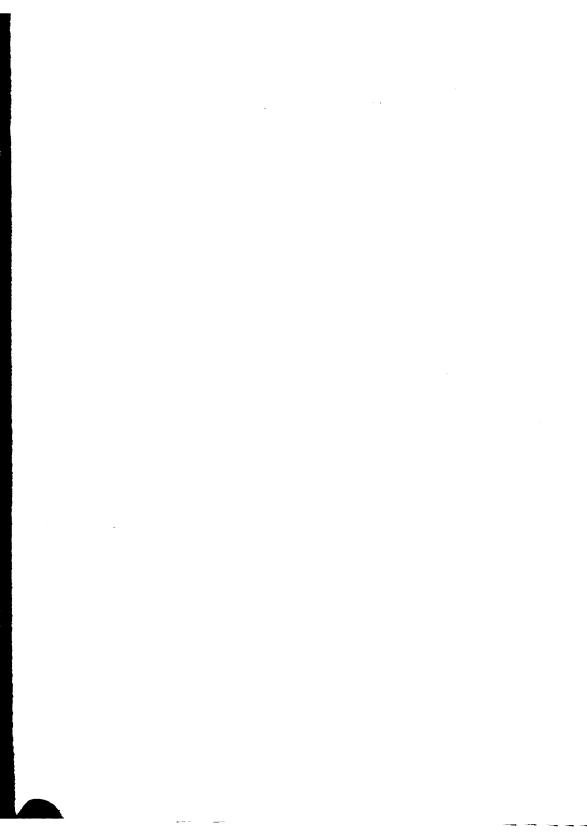






WRECK OF THE BATTLESHIP MAINE, HAVANA HARBOR

A general view of the cause of the Spanish-American War, showing the cofferdam built to permit a thorough examination, which proved the theory that the disastes was caused by a sunken mine or torpedo. After this inspection the wreck was cut up, floated out, and sunk in the Gulf of Mexico.



versity of Maine, at Orono (organized 1865; 1213 students); Bowdoin College, at Brunswick (q.v.); Bates College, at Lewiston; and Colby College, at Waterville. Maine was admitted into the Union in 1820. The capital is Augusta; largest city, Portland; other large cities are Lewston and Bangor. Pop. (1900) 694,466; district on the Agra branch of the Grand (1910) 742,371; (1920) 768,014.

Maine, The, United States battleship, sunk from an explosion in Havana harbor. Cuba, Feb. 15, 1898; 258 of Maintenance (map-té-nōp), Francoise

vana harbor, Cuba, Feb. 15, 1898; 258 of its crew of 363 being killed, and 9 reported missing. This disaster filled the nation with horror and consternation. It occurred when the relations between Spain and the United States were strained and the United States were strained and where her father a profiler to adventurer. and the United States were strained and was the main cause of the war that followed, a court of inquiry holding the vessel had been blown up intentionally. The wreck was raised and sunk outside the harbor in 1912.

by Philip Augustus.

Maine, Sir Henry James Sumner, an English jurist, born in 1822; was graduated at Pembroke College, Cambridge, in 1842. He was appointed regius professor of civil law in the same university in 1847, and reader on jurisprudence at the Middle Temple in 1854. From 1862 to 1869 he was law member of the Supreme Council of India, and on his return home he was elected Corpus professor of jurisprudence at Oxford. In 1877 he became Master of Trinity Hall, Cambridge. His works are of great value and include Ancient Law in Connection with the Engly History of Connection with the Early History of Society; Village Communities in the East and West; The Early History of Institutions; Dissertations on Early Law and Custom, and the Whevell Lectures on International Law. He died in 1888.

Maine-et-Loire (man-e-lwar), a

Maine-et-Loire (man-e-lwar), a western department of France; area, 2750 square miles. It has a gently-undulating surface, the slopes of which are generally covered with vines, while the plains are of great fertility. About one-half of the entire area is arable. Some of the white wines produced are much esteemed. The Loire traverses it almost centrally, east to traverses it almost centrally, east to west, and receives within the department the Maine, formed by the united streams of the Loire, Sarthe and Mayenne. The manufacture of cotton, linen and woolen tissues is important. Pop. 513,490.

where her father, a profligate adventurer, was then confined. Left quite destitute on his death in her tenth year, Mademoiselle D'Aubigné spent her youth in de-pendence on her rich relatives, and was Maine, an ancient province of France, glad to contract a nominal marriage with lying immediately s. of Normandy, and comprising the modern departments of Sarthe, Mayenne, and parts and infirm man. Her beauty, liveliness and for the French dominions of Henry II of England, and was wrested from John Scarron's death she was entrusted with the character of the rich relatives, and was glad to contract a nominal marriage with the famous Paul Scarron, a deformed, old marriage with relatives, and was glad to contract a nominal marriage with the character and relatives, and was glad to contract a nominal marriage with the character and relatives, and was glad to contract a nominal marriage with the character and relatives, and was glad to contract a nominal marriage with the character and relatives, and was glad to contract a nominal marriage with the character and relatives, and was glad to contract a nominal marriage with the character and relatives, and was glad to contract a nominal marriage with the character and relatives, and was glad to contract a nominal marriage with the famous Paul Scarron, a deformed, old marriage with the famous Paul Scarron, a deformed, old marriage with the famous Paul Scarron, a deformed, old marriage with the famous Paul Scarron, a deformed, old marriage with the famous Paul Scarron, a deformed of the famous Paul Scarron, a deformed on the famous Paul Scarron and the famous Paul Scarron's death she was entrusted with the charge of the children born to Louis XIV by Madame de Montespan. She assumed this office in 1669, and played her cards so dexterously that the king married her privately, probably in 1685, when her age was fifty and his own forty-seven. For the remaining years of his life she was his most confidential adviser. She was a virtuous woman, and a devout and bigoted Catholic, ambitious and resolute, but disinterested and charitable. Her published letters give her a creditable place in French literature. She died in 1719, at the nunnery or school of Saint Cyr, which she herself had founded.

Mainz (mints; English, Mentz: French, Mayence), a fortified town of Germany, in the grand-duchy of Hesse, finely situated on the left bank of the Rhine, opposite the mouth of the Main, 20 miles w. s. w. Frankfort. The Rhine is here crossed by a bridge con-necting Mainz with the small town of Castel, which is within the system of fortifications. There is also a railway bridge. The older part of the town has been mostly modernized since the deexplosion in 1857, and an extensive new quarter has been added since the recent widening of the fortified circuit. Among the more interesting buildings are the cathedral (recently restored), a vast building of red sandstone, finished in the fourteenth century, adorned with several

finely painted windows, frescoes, and a situated in the midst of a very fer great number of ancient and curious agricultural district, and coal of exmonuments; the former electoral palace, lent quality and great quantity is for now containing the city library (150,000 in the neighborhood. The industriction vols.), picture gallery, museum, etc.; the comprise coach-building, brewing, be old collegiate church of St. Stephen, a making, etc. Population of East a first experience of Cethic experience of the comprises of the comprise of the comp fine specimen of Gothic architecture; the grand-ducal castle; the courts of justice; the government buildings; the town hall, the government buildings; the town hall, a new renaissance structure; the theater, central railway station, Gutenberg's house and other buildings associated with the invention of printing, etc. There is a fine statue of Gutenberg by Thorwaldsen. The handsome new quay, about 330 feet in breadth, along the Rhine, affords a pleasant promenade; and there are several docks. The manufactures embrace leather, furniture, hardware, of Session from September, 1550, to Jul, carriages, tobacco, beer, chemicals, musical instruments, etc. The trade, particularly, supplied the decisions of the Cout of Session from September, 1550, to Jul, carriages, tobacco, beer, chemicals, musical instruments, etc. The trade, particularly transit, is extensive. Mainz was chiefly satirical, were printed by the Maifor long the first ecclesiastical city of land Club in 1530.

Maitland, SIB RICHARD (Lord Letger ingroup), a Scottish poor, in 149; lawyer, and statesman, born in 149

lent quality and great quantity is for in the neighborhood. The industr scomprise coach-building, brewing, be making, etc. Population of East a d West Maitland 10,214.

Maitland, John. See Lauderdale.

chiefly satirical, were printed by the Mai-land Club in 1530.

Maitland, William, commonly known
as Secretary Lethington, a

larly transit, is extensive. Mainz was for long the first ecclesiastical city of the German Empire, of which its archbishop-elector ranked as the premier prince. Its history during the sixteenth century is of considerable interest in connection with the progress of the Reformation. Pop. (1910) 113,245.

Maiolica (ma·yol'i-ka). See Faience.

Mair, John. See Major.

Maire, Le, Straats of, a channel betained the Lords of the Congregation, who had taken possession of Quebec province, Canada. Pop. (1911) 18,684.

Maistre (ma-tr or mas-tr), Joseph Maistre, land the was chosen one of her principal ministers, and was continually employed as her envoy to the English court. After bartleys murder he conspired to effect stresman and polemical writer, born at Chambery in politics, religion and philosophy, a supporter of absolute monarchy, and of the infallibility of the pope. His principal writings are Du Pape, De Feglise Gallicane, and the Soirées de St. Petersburg.—His younger brother, Navier De Maistre, and de ma Chamber, a delightful work. XAYIER DE MAISTRE, born at Chambery ence with Mary. In 1571 he joined Kirkin 1763; died at St. Petersburg in 1852; caldy in Edinburgh Castle; was prois chiefly famous for his Voyage autour
de ma Chambre, a delightful work.

Maitland (mātland), a town in New
South Wales, 95 miles
north of Sydney, on the Hunter River. Maitland died in prison in Leith, preIt comprises two distinct municipalities,
East Maitland and West Maitland, separated from each other by Wallis Creek,
over which is an excellent bridge. It is plant), Indian corn, a prominent species

of a genus of plants found in the warmer and Africa, and in several countries of parts of the world, where it answers a the south of Europe, as Spain, Italy and purpose similar to that of wheat in more Roumania. The green stems and leaves northern countries. The common maize form nutritious food for cattle, and in purpose similar to that of wheat in more northern countries. The common maize form nutritious food for cattle, and in or Indian corn is the Zea Mays of Great Britain it is sown and cut green botanists, a monœcious grass, of vigorous growth, with stems not more than 2 species, is the Chile maize or Valparaiso feet high in some varieties, and reaching the height of 8 or even 10 feet in others. The grains are large, compressed, and packed closely in regular parallel rows along the sides of a receptacle many inches long. In large varieties the ear or ob is often 1 foot long and 2 or 3 field officer next in rank above inches in thickness. Maize is extensively cises of the regiment or battalion, to cultivated in the United States, it being carry out the orders of his superior officers. cultivated in the United States, it being known as corn, and the crop at times



cakes and bread of various kinds, the est Hearth (1903), and Yolanda, Maid of favorite brown bread of New England being made from a mixture of corn and rye meal. The tender variety known as sugar-corn is, when boiled, a favorite table vegetable. It is largely kept for largest of the Balearic group, between winter use by canning. In America, Ivica and Minorca; greatest length, 58 large quantities of this grain are roasted till they split, and are then eaten under the name of pop-corn. From the green in shape, and deeply indented. The stems a juice is expressed, which unfermented gives a pleasant syrup, and fermented is converted into an excellent spirit. Paper has been made from maize they are low and shelving. The island fibers. The pith of the stem has been is generally fertile, producing, besides used as a packing for the sides of war large crops of cereals, hemp, flax, silk vessels, it swelling when wet so as to and saffron. Fruits abound; the pasprevent the flow of water through holes tures are rich, and maintain large nummade by artillery. Maize is also cultivated throughout a great part of Asia

cises of the regiment or battalion, to carry out the orders of his superior officers, and to command in the absence of the lieutenant-colonel.

Major, in music, designates in general a larger in contradistinction to a smaller interval of the same denomination, called a minor interval; thus a major tone is the interval between two tones having the proportion to each other in number of vibrations of 8:9; a minor tone the interval between two tones in the ratio of 9:10; a major third is an interval of two tones (major and minor); a minor third an interval of a tone and semitone. The major mode is one of the two recognized modern modes (or forms of the scale) in which the (or forms of the scale), in which the first third in the scale is a major third, in contradistinction to the minor mode, in which the first third is regarded as a minor third.

Major, CHARLES ('Edwin Caskoden'), an American author, born at Indianapolis, Indiana, July 25, 1000,000 bushels annually. Its flour, though ticed law at Shelbyville. His historical very nourishing, is not glutinous, and is usually mixed with wheat, rye, or other (1898) won inst nt success. This was flour before it is baked. It is largely followed by others, including Dorothy used in the United States for making Vernon of Haddon Hall (1902), A Forcakes and bread of various kinds, the est Hearth (1903), and Yolanda, Maid of favorite brown bread of New England Burgundy (1905).

Major, CHARLES ('Edwin Caskoden'), an American author, born at Indianapolis, Indiana, July 25, 1856; diel February 13, 1913. He practiced in the United States for making vernon of Haddon Hall (1902), A Forcakes and bread of various kinds, the est Hearth (1903), and Yolanda, Maid of favorite brown bread of New England Burgundy (1905).

Major, CHARLES ('Edwin Caskoden'), an American author, born at Indianapolis, Indiana, July 25, 1913. He practiced in the United States for making the practice of the Property 13, 1913. He practiced in the United States for making the practice of t



several railways. Pop. 248,191.

Majority (ma-jor'i-ti), in law, is the Malabar is often applied to the vhole extent of coast country as far north as the laws of a country permit a young person to manage his own affairs. In the United States, as well as in most Malabar Leaf, the leaf of the Cinther countries the are of maintain in the countries the are of maintain in the countries. other countries, the age of majority is twenty-one years.

Makaroff (mak'a-rof), Stepan Osipmakaron ovich, a Russian admiral, born in 1848. He served with conspicuous courage in the Russo-Turkish war of 1877-78. From 1891-94 he served as admiral and inspector-in-chief of naval artillery, and designed the famous ice-breaking steamer *Ermek*. He was given command of the fleet at Port Artur in the war with Japan, and on April 13, 1904, was one of the 600 who perished from the blowing up, by the Japanese, of the battleship Petropaulosk.

Makart (ma-kart'), Hans, a German painter, born at Salzburg in 1840; died in 1884. He studied at Vienna and Munich, and latterly settled at Vienna. He was a great colorist, but was deficient in connection and describe. was deficient in conception and drawing. Among his chief works are: A Trilogy of Modern Amorettes; The Seven Deadly Sine; The Dream of a Man of Pleasure; The Gifts of Sea and Earth; Leda; and The Entrance of Charles V into Antwerp. Maki (ma'ki), a name applied to some of the lemurs.

Makó (mo'kō), or Makovia, a town of Hungary, on the right bank of the Maros, 22 miles east by south of Szegedin. It has pastoral, agricultural and fishing interests and a number of and fishing interests and a number of oil mills. Pop. 33,722,

Makololo (ma-ko-lo'lo), a large and once powerful tribe in South Africa, between lat. 13° and 20° s. The Makololos attained considerable dium, or marking-nut tree of India, beminence during Livingstone's time, but longing to the nat. order Anacardiashortly after 1864 the kingdom was case. It closely resembles the cashewnut. broken up.

din, a Treatise on Moslem Conn, etc.

Malabar (mal-a-bar), a maritime district of British India, in the Malachi

malachi (mal'a-ki), the twelfth and last of the minor prophets.

Malachi (mal'a-ki), the twelfth and last of the minor prophets.

Chief town, Palma. cipal towns are Cananor, and Calicut. Pop. 6,029,304. Tellicherry The name

Malabar Leaf, the leaf of the Cin-rum of Malabar, formerly used in European medicine.

Malabar Plum, a tree Eugenia Eugenia Myrtacese. It grows Jambos, nat. order Myrtacese. It grows plentifully on the Malabar coast, and its fruit is much esteemed. Called also Rose-apple.

Malacca (ma-lak'a), a territory and town forming part of the British colony of the Straits Settlements, on the west coast of the Malay Peninsula, on the Strait of Malacca. It extends about 40 miles along the shore of the strait, and about 25 miles inland. Area, 875 sq. miles. The sea-coast is rocky, and the interior in some parts mountainous, with picturesque and fertile valleys intervening. Tapioca and rice are the chief products. The disrice are the chief products. The district contains deposits of gold and tin. Malacca is ruled by a resident councilor subject to the governor of the Straits Settlements. The town is one of the oldest European settlements in the East. being founded by the Portuguese in 1509. It was acquired from the Dutch in 1825. Its trade and importance are now slight. Pop. of town and territory 124,081.

Malacca, STRAIT OF, the channel between the Malay Peninsula and the Island of Sumatra, extending from latitude 1° to about 6° N. Entire length, about 520 miles; breadth, varying from 25 miles to 200 miles.

Malacca Cane, a cane made from the wing-leaved, Makrizi (ma-krē'zē), ABU AHMAD MOHAMMED, AL, an Arabic writer, born in 1360; died in 1442. He wrote an Historical and Topographical in of Egypt, a History of Saladin, a Treatise on Moslem Coins, etc.

Malacca Cane, a cane made from the win g-leaved, the win g-leaved, the wrote and respect to the win g-leaved, is of a brown color, sometimes mottled or clouded. It is brought from Singapore and Malacca, but is chiefly produced in

presidency of Madras, on the west coast; area, 5765 square miles; length, 145 Nothing is known of the history of the miles; breadth, varying from 25 miles writer, and it is even doubtful if Malachi on the N. to 70 miles on the s. A great ('Messenger of Jehovah') be a proper area, 5765 square miles; length, 145 Nothing is known of the history of the miles; breadth, varying from 25 miles writer, and it is even doubtful if Malachi on the N. to 70 miles on the s. A great ('Messenger of Jehovah') be a proper portion is comparatively low, intersected name or an assumed epithet. The book by narrow ravines, covered with forests evidently belongs to the latter part of and jungle, and watered by innumerable the governorship of Nehemiah, about B.C. streams. Tea and coffee plantations have 420. It contains denunciations of the been successfully established. The prin- sins of the Israelites, and predicts the

Malachite (mal'a-kit), a carbonate the Sierra Nevada. The valleys are ferof copper, of a dark tile and generally well cultivated, yielding
emerald-green color, and of a laminated, cereals, grapes, oranges, lemons, figs,
fibrous, or massive structure. The finest almonds, sugar-cane, etc. specimens are obtained from Siberia, but it is found in many places all over the world. Fibrous malachite, when finely pulverized, is used as a paint; massive malachite is made into boxes, knife-handles, table-slabs, and other orna-

Malacology (mal-a-kol'o-ji), the sci-

name given to those osseous fishes which are distinguished by all the rays of the fins being soft (except in a few individ-uals), exhibiting minute articulations, and often divided into small fibers at their extremities. They are divided into two suborders, the Malacopteri (proper) and the Anacanthini. They include the carp, salmon, pike, herring, cod, turbot and other flat fish, and the eels. See Ichthyology.

Malacostraca (mal-a-kos'tra-ka), subclass of crustaceans divided into two primary groups, sessile-eyed and stalk-eyed, and including the shrimps, lobsters, crabs, etc., together with the wood-lice, sandhoppers, etc.

Malaga (mal'a-ga), a seaport of southern Spain, in Andalusia, capital of a province of the same name, on the Mediterranean. It was anciently called Malaca; was a flourishing city under the Romans, and its long occupation by the Moors has left distinct marks in the older parts of the town; the Gibralfaro, or Moorish castle, on a hill everlesting the town, and considerable overlooking the town, and considerable portions of the ancient fortifications yet remaining. Among the important buildings are the cathedral, a highly decorated structure in the composite style, with a spire 300 feet high; the Episcopal palace, custom house, and several hospitals and charitable institutions, etc. The manufactures consist chiefly of iron, the ore The manuof which is obtained from rich mines in the vicinity; soap, cottons, linens, machinery, etc. The trade is of much more importance. The principal exports being group of islands situated to the south-olive oil, lead in bars, wine and fruit, east of Asia, and washed on the west particularly raisins, oranges, and almonds. The climate is one of the mildest monds. The climate is one of the mildest and most equal in Europe. Pop. 130,109. said to lie between the meridians of 95° and most equal in Europe. Pop. 130,109. said to lie between the meridians of 91° and 135° E., and the parallels of 11° of which is obtained from rich mines in

coming of the Messiah and the conversion of 2822 sq. miles; pop. 511,989. It is of the Gentiles.

Malachite (mal'a-kit), a carbonate the Sierra Nevada. The valleys are fer-

Malaga Wine, a sweet Spanish wine, rich, luscious

and full of body.

This term was formerly avery large handles, table-slabs, and other orna-mental articles, and is susceptible of a supposed to be due to noxious emanations beautiful polish. Blue malachite or azu-rite contains a larger proportion of car-bonic acid. Malacology (mal-a-kol'o-ji), the scior remittent type, chills, anemia, and ence of molluscous or splenic enlargement; and the causative agent is a protozoon—the Plasmodium, or Malacopteri, MALACOPTERYGII (mal-ackol, of malaria. This protozoon description is a protozoon—the plasmodium, or malacopteri, a-k o p-t è r-i j'i-l), a gains entrance to the body by the bite of an infected mosquito, belonging to the Anopheles group. There are three varieties of malaria, called tertian, quartan, and estivo-autumnal; of these, the tertian is by far the most common in the United States. Since the disease is carried by infected mosquitoes, the means of preventing the disease is obvious—extermination of the anopheles mosquito, and screening all patients suffering from malaria so that the mosquitoes cannot bite them and thus become infected and capable of carrying the infection to others. The one remedy for patients suffering from malaria is quinine given in proper doses and at proper periods of time; quinine should also be taken by people living in districts said to be malarial. With this definite knowledge of the cause of malaria, its means of propogation, and a specific remedy for it, there is no reason why each community should not determine that the disease should become a thing of the past. The anopheles mosquito breeds in puddles, marshes, pools and lakes; all swampy districts should be drained, and filled up; petroleum has been used with success in such districts, the larvæ of the mosquito being killed by this agent. The dosage of quinine and the exact hours for its ad-ministration must be determined by the physician, and will depend on the time of the chill. The diagnosis of malaria is made by microscopical examination of the blood.

Malay Archipelago

s. and 17°N. are generally fertile and covered with a character, and is very extensively used luxuriant vegetation, and they produce as that of literature and commerce. See all kinds of tropical products in abun
Ethnology. dance. Many of them contain volcances. Malcolm I (mal'kum), King of Scot-As regards their fauna and flora they may be divided into two main groups, those east of the Strait of Macassar and the channel between Bali and Lombok Strathclyde became parts of the Scottish

Malay Peninsula, the most southern part of continental Asia, the long narrow projection that stretches first s. and then S.E. trom Siam and Burmah. It is connected with Lower Siam by the Isthmus of Kra, has on the E. the Gulf of Siam and the has on the E. the Gulf of Siam and the mostly taken up with wars with England. China Sea, and on the w. the Strait of had nevertheless an important bearing on Malacca. It varies in width from 45 the civilization and consolidation of Scotmiles at the N. to about 210 miles. The land.—MALCOLM IV (the Maiden) sucarea is about 70,000 sq. miles, and the ceeded his grandfather, David I, in 1153, population is variously estimated at from He surrendered Northumberland and 1,000,000 to 2,000,000, including large Cumberland to Henry II in 1157. Died numbers of Chinese. The country is at Jedburgh in 1165, at the age of mountainous, with peaks of from 5000 to wenty-four. 9000 feet high; it is densely wooded; Malcolm, Sir John, a distinguished rivers numerous but short; minerals imthe exception of the British territories of Penang and Malacca, is divided among a number of more or less independent chiefs

Within these limits lie beard. The civilized Malays profess the s. and 17 N. Within these limits he beard. The civilized Malays process the some of the largest and finest islands in Mohammedan religion. They are said to the world, as Borneo, Sumatra, Java, be of a taciturn undemonstrative discipled to the Philippines, etc., but New position; naturally indolent, treacherous Guinea is not ranked as belonging to the in their alliances and addicted to piracy. The chief of the smaller islands when under excitement or passion they are the Moluccas or Spice Islands, Billiards with great ferocity every one they meet. ton, Banca, Madura, Bali, Lombok, Sum-bawa, Flores, Timor. The small islands with great ferocity every one they meet. are exceedingly numerous. The islands The Malay language is agglutinative in

the channel between Bali and Lombok having more affinities with Australia, while the others are rather Asiatic in character. The chief native race is the Malayan. A large portion of the archipelago is really or nominally under the sway of Holland, and this portion is der of his father, Duncan, by Macbeth, frequently called the Dutch East Indies. See separate articles on the principal islands or groups. and death of Macbeth he was crowned at Scone in 1058. In 1068 he granted asy-lum to Edgar Atheling, his mother, and two sisters (one of whom, Margaret, he married in 1070), with a number of Saxon exiles. His reign, which was mostly taken up with wars with England.

portant, more especially tin, which is born near Langholm, in Dumfriesshire, found in great quantity and largely exported. Politically the peninsula, with tered in 1782, as a cadet, the service of the East India Company. In 1797 he was made captain; and from that time to 1799 he was engaged in a variety of tributary to or in treaty with Siam and Britain. The native races are Siamese, fall of Seringapatam. He was three Malays and Negritos. Malays and Negritos.

Malays, the name of a race of people inhabiting the Malay peninsula, and spread over all the Asiatic Peishwa. In 1822 he was made major-drechipelago. They claim to have had their native country in the Highlands of per year from the East India Company. Sumatra, where they established the once powerful state of Menangkabo, now substant the Dutch In physical appear. powerful state of Menangkabo, now subject to the Dutch. In physical appear-ance they are rather under the middle Britain. He received the honor of knight-height, light-brown in color, with black hood in 1812. As an author his prin-straight hair, high cheek bones, black and cipal works are: A Sketch of the Sikks; slightly oblique eyes, and scanty or no The History of Persia; Sketches of PerMalden Malice

sia; A Memoir of Central India; a Life have anthelmintic properties, and are of Lord Clive. etc.

islands in the Indian Ocean, extending from lat. 0° 40′ s. to 7° 6′ N., nearly on the meridian of 73° 30′ E., and composed of seventeen clusters of atolis. The larger islands are richly clothed with wood, chiefly palm, and are fertile in fruit and in various kinds of edible roots; they also produce millet, and abound in sure road to destruction. He was concoconnuts, fowls, and all descriptions of demned to death, and guillotined on fish. The inhabitants carry on a con-April 22, 1794. He was the author of a siderable trade with Bengal, Ceylon and few miscellaneous treatiess. the Malabar coast, extending also to the Malherbe (mal-erb), François de, a Red Sea and to Sumatra. They are governed by a sultan, who resides in the in 1555; died in 1628. He was the proisland of Male or Mohl, and pays annual tegé of Henry IV; wrote light lyrics, tribute to the British government in Ceyodes, epigrams, etc.; and so far as form is concerned he may be considered the Malden (mal'dur).

Maldon (mal'dun), a municipal bor-ough and river port of Eng-land, county of Essex, 36 miles northeast of London, on the Blackwater estuary, near the mouth of the Chelmer. It has a fine old church dating from 1056, an interesting old town hall and a grammar school dating from the reign of Edward VI. Its industries are salt-crystallizing, iron-founding and oyster-fishing. Pop.

6253.

Malebranche (mål-bränsh), Nico-LAS, a French philosand ary favorite in Britain and on the Concolleges of La Marche and of the Sorbonne, and at the age of twenty-two he was admitted into the congregation of the oratory. In 1673 he published his reatise De la Recherche de la Vérité.

The doctrines of this celebrated work are founded upon Cartesian.

Malden (mal'den), a city of Massa-chusetts, in Middlesex county, on the Malden River, 5 miles N. of Molgnon DE, a French statesman, the son Boston. It has beautiful parks and resi- of Guillaume de Lamoignon, chancellor of Roston. It has beautiful parks and resiof Guillaume de Lamoignon, chancellor of
dences and numerous industrial establishFrance, was born at Paris in 1721. Afments, notably the great plant of the ter studying at the Jesuits' college he
Boston Rubber Shoe Co. Besides rubber
boots and shoes, it has manufactures of and became a counselor of the parliamerty and sand paper, chemicals, leather
lasts, cords and tassels, etc. Pop. (1910)
44,404; (1920) 49,103.

Maldive Islands (mal'div), a remarkable chain of
markable chain of temporary abolition of the parliament in
islands in the Indian Ocean, extending the reign of Louis XV, and were restored the reign of Louis XV, and were restored with its revival under Louis XVI. He held office along with Turgot, and resigned on his retirement. Aided by Tronchet and Desèze he acted as leading counsel for Louis XVI. Acts of loyalty far less decided were in that day the

maibran (ma-le-brhp), Maria Feli-father of French classical poetry.

Malibran (ma-le-brhp), Maria Feli-cita, one of the greatest singers of modern times, born at Paris in 1808, the daughter of a well-known singer and singing master, Manuel Garcia. She made her début in 1825 at the opera in London, and the following year went to New York, where she married M. Malibran, a French banker, from whom she soon separated. She returned to Europe, where her splendid vocal powers and dramatic ability made her an extraordin-

The doctrines of this celebrated work are founded upon Cartesian principles. The name, from L. malum. It is most Among his other writings are Conversations Métaphysiques et Chrétiennes; Aucuparia (mountain-ash or rowan tree), Traité de la Nature et de la Grace; immediately after it has turned red, but Méditations Métaphysiques et Chrétiennes; Traité de Morale, etc.

Male-fern, the Nephrodium or Lastine from the fruit of Pyrus easily obtained from the fruit of Pyrus tions Métaphysiques et Chrétiennes; immediately after it has turned red, but while still unripe. It is very soluble in water, and has a pleasant acid taste.

Male-fern, the Nephrodium or Lastine from the Nephrodium or Lastine from the formed design or intention of doing mischief to another, called also malice prepense or aforethought. It is express with large fronds rising from a short when the formed design is evidenced by spect caudex. Its rhizome and root-stalk

intention; and implied when the act is done in such a deliberate manner that the law presumes malice, though no particular enmity can be proved. Malicious mischief is the committing of an injury to public or private property from sheer wantonness or malice. This offense is punishable with great severity. Intent is the material ingredient in offenses of this nature; but as the law presumes malice in the very commission of the act, it lies on the party indicted to rebut the presumption of malice, or sufficiently explain the act. A malicious prosecution is a prosecution brought against a person maliciously and without reasonable cause. From the more want of probable cause malice may be inferred.

Malignants (ma-lig'nantz), in English history, a name applied by the parliamentary party during the civil war to describe the king's evil advisers; the name came to be afterwards given to all who supported the king against the parliament.

Malines (må-len). See Mechlin.

Mallard. See Duck.

Malleability (mal-e-a-bil'i-ti), the property of being susceptible of extension by beating; almost restricted to metals. The following is the order of malleability of the metals:-Gold, silver, copper, platinum, iron, aluminium, tin, zinc, lead, cadmium, nickel, zobalt. Ductility and malleability are nearly allied, but they are seldom possessed in the same proportion by the same

Malleus (mal'ē-us), one of the bones of the ear. See Ear.

Mallock (mal'ok), WILLIAM HURRELL, was born in Devonshire,

was born in Devonshire, England, in 1849, his mother being a sister of Froude, the historian. He was educated privately and at Balliol College, Oxford, where he gained the Newdigate for a poem on the Isthmus of Suez. He is a frequent writer on political and cocial subjects in the mergarines. cal and social subjects in the magazines, and has published The New Republic; The New Paul and Virginia; Is Life Worth Livingi; A Romance of the Nineteenth Century; The Old Order Changes, a novel; etc.

Mallow (mal'o; Malva), a genus of plants of the natural order Malvaceæ. M. sylvestris (the common

blue, and yield their coloring principle both to water and alcohol. The alco-holic tincture furnishes one of the most

delicate of reagents for testing the pres-ence of alkalies or a c i ds. The dwarf mallow (M. rotundifolia) and musk mallow (M. mos-chāta) are also found in Britain. The fiber of M. crispa is sufficiently tenacious to be used in making cordage.

Mallow has been naturalized in the United States.



Common Mallow (Malva sylvestris).

Malmaison (malmāzon), a historic cha-

teau in France, department of the Seine, 5 miles w. of Paris, once the property of Richelieu. It was the favorite residence of the Empress Josephine, wife of Napoleon I.

Malmedy (mäl'me-de), a town of Rhenish Prussia, about 24 miles south of Aix-la-Chapelle, on the Warche in a basin surrounded by hills; manufactures of sole-leather, paper, etc. Pop. 4680.

Malmesbury (mämz'be-ri), a town of England, county of Wilts, on an eminence, 23 miles N. E. of Bristol. It is well built, and has the remains of an abbey founded in the sixth century. Pop. (1911) 2657.

Malmesbury, JAMES HARRIS, EARL OF, son of James Harris, the author of Hermes, born in 1746; died in 1820. His diplomatic career, dating from 1768, was a brilliant success, and earned him the reward of an earlier in 1800. earldom in 1800. His Diaries and Correspondence were published in 1844, his Letters in 1870.—His grandson, JAMES HOWARD, third earl, born in 1807, has been foreign secretary and keeper of the privity seel. He published Merries of the privy seal. He published Memoirs of an Ex-Minister in 1884.

Malmesbury, William of, an Eng-probably in Somersetshire about the year 1075; died about 1143. He received his education at the Benedictine Abbey of Malmesbury, and subsequently became librarian and precentor of the abbey. His mallow) is a common and widely diffused De Gestis Regum Anglorum is a general species, possessed of mucilaginous prophistory of England, from the arrival of erties. The whole plant is used officinally the Saxons in 449 to 1128; he also wrote in fomentations, cataplasms and emol- a history from that year to 1143; De lient enemas. When fresh the flowers Gestis Pontificum Anglorum: Antiquities are reddish-purple, but on drying become of Glastonbury; etc. All his works are

Malmö (mal'men), a seaport of Sweden, capital of the laen or prefecture of Malmöhus, situated on the eastern shore of the Sound, opposite Copenhagen. The manufactures and ther industries are considerable, and the

tained from a grape originally brought fascicles or corymbs of white or red flowfrom Malvasia or Malvoisie in the Morea. It is made in the Azores, the Lipari Islands, Teneriffe, Sardinia, Sicily, but more especially in Madeira, from grapes that have been allowed to shrivel on the

Malo (ma'lo), Sr., a fortified seaport of northwest France, department of Ille-et-Vilaine, on a rocky island communicating with the mainland by a long causeway. It has a commodious and Malplaguet (mal-pla-kā) a mille-response to the kidney and in the spleen.

Malplaguet (mal-pla-kā) a mille-response to the kidney and in the spleen. 10,647.

Malone (ma-lon'), county seat of the allied British and Austrian troops Malone Co., New York, 59 under Marlborough and Prince Eugene, miles N. E. of Ogdensburg. It has iron, September 11, 1709.

was called to the London bar in 1767, but devoted himself entirely to literary pursuits. He published an edition of dred parts of barley yield about ninety-Shakespere with suggestive notes, in two parts of air-dried malt. See Brew-1790; Remarks on the Rowley (Chattering.

ton) Controversy; an Inquiry into the Ireland Shakesperean Forgeries; biographical memoirs of Sir Joshus Reynolds, blong to Britain, 62 miles s. s. w. of African Longth Dryden, W. Gerard, Hamilton, etc.

Lancelot, Tristram, the Quest of the Graal, and the Mort d'Arthur, was first printed by Caxton in 1485. Malory is supposed to have been a Welshman, but all that is known of him is that he was a knight, and finished the book about 1470. The work is one of the most celebrated of mediæval productions.

shipping trade of the port is large. Pop. nus of plants, the type of the nat. order (1912) 92,338.

Malmsey Wine (mam'zi), is a trees or shrubs, with opposite shortly-sweet wine obstalked leaves and axillary and terminal ers. The fruit of one species (Malpighia urens) is the Barbadoes cherry of the West Indies.

Malpighian Bodies and Cor-

Rance, the island, and causeway. Pop. miles 8. E. of Valenciennes, celebrated for the defeat of the French under Villars by

woolen, paper, flour and pulp mills, etc.

Malt (malt), grain, usually barley, steeped in water and made to steeped in water and made to steeped in the starch of the grain being editor of Shakespere, was thus converted into saccharine matter, born at Dublin in 1741; died in 1812. He after which it is dried in a kiln, and then was called to the London bar in 1767, used in the brewing of porter, ale, or but devoted himself entirely to literary been, and in whisky distilling. One hun-

Dryden, W. Gerard, Hamilton, etc.

Malory (mal'o-ri), Sir Thomas, born probably about 1430. His breadth, about 9 miles; area, 98 square compilation, The Most Ancient and Familes, to which the adjoining islands of mous History of the Renowned Prince Gozo and Comino add 24. It is of an irregular oval shape, deeply indented on all sides except the south, where the coast forms a continuous and almost unbroken line. The most important indentation is the double bay on which the capital, Valetta, stands. The greatest elevation of the island is about 750 feet. There are only a few small streams, but the springs are so numerous and copious that no Malot, HECTOR HENRI, a French nov-deficiency of water is felt. An extensive list, born near Rouen in series of water-works, including reservoirs 1830; died in 1907. He lived in London for irrigation, have recently been conas a newspaper correspondent and wrote structed. The soil is thin, and rests on a numerous novels, including the auto-calcareous rock; in some parts earth has biographical Le Roman de mes Romans. been brought from Sicily and put down.

Malpighi (mål-pö'gë), MARCELLO, an Corn, cotton, potatoes and clover are the Italian physician and chief crops. Both the vine and live are

climate is very hot in summer. but pleasant and healthy in winter, attracting many visitors at this season. Malta passed successively through the hands of the Phœnicians, Greeks and Carthaginians, and was finally attached to Rome during the second Punic war. After the fall of the Roman Empire it was seized at different times Vandals, Goths and Sar-From acens. the last it pass-

without defense to Napoieon. It was taken by the British in 1800, and finally annexed by them in 1814. The executive government is in the hands of a governor and council. By a new constitution adopted in 1888 the legislative council consists of the governor and the members of council (6), with 14 members elected by the constituencies into which Malta and the islands of Gozo and Comino have been divided. The people are mainly of Arabic race and speak a kind of Arabic mixed with Italian. Italian and English are also spoken. The educational institutions include a university, a lyceum, two secondary schools, besides primary and infant schools. Besides the capital Valetta and the Three Cities adjoining, there are several considerable towns or villages. The total population, inclusive of the garrison (about 5000) 206,690.

cultivated, and fruit, particularly figs and ranges, is very abundant. The manufactures consist of cotton goods, lace, jew-political opinions caused his banishment elry, etc. The central position of Malta in the Mediterranean makes Valetta an invaluable naval station. It has, in convergence here provided with excellent Physician et al., Physician et al invaluable naval station. It has, in con-sequence, been provided with excellent Physique et Politique; Tableau de la docks and very strong fortifications. The Pologne; Précis de la Géographie Universelle, etc.

> Cross. Cross. Maltese $\mathbf{D} \circ \mathbf{g} \stackrel{(\mathbf{m} \mathbf{a}, \mathbf{l}, \mathbf{r})}{\mathbf{t} \stackrel{\mathbf{e}}{\mathbf{z}} \mathbf{z}'),$ a very smalí a very smankind of spaniel, with long silky, generally white hair and round muzzie. They

Maltese

are lively and good - tempered, and make agreeable pets. Maltha

(mal'tha), a variety of bitumen, viscid and tenacious, like pitch. It is unctuous to the

Shar Iddud Bay MEDITERRANEAN Oragut Pt. SEA Ricasoli Pt. Tasbiesch . Bight Rinella B. laval Hospital Corrading The HARBOUR of VALETTA. CO **IPrison** ENGLISH MILES

the last it passed to Sicily, and followed its fortunes till 1522, when Charles V granted it to the order of St. John of Jerusalem, the knights of which defended it successfully against a economist, born in 1766; died in 1834. which detended it successfully against a economist, both in 1700, the tremendous siege by the Turks in 1565. He studied at Jesus College, Cambridge, In 1798 the grand-master surrendered it became fellow of his college, took orders without defense to Napoieon. It was and held a small living in Surrey. In taken by the British in 1800, and finally 1805 he was appointed professor of history and political economy in the East India Company's College at Haileybury, an office which he held till his death. In 1798 he first published the views with which his name is associated in his Essay on the Principles of Population as it Affects the Future Improvement of Society. It was improved and matured in subsequent editions. His leading principle is that population, when unchecked, goes on increasing in a higher ratio than the means of subsistence can, under the most favorable circumstances, be made to increase; that the great natural checks to excessive increase of population are vice. misery, and moral restraint; and the great business of the enlightened legislator is to diminish the first two and give every encouragement to the last. Besides Malte-Brun (mält-brun), geographer, the Essay Malthus wrote various pamproperly MALTHE Kon-phlets and works of temporary interest.

His theory has been strongly debated and It is a residence place for New Yorkers

county of York, 16 miles northeast of the city of that name, on the right bank of the Derwent. There are

Malva. See Mallow.

Malvaceæ (mal-vā'se-ē), the mallows, enous plants, having polypetalous flowers, monadelphous stamens, unilocular anthers, valvate estivation, and often an highest class at once of the Vertebrata external calyx (epicalyx) or involucre. A large proportion of the order consists those warm-blooded animals we familiarly of herbaceous or annual plants, inhabiting term 'quadrupeds,' the whales and other all the milder parts of the world, but fish-like forms, and man himself. Their found most plentifully in hot countries. found most plentifully in hot countries. Several species are of essential service to man. As emollients they are well known in medical practice. The hairy covering of the seeds of the various species of Gossprium forms raw cotton. The inner bark of many species yields fiber of considerable value. Many species of Althæa, Sida and Hibiscus are splendid flowering plants. See Mallow.

Malvasia (mal-va'shi-a), the Italian Napoli di Malvasia, a great fortress and commercial center of the Levant during the middle ages; now a small town with about 1000 inhabitants on the eastern shore of the Morea.

Malvern (mal'vern), Great, a fash-ionable watering place and health resort of England, county of even spines. The Worcester, 8 miles s. w. of the city of skeleton exhibits a Worcester, on the eastern slope of the uniformity of es-Malvern Hills. It is irregularly built, sen tial structure, but is surrounded by beautiful villas and and in most points handsome mansions, and has large and handsome hydropathic establishments, as fine church, etc. Malvern College is a flourishing proprietary institution on the plan of the great public schools. Pop. (1911) 16,514.

Malvern Hills, a range of England, on the borders of Worcester and Hereford shires. It extends north and south for about 9 miles, and attains an eliting of 1908 feet. and attains an altitude of 1395 feet.

Malwan (mäl'wän), a town of India, Bombay, on an island off the coast, 210 miles s. of Bombay. Pop. about 17,000.

opposed, and so far the facts do not acand has many fine homes. Pop. 6571. cord with it, whatever the future may Mamelukes, or Mamalukes (mam'disclose.

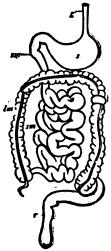
Mamelukes, or Mamalukes (mam's disclose.) Malton (mal'tun), a town of England, the former mounted soldiery of Egypt, consisting originally of Circassian slaves. As early as 1254 they became so powerful that they made one of their own number some large breweries, and also foundries, sultan, this dynasty continuing till 1517, agricultural implement works, etc. Till when it was overthrown by Selim I. 1885 it returned a member to Parliament. They still, however, continued to be virgop. (1911) 4822.

Malva. See Mallow. the end of the eighteenth century, and in 1811 Mehemet Ali caused a general mas-

sacre of them throughout Egypt.

Mammalia (mam-māl'ya;

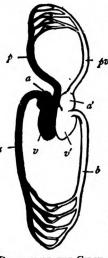
teristic is that the female suckles the young on a secretion peculiar to the class, furnished by the mammary glands of the mother, and known as milk. The skin is always more or less covered with hairs, which are found in many forms, from the finest wool or silky down to large coarse bristles and even spines. The agrees with that of man. The cav-ity of the thorax or chest is bounded by the ribs, which DIGESTIVE STSTEM OF A vary greatly in number, but gener-



MAMMAL

g, Gullet or cesophagus; ally correspond to s, stomach; m, smallintes-that of the dorsal tine; lm, Large intestine; r, vertebræ. The skull Large intestine terminat-forms a single

piece composed of bones immovably fastened together, to which is articulated the lower jaw, composed of two halves united at the chin. The skull is joined to the spine by means of two condyles which fit Mamaroneck (ma-mar'o-nek), a spine by means of two condyles which fit town of Westchester into the first cervical vertebra. The Co., New York, on Long Island Sound, limbs, like those of all other Vertebrata, 20 miles eastward from New York City. are never more than four. The front limbs are invariably present, but in monkeys, in the kangaroos, in the pig, cetaceans and such allied forms as the and most of all in the ruminants, exhibit dugongs and manatees the hinder limbs a division into compartments.



are referable to four groups, which differ in form, position, and function: incisors, canines, premolars and molars. The chest or thorax in all mammals is separated from the abdominal cavity by a complete diaphragm or 'midriff,' which thus constitutes a great muscular which thus constitutes a great muscular partition between these cavities, and also forms the most important agent in effecting the movements of the chest during respiration. Within the thorax the heart and lungs are contained; while the abdomen and its lesser pelvic cavity contain the organs relating generally to digestion, excretion, and reproduction. The stomach, generally simple, may, as in some

A liver are either completely suppressed or pres- and pancreas are present in all Mamma-ent only in a rudimentary state. The lia. The lungs agree in essential limbs are gener-structure with those of man, as also does ally well devel-the heart with its four chambers—right oped, and are most and left auricles and right and left ven-commonly adapted tricles. The red corpuscles of the blood for terrestrial pro- are non-nucleated, and are circular in gression; some are shape except in the case of the camels. suited for burrow- All mammals with the exception of the ing, others for monotremes are viviparous, but there are climbing, those of considerable differences in the relations the cetaceans and subsisting between mother and young beseals for swim fore birth, thus leading to the division ming, while some into placental and aplacental mammals (the bats) have (See Placenta.) Man and all other the forelimbs demammals except the monotremes and the forelimbs de-mammals except the monotremes and veloped into a kind marsupials belong to the former division. of wing. Teeth All mammals possess mammary or milk are present in glands, which, however, may differ chiefly most mammals; but in number and position throughout the they are only reprecedant. (See Mammary Glands.) In the sented in the emclassification of this important group authors in the whole theorities differ somewhat but the mammals. bryo in the whale-bone whales, and are mals may be divided into the following entirely absent in groups:—Man (Hominidæ); Apes and the ant-eater, pan- bonkeys (Simiæ); the Prosimians or Le-golin, and echidna. murs (Prosimii); the Bats (Chirop-The teeth are tera); the Insect-eaters (Insectivora); DIAGRAM OF THE CIRCULATION IN A MAMMAL.

(The cavities containing venous blood are narked black, those containing atterial blood are only a single of the cavities containing atterial blood are only a single of the cavities containing atterial blood are only a single of the Fiesh-eaters (Carnivora); the Seals (Pinnipedia); the Whales and Dolphins ont ossified to the (Cetacea); the Sea-cows (Sirenia); the Jaw-bo ness as in Elephants (Proboscidea); the Odd-toed lower forms. Mam- Ungulates (Perissodactyla); the Eventaining atterial blood are ing venous blood are mals which have toed Ungulates (Ferissodactyla); the taining arterial blood are only a single set Gnawers or Rodents (Rodentia); the left white). a. Right are of teeth through- Edentates (Edentata); the Marsupials, ricle; p., right ventricle; p. out life are termed or Pouch-bearing Mammals (Marsupia-pulmonary artery carry monophyodont; lia); and the Molotremes (Monotre-

ricle; r. right ventricle; p. pulmonary artery carrying venous blood to the lungs; pr. pulmonaryveins carrying arterial blood from the lungs; r. left ventricle; b. teeth) replaced by a se c o n d set of mals. These structures present in man blood to the body; c', vena carrying venous blood to the heart.

The teeth ventricle; b. teeth) replaced by a se c o n d set of mals. These structures present in man blood to the heart.

The teeth ventricle; b. teeth) replaced by a se c o n d set of mals. These structures present in man blood to the heart.

The teeth ventricle; b. teeth) replaced by a se c o n d set of mals. These structures present in man blood to the heart.

The teeth ventricle; p. out life are termed or router-bases (Monotremes (Monotremes (Monotremes (Monotremes) those who have the milk-producing organs, the distinctive mark of the mamnals. These structures present in man blood to the heart.

The teeth ventricle; p. tethose who have the milk-producing organs, the distinctive mark of the mamnals. These structures present in man blood to the heart.

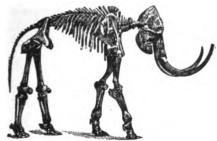
The teeth ventricle; p. tethose who have the milk-producing organs, the distinctive mark of the mamnals. These structures present in man blood to the heart.

The teeth ventricle; p. tethose who have the milk-producing organs, the distinctive mark of the mamnals. These structures present in man blood to the heart.

The teeth ventricle; p. tethose who have the mitals. an essentially lobular structure. The lobes are divisible into smaller lobules, which consist ultimately of groups of vesicles which open into minute ducts converging into larger channels which lead to the milk reservoirs at the nipple. The nipple itself is composed of un-striped muscular fibers and areolar tissue. It also possesses erectile powers, and blood-vessels are in consequence freely distributed to it. These glands, save in exceptional instances, are understances in the male. They are always veloped in the male. They are always in pairs on some part of the ventral surface of the body, but in number and position they vary much in the various groups.

Mammee Tree (ma-me'), or WEST

Mammon Man



Mammoth (Elephus primigenius).

remains of which are found in European, Asiatic, and North American formations. Geologically speaking, the mammoth, or Elephas primigenius, dates from the Postpliocene period. It survived the glacial period, and lived into the earlier portion of the huremains having

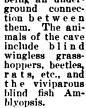
(Mammēa Americāna), nat. order Guttiferæ, a tall, handsome tree bearing a fruit been preserved in the ice and eventually about the size of a cocoanut. This has thawed out, was discovered towards the two rinds enclosing the pulp, which is close of the eighteenth century on the firm, bright yellow, and has a pleasant banks of the river Lena, in such a perfect taste and smell. The seeds, which are lasted that the flesh was eaten by dogs, large, are used as anthelmintics, and a wolves and bears. Its skin was perfectly preserved, and was seen to be clothed with a furry wool of reddish color, in-terspersed with black hairs. The skeleton and other parts of this animal are pre-served in the St. Petersburg Royal Museum. It must have been twice as bulky as the elephants at present living. Other examples have since been found.

Mammoth Cave, a stupendous cave in Kentucky, near Green River, about 80 miles s. s. w. of Louisville. It is one of a large series of vast caverns here formed in the lime-stone rock, and which are found over an area of 6000 miles in Kentucky, Tennes-see and Indiana. It has been penetrated 14 miles, and has many windings and offgum distilled from the bark is used to shoots, some of them but imperfectly ex-destroy chigoes.

Mammon (mam'un), a Syriac word of its stalactite and stalagmite formations used in St. Matthew as a are dusty and dilapidated; consequently personation of riches or worldliness, it is more remarkable for its extent, the There does not appear to have been any size of its halls, and height of its domes, idol in the East receiving divine honors than for the variety or beauty of its under this name.

scenery. It contains several small lakes Mammoth (mam'uth). a species of or rivers, the largest, Echo River, being extinct elephant, the fossil more than half a mile long. It rises and

falls a c cording as Green River is in flood or otherwise, there being an underground connecmals of the cave wingless grasshoppers, beetles,





Trees. See Sequoia.

St. Petersburg Mammath. been frequently found associated with human remains, and its figure carved on bone. It appears to have been widely endeavor has often been made in classifibone. It appears to have been widely endeavor has often been made in classindistributed over the northern hemisphere, cation to separate man from the brute
but never south of a line drawn through creation. One system, expressing a vast
the Pyrenees, the Alps, the northern gap between the Quadrumana and man,
shores of the Caspian, Lake Baikal, classifies man in the order Bimana ('twoKamchatka and the Stanovoi Mounhanded'), the highest division of the
tains. It had large curved tusks and
Mammalian class; and relegates the monshaggy hair. The bones and tusks have
been found in great abundance in Sibe-



progression and supporting the weight of the body; while the upper limbs have nothing to do with progression, but sub-serve prehension entirely. The bones of the face in man do not project forwards, but they are elongated in a downward direction; the face and forehead in the more civilized races being situated very pearly in the same plane. Similarly another noteworthy and distinctive character of the human form. The brain convolutions also are more numerous and complex than is the case with any other mammal. The teeth of man are arranged presence of the interval or diastema, in also Ethnology, Anthropology, Anthropology the less prominent muscular development of the buttocks and calves, and in other minor differences. The orangs most closely approach man's structure in the from England and Ireland, and 16 miles number of ribs and in the form of the from Scotland; greatest length, N. E. to cerebrum, while they exhibit the greatest soft the limbs. The chimpanzees are most small island, the Calf of Man (800 anthropoid in the shape of the cranium, in the arrangement and succession of the compared with that of the legs. Of the initiating in Snaefell (2024 feet). Lead higher apes the gibbons are those furthest and zinc are found in considerable quantem oved from the human type of tities, especially the former. Fishing is

The more recent arrange- structure. Chief among the psychical ments, however, classify man and the features, or rather among the results of monkeys in one order, making man the the operation of the principle of mind, highest family or group of this order, we note the possession of the moral sense From the purely anatomical point of view of right and wrong. The possession of the differences which separate the an- articulate language, by which he can thropoid apes from man are in some communicate his thoughts, is also the exrespects less than those which separate clusive possession of man, and draws a respects less than those which separate clusive possession or man, and draws a these higher apes from apes lower in the sharp line of separation between him and scale. But the mental or psychical enall other animals. With regard to the downents of man oblige us to remove him geological history of man, the earliest far above the highest Quadrumana; and traces yet discovered belong to the Posteven the characters by which he is pliocene deposits in conjunction with exanatomically separated from the highest isting species of shells and some extinct apes form a well marked and appreciable species of manmals. Man's advent upon surice. The first special obspactavistic of the certh, is consequently referred to series. The first special characteristic of the earth is consequently referred to a series. The first special characteristic of the earth is consequently referred to a man is his erect position and bipedal period much anterior to that which for progression. The lower limbs, with the mer limits and theological ideas prefect broad and plantigrade and the well-scribed. Among the modern theories redeveloped heel, are devoted exclusively to garding the origin of man may be noted progression and supporting the weight of those of (1) Darwin: that man is dithe body; while the upper limbs have rectly descended from an extinct form of pothing to do with progression, but sub-supproved and with a tail and no interior. anthropoid ape, with a tail and pointed ears, arboreal in its habits and an in-habitant of the Old World; further, that man has diverged into different races or but they are elongated in a downward man has diverged into different races or direction; the face and forehead in the subspecies, but that all the races agree more civilized races being situated very in so many unimportant details of nearly in the same plane. Similarly structure, and in so many mental pecuthe development of a distinct chin is also larities, that they can be accounted for a peculiarly human feature, and one only through inheritance from a common which in the highest varieties of mankind progenitor. (2) Wallace also affirms the becomes most marked. The great cranial original unity of man, and places him capacity of man, or the greater size of apart as not only the head and culminatthe cranial or brain portion as compared ing point of the grand series of organic with the facial portion of the skull, forms nature, but as, in some degree, a new and with the facial portion of the skull, forms nature, but as, in some degree, a new and distinct order of being; maintaining that a superior intelligence has guided the de-velopment of man in a definite direction and for a special purpose, just as man guides the development of many animal diastema or interval. The development holds a plurality of the race; adopts Darof hair also is very partial. The gorilla win's idea of natural selection accounting presents of all the apes the nearest ap- for the origin and endowments of man, or nair also is very partial. The gorina with sidea of natural selection accounting presents of all the apes the nearest appoint to the human type taken in its but rejects Wallace's idea of the higher entirety; but it differs in the relative controlling intelligence. (4) Mivart pronumber of vertebræ (13 dorsal and 4 lumpounds a theory of a natural evolution bar, to 12 and 5 respectively in man), in of man as to his body, combined with a the order of dental succession and in the supernatural creation as to his soul. See presence of the interval or diastema, in also Ethnology, Anthropology, Anthropo

an important industry, but the manuan important industry, but the manufactures are almost entirely domestic. The island 's governed by an independent legislature called the Tynwald, consisting of two branches—the Governor and Council and the House of Keys. Two judges or 'deemsters' try civil and criminal cases. The Manx language, a Celtic dialect, is still in use, although all the inhabitants speak English. The principal towns are Douglas, Castletown, Peel and Ramsey. This island was taken by the Norwegians in 1098, sold to the Scots in 1266, and was repeatedly occupied by the English and Scots up till 1344, when it remained in possession of the former. It was later held as a feudal sovereignty by the earls of Derby, and more recently by the dukes of Athole, from whom it was purchased for the British crown in 1764 for £70,000; and finally, in 1829, certain remaining privileges were ceded by the duke on receiving an award of £416,000. Pop. (1911) 52,034.

Manaar (man-a-ar'), GULF of, a part

of the Indian Ocean between ('eylon and Hindustan, separated from Palk's Strait by a reef called Adam's Bridge, which runs between the two islands of Manaar (18 miles by 2½ miles) and Ramisseram. The gulf is

noted for its pearl fisheries.

Manacor (mä-na-kör'), a town of Spain, in the island of Majorca. Pop. 12,408.

Manakin (man'a-kin), the name given to the dentirostral insessorial birds forming the subfamily l'iprinæ. They are generally small and of brilliant plumage, and are mostly confined to South America, a few species before four in Central America and Mexing found in Central America and Mexico. The typical genus is Pipra, which includes the bearded manakin (P. Manacus), and several others. An allied species is the beautiful orange manakin or the African manatee (M. Senegalensis).

cock-of-the-rock (Rupicola aurantia). The dugong (which see) belongs to the cock-of-the-rock (Rupicola aurantia)

Manáos (ma-na'oosh), a town of Bra- same order. zonas, on the Rio Negro. It has a large export trade in India rubber, cacao, dried fish, Brazil nuts, etc. Pop. 40,000.

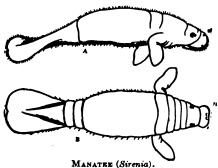
Manassas. See Bull Run.

Manasseh (ma-nas'se), (1) eldest about £7000. See Life-rookets.

Mancha, La (lä-män'chà), an ancient Egypt, His descendants formed a tribe,

which, in the Promised Land, was settled half east of the Jordan and half to the west of this river. (2) King of Judah, son of Hezekiah, whom he succeeded at twelve years of age, 697 B.C. He became an open idolater; was taken captive to Babylon; ultimately repented and was restored to his kingdom. He reigned for fifty-five years.

Manatee (man-a-te'), the sea-cow or lamantin, a gregarious aquatic mammal of the genus Manatus. order Sirenia, found on the coasts of



town of Same from above. n, Nostrils.

Managua (ma-nä'-gwà), a town in Central America, capital of the state of Nicaragua, near the southwest shore of the lake of same name, 32 miles s. s. w. of Leon. Pop., with the district, about 30,000.—The lake, about 38 miles long and 16 broad, discharges itself into that of Nicaragua.

Manakin (man'a-kin) the new construction of the state of Nicaragua.

Manakin (man'a-kin) the new construction of Maria and Sudh America, Africa, and Australia. They generally frequent the mouths of rivers and estuaries, and feed on algor and such littoral land vegetation as they can reach at high tide. Their anterior limbs or swimming paws are furnished with nails, by means of which they drag themselves along the shore. They are large awkward animals. times growing to 20 feet. The skin is of a grayish color, sparsely covered with hairs. Their flesh is excellent, and they furnish a soft, clear oil which does not become rancid. There are several species, the principal being the American manatee (M. Americanus), which inhabits the shallow waters of the east coasts of South and North America, and

man-na cosh), a town of Black in zil, capital of province Amazil. capital of province Amazili Ranby (man'bi). Captain George William, born in Norfolk in India rubber, cacao, dried nuts, etc. Pop. 40,000.

Manby (man'bi). Captain George William, born in Norfolk in 1765; died in 1854. About 1808 he invented the apparatus known by his name for saving life from shipwrecked vessels near the coast, and was rewarded with

Castile, forming the chief part of the modern province of Ciudad-Real; famous as the scene of Don Quixote's adventures. Manche (mansh), LA, a department of Northern France, bounded on the W., N., and N. E. by the English Channel, and landward by the departments of Calvados, Orne and Mayenne. It is about 80 miles long by 30 broad,

Manchester, a municipal and parlia-mentary borough and city of Lancashire, England, 188 miles m. N. W. from London by railway, and 32 miles east by north of Liverpool. The old town of Manchester proper, and the large and populous townships of Hulme, Chorlton, Ardwick, Cheetham, etc., are situated on the east or left bank



Manchester-The Royal Infirmary and Piccadilly, from the Queen's Hotel.

476,119.

and has an area of 2475 sq. miles. Pop. of the Irwell, while the extensive borough of Salford is situated on the right bank; Manchester

(man'ches-ter), a town but communication by a dozen bridges of Hartford Co., Connecticut, 9 miles E. of Hartford. It has great The Manchester charter of incorporation silk mills, and manufactures of paper, dates from 1838; in 1832 it was made a woolen and cotton goods, needles, machin-parliamentary borough, and in 1852 it ery, electrical appliances, sorp, etc. Pop. became a city. It has many important (1910) 13,641; (1920) 18,370. and handsome public buildings and many Manchester, a city, one of the fine streets. The center of the town is county seats of Hills-largely occupied by immense piles of borough Co., New Hampshire, the largest warehouses and offices, while the factoristic of the Management of the factorist of the management of the factorist of the management of the factorist of the factorist of the management of the factorist city north of the Massachusetts line in ries and other manufacturing works are New England. It is on the Merrimac and chiefly in the outskirts. Among the chief Piscataquog rivers, 18 miles s. of Concord, public buildings are the town hall or on Boston & Maine R. R. Abundant municipal buildings in the Gothic style, water power is derived from Amoskeag finished in 1877 at a cost of £1,053,264; Ealls. It is one of the first cities in the the Accient Courts of the control of water power is derived from Amoskeag finished in 1877 at a cost of £1,053,264; Falls. It is one of the first cities in the the Assize Courts, also a fine specimen country in the production of textile of modern Gothic, behind them being a fabrics, the making of shoes, and the well-arranged prison; the Royal Exmanufacture of cigars. There are over change; the Royal Infirmary; the old 20,000 textile workers; over 10,000 are town-hall, in which the Free Reference employed in the shoe business. It has Library is now located; the Free Trade a county court house, State industrial school, Institute of Arts and Sciences. Institution, etc. Among the churches the The grave of General Stark (q.v.) is in first place is due to the cathedral, a fine Stark Park. A World War Memorial is specimen of Perpendicular Gothic, built in Merrimack Square. Pop. (1910) in 1422; but the soft stone of which it is 70,063; (1920) 78,384. built having necessitated numerous re

Manchester Manchuria

pairs, the edifice has a comparatively of machinery in cotton-spinning towards new appearance. The chief educational the end of the eighteenth century gave institution is Owens College, the nucleus power and direction to the trade of modoff the Victoria University, founded in ern Manchester, and its progress since 1846 by a bequest of upwards of £100,000 has been extraordinarily rapid. A temform John Owens. (See Owens Colporary check resulted from the Civil war lege.) Cheetham's Hospital was founded under the will of Humfrey Cheetham in 1862, causing the deepest distress in 1853 for the education of poor boys. Attached to the institution is a library of South Lancashire. Pop. of Manchester, tached to the institution is a library of (1911) 714,427; of Salford, 231,380.

Manchester Party or School, number of denominational colleges—the number of denominational colleges—the the name given to an English political Lancashire Independent College, the party whose exertions were particularly Primitive Methodist College, St. Bede's directed to the development and thorough Roman Catholic College, etc. The Grammar School was founded in 1520, and has trade. They had their chief seat in Manchilotions at Oxford or Cambridge. They had their chief seat in Manchilotions at Oxford or Cambridge. Were the principal leaders. From their and philosophical societies, some of them advocating non-intervention in foreign afof considerable standing. The Free fairs, of arbitration instead of war, etc., Library, established in 1851, has a reference library in the main building of 200,000 volumes, and six branches with upwards of 100,000 volumes. Benevolent and charitable institutions are numerous. For open-air recreation there are the botanical and horticultural garden; the West India Islands and Central America, Queen's Alexandra and Philip's parks; and is valuable for cabinet work. It the Belle Vue zoological gardens; and possesses poisonous properties, which, never the interventing into the Allest Mercial in the Allest Mercial in the followed here in the properties of severe burnseum, and covering an area of 40 acres. The milky juice when dropped upon the Among the public monuments the most skin produces a sensation of severe burnnoteworthy is the Albert Memorial in ing. followed by a blister.

front of the town hall. The chief manufacture is cotton, though woolen and silk
fabrics are also produced. Metal manufactures, engineering, and the making of ing the northeastern section of the emall kinds of machinery employ many hands. Railway communication is of the east by the Amur or Amoor and Usuri,
most extensive kind the largest stations, which sensate it from Russian territory.

hands. Railway communication is of the east by the Amur or Amoor and Usuri, most extensive kind, the largest stations which separate it from Russian territory; being Victoria, London Road, Exchange on the west by the provinces of Irkutsk, and Central. The commerce of the town Mongolia and Chih-le; on the south by has been much facilitated and extended by the Gulf of Leaotong, the Yellow Sea the completion of the Liverpool and Man- and Cores. It is divided into three chester ship canal, opened January 1, provinces, Shing-King, Feng-Tien, or 1894. Its length is 35½ miles; its width Leaotong in the south, of which Mukden at water level being 172 feet, at bottom is the capital; Kirin in the center, with 120 feet; depth 26 feet; dock accommodation 133 acres. The manufacture of Lung-Kiang in the north, with capital gas, supply of water, working of tramways, etc., are directly or indirectly in the peninsula is the historically famous dation 133 acres. The manufacture of Lung-Manag in the norm, with Capital gas, supply of water, working of tram—Tsitsihar. On the southern extremity of ways, etc., are directly or indirectly in the peninsula is the historically famous the hands of the corporation, and an extensive scheme is being proceeded with is about 360,000 sq. miles. The Manchus for bringing an improved water supply are a hardy race, and their country has from Thirlmere in the Lake District.—long been the great recruiting ground for the Chaptage of the December 1 the following the country but of late years large tensive scheme is being proceeded with is about 350,000 sq. miles. The Manchus for bringing an improved water supply are a hardy race, and their country has from Thirlmere in the Lake District.— long been the great recruiting ground for the Chinese army; but of late years large name. Its history is legendary down to the tenth century, when it was devasted by the Danes. In the twelfth century the woolen manufactures began to develop, and in 1301 it received municipal liberties and privileges. During the civil war the town suffered much at the Manchu dynasty continued to reign in hands of both parties. The introduction the Manchu language becoming the court and official language. The country is mountainous, but on the whole fertile. The climate is good, for though the winters are severe they are assignats (which see) insofar as spenealthy and bracing. The vast forests cific pieces of property, enumerated in a of the north are rich in useful timber of table, were pledged for the redemption all kinds. The principal food crops are only a general claim.

The only a general claim. vine, indigo, cotton, opium, tobacco, etc., mandavi. are cultivated. In 1898 Russia obtained are cultivated. In 1898 Russia obtained from China a lease of the harbors of Port Arthur and Tal-lien-wan, at the latter of which the city of Dalny was built. The encroachments of Russia in Manchuria led in 1904 to a disastrous war with Japan, the armies of the latter capturing Port Arthur, Dalny and Mukden. By Public Beneats. the first part of which Japan, the armies of the latter capturing in 1733. His most celebrated production of the Arthur, Dalny and Mukden. By is the Fable of the Bees, or Private Vices the terms of the treaty of 1905 Russia Public Benefits, the first part of which withdraw from Manchuria, appeared in 1723, and the second in 1728. agreed to withdraw from Manchuria, appeared in 1723, and the second in 1728, while Japan restored that country to It created quite a sensation, and called China. The Chinese revolution of 1911- forth replies from Bishop Berkeley, Will-12 overthrew the Manchu dynasty in iam Law, and others. Among his other

contained the palace, etc.; the second, which was surrounded by a moat and walls, contained the houses of the government officials, soldiers, etc.; while outside dwelt the general body of the people. Since the British occupation the town has suffered severely from fires and floods. Pop. (1911) 138,299.

Mandamus (man-dā'mus), in law, a command or writ issuing from a superior court, directed to any person, corporation, or inferior court, requiring them to do some act therein specified which appertains to their office and duty, as to admit a person to an doubt. office or franchise, or to deliver papers,

Mandarin Duck, a beautiful spe-(Anas or Dendronessa galericulata) from Eastern Asia, the males of which exhibit a highly variegated plumage of green, purple, white and chestnut, the females being colored a more sober brown. The male loses his fine plumage in summer.

See Mandvi.

China, and a republican government succeeded the empire.

Manchus, or Manchoos. See preceding article.

Mandalay (man'da-lā), the capital of Burmah from 1860 to ist annexation by India in 1886. It is annexation by India in 1886. It is from the left bank of the Irrawaddy. It of the fifteenth century. That part of consists of four concentric quadrangles, the book which treats of the Holy Land consists of four concentric quadrangles, the book which treats of the Holy Land of which under native rule the innermost may be a record of the author's excontained the palace, etc.; the second, perience, but the greater part is taken from the travels of the friar Odoric, written in 1330, and other sources. The written in 1950, and other sources. The first printed English edition is that of Wynkyn de Worde, 1499; and the best that of Halliwell, 1839, reprinted 1866. Mandeville had long the reputation of being the 'father of English prose.' He was said to have been born at St. Albans about 1300, set out on his travels in 1322, returned in 1357, died and was buried at Liège; but much of his personal history is mere invention, and the very name of the compiler of the travels is a matter of

Mandible (man'di-bl), the term more especially applied to both Mandarin (man'da-rin), the term the upper and under jaws of birds. In mammals it is applied only to the under government officials of every grade in jaw, and in the Articulata to the upper China. The Chinese equivalent is kvan, or anterior pair of jaws, which are genwhich signifies literally a public character.

Mandarin (man'da-rin), the term the upper and under jaws of birds. In mammals it is applied only to the under jaw, and in the Articulata to the upper chinese control of the pods.

Mandingoes (man-ding'os), a negrotribe of West Africa. remarkable for their intelligence, and generally for the advances they have made in civilization. The original country of this people, who are now spread over a great portion of West Africa, was the north slope of the high tableland of Senegambia. They are nominally Mohammedans, are keen traders, work iron and gold, manufacture cotton cloth and leather, and cultivate a variety of crops.

They live in small independent states, their clay-built walled towns often containing about 10 (600 inhebitants.)

Malwah, a royal palace, etc. It occupies about 8 sq. miles of ground.

Manduria (man-do'rê-a), a town of Southern Italy, province of Lecce, 54 miles N. N. W. of Otranto. taining about 10,000 inhabitants.

Mandioc. See Cassava.

Mandogarh. See Mandu.

Mandoline (man'du-lin), a musical instrument of the guitar There are several varieties, each different tunings. The Neapolitan with different tunings. The Neapolitan and silver, and believed to contain a hunhas four strings tuned like those of the dred shekels of gold and sixty of silver.

natives of south and east of Europe and Western Asia, and not uncommon in British gardens. M. officinālis has large tap-roots; the leaves radical, sessile, ottem; but the flowers, which are white with a bell-shaped corolla, stand upon simple stalks. The fruit is a large two-celled berry of an orange color, containing many kidney-shaped seeds. The root period when Egypt fell under the rule of possesses narcotic qualities, and from its occasional resemblance to the human inferior kind of animal life, and to shriek when torn up. It was believed to have many magical virtues, and to be an inferior kind of the distribution of the standard the first occasional resemblance to the human inferior kind of animal life, and to shriek when torn up. It was believed to have many magical virtues, and to be an inferior kind of the standard the first occasional resemblance to the human inferior kind of animal life, and to shriek when torn up. It was believed to have many magical virtues, and to be an inferior kind of animal life, and to shriek when torn up. It was believed to have many magical virtues, and to be an inferior kind of animal life, and to shriek when torn up. It was believed to have many magical virtues, and to be an inferior kind of animal life, and to shriek when torn up. It was believed to have many magical virtues, and to be an inferior kind of animal life, and to shriek when torn up. It was believed to have many magical virtues, and to be an inferior kind of animal life, and to shriek when torn up. It was believed to have many magical virtues, and to be an inferior kind of animal life, and to shriek when torn up. It was believed to have many magical virtues, and to be an inferior kind of animal life, and to shriek when torn up. It was believed to have many magical virtues, and to be an inferior kind of animal life, and to shriek when torn up. It was believed to have many magical virtues, and to be an inferior kind of animal life, and to shriek when torn up. It was believed to have many magical virtues, and to be have many magical virtues, and to be an aphrodisiac and a cure for barrenness (Gen., xxx, 14, 16).

Mandrill (man'dril), a species of baboon (Oynogophalus mormon), which is distinguished by the mormon), which is distinguished by the short or rudimentary tail, by the elongated dog-like muzzle, and by the presence of buttock callosities which are generally brightly colored. The mandrills inhabit Western Africa, where they associate in large troops. Full-grown males measure about 5 feet; they are exceedingly strong and muscular, and fierce in disposition. They have cheek protuberances colored with stripes of brilliant red

and blue.

Mandu (man'du), or Mandogarh, a deserted town in Dhar State, Central India, the ancient capital of Malwah, 38 miles s. w. of Indore. It is celebrated for its magnificent ruins, in-Malwah, 38 miles S. w. of Indore. It is It is a clean and prosperous town, and celebrated for its magnificent ruins, in- has large exports of coffee. There is a cluding the great mosque, the finest specimen of Afghan architecture in India; a Lutheran Mission has its headquarters martle mausoleum of one of the kings of here. Pop. (1912) 48,412.

Mandvi (mänd'vē), a seaport in the state of Cutch, Bombay, In-dia. It is situated on the Gulf of Cutch, 36 miles s. of Bhuj, the capital of the state, and is a port of call for British-India steamers. Pop. 24,683.

Manch (ma'ne; Heb.), a Hebrew weight used in estimating gold

has four strings tuned like those of the dred shekels of gold and sixty of silver. willing, D, A, E; the Milanese has five Manes (ma'nez), among the Romans, tuned G, C, A, D, E. A plectrum is to whom were presented oblations of vicused in the right hand, the fingers of the left stopping the strings on the fretted first topping the strings on the fretted first (ma'na), Edouard, a French painter of the modern realistic school berger to the modern realistic school and sixty of silver. Mandrake (man'drāk) the popular school, born at Paris in 1832; died in name of plants of the 1883. The Boy with the Sword, in the genus Mandragora, nat. order Solanaceæ, Metropolitan Museum, New York, is one natives of south and east of Europe and of his most representative works.

Manfred (man'fred), King of the Two Sicilies; born in 1231; died in 1266. A natural son of the Emperor Frederick II, he was regent in Italy first for his brother and then for his nephew, on whose rumored death he was crowned king. He refused to resign in favor of his nephew, was excommunicated, and his kingdom of the Sicilies given as a papal fief to Charles of Anjou. The latter marched into Naples and gained a victory, in which Manfred was killed.

Italy, province of Foggia, on the gulf of same name, at the foot of Mount Gargano, 22 miles northeast of Foggia. It was founded by King Manfred about 1263. Pop. 11,549. Manfredonia (mān-frā-dō'nē-ā), a

Mangalore (man-ga-lor'), a seaport and military station of India, in South Canara district, Madras.

Manganese (man'ga-nez; chemical ore. symbol Mn, atomic glass. weight 55), a metal of a dusky-white or whitish-gray color, very hard and diffi-cult to fuse. Exposed to air it speedily oxidizes; it decomposes water with evolu-tion of hydrogen. The common ore of manganese is the dioxide, black oxide, or peroxide (MnO2), the pyrolusite of mineralogists, a substance largely employed in the preparation of chlorine for the manufacture of bleaching powder or chlofacture of plate glass, to correct the yellow color which oxide of iron is apt to ing cattle. It requires a liberally mainpart to the glass. It is also used in nured generous soil, which in favorable making the black enamel of pottery. circumstances may grow from 70 to 80 Other oxides are the protoxide (MnO), tons per acre. It is produced largely in sesquioxide (Mn₂O₂), the red oxide the United States. making the black enamel of pottery. Other oxides are the protoxide (MnO), (Mn_3O_4) , and permanganic acid (Mn_2O_7) . Mango (man'go), the fruit of the The latter is only known in solution or in a state of combination. It is largely used in analytical chemistry. Metallic manof tropical Asia, but now widely cultiganese is obtained by reduction of the vated throughout the tropics. Fine variations of the value of the control of the value of the control of the value of the control of the value of the v ganese is obtained by reduction of the oxide by means of heat and finely divided carbon. It resembles iron in appearance and properties; is a constituent of many mineral waters, and is employed in medicine. In steel manufacture it is used in certain proportions with advantage as regards the ductility of the steel and ability to withstand forging, and in other manufacturing operations it forms an important element. It is found in the United States, which yields an annual product at times above 300,000 tons.

Manganese Bronze, hronze in which the copper forming the base of the alloy is mixed with a certain proportion of ferro-manganese, and which has exceptional qualities in the way of strength, hardness, toughness, etc. Various quali-ties are manufactured, each suited for certain special purposes. One quality, in which the zinc alloyed with the treated copper is considerably in excess of the when simply cast is said to have a tensile strength of about 24 tons per square inch. with an elastic limit of from 14 to 15 tons. Another quality used in gun-founding has all the characteristics of forged steel without any of its defects. Another quality is in extensive use for toothed wheels, gearing, brackets, and all kinds of machinery supports. From its

It is used in the manufacture of

Mange (mānj), a cutaneous disease to which dogs, horses, cattle, etc., are liable. It resembles in some measure the itch in the human subject, ordinary mange being due to the presence of a burrowing parasite. Both local applica-tion and internal remedies are used in its cure.

Mangel-wurzel (mang'gl wur'zl), a large-rooted species rate of lime. It is employed in the manu- of beet (Beta vulgāris macrorhīza) exfacture of plate glass, to correct the yel- tensively cultivated in Europe for feed-

> rieties produce a luscious, slightly acid fruit much prized for dessert. The large fruit much prized for dessert. The large flat kernel is nutritious, and has been cooked for food in times of scarcity.

> Mango-bird, the Indian oriole (Oriolus Kundoo).
>
> Mango-fish, a fish of the Ganges (Polynemus risua). about 15 inches long, and highly esteemed for food. It is of a beautiful yellow color, and the pectoral fins have some of the rays extended into long threads. It ascends the Ganges in April and May, and is then sought after as a great delicacy.

> Mangold-wurzel. See Mangel-wur-

Mangosteen (mang'gō-stēn), a tree of the East Indies, Garcinia Mangostāna, nat. order Guttiferæ. The tree grows to the height of 18 feet, and the fruit is about the size of an orange, and contains a juicy white pulp of a delicate, sweet, subacid flavor. It is esteemed one of the most delicious and wholesome of all known fruits.

Mangrove (man'grov: Rhizophora), a genus of plants (type of the family Rhizophoracem) consisting of trees or shrubs which grow in tropical countries along the muddy beaches of low coasts, where they form impenetrable barriers for long distances. They throw mon-liability to corrosion it is largely employed in the manufacture of propellers.

Manganese-brown.

See Cappaugh-brown.

Manganese-brown.

See Cappaugh-lindin banyan tree.

The seeds germinate Manganite (man'ga-nit), one of the in the seed-vessel, the root growing down-ores of manganese, the ward till it fixes itself in the mud. The hydrated sesquioxide. It is also called hydrated sesquioxide or Gray Manganese-and durable, and the bark is used for



Mangrove Tree.

cal countries, extending as far south as New Zealand and Tasmania.

M a n hattan

(man-hat'an), a city, capital of Riley Co., Kansas, on the Kansas River, 52 miles w. of Topeka. It is the seat of the Kansas Agricultural

To stee seat of the Kansas Agricultural College. 1'op. (1920) 7089.

Manhattan, a borough of New York.
City (see New York).
Pop. (1900) 1,850,093; (1910) 2,331,542; (1920) 2,284,103.

Manhattan Island, New York, at Hudson River, and bounded on the north by Spuyten Duyvil Creek (now the Harlem ship canal), is about 13 miles long and 21/4 wide, and contains the principal business and residential section of the city of New York. It rises to an elevation of about 250 feet in its northern section, and is almost completely built over, with the exception of the extreme northern section.

Manhole (man'hol), an opening into a drain, boiler, tank, or other enclosure in the earth or elsewhere, through which a man may enter for ex-

amination, cleaning, or repair.

Manichæism (man-i-kē'izm), a great religious system which

hands, especially the nails. A manicurist is the one who professionally engages in

this duty.

Manifest (man'i-fest) is a document signed by the master of a vessel at the place of lading, to be exhib-

The fruit is said to be sweet Luzon and of the Philippine Islands, lies and edible, and the fermented juice is on the bay of the same name, and at made into a kind the mouth of the river Pasig. of light wine. The sists of an old fortified city with extenname is also sive suburbs, in which are the mass of given to the gethe population, and the business premises, nus Avicennia of factories, and residences of the European the verbena fam- inhabitants. Manila is the center of comily, which occu- merce of the Philippines, and exports pies large tracts sugar, tobacco, cigars and cheroots, in-of shore in tropi- digo, Manila hemp, coffee, mats, hides,



trepang, rice, etc. It imports British and United States cloths, hardware, etc., and a great variety of articles, tea, pottery, etc., from China. The manufactures consist chiefly of cigars and cheroots, and hemp and cotton fabrics. Manila was founded by Miguel Lopez de Legaspé, the conqueror of the Philippine Islands, in 1571. It has frequently suffered from sprung up in western Asia, near the earthquakes, one of the most disastrous close of the third century, of Semitic occurring in 1863. This city, formerly origin, but which adopted many Christian the capital of the Spanish Philippines, elements. It lingered on through persecution until the middle ages.

Manicure (man'i-kūr), professional seat of government of the Philippine care and treatment of the Islands. Pop. 597,995. MANILA HEMP. See

Manilla, or MA See Cassava. Man'ioc.

Maniple (man'i-pl), in the Roman Catholic and some other churches, one of the sacred vestments, vessel at the place of lading, to be exampled ited at the custom-house, containing a specific description of the ship and her being an ornament worn by the priest cargo, with the destination of the ship and of each package of the goods, etc.

Or MANILLA (ma-nil'a), the width and color as the stole and the ends,

Manipur (man-i-pör'), a native state of Northeastern India, consisting principally of an extensive valley in the heart of the mountainous country

hard, triangular scales with sharp edges, and overlapping each other like tiles on a roof; often called Scaly Lizards, Scaly Ant-eaters, or Pangolins. See Pangolin.

Manisa (mä'nē-sa; anciently Magnesia), a town in Asiatic Turkey. It was an important town in the middle ages, and is now a busy center of trade. Pop. about 35,000.

Manistee (man-is-te'), a city, capital of Manistee County, Michigan, on Lake Michigan, at the mouth of the Manistee River, 70 miles s. w. of Traverse City. It is an important center of lumber manufacture, having many saw and shingle mills, also ironworks, shirt, watch and furniture factories, etc. Fruit-growing is a large industry. Pop. 9694.

iron works, lumber mills, chemical factories, charcoal works, etc. It is a summer ries, charcoal works, etc. 1 resort. Pop. (1920) 6380.

Manito (man'i-tō), Manitou, among certain of the North American Indians, a name given to whatever is an object of religious awe or reverence, whether a good or evil spirit or a fetish. Two manitos or spirits are spoken of by

W. Territories, east by Ontario, and west by Saskatchewan. It occupies a position nearly in the center of the North American continent, and extends from 49° to 52° 50' N. lat.; and from 89° to 101° 20 w. lon.; area, 251,832 sq. miles. The climate is warm in summer, but very cold in winter. The summer mean is about 66°, but in winter the thermometer sinks to 30°, 40°, and sometimes 50° below zero, though this severe cold is mitigated by a clear dry atmosphere. The summer months are part of May, June, July, August and September. The prin-

and generally about 1¼ yards in length. part of its course in the United States. See Chasuble.

The largest lakes are Winnipeg, Winnipur (man-i-pör'), a native state pegosis and Manitoba, the two former being only partially included within the boundaries of the province. The greater part of the province consists of level treelying between Assam, Cachar, Burmah less prairie land, covered with a rich and Chittagong; area, 8300 sq. miles; vegetable growth in summer. The banks pop. 284,465.

Manis (ma'nis), a genus of edentate a timber belt extending from about half a mammals covered with large, mile to ten miles back. The soil is generally a rich black mold, resting partly on a limestone formation, and partly on a thick coat of hard clay. Wheat, oats, barley, Indian corn, hops, flax, hemp, and all kinds of garden vegetables produce excellent crops. For wheat growing Manitoba presents peculiar advantages, and the production is large. Potatoes and all other root-crops thrive well, and the prairie grasses furnish good hay. Game is abundant, and the rivers and lakes teem with fish. Lignite is found and the mountains give promise of considerable mineral wealth. The public affairs are administered by a lieutenantgovernor, an executive council, and a legislative assembly elected for four years. Manistique (man-is-tēk'), a city, entirely denominational, and is supported county sent of School-by local assessments, supplemented by craft Co., Michigan, on Lake Michigan, at legislative grants. The capital of the mouth of the Manistique River, 100 province is Winnipeg, situated at the miles w by s. of Sault Stc. Marie. It has junction of the Assiniboine and Red The school system established by law is entirely denominational, and is supported rivers; other towns are Portage la Prairie, Brandon, Selkirk and Emerson. The nucleus of Manitoba was the Red River Settlement established in 1812, but little progress was made till the territory became part of Canada in 1870. The trade of the province has been greatly increased since 1878, when Winnipeg was connected with the railway system of the manitoba (mani-tō-bā'), a province the Canadian Pacific has added to its Manitoba (mani-tō-bā'), a province of the Dominion of Cantha Manitoba (manitoba of the Dominion of Cantha Manitoba on the south by the United 188,100 sq. miles, taken from the North-States, on the north and east by the N. west Territory. Pop. (1911) 455,614.

a lake of Canada. Manitoba Lake, province of Manitoba, 30 or 40 miles s. w. of Lake Winnipeg, about 120 miles in length by about 25 miles in breadth; area, 1900 sq. miles. It receives the waters of several lakes at its northern extremity, and at its south-ern White Mud River. It discharges into Lake Winnipeg through the Dauphin River.

Manitou. See Manito.

Manitoulin Islands (m a n-i-t o'cipal rivers are the Assiniboine and the of North American islands in Lake Hu-Red River, the latter having the greater ron, consisting of Grand Manitoulin, 80 miles long by 5 to 30 broad, Little Mani- climates, as the Eucalyptus mannifera of

mailes long by 5 to 30 broad, Little Manitoulin, and Drummond Island. The two former belong to Canada, the latter to the United States (Michigan). Pop. about 2000, more than one-half being Indians.

Manitowoc (man-i-tō-wok'), a city, county seat of Manitowoc Co., Wisconsin, on Lake Michigan, 75 miles N. of Milwaukee. It has a fine harbor, with excellent shipping docks, and shipbuilding is an active industry. Its lake commerce is large, and there are grain elevators, coal docks, aluminumware factories, farm-implement works, cigar and furniture factories, etc. There is here a Polish orphan asylum; also the county insane asylum. Pop. (1910) 13,027; (1920) 17,563.

Mankato (man-kā'tō), a city, county has been passed through its meshes. It is Minnesota, at confluence of Minnesota and Blue Earth rivers, 86 miles s. w. of St. Paul. It has flour and knitting mills, furniture and engine works, plow and brick factories and many other industries. It has a State normal school. Pop. (1910) 10,365; (1920) 12,469.

Mann, Horace, educator, born at the folish manna, manna seeds and mannabrick food in 1859. The revival of the common school system was the work of his life, and his reports of the ignorance.

common school system was the work of his life, and his reports of the ignorance of the people and the incompetence of the teachers stirred the people strongly to the need of reform. He was secretary of the Massachusetts Board of Education for 11 years, and through his incation for 11 years, and through his influence important changes were made in the school system of the State. He was elected to Congress in 1848, and became president of Antioch College in 1852. His labors have been acknowledged by giving him a place in the New York Hall of Fame.

Manna (man'a), the sweet concrete juice which is obtained by incisions made in the stem of a species of ash, Frazinus Ornus, a native of Sicily, Calabria, and other parts of the south of Europe. The manna of commerce is collected in Sicily, where the manna-ash is cultivated for the purpose in regular plantations. The best manna is in oblong pieces or flakes of a whitish or pale-yellow color, light, friable and somewhat transparent. It has a slight ford; rector of Lavington and Graffham, peculiar odor, and a sweetish taste mixed supplied as a supplie

the Neckar. It is regularly laid out in square blocks, and is surrounded by a promenade on the site of the ancient ramparts. It is connected by a bridge with Ludwigshafen, a thriving town on the opposite bank of the Rhine, in Bavarian territory. It has an extensive harbor and docks, and is the chief commercial town on the Upper Rhine. Industries include the manufacture of machinery, sugar, chemicals, wall-paper, tobacco, etc. The principal buildings are the Schloss or

or pale-yellow color, light, friable and cated at Harrow and Balliol College. Oxsomewhat transparent. It has a slight ford; rector of Lavington and Graffham, peculiar odor, and a sweetish taste mixed Sussex (1834-40); archdeacon of Chicheswith a slight degree of bitterness, and is ter (1840-51). He took an active part in employed as a gentle laxative for chilther than the Tractarian movement, and in 1851 dren or persons of weak habit. It is, joined the Church of Rome, and was orhowever, generally used as an adjunct dained priest. On the death of Cardinal to other more active medicines. Other wiseman he succeeded him as Archbishop sweetish secretions exuded by some of Westminster (1865), and ten years other plants growing in warm and dry after he was made cardinal. Social and



philanthropic questions received much of factures are woolen and linen goods, mahis attention; he was an ardent supporter chinery, leather, etc. Le Mans existed in of total abstinence, and was a member of the commissions on the housing of the poor and on education. He wrote The Temporal Power of the Pope; The True Story of the Vatican Council, and The I'our Great Evils of the Day. He died in 1892.

Mannite (man/it; CoH14Oo), a peculiar variety of sugar obtained from manna, and also found in the juices which exude from several species of cherry, in the fermented juice of beetrot, carrots, etc.

Manœuvres (ma-nö'verz), the movements and evolutions of any large body of troops or fleet of ships, for the purpose of testing the efficiency of the various bodies of the service under the conditions of actual warfare, and for the purpose of instructing officers in tactics, and officers and men in their various from his designs. duties. For these purposes mimic war-fare is carried on periodically under the several of the leading powers.

Man-of-war Bird. See Albatross.

Manometer (ma-nom'e-ter; Gr. manos, rare, metron, measure), an instrument to measure or show the alterations in the rarity or density of the air, or to measure the rarity of any gas. Such instruments as measure the elastic force of steam are also properly termed manometers. They are variously constructed.

Manor (man'ur), originally a piece of dicular than the upper, territory held by a lord or Manse (mans), in S great personage, who occupied a part of it, as much as was necessary for the use of his own immediate family, and granted or leased the remainder to tenants for stipulated rents or services. Manors were also called baronies, as they still are lordships, and the lord was empowered to

Manresa (man-ra'sa), a city in Spain, province of and 34 miles Manresa (man-rā'sa), a city in Spain, province of and 34 miles northwest of the city of Barcelona. It is well built, surrounded by old walls, commanded by a fort, and has considerable manufactures, etc. Pop. 23,252.

| Mansel (man'sel), Henry Longue Mansel (man'sel), Henry Longu manded by a fort, and has considerable manufactures, etc. Pop. 23,252.

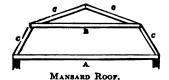
Mans, Le (lé man), a town of France, capital of department Sarthe.

on a height above the Sarthe, 115 miles southwest of Paris. The principal edifice is a fine Gothic cathedral, in part supplies of collections of the tenth century. The of ecclesiastical history in 1867, and Dean nave is in the Romanesque style; the of St. Paul's, London, 1868. Among his choir (104 feet high) is Gothic of the publications are The Philosophy of Kant thirteenth century. The principal manu- (1856), The Limits of Religious Thought,

chinery, leather, etc. Le Mans existed in the time of the Romans under the name of Cenomani: it was the birthplace of Henry II, the first of the Plantagenet rienry 11, the first of the Plantagenet kings of England; it witnessed the final dispersion of the Vendean army in 1793; and was the scene of the defeat of the French army under Chanzy (to whom a monument has been erected) by the Germans under Prince Frederick Charles January, 1871. Pop. (1911) 69,361.

Mansard (man-sar), François, a French architect, born at l'aris in 1598; died in 1666. The roof known by his name was his invention. (See Mansard Roof.) His nephew, Jules Hardouin, who assumed his name (1645-1708), attained great fame as an architect. The Palais de Versailles, Hôtel des Invalides, the Place Vendôme, and other works of the reign of Louis XIV, were

Mansard Roof, a roof formed with an upper and under name of military or naval manœuvres by set of rafters on each side, the under set



A, Tie-beam. B, Collar-beam. CC. Rafters.

approaching more nearly to the perpen-

Manse (mans), in Scotland, the dwelling-house of a parish minister of a rural parish. Every minister of a rural parish (quoad omnia) is entitled to have a manse erected and upheld by the heritors, but the ministers of royal burghs have preparly a cuch relative burghs have properly no such right, unships, and the lord was empowered to less where there is a landward district the hold a domestic court called the court longing to the parish in which the burgh baron for punishing misdemeanors, settlies. The term is sometimes loosely applied to the dwelling-house of dissenting less where there is a landward district beministers.

> School, London, and at St. John's College, Oxford, where he took his degree with double first-class honors in 1843. He became professor of moral and metaphysical

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Metaphysics, or the Philosophy of Conciousness (1860), The Philosophy of the Conditioned 1866), etc.

(mans'felt), PETER ERNST, COUNT VON, Austrian gen-Mansfeld eral and statesman, born in 1517; died in 1788 he resigned his office of chief-jus1604. He became governor of the Low tice; and the remainder of his life was Countries after the death of the Duke of spent in retirement. He was a great lawParma.—His natural son, Ernst (1585yer, not merely in a technical sense, but 1626), one of the best generals of the as one who could direct the practice of age, being disappointed in regard to the the courts towards broad principles of integrations. possession of his father's lands, joined the Protestant princes and became the bitter enemy of Austria, and a prominent leader in the Thirty Years' war. He was defeated by Wallenstein at Dessau in 1626, and died shortly afterwards.

Mansura mietta branch of Demiette

in a deep valley, surrounded by vestiges has linen and cotton manufactories, etc. of Sherwood Forest. There are cotton mills, manufactures of silk and cotton hosiery, lace thread mills, etc. Pop. (1911) 36,897.

Mant, RICHARD, born at Southampton, England, where his father held a living in the church, 1776; began his

Baltimore & Ohio, and Eric railroads. It tion of the Bible, which he prepared in is a manufacturing city, producing sheet conjunction with Dr. D'Oyley. steel, open hearth steel products, sanitary Mantchoos. See Manchuria. devices, stoves, brass and electrical goods, motors, farm implements, watch cases, steel chains, rubber goods, pumps, machin-arly Italian painter, born

eral, and in 1756 he was appointed chiefgustice of the King's Bench, and made
Baron Mansfield. In 1776 he was made
the art of engraving, and introduced
the art of engraving on copper into Upper
an earl. On the trial of Woodfall
Taly. His two sons, Francesco and
for publishing Junius' Letters, and on Carlo, were also painters.

some other occasions, he showed himself the zealous supporter of the government, and gave offense to the popular party. During the riots of 1780 his house in London was burned down by the mob. In 1788 he resigned his office of chief-jus-tice; and the remainder of his life was jurisprudence.

Manslaughter. See Homicide.

Mansura (man-sö'ra), a town of Lower Egypt, on the Damietta branch of the Nile, 34 miles s. w. Mansfield, (mans'feld), a town of of Damietta. It is the chief depot of the breadstuffs, cotton, indigo, hemp and flax 14 miles north by west of Nottingham, which this part of the Delta produces;

(1911) 36,897.

Mansfield, a town in Bristol Co., ecclesiastical career as vicar of Cogges.

Massachusetts, 24 miles hall, in Essex, in 1810. In 1820 he best by w. of Boston. It has manufactures came bishop of Killaloe; in 1823 bishop of straw and felt goods, machinists' tools, of Down and Connor; and in 1842 was chocolate, etc. Pop. (1920) 6255. chocolate, etc. Pop. (1920) 6255.

Mansfield, a city, county seat of died in 1848. The works of Dr. Mant Richland Co., Ohio, 175 consist of a vast number of sermons and miles w. of Pittsburgh, on Pennsylvania, tracts, but his celebrity rests on an editable of the property of the Pitts with the constant of the

early Italian painter, bornery, steel abrasives, mattresses, and other at Padua in 1431; died at Mantua in products. Sent of State reformatory. 1506. He was a pupil of Squarcione, Pop. (1910) 20,768; (1920) 27,824.

Mansfield, RICHARD, actor, was born fectionate relation did not continue. About 1459 he went to Verona, where he died in 1907. He studied art in England, painted a magnificent altarpiece, in the but adopted the theatrical profession his church of St. Zeno. About 1468 he redied in 1907. He studied art in England, but adopted the theatrical profession, his church of St. Zeno. About 1466 he recareer being mainly in the United States, where he was very popular, his range of characters extending from the Mikado to Richard III.

Mansfield, William Murray, Earl Scone, and the extending from the Mikado to Pavid, Lord Stormont, was born at Scone, in Scotland in 1705; died in 1793. Educated at Westminster School and at Oxoford, he entered Lincoln's Inn and was appointed solicitor-general, and obtained a seat in Parliament about the same time. In 1756 he was appointed chief-specific of the Kirsi's Rappointed chief-specific Mantelet (man'te-let), or MANTLET, are natives chiefly of tropical regions, but a musket-proof shield of are also found in France, Spain and the iron or some other material, used at warmer parts of Europe. They are very sieges for embrasures as a protection to gunners, and also for protecting markers at rifle-shooting target ranges.

Mantell (man'tel), GIDEON ALGERNON, geologist and palseon-tologist, born at Lewes, in Sussex in 1790; died in London in 1852. He practiced medicine in his native town, and later in London. Through his investigations the fossilized skeletons of those pugnacious, and are kept by the Chiness gigantic reptiles the Iguanodon and for the purpose of watching them fight. Hylseosaurus were discovered. He was a Mantis-crah a name given to cruspoular lecturer on geology, and published The Fossils of the South Downs (1822), Illustrations of the Geology of Sussex (1822), Wonders of Geology (1838), and Medals of Creation (1844).

the Seine, 36 miles W. N. w. of Paris. It given to the cloak or mantle which is contains a fine Gothic church. Pop. 8113. often represented behind the escutcheon.

Manteuffel (man'toi-fl), Edwin, In zoology the mantle is the soft skin or field-marshal, born in 1809; died in 1885. wise known as the pallium. This structhe entered the army in 1827 and advanced rapidly, becoming lieutenant-genwhere the shell when present, and vanced rapidly, becoming lieutenant-genwhere the shell is absent the mantle forms eral of cavalry in 1861. He took part in the Danish war of 1864, and next year an investing sac or integument in which the Danish war of 1864, and next year the viscera and other organs are conwass appointed governor of Schleswig. tained and protected.

Mantlet. See Mantelet. During the war between Prussia and Austria he commanded the army of the Main and fought at Hemstadt, Vettingen, Rossbruph and Würzburg. He played a distinguished part in the Franco-German war, especially in several actions around mar, especially in several actions around metz, at Amiens, and in driving Bourbaki's army across the frontier into E. of Milan, on an almost insular site on Switzerland. From June, 1871, to July, the Mincio, which here divides into several arms, and afterwards spreads out tion in France, and was made field-mar-larged govtion in France, and was made field-mar-shal. In 1879 he was appointed governor-general of Alsace-Lorraine.

Mantinea (män-te-ne'ä; Greek, Mantinea), an ancient city of Greece, in Arcadia, on the frontier of Argolis. It was the scene of the victory and death of Epaminondas, B.C. 362; and

to give them remarkable power to elude of the Jews, who live in a separate quarobservation. (See *Mimicry*.) The *M*. ter called the Ghetto. Mantua is a very
religiosa, or praying-mantis, has received ancient city, having been founded. it is
its name from the peculiar position of the said, by the Etruscans before the building
anterior pair of legs, resembling that of a person's hands at prayer. In their about three centuries with great ability,
habits they are very voracious, killing insects and cutting them to pieces. They splendor of their court and their pas



Praying-mantis (Mantie religiões).

Mantis-crab, a name given to crus-tacea of the genus

The Fossils of the South Downs (1822), Squilla, from the second pair of jaw-feet Illustrations of the Geology of Sussess being very large, and formed very like the (1822), Wonders of Geology (1838), and Medals of Creation (1844).

Mantes (mänt), a town in France, department of Seine-et-Oise, on the Seine, 36 miles w. N. w. of Paris. It given to the cloak or mantle which is contains a fine Gothic church. Pop 2112

lar and wide, and the public and private buildings have an ancient and substantial look. The most remarkable edifices are the cathedral, not very capacious, but after an elegant design by Giulio Ro-mano; several churches; the ancient ducal palace of the Gonzagas, partly used as barracks; the Academy of Science and Mantis (man'tis), a genus of orthopterous terous insects, remarkable for library and museum: the arsenal, and their grotesque forms. They frequent two theaters, one called the Teatro Virtrees and plants, and the forms and colors of their bodies and wings are so like the ances in summer. The manufactures are leaves and twigs which surround them as limited. The trade is chiefly in the hands to sive them remarkable power to elude of the Jews, who live in a separate quarter called the Ghetto. Mantua is a very ronage of literature and art. Virgil was born at the adjoining village of Andes, supposed to be the modern Pietole. Pop. 37,637.—The province, which is intersected by the Po, Mincio, and other streams, produces rice, wheat, silk, wine, etc.; area, 961 sq. miles; pop. 311,942.

Manu (ma'nö), an early Sanskrit writer, author of a book of laws, civil and religious, called the Insti-tutes of Manu, still extant and holding an important place in Hindu literature.

Manual Alphabet. See Deaf and
Dumb.

the practical use of tools and art implements, which is becoming a part of the ordinary school culture. Before 1876 education in this direction was not attempted in the schools, except to some minor extent in Russia and Finland. It was the Russian exhibit in this field at the Cen-tennial Exposition of 1876 that turned the attention of American educators toward this hopeful method, and manual training work was begun in 1877 at the Massachusetts Institute of Technology and at Washington University, St. Louis. The first manual training public school was opened in 1880 at St. Louis, and was so successful that similar schools were soon established in Chicago, Philadelphia, Baltimore and Toledo. Since 1885 manual training has become part of the course of study in all agricultural and mechanical colleges, and high schools of this character have been opened in large cities in general. These are not trade schools, founded for the purpose of teaching special trades, but were designed to give interesting in the school of the purpose of teaching special trades, but were designed to give interesting in the school of struction in general manual dexterity. But they have led to the opening of special trade schools in some cities, where particular trades can be learned. Manual training has recently been added to the work of the lower schools in some cities.

Manuel II (ma'nö-el), King of Port-ugal, born in 1889, second son of Carlos I, succeeded to the throne on the assassination of his father, Carlos on the assassination of his rather, Carlos I, February I, 1908, his elder brother, the crown prince, being assassinated at the same time. His reign failed to give satisfaction to the people, the long-continued corruption in administration and the state finances continuing, while profligacy and incapacity marked the character of the youthful king. In consequence a revolution broke out, October 4, 1910, which

ding the return of the king or any member of the Braganza royal family to Portugal.

Manures (ma-nûrz'), vegetable, ani-mal and mineral matters introduced into the soil to accelerate vegetation and increase the production of crops; substances used to improve the natural soil, or to restore to it the fertility which is diminished by the crops annually carried away. Animal substances employed as manures comprehend the putrefying carcasses of animals, ground bones, blood, the excrements of animals, Manual Training, the education as the dung of horses, cattle, sheep, poul-of the hands in try, etc.; urine, guano (the decomposed try, etc.; urine, guano (the decomposed excrement of aquatic birds); the scrapings of leather, horn and the refuse of the shambles; the hair or wool of animals. Liquid manure, consisting of town sew-age, the drainings of dung-heaps, stables and cow-houses, is largely employed in many districts. Almost every kind of vegetable substance, in one state or another, is used as manure. The principal mineral substances employed as manures are lime, chalk, sand, clay, marl; sulphates of potash, soda, ammonia and magnesia; nitrates of potash and soda; magnesia; nitrates of potasn and soda, and phosphates of lime. It is from containing one or other of these substances that apatite, basic slag, cubic niter, kainite, etc., are so valuable. Manures are usually distributed over the surface of the land and then ploughed or harewad into the soil or they may be apor the land and then program or rowed into the soil; or they may be applied in drills when the object is to give direct benefit to the young plant. The direct benefit to the young plant. The kind of manure required for each crop depends on the nature of the crop, the quality and composition of the soil, and Modern remany other conditions. searches upon plant nutrition, and the chemistry of agriculture in general, have shown us that the food of plants may be snown us that the food of plants may be classed under the two headings of air food and mineral food. Air food consists of ammonia, water and carbon dioxide; mineral food, of those substances which remain as ash when the plant is ignited. The former class of food is supplied to the plant partly from the atmenters and the plant partly from the atmosphere and partly from the soil, the latter from the soil entirely. In the production of food by natural processes of plant growth a certain amount of air food and also of mineral food is abstracted from the soil, those amounts varying for different species of plants; if this food be returned to the soil, then a further growth of plants may be expected; if, however, seed is sown in the partially impoverished soil, was quickly successful, the army and sown in the partially impoverished soil, navy joining the insurgents. King Manther must be a decrease in the amount uel field to Gibraltar, a republic was produced from that soil. As the claimed, and an edict was issued forbid-plants serve to nourish animals, it follows there must be a decrease in the amount of crop obtained from that soil. As the withdrawn from the soil by the plants may be returned to it in the shape partly of animal excreta, and partly of ground bones, etc. Different plants require dif-ferent kinds of food; if, therefore, the kind of crop grown on the same land be varied from year to year, and if the soil be tilled so as to unlock its natural supplies of mineral food, it will be found that the average yield of crops may be maintained simply by the restitution to the and carbon from the atmosphere, but it has been abundantly proved that unless this supply is augmented by artificial sources the plants soon begin to fall off and the yield of crop very sensibly to

manu scriptus, written by the hand) are literally writings of any kind, whether on paper or any other material, in contradistinction to printed matter. Previous to the introduction of printing all literature was contained in manuscripts, and the deciphering and proper use of these form an important part in the science of palæography. All the existing ancient manuscripts are written on parchment or on paper. The paper is sometimes Egyptian (prepared from the real papyrus shrub), sometimes cot-ton or silk paper (charta bombycina). The most common ink is the black, which beauty is also found in ancient times in manuscripts. With it were written the initial letters, the first lines, and the titles, which were thence called ruprics. Blue, green and yellow inks were more rarely used. On rare occasions gold and silver were the mediums, though from their cost they are oftenest confined to initial letters. With respect to external form, manuscripts are divided into rolls (volumina), and into stitched books or volumes (properly codices). Among the ancients the writers of manuscripts were mainly freedmen or slaves (scribæ librarii). At a later period the monks were largely engaged in the production of manuscripts. In all the principal monasteries was a scriptorium, in which the manuscripts. In all the principal monasteries was a scriptorium, in which the scriptor or scribe could pursue his work printer, born about 1447; died in 1515. In

lows that the substances which have been in quiet, generally assisted by a dictator, withdrawn from the soil by the plants who read aloud the text to be copied; the manuscript was then revised by a corrector, and afterwards handed to the miniator, who added the ornamental capitals and artistic designs. The most ancient manuscripts still preserved are those written on papyrus which found in Egyptian tombs. have been Several of these are of date considerably before the Christian era: notably fragments of the Iliad and a papyrus containing the orations of Lycophron and Euxenippus, 11 this restitution it must be borne in mind of writing. Next to them in point of age that it is not only mineral but also air are the Latin manuscripts found at Herfood which is to be restored. Plants undoubtedly draw large supplies of pitters. food which is to be restored. Plants un-culaneum. Then there are the manu-doubtedly draw large supplies of nitrogen scripts of the imperial era of Rome, and carbon from the atmosphere, but it among which are the Vatican Terence and Septuagint, and the Alexandrine codex of the British Museum. Numerous manuscripts of the Old and New Testaments of the second and third centuries exist; diminish. The theory of manuring consists, then, in maintaining in the soil such an amount of plant food, both mineral and organic, as shall enable us to reap the largest possible amount of crops from Library at Florence; and largest possible amount of crops from Library of Vienna; the Jewish Antiquithat soil.

Manuscripts (man'ū-skriptz; Lat. brary, Milan, etc. It was a common cusmanu scriptus, written to find the middle ages to oblitarate and erase writings on parchment, for the purpose of writing on the materials anew, manuscripts thus treated being called palimpsests.

The art of illuminating manuscripts dates from the remotest antiquity. Egyptian papyri were ornamented with vignettes or miniatures attached to the chapters, either designed in black outlines or painted in primary colors in distemper. The oldest ornamented Greek and Roman manuscripts that have survived are the Dioscorides of Vienna and the Virgil of the Vatican, both of the fourth century, and having vignettes or pictures in a Byzantine style of art. From the eighth to the eleventh century the initial letters in use were composed of figures of men, quadrupeds, fishes, birds, etc. The initials of the twelfth century are made up of masses of conventional foliage inter-spersed with the animal figures of the preceding centuries. Continuous borders, with vignettes, tail-pieces, etc., were also prevalent in later times, and some manuscripts are ornamented with very artistic designs. In the sixteenth century the art of illumination became extinct Some attempts have been made to revive it by adorning paper, parchment and vellum with designs in colors or metals.

1488 he established himself as a printer the conical and the cylindrical or Merat Venice, but the first work which he fin- cator's, distinguished from each other by at Venice, but the first work which he finished was not published till 1494. In the course of the ensuing twenty years he printed the works of the most ancient Latin and Greek authors extant, as well as many productions of his contemporaries, and some treatises of his own comhis son PAOLO MANUZIO, born in 1512; Mercator's Projection.) A nautical map died in 1574; a man distinguished as a is usually called a chart (which see). A classical scholar no less than as a printer; map of the er th, or a portion of the and by his grandson ALDO, born in 1547; earth, usually exhibits merely the positions of countries mountains givers

and by his grandson ALDO, born in 1547; died in 1597. See Aldine Editions.

Manyplies (men'i-pliz), the popular name given to the psal-

Manytch. See Manitch.

ter of the Marquis Cesare Beccaria, author of the well-known treatise on *Crimes* made by Anaximander of Miletus (B.C. and Their Punishment. After his father's 611-547). Ptolemy (flourished 126-161 death in 1805 he lived for some time in A.D.) drew maps according to the stereo-Paris with his mother, and in 1808 he graphic projection. Agathodæmon, an armarried the daughter of a Genoese tist of Alexandria, drew twenty-six maps banker, under whose influence he settled for the geography of Ptolemy. Roman down into the fervent Catholicism which colored all the rest of his life. His chief ger table made about 230 A.D., which works are the *Inni Sacri*, a series of gives itineraries of the whole world sacred lyrics; *Il Cinque Maggio*, a power-known to the Romans from Britain to ful ode on the death of Napoleon: the India. No attempt at scientific manning

spheroid, its surface cannot be made to coincide rigorously with a plane; and it spheroid, its surface cannot be made to coincide rigorously with a plane; and it therefore becomes necessary to have recourse to a projection. that is, a plan on a plane surface, which indicates with posed to have been born about 1150; and sufficient correctness the relative positions, dimensions, etc., of the different the University of Paris, and made an imparts of the spherical surface. There are five principal projections, the orthographic, the stereographic, the globular, 1199; contributed to the Arthurian cycle

the different positions of the point of projection, or that in which the eye is supposed to be placed. The last named gives Latin and Greek authors extant, as well a very erroneous idea of the relative size as many productions of his contemporaries, and some treatises of his own composition. He was the inventor of the is very useful to mariners, in enabling italic or cursive character, hence called them to lay off a course that can be
Aldine. His business was continued by steered by compass in straight lines. (See his son PAGIO MANUIUS born in 1512: Mercator's Projection). A position was and by his grandson ALDO, born in 1944; earth, usually exhibits merely the positions of countries, mountains, rivers, lakes, cities, etc., relatively to one anname given to the psalterium or omasus, the third chamber or cavity of the ruminant stomach.

Manytch. See Manitch.

earth, usually exhibits merely the positions of countries, mountains, rivers, lakes, cities, etc., relatively to one another, and by means of lines of latitude and longitude relatively to every other point on the earth's surface. But a map may be so colored or shaded as to give Manzanillo (mån-thå-nël'yō). (1)
A seaport on the south amount of rainfall, or o er meteorologicoast of Cuba, with a good roadstead. cal phenomena, the results of statistical Pop. 15,819. (2) A seaport of Mexico, inquiry, the languages spoken, etc. Hence state of Colima, on the Pacific. Pop. we have geological, meteorological, linguistic, and other kinds of maps. We Manzoni (man-zō'nē), Alessandro, find traces of maps among the Egyptians an Italian poet and novelist, in the times of Sesostris (B.C. 1618), who was born in 1784; died in 1873. He was caused his hereditary dominions and his the son of Count Pietro Manzoni and of conquests to be represented on tablets the Marchioness Giulia Beccaria, daughfor his people. The first attempt to draw ter of the Marquis Cesare Beccaria, au amp of the whole known world was thor of the well-known treatise on Unimes made by Angerimender of Miletra (BC) ger table made about 230 A.D., which gives itineraries of the whole world known to the Romans from Britain to India. No attempt at scientific mapping sacred lyrics; Il Cinque Maggio, a powerful ode on the death of Napoleon; the
tragedies Il Conte di Carmagnola, and
Adelchi; and his great novel I Promessi
Spost ('The Betrothed').

Maoris (ma'o-riz or mou'ris), the
name given to the natives of
New Zealand. See New Zealand.
Map, a projection on a plane surface
of the whole or a part of the
earth's surface, showing its main features
spheroid, its surface cannot be made to
face have been made. face have been made.

of romance the romances of the Quête du species are the white maple (A. dasycarbook, De Nugis Curialium, a note-book of (A. Pennsylvanicum); the mountain mathe events of the day and of court gossip; ple (A. spicatum); the striped maple or and to him is attributed a collection of moose wood (A. circinatum); and the rhymed Latin verse, in which the abuses large-leaved maple (A. macrophyllum). of the church are hit off with vigor and humor. Among the most remarkable of these are the satirical Apocalypse and the Confession of Bishop Golias.

Maple (ma'pl), a name for trees of the Maqui (ma'kwē), a Chilean evergreen or evergreen shrub (Aristotelia or evergreen shrub (Aristotel



Sugar Maple (Acer saccharinum).

About fifty species are known, distributed through North America, Europe, and different parts of Asia. They include small or large trees, with a sweetish, rarely or large trees, with a sweetish, rarely milky, sap, opposite deciduous, simple, usually lobed leaves, and axillary and terminal racemes or corymbs of small greenish flowers. The characteristic form of the fruit is shown in the figure. Two species are common in Europe: the great maple, often miscalled sycamore (A. maple, often miscalled sycamore (A. part. It communicates, by a strait about Pseudo-platănus), and the common maple 18 miles long and 3 broad, with the gulf (A. campestre). The wood of the former of the same name, which is an inlet of is valuable for various purposes, as for the Caribbean Sea, 90 miles in length, carving, turnery, musical instruments, and about 60 miles in width at the enwooden dishes, etc. Another well-known species is the Norway maple (A. platanoides), often planted as an ornamental tree. The wood of several American species is also applied to various uses. The sugar or rock maple (A. saccharinum) is plates is nearly transparent. Pop. 16. sugar or rock maple (A. saccharinum) is plates is nearly transparent. the most important species; this yields 000. maple sugar, which in many parts of the United States is an important article of manufacture. A tree of ordinary size will ries of the Amazon and Para, and belongyield from 15 to 30 gallons of sap yearly, ing to the province of Para; length, 180 from which are made from 2 to 4 lbs. of miles; breadth, 125; pop. (chiefly Indisugar. The knotted parts of the sugarans and Mestizoes), 20,000. maple furnish the pretty bird's-eye maple of cabinet-makers. Some other American

Saint Graal, Lancelot du Lac, and the pum); the red or swamp maple (A. ru-Mort Artus; was the author of a curious brum); the striped maple or moose wood

Maple (map), a name for trees of the genus Acer, nat. order Aceramacqui), from the juice of whose fruit a ceæ or Sapindaceæ, peculiar to the northern and temperate parts of the globe. instruments are made. It is cultivated as an ornamental shrub in northern countries.

Marabou-stork (mar'a-b5), the name given to two species of storks the delicate white species of storks, the delicate white feathers beneath the wing and tail of which form the beautiful and ornamental marabou feathers. One species is a native of West Africa (Leptoptilus marabou), another is common in India, where it is generally called the adjutant (which see).

> Marabouts (mar'a-bötz), Marabuts, among the Berbers of Northern Africa a sort of saints or sor-cerers, who are held in high estimation, and who exercise in some villages a des-potic authority. They distribute amulets, affect to work miracles, and are thought to exercise the gift of prophecy.—The name Marabouts is also used as equiv-

> Maracaibo (mārā-kī'bō), a seaport of Venezuela, on the western side of the strait which unites the lake and gulf of the same name, about 20 miles from the sea. There is a good trade in coffee, cacao, leather, hides, medicinal plants, etc. Pop. about 50,000.—The Lake of Maracaibo is about 98 miles long and 80 broad at the widest part. It communicates, by a strait about 18 miles long and 3 broad, with the gulf of the same name, which is an inlet of the Caribbean Sea, 90 miles in length, and about 60 miles in width at the en-

Pop. 16,-

(må-rå-zhō'), an island of Brazil, formed by the estua-

Maranham (må-rå-nyam'), or Ma-RANHÃO (må-rå-nyoun),

a province of Brazil, on the northeast August 10, 1792, after which he took coast; area, 177,566 sq. miles. A considerable part of the surface is occupied a leading part in the assassinations of erable part of the surface is occupied a leading part in the assassinations of by forests, yielding excellent timber and dyewoods. The soil is very fertile, producing maize, cotton, sugar, rice, cocoa, pimento, ginger, etc. Pop. 499,308. The capital, Maranhão (San Luiz de M.), is a prosperous, well-built city on an island of the same name, carrying on a good trade of the same name, carrying on a good trade in cotton, caoutchouc, hides, etc. Pop. about 40,000.

Marañon. See Amazon.

Maranta, a genus of plants, nat. order Marantaces. See Ar-

Marantaceæ (mar-an-tā'se-ē), an or-der of endogenous plants, growing in tropical countries; called also Cannaceæ. They are perennial herbs with fibrous roots or fleshy creeping rhizomes, alternate simple leaves with sheathing footstalks, and irregular racemose or panicled flowers. The type genus is Maranta, which is more commonly called arrow-root.

Maraschino (ma-ras-ke'no), a fine liquor distilled from a and of the convention where General small black wild variety of cherry. The Dumouriez and the Girondists, who en-

burgh, Dublin, Amsterdam, etc., support-theon with national honors, but were sub-ing himself by giving lessons in the mod-ern languages, and at intervals publish-Marathi (ma-rät'hē), a language of rn languages, and at intervals publishing works on medical and scientific subjects. The first breath of the revolution, however, brought him to the front, and scharacter. It is the vernacular of some when Danton instituted the club of the street millions of people, mostly in Cordeliers, Marat became the editor of Hyderabad and Bombay presidency. the Publiciste Parision, better known under its later title L'Ami du Peuple, which marathon (mar'a-thon), a village of der its later title L'Ami du Peuple, which was the organ of that society, and soon modern value) on a plain which extends became the oracle of the mob. It early for about 6 miles along the seashore, advocated the most extreme measures, with a breadth of from 1½ to 3 miles. and the tone became more furious as It is famous for the overthrow of the Marat was inflamed by the prosecutions Persians by the Athenians under Milof the authorities. His paper was issued tiades, 490 B.C., and for the Marathon from various places of concealment until races. (See fellowing article.)



Jean Paul Marat.

small black wild variety of cherry. The Dumouries and the Girondists, who enbest-known kinds are the maraschino de deavored at first to prevent his taking Zara, from Zara in Dalmatia, and that his seat, were the special objects of his from Corsica. An inferior kind is made attack. The establishment of the revolutionary tribunal, and of the committee for arresting the suspected, was adopted or apparent disease; often, however, dependent on disease of the messenter of the Jacobin Club he pendent on disease of the messenter of the signed an address instigating the people glands, or some obstruction in the course of the chyle.

Tara (ma-ra)**

Lara (ma-r Marat (må-rä), Jean Paul, one of over to the revolutionary tribunal, which the most infamous leaders of acquitted him; and the people received the French revolution, born near Neufhim in triumph and covered him with châtel in 1744. He studied medicine at wreaths. He was assassinated shortly Paris, and previous to 1789 had spent many after by Charlotte Corday, July 13, 1793. years in travel, visiting London, Edinhurgh, Dublin, Amsterdam etc. supports theon with nestonal honors but were sub-

was again changed to the Journal de la about 20 miles northeast of Athens. It République Française, a journal which was situated (probably on the site of the was the organ of that society, and soon modern Vrana) on a plain which extends

Marathon Run, a form of athletic jecting into Massachusetts Bay. It has adoption in several countries, a rising quarters for the Eastern, Boston and Cofrom the redevelopment of the ancient rinthian Yacht Clubs. It was formerly one Greek sports. After the battle of Mara- of the most important maritime towns of thon, a runner carried the news of the New England and is one of its oldest and victory to Athens, many miles distant. quaintest places. It has boot and shoe The legend is that he fell dead after telling his story. Long runs of this character the workshop of the Curtis-Burgess flying ter have now become common in many of machines. Pop. 7338.

Marattas. See Mahrattas.

Clement IX, whose portrait he painted, adhering to the edge of the book are set appointed him overseer of the Vatican by dashing cold water over them. gallery. He has been styled the last Marburg (mär'börg), a town of painter of the Roman school. His Marburg (mär'börg), a town of Prussia in the province of

comprehending solely those which are either white or black; 2, variegated marbles, or those in which the spots and Marcelli'nus. See Ammianus Marveins are interlaced and disposed without Cellinus. regularity; 3, shell marbles, or those which are in part made up of shells; 4, which are in part made up of shells; 4, lumachelli marbles, or those which are eral, five times consul (222, 215, 214, 210 apparently wholly formed of shells; 5, and 208 B.C.); the first Roman who succipolino marbles, or those veined with cessfully encountered Hannibal in the of some different color; 7, pudding-stone of some different color; 7, pudding-stone 208 B.C.

marbles, or those which are formed of reunited fragments, like the breecia marbles, only with the difference of having soldiers. It may be in slow, quick, or the pebbles rounded in place of being double time, the standard for the first angular. By antique marbles are understood those kinds made use of by the ancients, the quarries of which are now, for the most part, exhausted or unknown.

These include Parties marbles for the second 110 for the third 150.

March, a town of England, in the County and 29 miles northwest quarried), rosso rerde antico, etc.

our cities, in competition for marks of Marbling (marbling), in bookbind-honor. (marbling), in bookbind-ing, a process of ornamenting the edges of books by dipping them, Marattas. See Marattas.

Maratti (ma-rat'te), Carlo, an Italian painter and engraver, born in 1625. Louis XIV employed him to paint his celebrated picture of Daphne. The colors with a quill and comb. The colors of the colors o

painter of the Roman school. His Madonnas were particularly admired. He died in 1713 at Rome, where his chief works are to be found.

Marble (mar'bl), the name given to certain varieties of limestone the castle of the landgraves of Hesse, now partly used as a prison; the university (about 800 students), the first founded in Germany after the Reformance at all periods of the world been greatly in request for purposes of art or ornament. White statuary marble is a pure carbonate of calcium. Marbles have been divided into seven varieties or bisulphide of iron. It is of a paler color than ordinary pyrites,

classes. viz. 1, marbles of a uniform color, is of a paler color than ordinary pyrites, comprehending solely those which are being nearly of the color of tin, and its luster is more strongly metallic.

green talc: 6, breccia marbles, or those second Punic with are formed of angular fragments Syracuse (212 R.C.). He was killed in of different marbles united by a cement a skirmish with the Carthaginians in 208 в.с.

the most part, exhausted or unknown.

These include Parian marble, Pentelic of Cambridge, on both sides of the Old marble. Carrara marble (still largely Nene. Its two principal streets cross antico, giallo antico, at right angles, and are each nearly 2 miles long. Pop. (1911) 8403.

Marblehead (marbl-hed), a seaport and township of Essex County. Massachusetts, 12 miles north-east from Boston, on a rocky point pro-

Marcon

March, Francis Andrew, philologist, a race born in subjection to the harsh setts, in 1825. He became a lawyer in 1850 and professor of comparative philology at Lafayette College in 1858. He was made president of the Spelling Reform Association on its organization in apparently originally marchmen or bornson. His ability in philological science 1876. His ability in philological science is very high, and he has written Comparative Grammar of the Anglo-Saxon Language, Philological Study of the English Language, etc.

March Perron Conway (1864-), son of F. A., an American army officer, chief of staff of the U. S. Army from February, 1918. He was born at Easton, Pa., educated at Lafayette College, graduated from the U. S. Military in 1888. Academy in 1888. He served in the Philippines and received the surrender of Aguinaldo's chief of staff.—Francis A. March, Jr. (1863-), brother of for-MARCH, JR. (1863-), brother of for-mer, philologist, editor Thesaurus-Dic-tionary, author 'The World War,' etc.

Marcion (mar'si-on), the founder of an ascetic Gnostic sect, called after him Marcionites, was born at Sinope about the beginning of the second century of our era, his father being ond century of our era, his father being bishop of Sinope. He went to Rome about 140 A.D. and founded a system which assumed the existence of three original principles—the supreme and invisible, whom Marcion called the Good; the visible God, the Creator; and the Devil, or perhaps matter, the source of evil. The Creator, the God of the Old evil. The Creator, the God of the Old Testament, was the author of suffering. Jesus was not the Messiah promised by

day of the legal year; hence January, this being, but the son of the unseen February, and the first twenty-four days God, who took the form, but not the of March have frequently two years substance of man. Marcion denied the indicated, as January 1, 170½, or resurrection of the body; he condemned marriage, thinking it wrong to increase

sequently migrated east, displaced the Boii from their territory (the modern Bohemia), and under their king Maroboduus formed a great Marcomannic con-federacy to hinder the extension of the Roman power beyond Pannonia. Being defeated, however, by a rival confederacy composed of the Cherusci and their allies, they entered into more or less friendly relations with Rome until the time of Domitian, whom they defeated. Trajan and Hadrian kept them in check, but in 166 A.D. they invaded Pannonia, and commenced the long Marcomannio war. Aurelius drove them back, and Commodus purchased peace from them, but they con-Marchena (mar-cha'na), a town of tinued to make inroads into Rhætia and Spain, in Andalusia, provioum, and in the reign of Aurelian ince of Seville, and 30 miles east by penetrated Italy as far as Ancona, and south from the city of that name. There even threatened Rome itself. After that, are sulphur springs in its vicinity. Pop. however, they practically pass out of

mar-cho'ne), Guglielmo (William), an Italian physicist, born near Bologna in 1875. He was the first to succeed in devising a physicist, born near Bologna in 1875. He was the first to succeed in devising a physicist, born near Bologna in 1875. He was the first to succeed in devising a physicist, born near Bologna in 1875. He was the first to succeed in devising a physicist, born near Bologna in 1875. He was the first to succeed in devising a physicist, born near Bologna in 1875. He was the first to succeed in devising a physicist, born near Bologna in 1875. He was the first to succeed in devising a physicist, born near Bologna in 1875. He was the first to succeed in devising a physicist, born near Bologna in 1875. He was the first to succeed in devising a physicist, born near Bologna in 1875. He was the first to succeed in devising a physicist, born near Bologna in 1875. He was the first to succeed in devising a physicist, born near Bologna in 1875. He was the first to succeed in devising a physicist, born near Bologna in 1875. He was the first to succeed in devising a researches at the age of 15. His apparatus was tested in England in 1897, when messages were sent over a distance of 15 kilometers. He used it in reporting election returns in 1900, and rapidly increased the distance covered. until in 1902 he succeed in the physicist, born near Bologna in 1875. He was the first to succeed in devising a physicist, born near Bologna in 1875. He was the first to succeed in devising a literature physicist, born near Bologna in 1875. He was the first to succeed in devising a literature physicist, born near Bologna in 1875. He was the first to succeed in devising a literature physicist, born near Bologna in 1875. He was the first to succeed in the physicist, born near Bologna in 1875. He was the first to succeed in the physicist, born near Bologna in 1875. He was the first to succeed in the physicist, born near Bologna in 1875. He was the first to succeed in the physicist, born near Bologna in 1875. He was the first to Argentina. He was awarded, in 1909, one-half the Nobel prize for physics.

Marco Polo. See Polo.

Marcou, Jules, geologist, born at Salins, France, in 1824. He took part in the geological survey of the Jura Mountains. While in this work he made the acquaintance of Louis Agassiz, who invited him to the United States, and whom he assisted on his survey of the Lake Superior region in 1848. He became connected with the Museum of Margaret (mar'ga-ret), Queen of Comparative Zoology at Cambridge in Margaret (mar'ga-ret), Queen of Denmark, Norway and Comparative Zoology at Cambridge in 1861. He died in 1898.

dian post, capturing the first flag taken on land in the war. He became associate justice of the New York Supreme Court ministration, settling such important questions as the Oregon claim, the Arizona dispute, the Mexican boundary, Commo-

(mar-em'må), low swampy Maremme along the coast of Tuscany from the mouth of the Cecina to Orbitello.

Marengo

(mar-em'ma), low swampy tracts of Italy, extending the coast of Tuscany from the mouth of the Cecina to Orbitello.

Marengo

Italy, in the province of Alessandria, and so near the town of that name as to be considered one of the

that name as to be considered one of its suburbs; celebrated for the battle of June 14, 1800, when the French under Bonaparte defeated the Austrians under Melas.

Mareotis (mar-ë-ō'tis), or Mariout, a lake of Lower Egypt, separated from the Mediterranean by the long narrow belt on which Alexandria stands. The main expanse is about 28 miles long by 20 broad, and lies 8 feet below the sea level. Salt is extensively made here by evaporation.

Mare's-tail Coral. See Isis.

Marcus Aurelius. See Aurelius. See Aurelius. Antoninus.

Marcus Hook, a borough and port of Delaware River, 19 miles s.w. of Philadelphia. It has large marine trade, steel mills, foundries, chemical works, artificial silk mills, ctc. Pon. 5324.

Marcy (mar'si). William Learned the first death of her hushand in 1380 previously brought about his election; and after defeating Albert, the Swedish king, she also obtained possession of the graduating from Brown University, he mark; born at Copenhagen in 1353, married to Hakon, king of Norway, in 1363. The death of her hushand in 1380 placed Norway in her hands; that of her solvential works, artificial silk mills, ctc. Pon. 5324.

Marcy (mar'si). William Learned the throne of Denmark, to which she had previously brought about his election; and after defeating Albert, the Swedish king, she also obtained possession of the practiced law in Troy, N. Y. At the opening of the war of 1812 he entered the of Union, or Treaty of Calmar (1397). She died in 1412, after having raised hersely and supplied to the Northern Semiramis, Norway and Sweden, called the Northern Semiramis, the daughter of Waldemar III, king of Denmark; born at Copenhagen in 1353, The death of her hushand in 1380 placed Norway in her hands; that of her throne of Denmark, to which she had previously brought about his election; and after defeating Albert, the Swedish king, she also obtained possession of the practiced law in Troy, N. Y. At the opening of the war of 1812 he entered the of Union, or Treaty of Calmar (1397). throne of Sweden. She endeavored to place the union of the three kingdoms on a permanent basis by the celebrated Act of Union, or Treaty of Calmar (1397). She died in 1412, after having raised herself to a degree of power then unequaled in Europe from the time of Charlemagn of Saver the alder sister of justice of the New York Supreme Court in 1829, and in 1831 was elected senator the Norman Conquest took refuge with party, but resigned upon being chosen governor of New York, in 1832, an office which he held for three terms, though defeated in 1838 by William H. Seward. He was secretary of state in Pierce's administration, settling as to the Land of the English court, and to have instruction, settling as to the land of the English court, and to have instruction, settling as to the land of the English court, and to have instruction, settling as to the land of the English court, and to have instruction, settling as to the land of the English court, and to have instruction, settling as to the land of the English court, and to have instruction, settling as to the land of the English court, and to have instruction, settling as to the land of the English court, and to the land of the English court. of the English court, and to have effected many reforms in the Scottish church. She died in 1093. Her daughter Matilda married Henry I.

dispute, the Mexican boundary, Commodore Perry's negotiations with Japan, and the British fisheries dispute.

Mardi Gras (mar'de gras; 'fat Tuesday'), Shrove Tuesday, the last day before Lent. It is signalized in France by a gorgeous procession, which includes a fat ox richly caparisoned. In the United States the day is observed in New Orleans and some other southern cities with showy processions and other ceremonies.

Maremme (mar-em'ma), low swampy

Margaret of Anjou, daughter of René, titu-Mousson, in Lorraine, in 1425, and was married in 1443 to Henry VI of England. The imbecility of the king made her power being contested by the Duke of York, a claimant of the throne by an elder line, the protracted wars of the Roses commenced. At first victorious she was afterwards compelled to fee to Scotland, but raising an army in the north, she secured, by the an army in the north, she secured, by the battles of Wakefield (1460) and St. Albans (1461), the death of York and the release of the king. Her army, however, was soon afterwards annihilated at Towton (1461), and Edward (IV), the son of the late Duke of York, was declared king. She succeeded in obtaining assistance from Louis XI of France, but was once more defeated, and took refuge in France. Warwick then became embroiled with the young king, and determined to replace Henry on the throne. Edward was in turn obliged to escape to the continuous that the chaining conference from the nent, but obtaining assistance from the nent, but obtaining assistance from the Duke of Burgundy, returned and defeated Warwick at Barnet (1471). Margaret, collecting her partisans, fought the battle of Tewkesbury (1471), but was totally defeated. She and her son were made prisoners, and the latter, when led into the presence of the revel victor. into the presence of the royal victor,

was killed. Henry soon after died or was Margay or F. tigrina. It is about the murdered in the Tower, and Margaret size of the domestic cat, is of a pale remained in prison four years. Louis XI fawn color, with black bands on the foreransomed her for 50,000 crowns, and in parts, and leopard-like spots on the hind-

ter to Francis I, of France, was born at Angouleme in 1492. She was brought up at the court of Louis XII, and married the Duke of Alençon in 1509, became a widow in 1525, and in 1527 was esponsed to Henry d'Albret, count of the rank of princes, and stood between Bearn and titular king of Navarre. From counts and dukes in the German Empire. poused to Henry d'Albret, count of Béarn and titular king of Navarre. From this time she resided at Béarn, assisting in the development of the resources of the small kingdom, and making it a center of liberal influence. Many Protestants took refuge in her territories; and her name is closely linked with those of Rabelais, Dolet, Marot and the leading men of the period. She herself possessed no ordinary culture, being credited with a knowledge of six languages and the authorship of several works, of which the chief were Le Miroir de Fame Pécheresse, printed in 1533 and condemned by the Sorbonne for its Protestant tendencies; the Heptaméron, a collection of tales in imitation of the Decamerone of Boccaccio, and first printed in 1559; and a collection of poems published in 1547 under the title of Marguerites de la Marguerite des mother of Henry IV.

Margarine (marragarine), a mixture of steerine and nalmitine.

Margaret of Valois, Queen of has been domesticated and made very ter to Francis I. of France with the special state of the special stat

mother of Henry IV.

Margarine (mar'ga-rin), a mixture of stearine and palmitine, obtained from beef fat, lard, etc., and on the Missouri Pacific R. R. It has cotformerly regarded as a single fat. The name is now applied to an imitation of butter. See Butterine.

See Ladrones.

Marianna, a city, county seat of Lee Co., Arkansas, on L'Anguille River, 25 miles N. N. W. of Helena, on the Missouri Pacific R. R. It has cotformerly regarded as a single fat. The name is now applied to an imitation of butter. See Butterine.

butter. See Butterine.

Margarita (mär-ga-rē'tā), an island belonging to Venezuela, in the Caribbean Sea; greatest length, and Empress of Germany, daughter of 37 miles; greatest breadth, about 20.

Margarita was discovered by Columbus in 1498. Pop. about 40,000.

Margate (mār'gāt), a seaport, municing place in England, in the county of Kent, 64 miles east by south from London, pleasantly situated at the northern extremity of the Isle of Thanet. The town, which is a favorite resort with Londoners, is in the main well laid out with fine piers and promenades. The special features of Margate are its hospitals and its hotels; the only industry Bavarians and Saxons marched into Bof importance, as apart fro... the enterwith nne piers and promenades. The and Naples gained possession of the Auspecial features of Margate are its hostification and its hotels; the only industry Bavarians and Saxons marched into Boof importance, as apart from the entertainment of visitors, being its sea-fishing. Pop. (1911) 27,086.

Margay (marga), a Brazilian animal of the cat kind, the Feus Presburg, where she convoked the dist

and threw herself upon the sympathy of through several countries died in misery her. Hungarian subjects. The French at Cologne in 1642. and Bavarians were speedily driven from her hereditary states; Prussia made a Frederick; and though by the Treaty of Aix-la-Chapelle (1748) she was also compelled to give up the duchies of Parma, Piacenza, and Guastalla to Spain, her husband was elected emperor. During the time of peace which followed Maria Theresa, with the aid of her husband and the minister Kaunitz, made great financial reforms; agriculture, manufactures and commerce flourished, the national revenue greatly increased, and the burdens were diminished. The Seven Years' war again reduced Austria to a state of great exhaustion, but on its conclusion the empress renewed her efforts to promote the prosperity of her dominions. Her son Joseph was elected king of the Romans in 1764, and on the death of her husband, in 1765, she associated the young prince with herself in the government. In 1772 she joined in the dismemtary of Polaries of ment. In 1712 she joined in the dismemberment of Poland, obtaining Galicia and Lodomeria, while in 1777 she acquired Bukowina from the Porte, and in 1779, as a courthouse, partly as a prison. by the Peace of Teschen, gained the Inn by the Peace of Teschen, gained the Inn valley. She died in 1780. Of the sixteen which she bore to the emperor ten survived her, one of whom was the oldest town in the State. It is on the Ohio, and the mouth of the Musicante unfortunate Marie Antoinette.

Maria-Theresiopel. See Theresiopel.

Maria-Zell (må-rš'å-tsel), a s mall town of Austria in the extensive trade, and it has large flour extreme north of Styria, in the midst of mountains, near the Salza. Its celebrity company with numerous other industries. is due to its possession of a handsome church, with a shrine containing a small black image of the Virgin and Child, to which numerous pilgrimage processions Atlanta. It is on an elevated site and is proceed annually from different parts of a place of resort. It has various manufacthe Austrian dominions. The number of tures. Pop. (1920) 6190.

France. On the assassination of Henry with the title of Bey, and latterly of she became regent, but proved utterly incompetent to rule. Her partiality for were very numerous. unworthy favorites caused her deposition and imprisonment. She became reconciled to her son, the weak Louis XIII. a town of North Italy, 10 miles southeast through Richelieu, who had possessed of Milan; famous for the defeat of the himself of the highest power, but was again imprisoned at Compiègne in 1630. for a victory of the French and Italians Thence she escaped, and after wandering over the Austrians in 1859. Pop. 6666.

Marie Galante (ga-länt), an island in the Wes: Indies, secret peace with the queen, who un-willingly abandoned Silesia and Glatz to deloupe, of which it is a depender cy. The chief productions are sugar, coffee, to-bacco, indigo and cotton. Por. about 17,000, chiefly negroes.

Marienbad (mä'r i-en-bat), one of the most frequer ted and picturesque of the Bohemian watering-places, about 24 miles from Carlsbad, with saline and purgative springs. Pop.

4588.

Marienburg (ma'ri-en-burh), a town in Prussia, in the government of Danzig, and 27 miles southeast of the city of that name, on the Nogat. It was once the seat of the knights of the Teutonic order, and contains the fine castle of the grand masters. (1905) 13,095.

Ohio and the mouth of the Muskingum River, 80 miles s. E. of Zanesville. Here is Marietta College, founded in 1835. Pe-

the Austrian dominions. The number of annual pilgrims is said to reach the great number of 200,000.

Marie Antoinette. See Antoinette.

Marie de Medici

(må-rë de med'iche), the daughchē), the daughditions to resort. It has various manufactures or a piace of resort. It has various manufactures and a piace of resort. It has various manufactures. Pop. (1920) 6190.

Mariette (må-re-et), Auguste Edward, a distinguished was attached to the Egyptian museum in Paris, and after successful scientific expectations to Egypt he was appointed by the chē), the daugh- ditions to Egypt he was appointed by the ter of Francis II of Tuscany, born in vicercy inspector-general of monuments 1573; married in 1600 to Henry IV of and curator of the museum at Boulak, France. On the assassination of Henry with the title of Bey, and latterly of she became regent, but proved utterly in-Pasha. He died in 1881. His works

Marigold (mar'i-gold), a name of sev-eral composite plants. The only by the road from Rimini. The princommon marigold (Calendula officinalis) common marigoid (Valendula officinalis) cipal inhabitants, however, reside in the is a native of France and of the more hamlet of Il Borgo, at its foot. Pop. southern parts of Europe. It is an annual, from 1 to 2 feet high, with large deep-yellow flowers. It is as prolific as a trurin in 1808. In 1830 he became an broths and soups, partly to give color, officer in the Sardinian army, but to and partly as an aromatic seasoning. It had also many medicinal virtues assigned to it, such as emmenagogue, diaphoretic, to Paris. There in 1838, under the astonic, antispasmodic and alterative. to it, such as emmenagogue, diaphoretic, to Paris. There in 1838, under the astonic, antispasmodic and alterative. Losumed name of Mario, he accepted an appearable it is used as an embrocation for pointment as first tenor of the opera, and bruises. It is now but little used, as it later sang in America. He died in 1883. has been replaced by other drugs. A marion (mar'i-on), Francis, an umber of species of this genus are indigenous to the Cape of Good Hope. born at Winyah, South Carolina. His The so-called African marigold and French marigold, common in flower bortionary war was most brilliant, and he ders, are both Mexican species, and have brilliant flowers. They belong to the soldiers having made himself a here of rebrilliant flowers. They belong to the soldiers, having made himself a hero of rogenus Tagetes. The corn-marigold is mance by the character of his exploits. genus Tagètes. The corn-marigold is mance by the character of his exploits.

Chrysanthèmum segètum; the fig-marigold is a Mesembryanthèmum; the marsh marigold is Caltha palustris.

Marion, a city, county seat of Williamson Co., Illinois, 114 miles s. E. of St. Louis, Mo. It has coal

Mariner's Compass. See Compass.

Marines (ma-rēnz'), a military force on four railroads, in a fertile farming disdrilled as infantry, whose especial duty is to serve on board ships trict. It has manufactures of motor trucks, glassware, castings, machinery, of war when on commission, and also on gasoline motors, shoes, brick, flour, pulp shore under certain circumstances. They are trained to seamen's duties, but do not other products. A National Soldiers go aloft, being mainly employed in sentry Home is here. Pop. (1910) 19,359; duty, etc. The force was first embodied by an order in council in 1664 as a nursery for seamen to man the fleet. The United States and Britain are the only nations which employ marines in this manner.

Marinette, a city, county seat of Grant Co., Indiana, on the Mississin-ewa River, 63 miles N. E. of Indianapolis, on four railroads, in a fertile farming districk, glassware, castings, machinery, of trailroads, in a fertile farming districk, glassware, castings, machinery, of war when on commission, and also on four railroads, in a fertile farming districk. It has manufactures of motor railroads, in a fertile farming districk. It has manufactures of motor railroads, in a fertile farming districk. It has manufactures of motor railroads, in a fertile farming districk. It has manufactures of motor railroads, in a fertile farming districk. It has manufactures of motor railroads, in a fertile farming districk. It has manufactures of motor railroads, in a fertile farming districk. It has manufactures of motor railroads, in a fertile farming districk. It has manufactures of motor railroads, in a fertile farming districk. It has manufactures of motor railroads, in a fertile farming districk. It has manufactures of motor railroads, in a fertile farming districk. It has manufactures of motor railroads, in a fertile farming districk. It has manufactures of motor railroads, in a fertile farming districk. It has manufactures of motor railroads, in a fertile farming districk. It has manufactures of moto

Bay, Wisconsin. Bridges here cross the commercially for its manufacture of steam Menominee River to Menominee, Michishovels, dredges, winches, garments, cut gan. It has numerous saw mills, the lumber interests being large; also large iron castings, band implements, brass and fishing interests, and manufactures of bronze castings, etc. It has stockyard, pianos, cutlery, excelsior, boxes, hoops, packing plant and the Eric shops. Popnovelties, flour, pape? and pulp, etc. Pop. (1910) 18,232: (1920) 27,891.

Marino (ma-rend), San, a town and small independent republic in philosopher, born in Burgundy in 1620, Italy. The territory consists of a craggy served as priest at St Marinsons. Italy. The territory consists of a craggy tract, with an area of about 22 square miles, on the borders of the provinces of Forli and Urbino, near the Adriatic coast. It is the last surviving representative of the Italian republics. At the discoveries in hyd head of the government are two 'cap- The law according the samiltant regent' elected for six months. Of the atmospher There is a militia of 950 men. The town covered by him a San Marino occupies the crest of a rocky See Boyle's Law.

cipal inhabitants, however, reside in the

marigold is Caltha palustris.

Marine Law. See Commercial Law, International Law.

Mariner's Compass. See Compass.

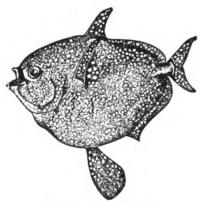
Mariner's Compass.

miles s. E. of St. Louis, Mo. It has coal mines and grain interests. Pop. 9582.

a city, county seat of Grant Co., Indiana, on the Mississin-ewa River, 63 miles N. E. of Indianapolis,

served as priest at St. Martin-sous-Beaune, became member of the Academy of Sciences in 1666, and died in 1684. He followed closely in the steps of Galileo and Torricelli, and made many important discoveries in hydrostatics and hydraulics. The law according to which the density of the atmosphere is regulated was discovered by him and Boyle independently.

(mar-i-pō'sā), a large and consul. beautiful fish found in the against Mariposa open Atlantic and Pacific Oceans.



Mariposa (Lampris luna).

Mariput (mar'i-put), the zoril, an animal of the genus Viverra, the V. zorilla, a species of civet.

Maritime Law. See Commercial Law.

Maritza (mä-re'tsa: the ancient He-brus), a river of Turkey, rising in the Balkans and flowing through Eastern Roumelia, southeast to Adrianople, where it bends to the southwest, and falls into the Ægean Sea by the Gulf of Enos. It is over 300 miles long, and navigable to Adrianople, about 100 miles in 1763. from its mouth.

Maritzburg. See Pietermaritzburg.

Mariupol (ma-ri-ö'pol), a town and seaport of S. Russia, in the government of Ekaterinoslav, on the Sea of Azof. Pop. 52,770.

Marius (mā'ri-us), Caius, a Roman general, born in 157 B.C., of obscure parents, at the village of Cereatæ, near Arpinum. He served with distinction at Numantia in 134 B.C. under tinction at Numantia in 134 B.C. under being employed as a seasoning. Scipio Africanus; was made tribune of the people in 119, and acquired much popularity by his opposition to the nobles. In 115 B.C. he was appointed prætor, and a year later proprætor of Spain, which he cleared of robbers; he also increased his influence by his marriage with Julia, the aunt of Julius age of the German Empire the mark is Cæsar. In 109 B.C. he accompanied the Consul Q. Cæcilius Metellus as his lieutenant to the Jugurthine war. He be a money of account in Hamburg being employed as a seasoning.

Mark, a term formerly used in Engish mark of a money of account. English shilling. brought this war and the war in Transalequal to nearly 1s. 6d.

pine Gaul against the Teutons to a victorious close; and six times was chosen

Mark, St., the Evangelist, according to the old ecclesiastical writera,

On the outbreak of th against Mithridates, Marius, wh long been jealous of Sulla, endeave deprive him of his command, and had ed to 1 the struggle which followed was compe ed to flee from I taly. After hairbed the escapes he landed in Africa amitheruins of Carthage, and remained the til recalled by Cinna, who had her led a successful movement in his favor company with Cinna he marched a ainst Rome which was chilged to viole the Rome, which was obliged to yiel, the entry of Marius and his followers being attended with the massacre of m st of his chief opponents. On the comretion of the term of Cinna's consulship le declared himself and Marius consuls (R.C. 86), but the latter died seventeen days

Marivaux (ma-re-vo), Pierre Car-LET DE CHAMBLAII DE, a French dramatic writer and no elist, a French dramatic writer and no elist, born at Paris in 1688. After writing three or four novels and a series of articles of the 'Spectator' type from 1720 onwards he produced a larse number of plays, the best being the Surprise de l'Amour (1722), the Jeu de l'Amour et du Hazard (1730), and Les Fausses Confidences (1737). They were characterized by a certain skilfully embroidered phrasing which gave rise to the broidered phrasing which gave rise to the term marivaudage, but they have also no little charm of feeling as well as of intellectual finesse. Two uncompleted nov-els, Marianno and the Paysan Parvenu, contain much excellent work. He was made an academician in 1736, and died

Marjoram (marjo-ram; Origanum), a genus of plants of the nat. order Labiatæ. The common marjoram (Origanum vulgare), a native of Britain, is a perennial under-shrub growing among copsewood in calcareous soils. The leaves are small and acute; the flowers reddish, in clustered spikes. Sweet marjoram (O. Majorana) is a biennial, cultivated in gardens. As soon as it blossoms it is cut and dried for culinary use, being employed as a seasoning.

the person known in the Acts of the nation-wide fame. He subsequently de-Apostles as 'John, whose surname was voted himself to writing and lecturing. Mark' (Acts, xii, 12, 25), for many years In 1900 he published 'The Man with the the companion of Paul and Peter on their Hoe, with Notes by the Author.' 'Linthe companion of Paul and Peter on their Hoe, with Notes by the Author. Linjourneys. His mother, Mary, was gencoln and Other Poems' appeared in 1901. erally in the train of Jesus, and Mark He wrote a number of essays including was himself present at a part of the "The Poetry of Jesus," The Social Conevents which he relates in his gospel, and received his information partly from eye-witnesses. He was the cousin of Barna- and edited 'Remarkable Writings of The Children in Bondage.' Writings of events which he relates in his gosper, and received his information partly from eye-witnesses. He was the cousin of Barnabas (Col., iv, 10), and accompanied Paul and him to Antioch, Cyprus and Perga in Pamphylia. He returned to Jerusalem, whence he afterwards went to Cyprus, and thence to Rome. He was the cause of the memorable 'sharp contention' between Paul and Barnabas. Of the close of his career nothing is known; and it is by no means certain even that the various passages, on which the church has based the biographical notes already cited, uniformly refer to the same indirectly solven and was charged with connivance with pirates and privateers who took refuge in Delaware Bay.

Markhor (märkor), a wild goat native to Asia. It is closely

Markets. See Fairs.

Markham (mark'am), CLEMENTS ROBERT, an English geog-rapher and traveler, was born in 1830, and educated at Westminster School. He was in the navy in 1844-51, after which he traveled in Peru, and published Cusco and Lima (1856). In 1860-61 he visited Peru and India in connection with the establishment of cinchona plantations in the latter country, one result being the publication of *Travels in Peru and India* (1862). In 1865-66 he visited Ceylon and India, and in 1867-68 accompanied the Abyssinian expedition, an account of which he wrote. He was made C.B. in 1871. He has held several government a fruit that is roasted and eaten. The appointments. Other works of his are: black juice of the unripe fruit serves to Life of the Great Lord Fairfax; Sketch make a marking-ink.

of the History of Persia; Peruvian Bark;
The War Between Peru and Chile, etc.

Markirch (markirh), or St. Marie-Aux-Minnes, a town of Germany, in Unper Alsace in a valley on many, in Unper Alsace in a valley on He was knighted in 1896, and died Jan. 30, 1916. His brother, ALBERT HASTINGS MARKHAM, born in 1841, was an Arctic

Markhor (markor), a wild goat native to Asia. It is closely related to the domestic variety, but has long massive spirally twisted horns. There are four subspecies, distinguished chiefly by variation in the shape of the horns. The extremes are represented by the Astor and Suliman markhor. In the first, which is named from the village of Astor in northwestern Kashmir, the horns form an open spiral and are long and massive; in the second, named from the Suliman range in which it is found, the horns are short and straight with the keel running around them like the thread of a screw.

Marking-nut (Semecarpus Anacardium), a tree of the

many, in Upper Alsace, in a valley on both sides of the river Leber. 12,372.

Markham, born in 1841, was an Arctic voyager and writer on polar research and was made a rear-admiral in 1892.

Markham, Edwin (1852-), an Markham, American poet, born at Oregon City, Oregon. In his boyhood days he was taken to California and there worked at farming and sheep-herding and blacksmithing. He was educated at San José Normal School and two western colleges; was superintendent of public schools till 1899, in which year his soil depends in a great degree on the striking poem, The Man with the Hoe, suitable proportion of the earths which was written. He had written verses for many years, but it was not until The an argillaceous marl will be more suitable Man with the Hoe' appeared that he won

much probability by its tenacity or loose- as to obtain the public thanks of the king ness, moisture or dryness.

Marlborough mariborough Middlesex Co., Massachusetts, 25 miles w. of Boston. It has extensive manufactures of boots and shoes, also produces shoe machinery, electric appliances, etc. Pop. (1910) 14,579; (1920) 15,028

Marlborough (marl'b'ruh), a mu-nicipal borough of England, in Wiltshire, on the Kennet, a tributary of the Thames. There is here a flourishing grammar school, Marlborough College, opened in 1845. Pop. 4401. Marlborough, a provincial district, New Zenland, occupy-ing the northeast portion of South Island, and bounded by the sea and the provincial and bounded by the sea and the provincial district of Nelson. Its extreme length is 130 miles, breadth 60 miles; area, about 3700 sq. miles. In the south of the district are the Wairau Plains, one of the finest sheep tracts in New Zealand. Capital, Picton, situated on an arm of Queen Charlotte Sound. Pop. 11,113.

Marlborough, John Churchill, Duke of, an English general and statesman, second son of Sir Winston Churchill; was born at Ashe, in Devonshire, in 1650. At the age of Devonshire, in 1650. At the age of twelve he became page to the Duke of York (afterwards James II), by whom at sixteen he was appointed an ensign. He



Duke of Marlborough.

was present at the siege of Tangiers, and soon after his return rose to the rank of captain. In 1672 he accompanied the

of France. On his return to England he (marl'bur-ō), a city of was made lieutenant-colonel, and through the influence of his sister Arabella, mis-tress of the Duke of York, his advance-ment was rapid. He had a regiment of dragoons presented to him, and strength-ened his influence at court by his mar-riage with Sarah Jennings, an attendant upon the princess, afterwards Queen Anne. In 1682 he obtained the title of Baron of Eyemouth, and a colonelcy in the guards. On the accession of James II he was sent as ambassador to France, and soon after his return was created Baron Churchill of Sundridge, and raised to the rank of general. The same year he suppressed the rebellion of the Duke of suppressed the rebellion of the Duke of Monmouth. On the arrival of the Prince of Orange he joined him at Axminster, and was rewarded by the earldom of Marlborough, and the appointment of commander-in-chief of the English army in the Low Countries. The following year he served in Ireland, where he reduced Cork, Kinsale, and other places. In 1691 he was suddenly dismissed from all 1691 he was suddenly dismissed from all his employments and committed to the Tower on the charge of high treason, but soon obtained his release; though it ap-pears that the suspicions against him were not without foundation. On the death of Queen Mary he was made a privy-councilor, and appointed governor to the young Duke of Gloucester; and in 1701 was created by King William com-mander-in-chief of the English forces in Holland, and also ambassador plenipotentiary to the states-general. Still greater honors awaited him on the accession of Queen Anne in 1702, when he was created captain-general of all the forces at home and abroad, and sent plenipotentiary to The Hague, where he was also made cap-tain-general by the states. In the cam-paign of the same year he drove the French out of Spanish Guelders, and took Liège and other towns, for which he was created Duke of Marlborough. In 1704 he stormed the French and Bavarian lines at Donauwörth, and in the same year, in conjunction with Prince Eugene, gained the victory of Blenheim over the French and Bavarians, headed by Marshal Tal-lard and the Elector of Bavaria. The nation testified its gratitude by the gifts of the honor of Woodstock and hundred of Wotton, and erected Blenheim Palace for him, one of the finest seats in the king-dom. During the year 1705 he con-ducted successful negotiations at the courts of Berlin, Hanover and Venice. Duke of Monmouth to assist Turenne and the new emperor, Joseph, presented against the Dutch. At the siege of Maeshim with the principality of Mindelheim. Tricht he distinguished himself so highly On the victory of Ramillies, 1706, a bill

was passed to settle his honors upon the Great, Edward II, Dr. Faustus, and the male and female issue of his daughters. Jeso of Malta, he left a translation of the In the campaign of 1707 his antagonist Metamorphoses of Ovid, and some lyrical was the famous Duke de Vendôme, over poems, among them the Passionate Shepwhom he gained no advantage, and on herd; another poem, Hero and Leander, his return, found that his popularity at was completed by George Chapman. He court was on the decline. In 1708, in appears to have led a reckless, dissipated conjunction with Prince Eugene, he life, and died in 1593, from a wound gained the battle of Oudenarde. In 1709 received in a quarrel with a serving-man he defeated Marshal Villars at Malpla-at Deptford. Marlowe was by far the quet, though at a cost ill repaid by the greatest dramatic writer before Shakescapture of Mons. On the next visit of peare.

Marlowe Julia, actress, born at Caldcapture of Mons. On the next visit of the duke to England he found that the duchess, by her great arrogance, had so disgusted the queen that a total breach had ensued. Early in 1710 he returned to the army, and with Prince Eugene gained another victory over Villars. During his absence a new ministry, hostile to himself, was chosen, and on his return to himself, was chosen, and on his return favore with child parts, her first mature part being Parthenia, in Ingomar, in 1888. Since that date she has been a favorite in Shakepearean and other leading parts. She married Robert Tabor, prosecution commenced against him for applying the public money to private purposes. He repaired in disgust to the Low Countries in 1712, but returned a short 10 miles west of Paris. It contained a royal castle, built by Louis XIV and deaccession of George I was reinstated in accession of George I was reinstated in stroyed after the revolution. the supreme military command. Retiring Marmalade (mar'ma-lad; Portu-from all public employments, his mental faculties gradually decayed, and he died quince), a jelled preparation made from at Windsor Lodge in 1722, leaving four quinces, peaches, apricots, oranges, etc., daughters, who married into families of and portions of their rinds, the most com-JENNINGS, born in 1660; died in 1744, Seville oranges.
has been almost equally celebrated for her boundless ambition and avarice. The title boundless ambition and avarice. The title full the decondants of one of their

Marline-spike (mar'lin spik), an which resembles marmalade. It is also iron pin tapering to called Mamee-sapota.

a point, and principally used on board ship to separate the strands of a rope in the spiral of the order to introduce the ends of some other distilled in Ceylon from the flowers of the through the intervals in the act of knot-Bengal quince (Belou Marmëlos), and ting or splicing; it is also used as a lever much used by the natives as a perfume

ting or splicing; it is also used as a level in various operations.

Marlitt, E., the pseudonym of the John, born at Arnstadt, Thuringia, in 1829; died in 1877. She was for a time on the operatic stage and after 1863 wrote a long series of novels, many of which were translated into English.

Marmont (marmon), Auguste Special Marlow.

Marmont (marmon), Auguste Viesse Dec. Duke of Ragusa and Marshal of France, was born in 1774 at Chattillonsur-Seine. the son of an ex-officer in the

fell to the descendants of one of their ea), a tree of the order Sapotaceae, a nadaughters, who have assumed the name of the of the West Indies and tropical America, valued for its fruit, the pulp of

sur-Seine, the son of an ex-officer in the Marlowe (marlō), Christopher, an army. In 1792 he joined the artillery, English poet and dramatist, and at Toulon became acquainted with born at Canterbury in 1564, and educated Napoleon Bonaparte, who chose him for at Cambridge, whence he proceeded M.A. his aide-de-camp. In Italy he greatly in 1587. He afterwards settled in Londistinguished himself, and after the don, and became an actor as well as a battle of Marengo attained the rank writer for the stage. Besides six trage-of general of division. He obtained the rank writer for the stage. dies of his own composition, the best the title of Duke of Ragusa for his defense known of which are Tamburlaine the of Patendar, territory against the Rusat Wagram, and after the truce of Znaim was made field-marshal. He afterwards governed the Illyrian Provinces till 1811, when he succeeded Masséna as commander in Portugal. In conjunction with Soult he raised the siege of Bajadoz, but was ultimately badly beaten at Salamanca by Wellington. In the campaign of 1813 he held the command of an army corps in Germany, and fought in the batcorps in Germany, and fought in the battles of Lützen, Bautzen and Dreeden. In 1814 he fought a final battle under the walls of Paris, but opposition appearing fruitless he surrendered to the allies. This proceeding was one main cause of Napoleon's immediate abdication, and brought Marmont into favor with the Bourbons. After the restoration Louis Bourbons. After the restoration Louis Didelphys murina of Cayenne, D. der-XVIII made him a peer of France, but sigëra of Surinam. It carries its young he was compelled to withdraw from Paris about with it on its back. by the revolution of 1830, and his name Marmoset (mar'mu-set), a name of was struck off the army list. He accomown memoirs. 1852.

marmora (mär'mo-ra), or Marmara, America (Cynòmys Ludovicidnus) is the Sea of (anciently Propontis), an inland sea, lying between European and Asiatic Turkey, communicating with the Mediterranean by the Dardanelles, and with the Black Sea by the Bosporus; lergth from Gallipoli to the head of the Gulf of Izmid, 177 miles; tributary of the Seine on the right, rises greatest breadth, rather more than 50 miles. It contains several islands, of enters the Seine about 3 miles above which the largest is Marmora, famous for its quarries of marble and alabaster. Marmora (mar'mo-ra), or Marmara,

sians and Montenegrins. He was present Marmose (mar'mos), a marsupial



Marmose (Didelphys murina).

was struck off the army list. He accompanied Charles X in his exile, and after-ican monkeys, the smallest of the monkey wards traveled, publishing the results of tribe. They are agile in their movements, his travels in 1837-39. He also wrote possess long, non-prehensile tails, and Esprit des Institutions Militaires and his have a thick woolly fur. They bear a He died at Venice in close resemblance to squirrels in general appearance, feed upon fruit and insects, Marmontel (mar-mon-tel), Jean and occasionally upon the smaller birds FRANCOIS, a French and their eggs. The marmoset family writer, born in 1723; died in 1799. After (Hapalidæ) is generally divided into two acting as a teacher of philosophy in a genera, Hapale and Midas, each including seminary at Toulouse he in 1745 went by a great number of distinct species, the Voltaire's advice to Paris, where his tragmost familiar being the Black-eared mar-edies Denys le Tyran (1748) and Aristomoset (Hapale Jacchus) and its varieties mène (1749) brought him considerable H. penicillata, H. vulgaris, etc. These celebrity. By the favor of Madame Pom- are also known by the name of Ouistit. padour he was appointed to a post in Marmot (marmut), a rodent quadconnection with the royal buildings. In
1761 he published his first series of classed with the squirrels. They are
Contes Moraux ('Moral Tales'). In thick-bodied, have short tails and short
1763 he succeeded Marivaux as a member legs, and live in burrows, which are gen-1763 he succeeded Marivaux as a member legs, and live in burrows, which are genof the French Academy, and he was aperally excavated in mountainous situations and consist of a series of galleries 1783 he was elected secretary to the in which whole communities reside. Durfrench Academy. On the breaking out ing the winter they lie dormant. The of the revolution he retired to a cottage marmots inhabit Europe, Northern Asia in Normandy, where he wrote a new senies of tales and Memoirs of his own life. He also wrote Bélisaire (1767), found in plenty on the Alpine or Eurologédie, etc.

The prairie-dog or prairie-marmot, or wistonwish, of North Marmons (mär'mo-ra), or Marmara.

Marne, a department of France, bounded by Ardennes, Aisne, Seine-et-Marne, Aube, Haute-Marne and Meuse; 67 miles long by 60 miles broad; area, 3158 square miles. About two-thirds of it is arable, and the crops, chiefly rye and oats, more than supply the consumption. The vine is largely cultivated; but though the champagnes of Rheims and Epernay are famous, the general produce of the vineyards is indif-

meral produce of the vineyards is indifferent. Châlons-sur-Marne is the capital. Pop. (1906) 434,157.

Marne, HAUTE (Upper Marne), a department of France, bounded by Meuse, Marne, Aube, Côte d'Or, Haute-Saône and Vosges; area, 2401 sq. miles. Ramifications of the Vosges make the greater part of the surface mountainthe greater part of the surface mountainous, and the elevated plateau of Langres in the department forms part of the great European watershed. The principal rivers are the Marne, with its tributaries, and the Meuse. The ordinary agricultural crops equal the consumption, and the wine is partially exported. The forests are extensive, and furnish fuel for smelt-

are extensive, and furnish fuel for smelting the ironstone of the department. The coal-measures are partially developed, but the prevailing rock is Jura limestone. Chaumont is the capital. Pop. 224,888.

Marne, BATTLE OF THE, the great conflict which marked the climax of the German advance into France in the Great European War, and their retreat to the serviced warray of their retreat to the serried array of trenches to which the fighting was to become confined. This battle is regarded by many as the turning point in the war so far as the struggle in the west was con-cerned, and the rescue of France from a situation of imminent danger. In the di-rection of the river Marne, with Paris as their goal, marched the great German hosts after they had overrun Belgium in August, 1914, the French and British August, 1914, the French and British armies retreating before their seemingly irresistible advance. It was a critical period in the history of France, one in which the Germans, estimated at 900,000 in number and flushed with victory over the Belgians, faced 1,000,000 French and British as yet practically untried on the British, as yet practically untried on the battlefield, but fully recognizing the need of a desperate defense. The British wing of the allied armies, small in number, was struck at Mons on August 28 by a greatly superior force and hastily fell back, barely superior rice and marity let back, barely many needs and south of the draw seconing disaster; while the French were Morin. The important result of this day's stubbornly retreating before the powerful manœuvres was that Von Kluck's right German forces which had fought their had been turned, compelling him to preway to the Paris-Verdun line, and were sent two fronts to the advancing foesturdily driving forward towards the September 7 was a day marked along the French capital. General Joseph the whole line of desperate fighting, Von

department of France, French commander-in-chief. treating, did so only for strategic reasons, having it in view to halt and give battle in a selected position behind the waters of the Marne, where he could avail himself of the large body of troops occupying the outlying defenses of Paris. On reaching this position in early September, he began a new disposition of his forces, shift-ing his center eastward. General Von Kluck, commanding the right wing of the invaders, and marching directly upon Paris, made a sudden shift in the same portant just then to annihilate the opposing forces than to occupy the capital.

latter could wait. On September 5, Von Kluck crossed the Marne above Meaux, leaving a strong force on the west bank of the Ource to protect his right wing. East of him lay Von Bulow's army, the remaining German armies being disposed to support those named. It was a formidable force which Joffre thus faced when he halted his retreat with the purpose of striking the blow which he had in view in his retreat. Paris, indeed, was in such danger that the official staff of the government had been hastily transferred to Bordeaux, and on September 6 the forces assigned for its protection were hastily transferred to the front, leaving the Paris forts by every means of transportation available. day designed for the launching of Joffre's day designed for the launching of Johres forces against the Germans had been reached and the two great armies faced each other along a wide front. Sunday, September 6, 1914, was a critical date in the history of France. Joffre's attitude of defense was about to be changed for an attitude of offense and no man could safely predict the issue. If the German army would force its way through the opposing line Paris would fall once more into the hands of a powerful foe and an immense advantage be gained, even if this event should not prove fatal.

The unexpected forward movement of the French forces upon Von Kluck's flank caused him in all haste to check his advance across the Marne and form new vance across the Marne and form new plans to meet the advancing fee. This led to one of the events that decided the fate of the battle. The British had joined in the advance, striking Von Kluck's right and center, and by nightfall their line was firmly fixed across and south of the Grand Morin The important result of this day's to draw back from the Grand Morin. The following day marked a general turning of the tide, its most important merel being the capture of Montmarail, in the Roman Catholic Church. See Druses.

Maroons (ma-rönz'), the name given to runaway negroes in Jawesen being the capture of Montmarail, in the Pottic Morin by D'Esparant a fast in some parts of South America. event being the capture of Montmarall, in maica and in some parts of South Amerthe Petite Morin, by D'Esperay, a feat ica. In many cases they rendered them-which led to the exposure of Von Bulow's selves formidable to the colonists. When right flank. This fact was quickly dis-Jamaica was conquered by the English in covered by General Foch, who pushed his 1655 about 1500 slaves retreated to the left wing forward during the night, gain-mountains, and continued to harass the ing a position well to the west of Von island till 1795, when they were reduced Bulow. Far more important, however, by the aid of bloodhounds.

was a signal fact discovered by his air Maros (mä'rosh), a river of Hungary scents. In some way not essily explained Maros which enters the Theise at scouts. In some way not easily explained Von Bulow's left and Von Housen's right had been separated, leaving a gap into which Foch daringly pushed his way between the two German armies.

September 9 was a day of heavy rain, but by its end the German rights had been hopelessly broken, Foch and D'Esperay occupying the gap that had been made, and driving two of Von Bulow's corps into an area of marshy ground. They got to higher ground in the next morning, but had lost many men taken prisoners and at least 40 guns. Von Bulow's left and Von Housen's right were now in similar straits, the French lines between them, well equipped with artillery, causing seri-ous loss of life, while the German armies were driven back to right and left and their lines hopelessly separated. Reinforcements at this time reached the German lines, but they were unable to check the French advance, while the Crewn Prince's army sought in vain to drive a wedge between the French right and the front of the Mcuse. By the evening of the 10th the battle was practically at an end and the French victory assured. The retreat continued during the next day and on the 12th the Germans reached the fortified ground they had previously pre-pared on the line of the Aisne. The great Teutonic drive had signally failed; the French were the victors; Paris was

Maronites (mar'on-itz), a sect of eastern Christians, whose origin was a consequence of the Monothelite controversy. (See Monothelites.) On the condemnation of the Monothelites by Anastasius, early in the eighth cen-tury, the remnant of this party survived in the Maronies, so named from their founder Maron—a society of monks in Syria, about Mount Lebanon, which is mentioned as early as the sixth century. They become a warlike mountain people, who defended their political and religious independence boldly against the Mohammedans. Their political constitution is that of a military commonwealth. Since

Kluck bearing the brunt of the most furi- the twelfth century they have several mountains, and continued to harass the island till 1795, when they were reduced by the aid of bloodhounds.

Maros which enters the Thaise of

which enters the Theiss at Szegedin after a course of 400 miles. Maros-Vásárhely (mä'rosh-vä'särof Transylvania, on the Maros, in a beautiful and fertile district, 54 miles N. N. E. of Hermannstadt. Pop. 19,522.

Marot (ma-ro), Clement, a French epigrammatist and writer of light lyrical pieces, born at Cahors in 1495. He went to Paris as page of Margaret of France, duchess of Alençon. whose brother Francis I he afterwards accompanied to the Netherlands. In 1525, having followed the king to Italy, he was wounded and made prisoner in the hettle of Pavis After his return to the battle of Pavia. After his return to Paris he was suspected, possibly on the charge of his mistress Diana of Poitiers, of being favorable to Calvinism, and was thrown into prison. During his confinethrown into prison. During his confinement he wrote L'Enfer, a satire on his judges; and a modernized edition of the Romance of the Rose; and the king finally set him at liberty. His connection with Margaret, now Queen of Navarre, with whom he had quarreled, was renewed, but he soon went to Italy, and thence to Geneva (1543), where Calvin succeeded in making him a nominal proselvte. elyte. He recanted, however, and returned to Paris; but being again in danger as a suspected heretic, he fied to Turin, where he died in poverty in 1544. His translation of the Psalms, made in conjunction with Beza, was long used in the Protestant shuppher in France though the Protestant churches in France, though his own life was marked by complete re-ligious indifference. The combination of satirical humor, naïveté, and delicacy exmarque (mark), Letters of, or Letters of Marque and Exple

PRISAL, a license or extraordinary commission granted by a sovereign or the supreme power of one state to the citizens of this state to make reprisals at sea on the subjects of another, under pretence of indemnification for injuries received; that is, a license to engage in privateer- wife. Different localities have different

about 3500 feet; the intervening valleys are singularly fertile and picturesque. Their principal productions are yams, bread-fruit and cocoanuts. They were discovered in 1595.

Marquetry (mar'ket-ri; Fr. marquete-rie), inlaid cabinet work in which thin slices of different colored wood, sometimes of ivory, pearl, shell, or metal, are inlaid on a ground usually

plorer in North America, born in Picardy, ence of witnesses, and all the customary France. After spending several years in forms and ceremonies being simply conmission work, he led a party down the Illinois and the Mississippi to the Arkansas. Died in 1675.

Marrow. See Medulla.

kansas. Died in 1675.

Marquette, a city and summer requette County, Michigan, on the shore of Lake Superior, 430 miles N. of Chicago. It has a good harbor and immense docks for the shipment of iron ore, which is abundant in the county. There is also an extensive brownstone quarry, large machine shops and blast furnaces, railroad shops, woodworking factories, trap rock quarries, etc. There is a State normal school. a State prison, and a house normal school, a State prison, and a house of correction. Pop. (1920) 12,718.

Marquis (mir'quis). MARQUESS (Fr. mcrquis; I tal. marchese; Ger. markgraf), a title of honor next in dignity to that of duke, first given to the supplemental of the market of the supplemental of the market of the supplemental of the market of the supplemental of the those who commanded on the marches or frontiers of countries. The title was first introduced into England by King Richard II, in the year 1387, but fell into disuse until the reign of Edward VI, who cretion as regards sea life, but he cannot ated the Marquisate of Winchester in be said to be a great master of plot. He 1551. The corresponding female title is died at Langham, Norfolk, in 1848. One

by which they are united for life and assume the legal relation of husband and

that is, a license to engage in privateering. Letters of marque were abolished forms of the institution, the most broadly among European nations by the Treaty marked of which are connected with the of Paris of 1856. The United States of right to have only one wife—monogamy, America was invited to accede to this arreement, but declined.

Marquesas (mar-ka'sas; Fr. Mar-eral husbands, is known to have existed in another times and still exists in ceral husbands and still exists in ceral husbands. America was invited to accrete a present, but declined.

Marquesas (mar-ka'sas; Fr. Mar-eral husbands, is known to have existed in ancient times, and still exists in certain the South Pacific Ocean, lat. 8° to 113°s.; lon. 138°30′ to 143°w, belong most civilized communities monogamy is ing to France, composed of twelve islands and islets. Their coasts are generally church of Rome ranks marriage among inaccessible, rising from the water like the prevailing practice. Though the Church of Rome ranks marriage among the sacraments, and religious observances are one or two excellent natural harbors. Hiva-oa is the next in size. Some of their mountains reach an elevation of valid the civil contract. To render their mountains reach an elevation of valid the civil contract constituting marabout 3500 feet; the intervening valleys it is requisite that the free will of each it is requisite that the free will of each of the parties should be spontaneously exercised, and that each should be capable of giving an intelligent consent. By common law the age of consent is four-teen for males and twelve for females. This prevails in England, and in the Uni-ted States except where changed by State legislation. In the United States marof oak or fir, well seasoned to prevent riage is regarded as being entirely based warping.

Marquette

(mar-ket), Jacques, Jessent of the parties; solemnization by a uit missionary and exclergyman or by a magistrate, the present mutual control or by a magistrate, the present matter or on the present mutual control or by a magistrate, the present matter or on the present mutual control or by a magistrate, the present mutual control or by a magistrate, the present mutual control or by a magistrate, and the control or by a magistrate or by a

Marryat (mer'ri-at), FREDERICK, an English novelist and naval officer, born in 1792. In 1806 he entered the navy as midshipman on board the Impérieuse, commanded by the cele-brated Cochrane, afterwards Lord Dundonald; and having served with distinc-tion and attained the rank of captain he retired in 1830. His first attempt in lit-erature was made in 1829, by the publi-cation of Frank Mildmay. His success led to an extensive series of works of the like kind, including The King's Own. Peter Simple, Jacob Faithful, Japhet in Search of a Father, Midshipman Easy, The Pacha of Many Tales, and others. He was also the author of a Code of Signals for the Merchant Service (1837). Captain Marryat's novels are remarkable for broad humor and fidelity of descripmarchioness.

Marriage (mar'ij), a solemn contract gained distinction as a novelist. See by which they are united for life and

Mars (marz), the Roman god of war, at an early period identified with

Mars

the Greek Ares, a delty of similar attri- the planet in a period of 30 hours 14 butes. Like Jupiter he was designated father, and was regarded in particular as the father of the Roman people, Romulus and Remus being the fruit of his intercourse with Rhea Sylvia. Several temples at Rome were dedicated to him. His service was celebrated not only by particular flamines devoted to him, but by the College of the Salii, or priests of Mars. The month of March, the first month of the 1.0 man year, was sacred to him. As the tutelary deity of Rome he was called Quirinus, in his character as the god of war Gradivus (the striding). Ares, the Greek god of war, was the son of Zeus (Jupiter) and Hera (Juno). He is represented as terrible in battle, but not as invulnerable, since he was wounded at various times by he was wounded at various times by Heracles, Diomedes and Athena. He is represented as a youthful warrior of strong frame, either naked or clothed with the chlamys. The chief seats of the worship of Ares were in Thrace and

its distance from the earth varies from about 35,000,000 to 244,000,000 miles; it rotates on its axis in 24 hours 37 minutes 22 seconds; the inclination of its axis, or the angle between its equator and its orbit, is 28°; its diameter is about 4400 miles. Its surface bears some degree of resemblance to that of the earth, though with variations of singular charac-These consist of canal-like markings covering much of the surface and which have given rise to much controversy, some astronomers contending that they are irrigation canals of artificial origin, and indicate that Mars is inhabited.

This theory however, is not widely accepted. The reddish hue of Mars is one Latin, Massilia), a city and the principal of its characteristic features. About commercial seaport of France, on the every 8 years 7 months it is in perihelion and perigee at the same time, and has a wonderful brilliancy. At its poles are white portions, which decrease and in-crease in size at the beginning and end of the Martial summer, so that the poles are supposed to be surrounded with snow, though much doubt is felt regarding this. In 1877 two satellites, both very small bodies, were discovered by Professor Hall of the Naval Observatory, Washington.

minutes; the inner one, 5800 miles from the center of Mars, has a period of 7 hours 38 minutes.

Mars, ANNE FRANÇOISE HYPPOLITE BOUTET, a French actress, born at Paris in 1779. As Célimène in Molière's Misanthrope, and Elmira in Tartuffe, as well as in several similar characters in the plays of Marivaux, she was superb. Louis XVIII settled on her, as well as on Talma, a pension of 30,000 francs. She quitted the stage in 1841, and died at Paris in 1847.

and died at Paris in 1847.

Marsala (märsä'là), a seaport of Sicily, on the promontory of Cape Boeo, 18 miles s. s. w. of Trapani. The principal edifice is a large cathedral. The harbor has been so silted up as to admit only small vessels. See Lilybæum. Pop. (1911) 65,451.

Marsden (marz'den), WILLIAM, or iental scholar, born in Dublin in 1754. was sent out early in life to

strong frame, either naked or clothed with the chlamys. The chief seats of the worship of Ares were in Thrace and sumatra, in the East India Co.'s service, Scythia.

Mars, the planet which lies next beyond the orbit of the earth. It admiralty, retiring in 1807. Among his moves around the sun in 686.9797 of our works are: History of Sumatra, Dictionmean solar days, at the average distance ary of the Malayan Language; Grammar of 139,312,000 miles, its greatest and least distances being 152,284,000 and of the Malayan Language; Translation of the Malayan Language; Translation of the Travels of Marco Polo, with a 126,340,000 miles; its orbit is inclined to commentary; and Numismata Orientalia. the ecliptic at an angle of 1° 51′ 5″; He died in 1836.

Marseillaise Hymn (mar-se-laz'), of the French Republic. The words, and, as is generally believed, the music, were written in 1792 by Rouget de l'Isle, an officer in garrison at Strasburg, on the occasion of a body of volunteers leaving that city for the war against Austria and Prussia, and the poem was entitled by him Chant du Guerre de l'Armée du Rhin ('War-song of the Army of the Rhine'). It was called Marseillaise because first sung in Paris by volunteers from Marseilles.

Mediterranean, capital of the department of Bouches-du-Rhône. It is situated on the northeastern shore of the Gulf of Lyons, and lies in the form of an amphitheater round a natural harbor of modern size now known as the Old Harbor. From the inner end of the harbor runs inland one of the finest of the city thoroughfares, called the Cannehière next the harbor, while at right angles to this another great thoroughfare or broad avenue runs through the city. Though a handsome The outer one, 14.500 miles distant through the city. Though a handsome from the center of Mars, revolves round city as a whole, Marseilles is not rich

Marshall Marsh

in public edifices. The most deserving the many species of extinct vertebrate of notice are the large new cathedral in the Bysantine style; the church of Nôtre the Rocky Mountains. He wrote Odo-Dame de la Garde, on a hill of same tornithes, Dinocerata, etc., with a large name; the church of St. Victor; the number of scientific papers. He died in Hôtel de Ville; the Prefecture; the 1899.

Palais des Arts de Longchamp, with picture sellery and natural history museum:

Marshal (mar'shal), French Mar ferure sellery and natural history museum: ture gallery and natural history museum; consists of a series of extensive docks along the shore to the west, with a pro-tecting breakwater in front. In recent In recent times Marseilles has made great progress in its extent, street improvements, population and commerce, largely owing to peror, and on other high occasions. The conquest of Algeria and the opening is still a marshal at the head of of the Suez Canal. The most important households of German sovereigns. of the Suez Canal. The most important households of German sovereigns. In manufactures are soap, soda and other chemical products; also olive and other est military honor. In Germany generalis, sugar, machinery, iron and brass feld-marshal is the highest military work, candles, glass, earthenware, etc. honor. In the United States a marshal The trade is chiefly in soap, olive oil, is an executive officer (resembling the wine, brandy, corn, flour, dried fruits, tobacco, wool, skins, iron, cotton, etc.—
Marshall, a city, county seat of Marseilles was founded by a colony of Greeks from Asia Minor about 600 years before Christ, the original name being & Alton and Missouri Pacific Railways. Massalia. It attained great prosperity Here are Missouri Valley College, the as a Greek colonial center, and the Greek Academy Notre Dame de Sion, etc. It language is said to have been spoken here has milling plants, elevators, serum plant, till several centuries after Christ. It large shoe factory and other industries. Was taken by Cesar in B.C. 49. On the Pop. 5200.

Marshall, a city, county seat of Kansas City, on Chicago before Christ, the original name being & Alton and Missouri Pacific Railways. Here are Missouri Valley College, the has milling plants, elevators, serum plant, till several centuries after Christ. It large shoe factory and other industries. Marshall, a city of Texas, seat of Shreveport, La. Timber and glass sand the Saracens, and in the tenth century are plentiful in the vicinity, and there are carrywheal works are well along mills

it came under the dominion of the counts car-wheel works, saw and planing mills, of Provence, and for some centuries after cotton-seed oil mill, ice factory, etc. Here followed the fortunes of that house, are Wiley University (Methodist Episcopo, (1911) 550,619.

Marsh, George Perkins, scholar and colored students. Pop. (1910) 11,452; (1920) 14.271.

stock, Vermont, in 1801. He was graduated at Dartmouth College, studied law, and practiced at the bar. In 1842-49 he was a member of Congress, and in 1851 came a captain in the Revolutionary war American minister at Constantinopie. American minister at Constantinopie. From 1861 till his death in 1882 he was

Marshal (mar'shal), French MARÉ-CHAL, a word of German orthe exchange; public library; and the igin signifying originally a man aptriumphal arch through which the town pointed to take care of horses. A similar is entered on the side of Aix. The harterm is the French connétable or conbor is strongly defended by various stable, from L. comes stabuli (count or works. What is called the New Harbor master of the stable). The marshal of term is the French connétable or con-stable, from L. comes stabuli (count or master of the stable). The marshal of the German Empire derived his origin from the Frankish monarchs, and was equivalent to the comes stabuli or conmétable. He had to superintend the cere-monies at the coronation of the em-peror, and on other high occasions. There is still a marshal at the head of the

the Saracens, and in the tenth century are plentiful in the vicinity, and there are it came under the dominion of the counts car-wheel works, saw and planing mills,

and took part in several battles, became a lawyer, and in 1788 advocated the adoption of the Federal Constitution in American minister to Italy. He published adoption of the Federal Constitution in a Grammar of the Old Icelandic Lanseveral powerful speeches. He was guage, The Origin and History of the elected to Congress in 1799. In 1800 he English Language, The Earth as Modified was appointed Secretary of State by Human Action atc. was appointed Secretary of State by Human Action, etc.

Marsh, Othniel C., naturalist, born at Lockport, New York, in 1831. He devoted himself to the investigation of extinct vertebrate a nime of the country. 1831. He devoted himself to the investi- had no superior in the country. On Jangation of extinct vertebrate a n im als. uary 31, 1801, he was appointed Chieffrom 1883 he was President of the Na- Justice of the Supreme Court of the tional Academy of Science. In 1866 he United States, and held this high office was appointed professor of palseontology for thirty-four years, his decisions being in Yale College, and was distinguished for regarded as the standard authority on

constitutional questions.

Marshfield, a city of Wood Co., Wisconsin, 165 miles N. w. of Milwaukee. It has manufactures of furniture, stoves, wood veneer. excelsion bed-springs. furniture, stoves, wood veneer, excelsior, bed-springs, etc. Pop. (1920) 7394.

Marsh-gas. See Fire-damp.

Marshmallow (marsh-mal'lo), the officinalis, Aŀ common European plant, growing in marshes, especially near the sea, in great abundance. It is employed medicinally as a demulcent, and is the guimauve of the French, used in the preparation of demulcent lozenges. It is perennial, and

demulcent lozenges. It is perennial, and has a white, fleshy, carrot-shaped root, which may be used as food. The hollyhock (A. rosea) is another species.

Marshman (marsh'man), Joshua, an English missionary, born in Wiltshire, 1768, and sent in 1799 by the Baptist Missionary Society to Serampore, India. He translated a great portion of the Bible into Chinese, published the works of Confucius (1811), and with Carey a Sanskrit Grammar (1814), and with Carey a Sanskrit Grammar (1815) and a Bengali-English Dictionary (1825).

He died at Serampore in 1837.—His son, John Clark Marshman (1794–1877), was official Bengali translator, and wrote a History of India. a History of India.

Marsh-marigold (mar'i-gold; Caltebral centra, the absence of any traces that palustris), a of limbs, the absence of a mandible and plant of the nat. order, Ranunculaceæ of ribs, and the structure of the gills. is a common wild plant found in damp places; in America also known as cowplaces; in America also known as cowplaces; in America also known as cowplaces; in America also known as cowplaces. The substitution of the slip. It has kidney-shaped, shining leaves, reigns of Elizabeth and James I; edurand large wellow flowers.

No man has Marsh-rosemary (ros'ma-ri), the North American constitutional questions. No man has equaled him in developing the foundamental principles of the Constitution. He died in 1835.

Marshall, Thomas Rilly, an Amerope, the root of which is a strong astringent in Marchaelt, Indiana, Marsilius of Padua (mär-sil'i-us) or Marsilius of Padua (mär-sil'i-us)

man, was born in Manchester, Indiana, Marsilius of Padua (mar-sit'1-us) March 14, 1854. He was graduated from Wabash College in 1873, and admitted to the bar in 1875. In 1908 he was elected Democratic governor of Indiana. In November, 1912, he was elected vice-president of the United States on the Democratic ticket and was re-elected in 1916. Marshalltown (mar'shal-toun), a city, capital of Marshalltown, is situated near the Iowa River, 50 miles N. E. of Des Moines. Large quantities of grain are shipped; there is a large pork-packing establishment, manufactures of furnaces, engines, machinery, glucose, etc. Pop. 15,731.

Marshalsea (mar'shal-stoun), a Louis of Bavaria, King of Romans, and the authors chose this opportunity to demonstrate by plausible arguments the supermacy of the Empire and its independence of the Holy See. Marsilius accompanied Louis to Rome, and saw him crowned emperor by those who claimed to be the delegates of the people while John XXII was deposed and a mendicant friar raised to the papal seat. Marsilius was later appointed archbishop of Milan. Marsh-elder. See Guelder-rose.

Committee Commit

persistent notochord without ossified ver-

He was entered at the Middle Temple, of which society he became lecturer, and died after 1633. He was the author of eight plays, all acted at the Black Friars theater with applause. Six of these were printed in one volume in 1633, and dedicated to the Viscountess Falkland. He assisted Ben Jonson and Chapman in the composition of Eastward Ho. He also wrote three books of satires, entitled the

became blind in his fourth year, and to this the introspective and morbid character of much of his work must be attributed. His poems were collected at various times in the volumes entitled Song-

ious times in the volumes entitled Songtide (1870), All in All (1875), and Wind
Voices (1883). He also wrote critical
papers and novelettes. A selection of
the stories was published after his death
under the title For a Song's Sake. He
died in 1887.

Marston, Westland, an English poet
ton in 1820; died in 1890. He went to
London to study law, but devoted himself
to literature, his first tragedy. The Patritol literature, his first tragedy. The Patritime seat of the Burmese government, on
the salven River, captured by the British in 1824, and again in 1852.

Martagon (mar'ta-gon), a kind of
the stories was published after his death
under the title Kong (flesh-eaters), of which the
best known are the 'Tasmanian wolf'
and 'Tasmanian devil.'

Marsyas (mar'si-as), a personage in
said to have challenged Apollo to a trial
of skill in flute-playing, and, be ing
beaten, was flayed alive by the god.

Martaban (mär-ta-bän'), a small
town is Burmah, at one
time seat of the Burmese government, on
the right bank and near the mouth of
the salven River, captured by the British in 1824, and again in 1852.

Martagon (mar's-as), a personage in
to 'Tasmanian devil.'

Marsyas (mar'si-as), a personage in
said to have challenged Apollo to a trial
of skill in flute-playing, and, be ing
said to have challenged Apollo to a trial
of skill in flute-playing, and, be ing
said to have challenged Apollo to
the salve trail and 'Tasmanian wolf'
said to have challenged Apollo to a trial
of skill in flute-playing, and, be ing
said to have ch

correspond to several orders of ordinary mammals. They belong to the aplacental mammals, and their most striking peculi-

veloped. The marsupials link the mammals, through the Monotremata (which see), to the birds and reptiles. There are many genera both herbivorous and carnivorous, the great bulk of them being confined to the Australian region. The kangaroo and opossum are familiar examples. The Marsupialia are divided into the following sections:—Rhizophäga (root-eaters), including the rodent-like Marston, Philip Bourke, an English poet, son of Westland or potoroos, all strictly plant-eaters; the Marston, born at London in 1850. He Carpophága (fruit-eaters), of which the typical group is the phalangers, the best known being the Australian opossum; the Entomophaga (insect-eaters), in which are the American or true opossum, the bandicoots, and the banded ant-eater; Sarcophäga (flesh-eaters), of which the best known are the 'Tasmanian wolf' and 'Tasmanian devil.'

real lyrical compositions, some short stories collected in 1861 under the title of Family Credit, and a novel, A Lady in cross-head forming at one end a pick, and her own Right, published in 1860.

Marston Moor, in Yorkshire, about moon, or other termination.

Martello-towers (mår-tel'ō), the york, a locality celebrated for the battle between the royal forces under Prince ful origin) given to small circular-shared ful origin given to small circular-shared full origin given to small circular shared full circular sha

York, a locality celebrated for the battle between the royal forces under Prince Rupert and the troops of the Parliament forts with very thick walls, chiefly built under Fairfax and Cromwell (July 2, to defend the seaboard. A number of 1644), in which the latter were victorisuch towers were built on the British coast, especially in the south, in the Marsupialia, or Marsupials (marsupialia, a pouch), an extensive group of mamsure and in agazine, the proper strength of the defenders. malia, differing from all others in their serving as a casemate for the defenders; organization, and including genera which the roof is shell-proof. The armament is

a single heavy traversing gun.

Marten (mar'ten), the name of several carnivorous quadrupeds mammals, and their most striking peculiarity is the production of the young in an immature state, a feature which renders necessary the pouch in which the ders necessary the pouch in which the immature young are placed immediately gated and slender. The legs are short, on their birth. In this pouch are the mamme or teats, and sheltered here the lamperfect young ones, attached to the imperfect young ones, attached to the imperfect by the mouth, remain till fully degreat ease. The common marten (2007tes (Mustéla) foina), is found in Europe martial appointed by some superior offigenerally, as also is the pine-marten (M. cer. Under special circumstances of inabietum). They feed on the smaller surrection or rebellion, where the ordiwild animals, such as rats, mice, etc., nary law is insufficient to protect life and
but also attack birds and devour eggs. property, it is sometimes necessary to
The pine-marten occurs chiefly in North
administer the law according to the pracAmerica and in the northern parts of tire of military courts, by an armed force America and in the northern parts of Asia. It is of smaller size than the common marten, possesses a yellowish mark



the rank of tribune and the rights of the couestrian order. In 100 a.d. he returned to Spain to his native city, and died in Pannonia about the year 316. He there not earlier than 104 a.d. His ceserved under Constantius and Julian, and lebrity is founded on fourteen books of went to Gaul. Among other virtuous and

The common marten (Mar- a distinct tribunal, known as a courttice of military courts, by an armed force occupying the disturbed district. The district is then said to be under martial law.

Martin (mar'tin), a name applied to several birds of the genus Hirundo or swallows. The one best known is the H. urbica, or house-martin, a familiar British bird which builds a globular nest under the eaves of houses, or in the upper angles of windows. In habits it resembles the chimney-swallow, but its tail is less markedly forked, while its nest is also different, that of the chimney-swallow being cup-shaped. See

Pine-marten (Mustile Martes or Martes abitium).

on the throat, and has a finer fur largely used for trimmings. It burrows in the ground. The famous sable marten (M. Erance, 1882-86, gaining a reputation as Zibellina), which furnishes the valuable one of America's great landscape paint-sable fur, is nearly allied to the pine-marten. It inhabits Siberia. The American sable is furnished by the M. leucopus; and Pennant's marten (M. Canadensis), or the fisher, as it is popularly called, is another well-known species.

Martin, tomer Dodge, American are in 1836; died in 1897. After a trip to Europe (1876) he fell under the influence of the Barbizon School, and lived in France, 1882-86, gaining a reputation as one of America's great landscape painters. Among his pictures are Harp of the Winds, now in the Metropolitan Museum, New York; Westchester Hills, Adirondensis), or the fisher, as it is popularly called, is another well-known species.

Martin, Luther, American Martin, total form the fisher of the Swallow.

Martin, total of the Swallow.

Martin, total of the Swallow.

Europe (1876) he fell under the influence of the Barbizon School, and lived in France, 1882-86, gaining a reputation as one of America's great landscape painters. Among his pictures are Harp of the Winds, now in the Metropolitan Museum, N. Y., in 1836; died in 1897. After a trip to Europe (1876) he fell under the influence of the Barbizon School, and lived in France, 1882-86, gaining a reputation as one of America's great landscape painters. Among his pictures are Harp of the Winds, now in the Metropolitan Museum, N. Y., in 1836; died in 1896; died in 1897. After a trip to the Swallow.

densis), or the fisher, as it is popularly port Lanascape.

called, is another well-known species.

Martha's Vineyard, the principal island of N. J., in 1744; died in 1826. He was Dukes county, Massachusetts, 12 miles graduated at the College of New Jersey W. N. w. of Nantucket, 19 miles long, (Princeton) in 1762, and was admitted and from 2 to 10 broad. It contains several towns and seaside resorts. and from 2 to 10 broad. It contains to the Maryland bar in 1711. He was several towns and seaside resorts.

Martial (mar'shal), in full Marcus active in opposition to Great Britain, and became attorney-general of Maryland in Valerius Martialis, a Ro-1778. He was a delegate to the convenment witer of epigrams, was born at tion to frame the U. S. Constitution Biblils, in Spain, A.D. 43, and educated (1787). but withdrew because of his opat Calagurris (Calahorra), the birthplace position to a strong national governof his friend Quinctilian. He went to Rome when young, during the reign of justice of the court of oyer and terminer Nero, and lived under Galba and the in Baltimore; and was again attorney-following emperors. Domitian gave him the rank of tribune and the rights of the Maryland bar in 1711. He was active in opposition to Great Britain, and became attorney-general of Maryland in 1818-181. He was a delegate to the convention of tion to frame the U. S. Constitution in 1818 to 1816 he was chief Nero, and lived under Galba and the in Baltimore; and was again attorney-following emperors. Domitian gave him the rank of tribune and the rights of the Maryland bar.

lebrity is founded on fourteen books of went to Gaul. Among other vi-tuous and epigrams, which for the most part depict benevolent acts he divided his cloak with epigrams, which for the most part depict benevolent acts he divided his cloak with with no less good sense than pungent wit the life of imperial Rome.

Martial Law, the law by which the discipline of an army following night covered with the half of is maintained, applying only to persons in actual military service, and only to their conduct in such service. The years in retirement he visited his native jurisdiction under the law martial is in place, and converted his mother. About the year 375 he was chosen against his she now showed a decided leaning will Bishop of Tours. In order to with-towards Positivism, and in 1853 pubdraw himself from the world he built the lighed a condensation of Comte's Positive

mostly intended to inculcate some usequakes are not unfrequent. About two-ful lesson, such as those having the title fifths of the island are under cultivation, of Illustrations of Political Economy with sugar-cane, manioc, yams, bananas, (1831-34), which were followed by Illustrations of Taxation and Poor Laws and mountain slopes are in most parts coveral United States, after returning from which she published Society in America, is several good harbors, the best of which which she published Society in America, is Port Royal, on the southwestern side and A Retrospect of Western Travel. In 1839 and 1840 appeared Deerbrook and rered by the Spaniards on St. Martin's The Hour and the Man, two novels, the Day, 1493, being then peopled by Caribs, first of which especially acquired a wide nopularity. In 1848 she issued Eastern It was twice captured by the British, in

will Bishop of Tours. In order to withdraw himself from the world he built the lished a condensation of Comte's Possitive famous convent of Marmoutiers, and is said to have died about the year 400. Importance may be mentioned her Histogophy. Among her other works of said to have died about the year 400. Importance may be mentioned her Histogophy. Among her other works of His festival takes place on the 11th of November. See Martimas.

Martin, St., one of the Leeward Islands, West Indies, between the islands of Anguilla and St. Bartholomew, belonging partly to the French and after her death, with some additions by partly to the Dutch: area, 30 square miles. From the salt-water lagoons in the south quantities of salt are obtained. The climate is considered healthy. Nearly a friend (Mrs. Chapman).

Martineau, was born at Norwich in 1805, educated there at the High School writer, a younger brother of Harriet all the inhabitants are English. Pop. 7000.

Martineau, was born at Norwich in 1805, educated at the Norwich Grammar Martin, ters, born at Edinburgh in Bristol, and Manchester New College, York. After holding ministerial appointments and parliamentary agent. In 1851 he married Miss Helen Faucit, who had played Iolanthe in his successful version of Hertz's King Rene's Daughter. Street chapel from 1859 to 1872. In 1868 he was apointed principal of Manchester New College, (1858), Dramas by H. Hertz and Ochlessophy in Manchester New College (1858), Dramas by H. Hertz and Ochlessophy in Manchester New College (1858), Dramas by H. Hertz and Ochlessophy in Manchester New College (1858), Pramas by H. Hertz and Ochlessophy in Manchester New College (1860), Poems of Catullus Life (2 vols. 1843-47), Miscellanies (1861), etc. He is also the author of 1852), Etades of Ornistianity (1858), the Life of Professor Aytoun (1867), A Study of Spinoza (1882), Types of and of the Life of the Prince Consort, on the completion of which (5 vols. 1874-80), he was knighted and made K.C.B.

Martinique French West India Islands, and, in th

80), he was knighted and made K.C.B. In the same year he was elected rector of St. Andrew's University.

Martinique (marti-nek'), one of the French West India Islands, in the Windward group, 30 miles ands, in the Windward group, 30 miles south by west of Dominica and 20 miles form, high and rocky, about 45 miles long and 10 to 15 broad; area, 380 square miles. Its loftests under the Use of Young Persons, appeared in is 4450 feet high. The climate is hot, 1823. Next came a number of stories, mostly intended to inculcate some useful lesson, such as those having the title of Illustrations. popularity. In 1848 she issued Eastern It was twice cantured by the British, in Life, Past and Present, the result of a 1794 and in 1809, being restored to visit made by her to the East in 1846. France in 1814. Its chief town, St Up to about this time Miss Martineau Pierre, with about 30,000 inhabitants, had been known as a Unitarian. but was completely destroyed, with all its

people, by a terrible volcanic explosion icis et Orbs Novo Decades octo—a hisin 1902. Pop. 203,781. tory of the discoveries of Columbus and

Martinmas (martin-mas), the feast his successors, from their own narratives; of St. Martin of Tours, the 11th of November.

Martinsburg, capital of Berkley to Egypt in 1501, and his Opus Epistoginia, on the Baltimore and Ohio Railroad, 100 miles w. of Baltimore. It produces carriages flour furniture, woolens (Florence in 1500; entered the order of Florence in 1500; e

of Doctor of Medicine at Erlangen, he ford in 1549, but on the accession of joined Spix in the scientific expedition to Queen Mary was commanded to quit the Brazil, set on foot by the Austrian and country, and returned to his Strasburg Bavarian governments (1817 to 1820). On his return to Bavaria he was approfessorship. In 1556 he removed to On his return to Bavaria he was appointed professor of botany and director of the botanic garden at Munich, appointing tyr was the author of many works on ments which he held till 1864, when he divinity, including Biblical commentaries. retired. He was the author of a large His Epistolæ were published in 1570; number of botanical works, but is chiefly and his Loci Communes Theologici in known through those arising out of his 1580-83. known through those arising out of his journey to Brazil—Reise nach Brazilien

Martyrology (mar-ter'ol-o-ji), orig(1824-31); Historia naturalis Palmarum
(1823-45) and Flora Braziliensis the acts of the martyrs; now more com(1840-71), the last two of which are monly applied to mere registers of names
among the most remarkable in botanical and deaths of those who have suffered

ment into Hindustani and Persian.

Martyr (mar'ter). Peter (more correctly Pietro Martine deceased read.

Maruts (ma'rutz), in Hindu mythologeographical writer, born in 1455; died in 1526. In 1487 he entered the service of Ferdinand and Isabella of Spain, who created him counselor of the Indies. born at Hull in 1620; died at London in Charles V also treated him with favor.

His principal works are De Rebus Ocean-

road, 100 miles w. of Baltimore. It produces carriages, flour, furniture, woolens and worsted, etc. Pop. (1920) 12,515.

Martins Ferry, a city of Belmont Fiesole in 1516, and in 1519 removed to Padua, where he studied Greek and philohin River, 2 miles above Wheeling. Coal osophy. After holding important offices is abundant in the vicinity, and it has in his order he was compelled in 1542 on large glassworks, a blast furnace, tin and rolling mills, machine works, etc. Pop. (1910) 9133; (1920) 11,634.

Martius (mart'se-us), KARL FRIED-RICH PHILIPP VON, a German traveler and naturalist, born in 1794; bishop Cranmer, to England. He was appointed to the theological chair at Oxford in 1549, but on the accession of joined Spix in the scientific expedition to Brazil, set on foot by the Austrian and country, and returned to his Strasburg Bavarian governments (1817 to 1820). On his return to Bavaria he was appointed to occupy the office of theological 1580-83.

(1840-71), the last two of which are among the most remarkable in botanical and deaths of those who have suffered martyrdom for the Christian faith.

Martos (mär'tōs), a town in Spain, Andalusia, in the province of Latryrs (mar'terz: Greek for 'witnesses'), a name applied by Land. It contains a fine thirteenth century church. Martos was taken from the particular, who in the early ages of Moors in 1225 by Ferdinand III, who bestowed it on the order of Calatrava. Pop. 17,078.

(mar'tin). Henny, mission-tivals in honor of the martyrs seem to Martyn (mar'tin), Henry, missionary, son of a miner, born have been observed as early as the secnear Truro, Cornwall, in 1781. He was ond century. The Christians offered
graduated as senior wrangler at Camprayers at the tombs of the martyrs, and
bridge in 1797, and in 1805 went out to
India as military chaplain. In 1811 he had given to the world. The rite was
went to Persia, and died in 1812 at Tokat
concluded with the sacrament of the
in Asia Minor, while on his way back to
Europe. He translated the New Testament into Hindustani and Persian.

his father in 1640 he made the tour of it as Mariolatry. Europe; afterwards acted as secretary to veneration did not become official in the the English legation at Constantinople; orthodox Latin Church till the 6th cenand on his return was appointed assist-tury, when the Christian Church began ant to Milton in his office of Latin sector celebrate festivals in her honor, of and on his return was appointed assistant to Milton in his office of Latin secretary. In 1660 he was elected to parliament for his native place, which he represented honorably to the end of his life. Besides a small handful of finely musical poems, he composed much humorous and sattrical verse, and was the writer of several political pamphlets. Notwithstanding his opposition to the court his wit commended him to Charles II, who made more than one attempt to win him by bribes, but failed to shake the win him by bribes, but failed to shake the the Assumption). The festive probity and love of liberty which had Immaculate Conception is celebrated him the name of the 'English by the Roman Catholic Church. Aristides.

See Mirabilis. Marvel of Peru.

Mark (marks), KARL, a German socialist, born in 1818, studied law and philosophy at Berlin. After editing the Rheinische Zeitung at Cologne from 1841 till its appropriate he west in 1844. 1841 till its suppression, he went in 1844 to Paris, where he took part in the publication of the Deutsch-Französische Jahrbücher, and a newspaper Vorwärts. Being compelled to flee to Brussels, he there in 1848 became head of the central committee of the socialists. In the same year he made an attempt at Cologne to revive the Rheinische Zeitung, but removed to London in 1849. In 1864 he established the International, but after the disruption in 1872, when he led the to New York. He died in 1883. His which, although suppressed, formed sufficient work, the Bible of one group of cient excuses for the imprisonment of the socialists, was Das Kapital, published in Princess Elizabeth in the Tower, and the excusion of Lady Long Crow and Long Cr

er of Jesus, according to tradi-tion embodied in the apocryphal gospels the daughter of Joachim and Anna (Luke, i, 32). The story of her life so far as it is given in the New Testament begins with her betrothal to Joseph (Luke, i,), and the narrative of the birth of Christ. She is thrice mentioned during Christ's public ministry (John, ii; Matt., xii, 47; John, xix, 25-27), and once after his death (Acts, i, 14). A tradition her husband, told acutely upon Mary's asserts that she lived and died at Jeru-salem under the care of John; another that she died at Ephesus, to which she that she died at Ephesus, to which she mary II, Queen of England, born in and John had retired from the siege of Jerusalem. A later tradition asserts that James, duke of York, afterwards James on her grave being opened three days II, by his wife, Anne Hyde, daughter of on her grave being opened three days 11, by his wife, Anne Hyde, daughter of after her burial only the grave-clothes Lord Clarendon. She was married in were found in it. The devotion or veneration paid by Roman Catholics and when the Revolution dethroned her others to the Virgin Mary is condemned father, Mary was declared joint-possessor by Protestants in general, who stigmatize of the throne with William, on whom all

The title of Mary to which the Purification, the Annunciation, and the Visitation (the visits of Mary to Elizabeth) are still retained in Protestant countries. The Greeks and Roman Catholics, and the schismatic man churches in the East, observe several feasts besides the above in honor of the Virgin; for instance the birth of Mary, and her death and reception into heaven (by the Roman Catholics called the Assumption). The festival of the Immaculate Conception is celebrated only

Mary I, Queen of England, daughter of Henry VIII by Catharine of Aragon, was born in 1516. After her mother's death she was declared illegitimate, but was restored to her rights when the succession was finally settled in 1544. She was bred up by her mother in the Roman Catholic faith, on which account she was treated with rigor under Edward VI. She ascended the throne in 1553, after an abortive attempt to set her aside in favor of Lady Jane Grey. One of her first measures was the reinstatement of the Roman Catholic prelates who had been superseded in the late reign. Her marriage to Philip II of Spain, united as it was with a complete restoration of the Catholic worship, produced much discontent. Insurrections broke out under Cave in Devonshire, and Wyat in Kent, Mary (mā'ri), The Virgin, the moth-er of Jesus, according to tradi-tion embodied in the apocryphal gospels reconciled to the pope. As victims of the daughter of Joachim and Anna (Luke, i, 32). The story of her life so for as it is given in the New Testament in the lower, and the execution of Lady Jane Grey and her husband Lord Guildford Dudley. Eng-land was now formally declared to be the daughter of Joachim and Anna heresy and political conspiracy, nearly (Luke, i, 32). The story of her life so for as it is given in the New Testament in the lower, and the execution of Lady Jane Grey and the husband Lord Guildford Dudley. Eng-land was now formally declared to be heresy and political conspiracy, nearly (Luke, i, 32). The story of her life so mer, Latimer and Ridley. Under Philip's influence a war began with France, which ended in the loss of Calais in 1558, after it had been in the hands of the English for above 200 years. This disgrace, and the aversion alike of her subjects and of already disordered health, and she died in 1558 after a reign of five years.

States; bounded N. by Pennsylvania, E. Pop. (1900) 1,188,044; (1910) 1,295, and S. E. by Delaware and the Atlantic, S. 346; (1920) 1,449,661. and S. E. by Delaware and the Atlantic, S. 545; (1920) 1,449,001. by Virginia and Chesapeake Bay, and S. W. by Virginia and West Virginia; area 12,327 sq. miles, the land area mouth of the Ellen. The industries inbeing 9941 sq. miles. The part of the clude iron-founding, brewing, tanning, state lying to the east of Chesapeake Bay flour-milling and sail-making. The heris called the Eastern shore, and the ring fishery is productive. There are sevother on the west the Western shore. The eral collieries and iron furnaces. Pop. Eastern shore has a low, flat and somewhat sandy surface, covered in many places with stagnant water, which makes ague Mary Stuart, born at Linlithgow and intermittent fever prevalent. The Palace in 1542, and was the daughter of western shore gradually rises towards the James V by his queen, Mary of Lorraine, northwest, where it becomes very mounnorthwest, where it becomes very mountainous, being traversed by five or six ridges of the Appalachian chain, and attains the height of 3000 feet above sea-level. Beyond this the land again sinks, forming the Hagerstown Valley, part of the great Appalachian Valley. In the extreme west are the beautiful elevated extreme west are the beautiful elevated valleys named glades. The chief rivers are the Potomac, the Susquehanna and the Patapsco. Almost all the lower part of Maryland is covered with alluvial deposits. In the Hagerstown Valley there is a full development of the Carbonifis a full development of the Carbonifthe widowed queen returned to Scotland.
erous system, with its valuable seams Mary had, of course, been educated in
of coal and ores of iron. There are three France as a Roman Catholic, but when
important coal fields in the state. The she returned to Scotland she found that
other minerals are numerous and some the influence of the Presbyterians was
of them of value. The most important paramount in her kingdom. Though incrops are Indian corn, wheat and oats. Tobacco is very largely grown. The soil of the Eastern shore is well adapted for peaches and market gardening. The fisheries are productive, and there are extensive oyster beds, surpassing those of any other state. The principal manufactures woolem goods, cordage, bricks and articles in iron; the trade, chiefly foreign, is extensive. A large part of the foreign trade consists in the exportation of canned fruits, vegetables and oysters. Annapolis is the seat of government; but Baltimore is the most important city of the State, and the chief seat of commerce. There is an excellent system of free public schools, and among the higher educa-tional institutions may be noted the St. John's College at Annapolis, and the Peational institutions may be noted the St. Mary began with her second marriage, John's College at Annapolis, and the Peanamely, to her cousin, Lord Darnley, body Institute (founded in 1857), and whom ske married on July 29, 1565.

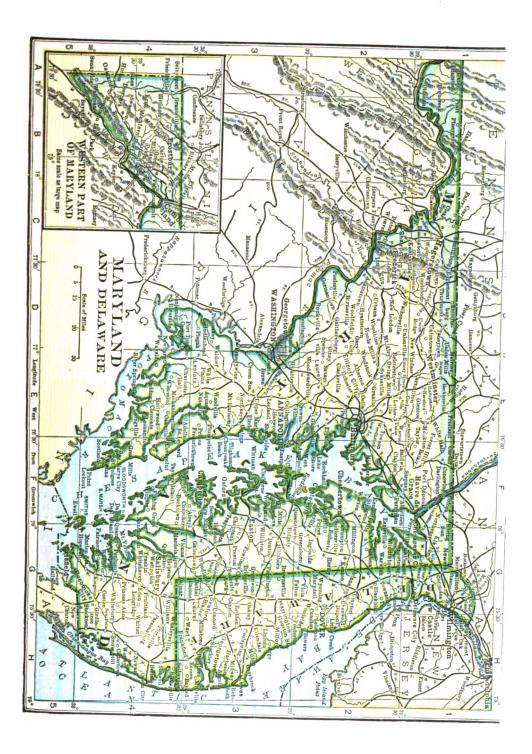
the administration devolved. She died in the Johns Hopkins University (opened in 1694. See William III.

Maryborough, a town, Queensland, Australia, 180 miles queen of Charles I, by whom this district north of Brisbane, center of a gold, coal, timber and sugar district. Pop. 13,000.

Maryborough, a municipal town, as a place of refuge for the Catholics of Maryborough, 112 miles by rail England. It was one of the original N. E. of Melbourne, Australia. Pop. 6000. thirteen States. During the Civil war Maryland, one of the American colopinion was much divided in the State, bounded N. by Pennsylvania. E. Pop. (1900) 1.188.044: (1910) 1.295.

11,423.

father dying when she was a few days old, the regency was, after some dispute, vested in the Earl of Arran, who declined Henry VIII's demand for the hand of Mary for his son Edward. In the summer of 1548 the young queen was sent by her mother to France, where she was educated in a French convent, and in 1558 was married to the dauphin, afterwards Francis II. He died seventeen months after his accession to the crown, in December, 1560, and in August, 1561, clined to have Roman Catholicism again set up in Scotland, after a vain attempt to influence Knox she resigned herself to circumstances, quietly allowed her half-brother, the Frotestant Errl of Moray, to assume the position of first minister, surrounded herself with a number of other Protestant advisers, and dismissed the greater part of her train of French courtiers. She even gave these ministers her active support in various measures that had the effect of strengthening the Presbyterian party; but she still continued to have the mass performed in her own private chapel at Holyrood. At first her subjects were quiet, she herself was popular, and her court was one of the most brilliant in Europe. The calamities of





Darnley was a Roman Catholic, and imhands of the confederates. The letters, mediately after the marriage the Earl of which have come down to us only in the mediately after the marriage the Earl of which have come down to us only in the Moray and others of the Protestant lords form of a translation appended to Bucombined against the new order of things. chanan's Detection, clearly show, if they They were compelled to take refuge in are genuine, that the writer was herself England, and the popularity of Mary began to decline. In addition to this Darn-ley proved a weak and worthless profligate, and almost entirely alienated the guilt, and on the 24th of July she was queen by his complicity in the murder of forced to sign a document renouncing the Rizzio (March 9, 1566), though a reconcrown of Scotland in favor of her infant ciliation seemed to be effected between son, and appointing the Earl of Moray them about the time of the birth of their regent during her son's minority. After England, and the popularity of Mary began to decline. In addition to this Darnley proved a weak and worthless profligate, and almost entirely alienated the
queen by his complicity in the murder of
Rizzio (March 9, 1566), though a reconciliation seemed to be effected between
them about the time of the birth of their
son, afterwards James VI of Scotland
and I of England (June 19, 1566).
About the close of the same year, however, Darnley withdrew from the court,
and in the meantime the Earl of Bothwell had risen high in the queen's favor. well had risen high in the queen's favor. When the young prince James was bap-tized at Stirling Castle, on December 7, 1566, Bothwell did the honors of the 7, 1566, Bothwell did the honors of the occasion, and Darnley, the father of the prince, was not even present. Once more, however, an apparent reconciliation took place between the king and queen. Darnley had fallen ill, and was lying at Glasgow under the care of his father. Mary visited him, and took measures for his removal to Edinburgh, where he was lodged in a house called Kirk-of-Field, close to the city wall. He was there tended by the queen herself; but during the absence of Mary at a masque at Holyrood the house in which Darnley lay was blown up by gunpowder, and he lay was blown up by gunpowder, and he himself was afterwards found dead with Fotheringhay Castle, Northamptonshire. Marks of violence on his person (February 9, 1567). The circumstances attending this crime were very imperfectly investigated, but popular suspicion unequivocally pointed to Bothwell as the ringleader in the outrage, and the queen herself was suspected, suspicion becomfore Elizabeth's life, and having been tried by a court of Elizabeth's appointing, was on October 25, 1586, condemned to be ringleader in the outrage, and the queen herself was suspected, suspicion becomfore Elizabeth signed the warrant, but this was at last done on February 1, off by Bothwell, with little show of resistance, to his castle of Dunbar, and married to him on the 15th of May. A later, on February 8, 1587, in the castle number of the nobles now banded together agreed as to the attractions, talents and lay was blown up by gunpowder, and he

regent during her son's minority. After regent during her son's minority. After remaining nearly a year in captivity Mary succeeded in making her escape from Loch Leven (May 2, 1568), and assisted by the few friends who still remained attached to her, made an effort for the recovery of her power. Defeated by the regent's forces at the battle of Langside (May 13, 1568), she fied to England, and wrote to Elizabeth entreating protection and a personal interview: ing protection and a personal interview; but this the latter refused to grant until Mary should have cleared herself from the charges laid against her by her subjects. For one reason or another Eliza-beth never granted Mary an interview, but kept her in more or less close captivity in England, where her life was passed in a succession of intrigues for accomplishing her deliverance. For more than eighteen years she continued to be the prisoner of Elizabeth, and in that time the place of her imprisonment was frequently changed, her final prison being Fotheringhay Castle, Northamptonshire. She was at last accused of being implinumber of the nobles now banded together against Bothwell, who succeeded in collecting a force; but on Carberry Hill, where the armies met on the 15th of June, to her character. Contemporary writers his army melted away. The queen was hored to surrender herself to her insurgent nobles, Bothwell making his escape to Dunbar, then to the Orkney Islands, and finally to Denmark. The confederates first conveyed the queen to Edinburgh, and thence to Loch Leven Castle, where she was placed in the custody of Lady Douglas, mother of the Earl of Moray. A few days after, on the 20th of June, a casket containing eight letters and some poetry, all said to be in the handwriting of the queen, fell into the France,' long ascribed to her, were written by a French journalist of the eight-

marysville, a city, capital of Yuba Burias and Ticao, and 65 dependent istands. Area, 1732 square miles; pop. 4500.

River, 52 miles N. of Sacramento. It contains Notre Dame College, and has fruit canneries, woolen mile, etc. Pop. born in 1863. His works include, Cavalleria Rusticana, L'Amico Fritz, etc. (mas'ka-long; Esox no-

Masaccio (ma-sat'chō), properly Tommaso Guidi, one of the oldest painters of the Florentine school, the church del Carmine, at Florence, are but also introduced into other waters. some excellent paintings of his, also at Mascara (mäs-kå-rä'), a town in Algeria, picturesquely situated Baldinucci and Vasari place Masaccio on the south slope of Mount Atlas, 48 among the first painters by whom the harshness and difficulty of the art was diminished, and life and expression given the died in 1428.

the sea, and so named from the Masai, ated east of Madagascar. who are its sinet inhabitants. It is gen-erally elevated, Mount Kilimanjaro being Masefield (mās'fēld), John, an Eng-erally elevated, Mount Kilimanjaro being

nsn and truit, and his outspokenness with Punic war, defeated Syphax, king of regard to Spanish oppression procured Western Numidia. His acquisition of a him a large faction among the common number of Carthaginian provinces led to people. In 1647 Masaniello refused to the third Punic war, in the second year pay the tax on a basket of fruit brought of which he died (148 B.C.), aged about a by him to the city. He was supported bundred years. His kingdom, at his own by the people, who broke into open rebellion and carried all before them. The of whom Mastanabal, the youngest, was Spanish viceroy was forced to make concessions and redress grievances, where— Mash a covering for the face often cessions and redress grievances, where mask, a covering for the face, often upon Masaniello laid down his arms. But

Masbate (mäs'bāt), a province of the Visayan Islands, Philippines,

Mascalonge (mas'ka-long; Esox no-bilior), a fine North American fresh-water fish of the pike ge-

Masai-Land (ma-sa'i-land), a region Mascarene Islands, (mas-ka-ren') in eastern equatorial Mascarene Islands, (mas-ka-ren') the islands of Africa, between the Victoria Nyanza and Réunion, Mauritius and Rodriguez, situ-

the chief mountain mass. It contains (1874-). For many years he led a rov-Naivasha and other lakes. The Masai ing life, at sea and on shore. His narra-Naivasha and other lakes. The Masai ing life, at sea and on shore. His narratre a well-built race, not of the negro tive poems include The Everlasting Mercy, type, and support themselves partly by The Widow of Bye Street, Reynard the cattle-raising, partly by the plunder of Fox, and many others. His dramatic their weaker neighbors. It is partly works include The Tragedy of Pompey the within British, partly within German Great, Philip the King, The Condemned Cell, Good Friday, etc.

Masaniello (mas-in-i-el'o), properly Tommaso Annello, a celebrated Neapolitan insurgent, born at only of the eastern portion of the country, Amalfi in 1622. He gained a livelihood in Naples as a fisherman and a dealer in help of the Romans during the second fish and fruit, and his outspokenness with regard to Spanish oppression procured Western Numidia. His acquisition of a

resentation of the human features. They he still appeared dangerous to the vice-resentation of the human features. They roy, who invited him to his house, and have been in use from the most ancient probably mingled poison with his wine. times. Among the Greeks they were used probably mingled poison with his wine. times. Among the Greeks they were used in a delirium Masaniello ran through the particularly in the processions and cerestreets of Naples, shooting his best monies attending the worship of Dionysus friends. He was assassinated by some of (Bacchus). As the origin of Grecian his companions, but the next day his murderers became victims to the popular rage.

Masaya (masi'ya), a town of Central the worship of Dionysus, masks were used in Masaya (masi'ya), a town of Central the even in the beginning. The ancient masks usually covered the whole head, miles northwest of Granada, in a very and represented, with the features, the fertile district near the volcano of head, hair and eyes. They had mostly Masaya (3500 feet high). Pop. 20,000, very large open mouths, and seem to

have had some effect in strengthening the School. Commission form of government. voice of the speaker, this being required Pop. (1910) 11,230; (1920) 20,065. by the immense size of the old theaters. Mason and Dixon's Line, The Roman theater differed little from The Roman theater differed little from the Grecian in the use of the mask, which the line of 39° 43′ 26.3″ north latitude, the Italian popular theater, called Commedia dell' Arte, closely resembling the and Pennsylvania. From the time of the old Roman mime and pantomime, still grant of the latter territory to William retains. The mask ordinarily used at Penn by Charles II, there were active masked balls or masquerades is a coverdisputes between the family of Penn and ing for the head and face made from a that of the Lords Baltimore, the possessions of Maryland as to the boundary he light stuff, a common form being the halfmask covering eyes and nose only. See Masqued Ball.

Mask, a species of drama. See Masque. Mask. THE IRON. See Iron Mask. Maskelonge. See Mascalonge.

1767 commenced the publication of the Nautical Almanac, which he edited till his death. In 1774 he was employed in observations on the eclipses of Jupiter's

Mason (mā'sun), William, lish poet, born in 1725. He studied at Cambridge, and in 1748 published Isis, a poem, in which he sattrized through three degrees of longitude, to the line border of Virginia, the present West Virginia piece provoked a reply from Thomas Warton, entitled the Triumph of Isis. In 1752 he published his Elfrida, a tragedy Pennsylvania and the Ohio River.

Masonry, Free See Freemasonry.

Masonry, Free See Freemasonry. on the Greek model. Having obtained the living of Aston, Yorkshire, he was appointed one of the royal chaplains. In 1759 appeared his Caractacus, a drama. Some years after Mason was made premote the commonly known as the Trap-door Soider (Wygale or Cteniza Commonly known as the Trap-door Soider). centor and residentiary canon at York. Spider' (which see). One of his principal works, the English Garden, a poem, appeared between 1772 and 1782. In 1775 he published the poems of Gray. Died in 1797.

and 1782. In 1775 he published the poems of Gray. Died in 1797.

Mason City, Co., Iowa, 121 miles N. of Des Moines, on 5 railroads. The manufacturing and jobbing houses here do an annual business of \$41,000,000. It has the largest beet-sugar plant in Iowa, great and the shore. They stand high out of cement plants, packing plants, brick and tile works, and other industries. Seat of which they sustain shocks that National Memorial University; also a Junior College affiliated with the High

sors of Maryland, as to the boundary between the two territories. Delaware was first deliminated from Maryland by a line running north and south, and the final boundary line was surveyed in 1763, the line of demonstration of the surveyed in 1763, the line of demarcation being named after the astronomers Charles Mason and Jeremiah Dixon, who traced the greater part of it. The charter to Penn fixed the southern boundary of his province at Maskelyne (mas'ke-lin), NEVIL, and the southern boundary of his province at English mathematician the 40th degree of latitude, and the disand astronomer, born in 1732; was educated at Westminster and Cambridge, beginning or the end of the 40th degree, chosen a fellow of the Royal Society, and The first would have extended Pennsylvapute was as to whether this meant the beginning or the end of the 40th degree. in 1761 deputed to proceed to St. Helena nia southward below Baltimore; the secto observe the transit of Venus. In ond would have given to Maryland the to observe the transit of Venus. In ond would have given to Maryland the 1765 he became astronomer royal; and in site of Philadelphia. The boundary, as finally fixed, ran nearly midway between these extremes. Milestones were set up along the whole of this boundary line. The line, as finally drawn, has been popusatellites; and the same year went to larly supposed to have been the dividing Scotland to ascertain the gravitative at- line between the free and slave States; traction of the mountain Schiehallien. but this is an error, as slavery until lie died in 1811.

Mason (ma'sun), William, an Engto the Constitution was still legal in Delaware, which is both north and east

Mason-wasp, a name given to certain hymenopterous insects, especially Odynerus musarius, from their

fastened together by cocoanut fibers. matter of spectacle and music. The taste

referring to the Hebrew text of the Old Testament, and written in Chaldee chiefly on the margin of Hebrew MSS. These notes are various in their character, critical, grammatical and explanatory, and guised by dominoes. This kind of amuseinclude an indication of the vowel-points and accentuation of the Hebrew text according to the Jewish tradition. At what time the accumulation of these notes was commenced cannot be ascertained. According to some Jewish writers they were begun in the time of Ezra. A large part of them were compiled in the Jewish schools of Tiberias subsequent to the third century, and the collection was not completed till the eighth century at the earliest.

Maspero, Gaston, C. C., a French Egyptologist, born in Paris, 1846. He became professor of Egyptian archæology and philosophy at the College of France and published various works on the subject. His monumental work is History of the Anoient Peoples of the Classic East. Died June 30, 1916.

Masque (mask), or Mask, a dramatic entertainment much in favor in the courts of princes during the sixteenth and seventeenth centuries, in the latter particularly in England. In its earliest form it is perhaps best described as a masquerade with an arranged program of music, dancing, etc., and a ban-quet. The first masque of this kind in missal or mass-book. The masses are England, according to Holinshed's Chron-modified according to many circumicle, was performed in 1510, and they were frequently introduced into the plays of Shakespere, and Beaumont and Flet-The parts in the masques of the sixteenth and seventeenth centuries were usually represented by the first personages of the kingdom: if at court the king, queen, and princes of the blood often performed in them. Under James I the masque assumed a higher character, more artistic and literary care being expended in its preparation. In this regard Ben Jonson takes an important place, his masques, despite much that is frigid and pedantic, having not a little genuine sixteenth and seventeenth centuries were pedantic, having not a little genuine poetry. Inigo Jones was for a number of years exclusively employed upon the vears exclusively employed upon the masses according to the different rites; decorations and elaborate machinery of the Greek mass, the Latin mass, the Rother court masques, and Henry Lawes man and Gregorian mass, etc.

Mass, in physics, the quantity of mathematical particles of a body, or the sum of point of view, the most beautiful of the productions which bear the name of mass of a body is estimated by its weight.

They are rowed sometimes with as many for masques decreased in the reign of as sixteen oars.

Masora, or Massorah (ma-so'ra), a given to the progress of English dramatic dition,' the name of a collection of notes were not again brought into fashion.

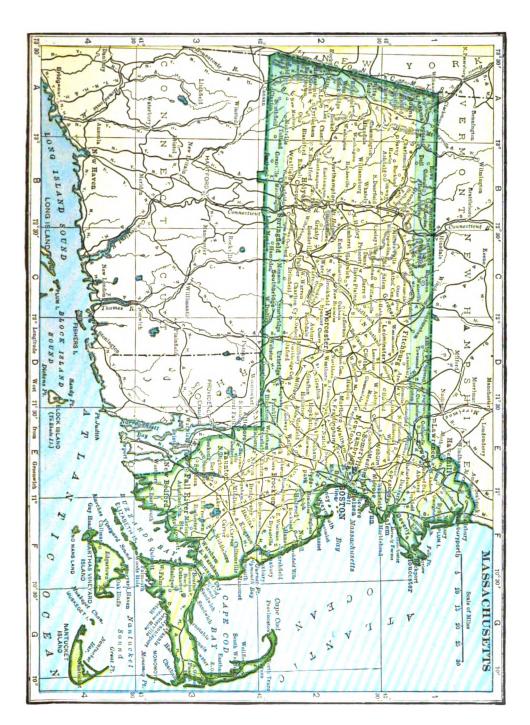
referring to the Hebrew text of the Old

Masqued Ball (maskt bal), an encretering to the distinct of the Old masqued Ball (maskt bal), an encretering to the distinct of the Old masqued Ball (maskt bal), an encretering to the distinct of the Old masqued Ball (maskt bal), an encretering to the distinct of the Old masqued Ball (maskt bal), an encretering to the distinct of the Old masqued Ball (maskt bal), an encretering to the distinct of the Old masqued Ball (maskt bal), and encretering to the distinct of the Old masqued Ball (maskt bal), and the old masqued Ball (maskt ball), and the old masqued Bal

guised by dominoes. This kind of amusement became popular in Italy about the year 1512, about which time it was introduced into England b. Henry VIII.

Mass, in the Roman Catholic Church, the prayers and ceremonies which accompany the consecration of the eucharist. The word is used generally for all that part of the Catholic service in which the eucharist is offered. At present the mass consists of four chief present the mass consists of four chief parts:—1. The introduction; 2, the offertorium, or sacrifice; 3, the consecration; 4, the communion. These four chief parts, of which the latter three are con-sidered the most essential, are composed of several smaller parts, each having its proper denomination. They consist of prayers, hymns, shorter and longer pas-sages of the Holy Scriptures, and a number of ceremonies, which, as the essential point of the mass is the sacrifice of the Lord, consist partly of symbolical ceremonies commemorative of important circumstances in the Saviour's life, or signs of devotion and homage paid to the presence of the Lord in the host. The order of these ceremonies, and of the whole modified according to many circumstances, e.g. according to the saint in honor of whom the mass is celebrated, or the seasons of the year connected with different events in the Saviour's life, or the purpose for which the mass is said, as the missa pro defunctis (mass for the dead). Votice mass incorporters dead). Votive mass is an extraordinary mass, instead of that of the day, rehearsed on some special occasion. Low mass is the ordinary mass performed by the priest, without music. High mass is celebrated by the priest, assisted by a deacon and subdeacon or other clergy. and sung by the choristers, accompanied by the organ and other musical instru-ments. Besides these there are different masses according to the different rites;

masque, though possibly defective in the whatever be its figure, or whether its bulb





sandy near the coast, where salt marshes frequently occur, these yielding good crops of hay. The s. E. section has many shallow lakes, and abounds in swamps, producing cedar timber and yielding large crops of cranberries. In the middle and western parts the soil is fertile and well cultivated. Among the chief products well cultivated. Among the chief products are potatoes, hay, maple sugar, honey and dairy materials; tobacco yields good returns and cattle are largely kept. The Boston in 1861, belief are largely kept. returns and cattle are largely kept. The shief grains are oats, rye and barley; corn being raised for home consumption and wheat, buckwheat and barley raised only in small quantities. A considerable portion of the surface of the ground is still covered with forests, consisting of pine, oak, walnut, birch, maple, ash, ceder charged observery and chest the first the dar, cherry and chestnut. Of fruits the ducted in cocoperation with the Institute. apple gives the largest yield. The climate Massage (mas'azh. Fr. masser, to is liable to extremes of heat and cold.

or magnitude be great or small. See

Dynamics.

Massa-Carrara (mās'a-kār-rā'a)

state of Italy, situated on the western slope of the Apennines, bounded principally by Tuscany and the Duchy of Modena. In 1741 it passed into the hands of the house of Modena, with whom, excepting the period of French occupation (1796-1814), it remained until 1859, when it was united with those portions of the duchies of Parma and Modena lying west of the Apennines, and erected into the province is celebrated for the Carrara marble. Area, 685 sq. miles; pop. 195, and poblishing, slaughtering and meating, paper and wood pulp, finished lasses and important process are smalled to the actival massachusetts.

Of mineral products granite is largely quarried, and marble, limestone, emery quarried, and markle, limestone, emery quarried, and markle, limestone, emery quarried, and markle limestone, emery quarried, and markle limestone, emery quarried, and quartz are abundant. There are abundant. Themery and quartz are abundant. There are abundant. There are abund Massachusetts (mas-sà-chū'sets), leather, electrical machinery and supplies. United States, bounded north by Vermont tant industry. In shipping Massachusetts and New Hampshire; east by the Atlantic, Rhode Island Union except New York. Boston, the and Connecticut; and west by New York; second seaport of the Atlantic coast, area, 8266 sq. miles; capital, Boston. The greatest length is 160 miles; width 47 to 90 miles; the coast line, which has connection with the railways may be menalength of about 250 miles, is indented with deep and extensive bays, of which Massachusetts Bay (which includes the of the State, with a length of 5% miles. In large bays of Boston and Cape Cod), educational matters Massachusetts has a Buzzard and Nantucket bays are the most capacious. The indentations in tutions being Harvard University, the these bays form excellent harbors, the oldest in the Union, Boston University, most commodious of which are Newbury-port, Boston Harbor and Marblehead. lims College, Clark University, Wilport, Boston Harbor and Marblehead. lims College, etc. Massachusetts is did the islands of Nantucket and Martha's vided into fourteen counties; and besides Vineyard, with several others, belong to most capacious. The indentatious these bays form excellent harbors, the most commodious of which are Newbury-port, Boston Harbor and Marblehead. It is lands of Nantucket and Martha's vided into fourtgen counties; and besides Vineyard, with several others, belong to the capital, Boston, the chief towns are Massachusetts. The west part of the state is traversed by the Green Mountains, whose loftiest peak rises 3500 feet above sea-level. The most considerable rivers are the Connecticut, Housatonic and the Merrimac. The soil is poor and sandy near the coast, where salt marshes frequently occur, these yielding good frequently occur, the frequently occ the central part of Massachusetts, ex-tending from Cape Ann to Plymouth Bay Massachusetts Institute of Technology, a school of applied science, established in Boston in 1861, but now at Cambridge in Boston in 1801, but now at Cambridge in a striking group of buildings on the Charles River, dedicated in June, 1916. Instruction is given in subjects leading to the degrees of bachelor and master of science, and dector of philosophy and of engineering. The Engineering and Mining Schools of Harvard University are conducted in cocorrection with the Institute.

(mas'azh. Fr. masser, to knead), a form of medical

treatment in which the body of the patient, or some particular part of it, is subjected at the hands of an attendant to a variety of processes technically discriminated as stroking, rubbing, kneading, pinching, pressing, squeezing and hacking. The tendency of this treatment is to assist and stimulate the circulation, and to increase the waste-removing action of the lymphatic vessels, and thus to afof the lymphatic vessels, and thus to affect the nutrition, not only of the parts acted upon, but of the whole body, and promote the removal of local swellings, inflammatory products, etc. The process, for which half an hour daily is usually sufficient, is performed upon the naked skin by the bare hands of the operator, no oil being used; and the hands ought to be strong and firm, but soft, very conto be strong and firm, but soft, very considerable exertion being expended in the operation. The attendant (who is termed a masseus, if a man; a masseuse, if a woman) needs to be carefully trained, and should have a sufficient knowledge of anatomy to be able to separate out with the finerage of single purely or received. the fingers a single muscle or group of muscles for treatment, and to trace the direction of the larger vessels and nervethe limbs of the patient, the strokes died in 1817. should always be from the extremities towards the heart, not backwards and forwards in a random way; and in kneading rence, Grasse and Racquette rivers. Electhe belly with the heel of the hand, the trical power is developed from the St. movements are carried round in the direction of the colon. The treatment has (4000 employees), silk mills, dairy plants, been remarkably successful in cases of etc. Pop. (1920) 5993.

Massenet (mas-na), Jules a French composer (1842-1912), author of many operas including Herodias. cles.

Massagetæ (mas-saj'e-tē), a collective name given by the ancients to the nomadic tribes of Central

Massaua. See Massowa.

olution he entered a battalion of volunteers, was elected chief of his battalion in 1792, and in 1793 made general of brigads. In 1794 he was appointed general of division, and took command of the right wing of the French army in Italy, where, at Rivoli and elsewhere, he highly distinguished himself. In 1799 he defeated the Austrian and Russian forces at Zürich, and in 1800, by his defense of Genoa for three months, gave Bonaparte time to strike successfully at Marengo. In 1804 he was created a marshal of the empire. In 1805 he received the chief command in Italy, where he lost the battle of Caldiero, and after the peace of Pressburg occupied the kingdom of Naples. In 1807 he was given the command of the right wing of the French army in Poland, and soon after received the title of Duke of Rivoli. In 1809 he distinguished himself against the Austrians, and at Esslingen his constancy and firm ness saved the French army from total destruction. Napoleon rewarded him with the dignity of Prince of Esslingen. In muscles for treatment, and to trace the 1810 he took command of the army in direction of the larger vessels and nerverously and forced Wellington within trunks and act upon them directly. The the lines of Torres Vedras, till want of principal movements should be character-provisions compelled Masséna to retire. It is a certain uniformity and method. Napoleon recalled him from Spain, and Thus, in stroking with a steady pressure in 1812 left him without a command. He the limbs of the patient, the strokes died in 1817.

nutrition dependent upon disturbances of thor of many operas including Herodias, stomach, bowels, or liver; and it has Don Cesar de Bazan, Manon Lescaut, proved valuable in diabetes, some of the Thais, Le Cid, Le Jongleur de Notre special diseases of women, and certain Dame, Ariane, etc.; also oratorios, cancases of paralyzed and contracted mustatas, and orchestral works, notably Scenes Pittoresques, Hongroises, and Dramatiques. Massey (mas'se), Gerald, an English poet, born at Tring in 1828, of poor parents, and for some time an Asia who dwelt to the east and northeast of the Caspian Sea. Cyrus lost his life of the Caspian Sea. Cyrus lost his life in fighting against them.

Massai. See Masai.

The volume attracted the notice of Language and the some time and the subsequently of the Caspian Sea. Cyrus lost his life edited the Spirit of Freedom, a Radical paper, and in 1854 published his Ballad of Babe Christabel, and other poems. The volume attracted the notice of Language time and the subsequently and the subsequently of the Caspian Sea. Cyrus lost his life edited the Spirit of Freedom, a Radical paper, and in 1854 published his Ballad of Babe Christabel, and other poems. dor, and the poems issued in succession to it met with no little popularity. For Masséna (mås-ä-nå). André, Marsome years Massey wrote poetical critisment of the first properties of the some years Massey wrote poetical critisment of the first properties of the some years Massey wrote poetical critisment of the first properties of the some years Massey wrote poetical critisment of the some y

ualism (1872), A Book of the Beginnings (1882), and the Natural Genesis (1884). For some years he was popular both at home and in the colonies as a lecturer

Terra di Lavoro, Naples, Italy, and having on its slopes a town of the same name. The Massic wine has been famous from remote times.

Massicot (mas'i-kot), the yellow protoxide of lead (Pb O), used as a pigment, etc. See Litharge.

Massillon (mas-e-yōn), JEAN BAP-TISTE, a French pulpit ora-tor, born in 1663 at Hyères, in Provence; entered in his eighteenth year the congregation of the Oratory, professed belles-lettres and theology at Montbrison and

dramatist, born at Salisbury in 1584. He studied at Oxford, but quitted the university without taking a degree, and repaired to London about 1606. Little is known of his personal history beyond the known of his personal history beyond the hat he was associated with Fletcher, who had charge of the details of the who had charge of the details of the ship under the general composition of certain plays. A note of his burial appears in the register of St. Saviour's, Southwark: 'March 20, 1639-1640, buried Philip Massinger, a stranger', As a description of the control of th

however, he is rather eloquent and forci-(1882), and the Natural Genesis (1884). ble than pathetic, and he is defective in For some years he was popular both at humor. His best plays are the Duke of home and in the colonies as a lecturer Milan, A City Madam, A Very Woman, on Spiritualism and various social and socialistic subjects. He died in 1907.

Massico (mas'i-kō; Mons Massicus), maintains its place on the stage, chiefly a mountain in the province of on account of the characters Marrall and Oversech.

Overreach.

Masson (mas'on), David, critical and biographical writer, born at Aberdeen, Scotlan, in 1822; was educated at the Marischal College and at Edinburgh University. After engaging in miscellaneous literary work in Edinburgh and London, he was in 1852 appointed to the chair of English language and literature at University College, London. In 1859 he became editor of Macmillan's Magazine, and in 1865 accepted lettres and theology at Monthrison and Vienne; and was called to Paris in 1636 ture in the University of Edinburgh. His to direct the Seminary of St. Maloire. The applause which he met with in example. Louis XIV gave him special praise, and the deaths of Bossuet and study of Milton's life and times (six Bourdaloue, in 1704, left him at the head of the French preachers. He pronounced Their Styles (1859); Recent British the funeral eration of Louis XIV in 1715, and in 1717 the regent appointed him to the see of Clermont. In the year following he was chosen to preach before Louis XV. He died in 1742.

Magazillon (mas's,il-on), a city of Massowah, or Massawa, Massowah, or Massawa, the chair of rhetoric and English litera-

Massillon (mas'sil-on), a city of Stark Co., Ohio, on the Tuscarawas River and the Ohio Canal, 8 coast of Africa, now belonging to Italy, miles w. of Canton. The natural resources are a high grade of domestic coal, trea. The town stands on a small barren sandstone and fire clay. From the stone and clay are manufactured very fine from the mainland, and is very hot and consisting of sand and brick. Other manusumbetty. It is the natural commercial and clay are manufactured very fine from the mainland, and is very hot and qualities of sand and brick. Other manufactured articles are engines, threshers, outlet for the products of the Soudan and saw mills, feed cutters, stoves, furnaces, northern Abyssinia, and the exports cast iron pipe, sheet steel, steam hammers, brought by caravans from the interior inetc. The city is surrounded by very fertile farm lands. It was founded in 1825. The city is surrounded by very fertile farm lands. It was founded in 1825. Wax, etc. Until 1885 it was an Egyppop. (1910) 13,879; (1920) 17,428.

Massinger (mas'in-jer). Phillp, a session of by Italy. Pop. (exclusive of distinguished English Italian troops) 7775.

Massys. See Matsys.

orders of the captain. The duties discharged by the master have latterly been 1640, buried Philip Massinger, a stran-consigned to an officer known as naviger.' As a dramatist Massinger is more pating lieutenant. The rank of master natural in his characters and poetical in (between that of ensign and lieutenant) his diction than Jonson, and some critics still exists in the navy of the United rank him next to Shakespere. In tragedy, States. In the merchant service, the mass ter is the person entrusted with the chief command of the vessel, and usually styled by courtesy captain. He is the confidential servant or agent of the owners, who are bound to answer for a breach of contract committed by him. The master has the privilege of using the royal horses, power to hypothecate or pledge the ship and cargo for necessary repairs executed abroad. He may enforce obedience to his of office is dependent upon the existence lawful commands by reasonable and moderate chastisement, but has no jurisdicerate chastisem.nt, but has no jurisdiction over a criminal; his business is to deliver him to the proper tribunals. He of the judges of the Chancery Division of tion. The master of an American ship must be a citizen of the United States. must be a citizen of the United States. Queen's Dench, and above the Singer of the Common Pleas.

In Europe generally the qualifications of justice of the Common Pleas.

Master-singers (German, Meister-singers singer), the name selected and employed.

Master in Chancery, an officer of a chancery court, appointed to assist the chancellor. Causes involving intricate accounts are often referred to a master for hearing. He is often appointed to examine witnesses, to take depositions, to report the facts of a case, to make settlements under deeds, etc.

Master of Arts (M.A. or A.M., artium magister), an academical honor conferred by the unieven in the twelfth and thirteenth centuries the honor was so highly esteemed in France that the most distinguished men were eager to obtain it. Afterwards, the universities were multiplied, and many abuses crept in, it lost much of its importance. In the English universities this degree is the highest in the arts faculty. In the German universities the title is merged in that of Doctor of Philosophy (Ph.D.).

Master of the Buckhounds, Mastic, and Western Asia. The even in the twelfth and thirteenth cen-

an officer of the royal household of Britain, in the master of the horse's department. He is entrusted with all matters connected with the royal hunts. He goes out of office on a change of ministry.

is compelled to keep a proper tribulais. He of the judges of the Chancery Division of and must produce it, with the ship's pathe rolls of all patents and grants that pers, on the requisition of the compass the great seal, and of all records of mander of a ship-of-war of his own nather Court of Chancery. He ranks next the Court of Chancery. He ranks next after the Lord Chief-justice of the Queen's Bench, and above the Lord Chief-

must be attested by examination by proper authorities; but in the United States the civil responsibility of the owners for their flourished in Mainz, Strasburg, Augsacts is esteemed sufficient. The master burg, Nürnberg and various other Geris liable to the owners by whom he is man cities, in the fourteenth and fifteenth centuries, in some cases surviving even to recent times. It represented the poetical efflorescence of burgher life as the Minnesingers had represented that of the feudal chivalry. The members of the guild met and criticised each other's productions in and criticised each other's productions in accordance with a remarkable series of canons dealing with literary form. Victory in their own competitions carried with it the right to take apprentices in song craft, who at the expiry of their term, and after singing for some time with acceptation, were themselves admitted as full masters. Among the most academical honor conferred by the uni-with acceptation, were themselves admitversities of the United States, Britain, ted as full masters. Among the most France, Germany, etc., upon students famous master-singers were Hans Sachs, after a course of study and a previous Henry of Meissen (Frauenlob), Regen-examination in the chief branches of a bogen, Hadlaub and Muscatblut. The liberal education, particularly languages, development of artificial canons in the philosophy, mathematics, physics and search for novelty ultimately reduced the history. The precise period of the intro-whole scheme to utter absurdity, the duction of this title is not known; but literary productions becoming lifelessly even in the twelfth and thirteenth cenmechanical.

Lentiscue), a native of Southern Europe, North Africa, and Western Asia. The resin, which is principally produced in the Levant, and chiefly in the island of Chios, is obtained by making transverse incisions in the bark, from which it issues in drops. It comes to us in yellow,

Mastication **M**atabels

brittle, transparent, rounded tears, which land, Germany, France and Italy. A soften between the teeth with a bitterish taste and aromatic smell. Mastic consists of two resins, one soluble in dilute alcohol, but both soluble in strong alcohol. It is used as an astringent and an aromatic. Its solution in spirits of wine constitutes a good vernish. Berwine constitutes a good varnish. Bar-bary mastic is obtained from the Pis-tacia atlantica, which grows in the north of Africa and the Levant. Mastic is conof Africa and the Levant. Mastic is consumed in vast quantities throughout the Turkish Empire as a masticatory for cleansing the teeth and imparting an agreeable odor to the breath. It was formerly in great repute as a medicine throughout Europe. See also Lentiscus.

Mastication (mas-ti-kā'shun), the process of division of the food effected in the mouth by the rombined action of the jaws and teeth, the tongue, palate and muscles of the cheeks. This process is seen in its typical perfection in the higher Vertebrata only. By it the food, besides being triturated, is mixed with the salivary fluid. Imperfect mastication is a fertile source of indigestion. of indigestion.

Mastiff (mas'tif), a race of large dogs found under various names from Tibet to England. The English mastiff is a noble looking dog with a large head, a broad muzzle, lips thick and pendulous on each side of the mouth, hanging ears and smooth hair, the height to 29 inches. The old English breed was brindled, but the usual color to-day is some shade of buff with dark muzzle and ears. The Tibet mastiff, which is also a fine animal, is common in Tibet and in Bhutan as a house dog.

Mastiff-bat, a name given to an Asiatic and South African bat of the genus Molossus, from its head resembling that of the mastiff-dog.

Mastitis (mas-ti'tis), or MAMMITIS, inflammation of the breast. Mastodon (mas'tu-don), an extinct (mas'tu-don), an extinct genus of Proboscidea or Elephants, the fossil remains of which first occur in the Miocene rocks of the Tertiary period, and which persist through the Pliocene and Post-pliocene epochs. In general structure the mastodons bear a close resemblance to the existing species of elephants. Their chief neculiarities consist in the dentition and isting species of elephants. Their chief printed. Large ships cannot anchor peculiarities consist in the dentition and within 5 miles of the shore. In 1864 a structure of the teeth, from the curious storm-wave swept over the town, which mammillary processes on which the generic name is derived (Greek mastos, Masulipatam has never since regained breast). The geographical range of the mastodons included North America, Eumastodons included North America, Europe and Asia—one species, the Masto-don longirostris, having inhabited Eng-



MASTODON RESTORED. 1, Molar tooth, weighing 17 lbs. 2, Skull of Mastodon of Miocene period.

Piedmont, measured 17 feet from the tusks to the tail; and an American specimen measured 18 feet in length and 11 feet 5 inches in height.



Mastodon Angustidens.

Masulipatam (ma-ső-li-pá-täm'), s town of India, presidency of Madras, 220 miles N. N. E. from the city of that name, on a low flat on the Bay of Bengal, near one of the mouths of the Kistnah. It consists of the pettah or native town, the European quarter, and the fort, at some distance and now neglected. The town is a station of the Church Missionary Society, and there are both Protestant and Roman Catholic churches. The manufactures consist chiefly of cotton goods, plain or printed. Large ships cannot anchor

Matamoros Mate

Zambesi, north of the Transvaal, into which they removed from Natal in 1827 under the leadership of their chief Mose-likatse. They are a warlike people. Their territory, known as Matabeleland,

of the largest, safest and most conve-

which is dipped into a composition that ignites by friction or other means. One of the first forms of this article was the of resinous or dry pine wood with pointed position.

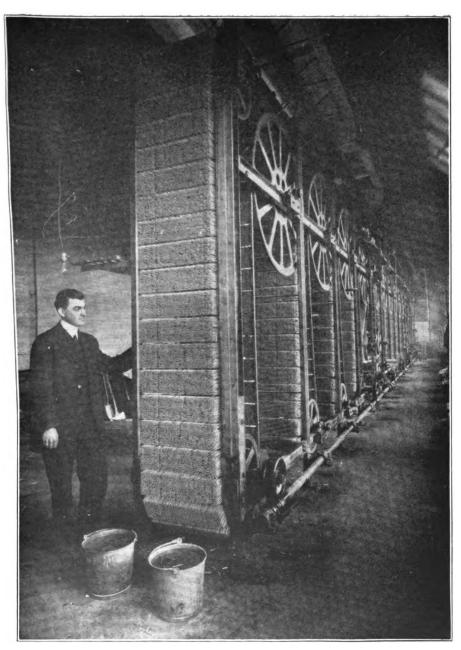
ends dipped in sulphur, which were lighted with tinder ignited by a flint and steel. The lucifer match was introduced in 1827, the inflammable substance being in the first half of the fifteenth century, a mixture of chlorate of potash and sul- and were succeeded by the arquebus. See phide of antimony, applied to the match, Musquet. which had been previously dipped into melted sulphur. The matches were ignited by being drawn smartly through is to assist the master or commander, a piece of folded sandpaper. This was and to take, in his absence, the command succeeded after a few years by the Congreve match, in which phosphorus was times two, three, or four mates in a mer-

substituted for the sulphide of antimony. Many improvements have since been made both in the composition of the likatse. They are a warlike people. igniting materials and in the processes of Their territory, known as Matabeleland, manufacture. Sulphur, owing to its of-is now under British protection. Besides fensive smell, is now commonly discarded the Matabele there dwell here also numbers of the Makalaka and Mashona position is essentially an emulsion of tribes, its population being estimated at phosphorus in a solution of gum or glue, 175,000. In 1893 the Matabele were combined with a quantity of chlorate of severely worsted in pitched battles by the potash, red lead, or nitrate of lead, to forces of the British South African Company and the territory is now included coloring matter as cinnabar, smalt, etc. igniting materials and in the processes of Matamoros (mat-a-mō'ros), a city of many accidental deaths and even to will-maulipas, on the right bank of the Rio Grande del Notre, about 10 miles above its mouth in the Gulf of Mexico. Ject to an insidious disease (nace the first process of manufacture, are sub-above its mouth in the Gulf of Mexico. Pop. 8347.

Which frequently proves fatal. Fortunately all risks whatever may be avoided by the use of amorphous phosphorus Cuba, 52 miles east of Havana, with one which is an efficient substitute, and entitled the control of the c of the largest, safest and most conve-tirely innocuous.—Safety-matches were nient harbors in America. It has con-invented in Sweden in 1855, and are now siderable commerce, exporting sugar, mo-lasses, and coffee, and ranking in imported composition is divided between the lance next to Havana. Pop. 64,385. It match and the friction paper attached is the capital of Matanzas province, to the box, so that the match can 3700 sq. miles in area; pop. 202,444. lighted in ordinary circumstances only Matanzan (ma-ta-pan'), CAPE (anbeing rubbed on the prepared paper. ciently Tandrum Promen compound put on the match consists to the box, so that the match can be lighted in ordinary circumstances only by compound put on the match consists of torium), the most southern extremity of chlorate and bichromate of potash, redthe Morea, Greece, and of the European lead, and sulphide of antimony, while the continent. It terminates in a high, steep, friction paper is coated with a mixture continent. It terminates in a high, steep, friction paper is coated with a mixture pyramidal point, at the base of which is of amorphous phosphorus and sulphide of a volcanic cavern. Upon its summit are antimony.—Vestas are a kind of matches the ruins of a temple, probably of Poseimade of a wick of fine cotton threads don.

Mataró (mä-tà-rō'), a town of Spain, smoothed and rounded by being drawn in Catalonia, on the Mediterthrough a metal plate pierced with circular paper. 19 miles portheast of Barrelone color holes of the desired size: the wick ranean, 19 miles northeast of Barcelona. cular holes of the desired size; the wick It has manufactures of linen, cotton and woolen goods, soap, etc.; and a considerable trade. Pop. 19,704.

Match (mach). In the most common sponys paper soaked in a solution of sense of the term, matches are niter and bichromate of potash, and splints or small slips of wood, one end of tipped with the usual ingredients.—which is dipped into a composition that Vesuvians are round matches of wood ignites by friction or other means. One having a large head at each end made of having a large head at each end made of a mixture of charcoal, niter, etc., and brimstone match, which was a thin strip tipped with the ordinary igniting com-



MATCH MAKING MACHINE

The match sticks are prepared, dipped in the ignition composition and dried by this machine. The matches are removed and packed in bores by automatic machinery so that manual labor is practically eliminated in the manufacture.

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chantman, according to her size, denom- subjected to certain processes which eninated first, second, third, etc., mates. able other relations to be d.duced. Math-The law of the United States recognizes ematical principles which are deduced only two descriptions of persons in a from axioms with the help of certain defi-

olate, unequally serrated leaves, much-the application of its principles in as-branched racemes of flowers, the subdi-tronomy and in investigating the actions branched racemes of flowers, the subdivisions of which are somewhat unbellate. In Brazil and other parts of South America the leaves are extensively used as a the leaves are extensively used as a thermodynamics, electricity and magnesubstitute for tea, the name Maté having the modynamics, electricity and magnesubstitute for tea, the name Maté having the mathematics. See Algebra, Arithmetic, gourd or calabash in which the leaves are infused. Boiling water is poured upon the powdered leaves, then a lump of burned sugar and sometimes a few drops crease Mather, was born at Boston in of lemon juice are added. Usually the 1663. He was graduated at Harvard Colinfusion is sucked through a tube, sometimes of silver, having a perforated bulb minister in Boston, as colleague of his to act as a strainer at the lower end. father. He strove to maintain the ascend-

17,801.

Materialism (m a - t ë' ri-al-izm), in philosophy, that system which denies the existence of a spiritual the mind or soul, distinct from matter; or in a more extended sense, the doctrine that is founded on the hypothesis that

name given to the materials with which physi ians attempt to cure or alleviate the numerous diseases of the human body, and which comprehend a great variety of substances taken from the mineral, animal and vegetable kingdoms—such as mercury, antimony, arsenic, and zinc, from among the metallic bodies; in 1630; was graduated at Harvard zinc, from among the metallic bodies; in 1656; was ordained a minister in 1661; sulphur, lime, soda. niter, magnesia, president of Harvard College from 1685; borax and several salts, from among to 1701. When King Charles II signified his wish that the charter of Massatances belonging to the animal and vegetable kingdoms.

only two descriptions of persons in a from axious with the neip of certain demerchantman—the master and mariners, nitions belong to pure mathematics, and the mates being included in the latter, those which have been deduced with the and the captain being responsible for help of pure mathematics from certain their proceedings. In the British navy simple physical laws, beiong to mixed the term is limited to the assistants of mathematics. Arithmetic, geometry, alcertain warrant officers, as boatswain's gebra, plane and spherical trigonometry, mate, gunner's mate, etc. Maté (ma'tà), the plant that yields ferential and integral calculus, quaternions, a kind of holly, nat. order etc., are departments of pure mather Aquifoliaces. It has smooth, ovate-lance—matics; the dynamics of rigid bodies and

burned sugar and sometimes a few drops of lemon juice are added. Usually the least such at the lower end. It contains theine, and acts as a slight aperient and diuretic.

Matera (ma-ta'ra), a town of South Matera (ma-ta'ra), and in 1684 was ordained to minister in Boston, as colleague of his father. He strove to maintain the ascending aperient and diuretic.

Matera (ma-ta'ra), colonial author, the eldest son of Increase Mather, was born at Boston in 1683. He was graduated at Harvard Coline in 1685 was ordained minister in Boston, as colleague of his father. He strove to maintain the ascending which had formerly belonged to the New England clergy in civil affairs, but which was then on the decline. In 1685 he published his Memorable Providences residence of an archbishop, and Italy, province of Potenza. It published his Memorable Providences reis the residence of an archbishop, and lating to Witchcraft and Possessions, has a cathedral and three convents. Pop. which was used as an authority 17,801. persecution and condemnation of nineteen victims burned for witchcraft at Salem in 1692. He died in 1728, with the reputawhich denies the existence of a spiritual tion of having been the greatest scholar or immaterial principle in man, called and author that America had then produced, his publications, some of huge dimensions, amounting to 382. all existence (including, of course, the blended in most of his works with great modification of matter Credulity. modification of matter.

Materia Medica (materia a media ka), the collective of New England from 1625 to 1800 tries tries to 1800 tries trie

Mathematics (math-e-mat'iks) is against a compliance. In 1689 he was the science in which deputed to England, as agent of the provknown relations between magnitudes are ince, to procure redress for grievances.

He held conferences with King James II, N. of Kyoto, has large manufactures of and with William and Mary, and in 1692 paper. Pop. 36,000. returned to Boston with a new charter from the crown, settling the government of the province. He died at Boston in 1723. from the crown, settling the government of the province. He died at Boston in 1723. His publications were 92 in number, of which his essay for the recording of llustrious Providences (1684) is one of the chief. His book to prove that the devil might appear in the shape of an innocent man, enabled many convicted of witcheraft to escape death.

Mathew (math'û), Theobald, popularly known as Father Mathew, Irish apostle of temperance, was born in 1790, studied at Maynooth, Matrix (ma'triks). In mining and getain the province. Mathem (math'û), a town of England, in Derbyshire, on the Derwent, 17 miles northwest of Derby, with lead mines which employ a number of the inhabitants. Pop. (1911) 6746.—
The village of Matlock-Bath, about a mile watering-place.

Matricaria (mat'lok), a town of England, in Derbyshire, on the Derwent, 17 miles northwest of Derby, with lead mines which employ a number of the inhabitants. Pop. (1911) 6746.—
The village of Matlock-Bath, about a mile watering-place.

Mathew (mat'lok), a town of England, in Derbyshire, on the Derwent, 17 miles northwest of Derby, with lead mines which employ a number of the inhabitants. Pop. (1911) 6746.—
The village of Matlock (mat'lok), a town of England, in Derbyshire, on the Derwent, 17 miles northwest of Derby, with lead mines which employ a number of the inhabitants. Pop. (1911) 6746.—
The village of Matlock-Bath, about a mile watering-place.

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Mathew (mat'lok), a town of England, in Derbyshire, on the land, in Derbyshire, on th

was born in 1790, studied at Maynooth, was born in 1790, studied at mayboth, matrix ology, the rock or main sub-and was ordained a priest in 1814. ology, the rock or main sub-shortly afterwards he was appointed to stance in which any accidental crystal a missionary charge at Cork, and estab-mineral, or fossil is embedded a missionary charge at Cork, and estab-lished a society, on the model of those of St. Vincent de Paul, for visiting the sick and distressed. A more extended toward toward devicts a social group which is ruled over by a woman or women. It is of St. Vincent de Paul, for visiting the sick and distressed. A more extended undertaking was the celebrated temperance crusade, which was so successful that in a few months he had 150,000 that in a few months he had 150,000 converts in county Cork alone. A similar success attended his work in many rish and English towns, and in recognition of this a civil list pension of £300 was bestowed on him. He died in 1856.

Matisse, Henri, French artist and set of in 1869 and studied at the Ecole designed the school of Impressionism (q. v.) and quickly the same profession. He quitted his namade himself leader of the post-impressionists, startling the world with a number of grotesque paintings that were designed to stimulate the imagination of the chiefly painted portraits and half-figures beholder rather than present a photographic reproduction of objects. Among great works of which a Descent from the his paintings are: 'The Woman with the Cross, in the cathedral of Antwerp, is Green Eyes,' 'Gold Fish,' 'Nude Model.' a favorable specimen, also his picture of finance in 1836, and privy councilor 1903.

Matsumoto, Japan, 130 miles N.w. of Hospital for the Criminal Insane. Pop.

of Japan.

Mathura. See Muttra.

Matrix (ma'triks), in mining and ge

Matsumoto, a town of Honshu, ery, air-brakes, etc. Here is the State Tokyo, manufactures silks, baskets, and preserved fruits. Pop. 35,000.

Matsushime a pineeled word in the matter of hats, silk, machinery, air-brakes, etc. Here is the State for the Criminal Insane. Pop. 6727.

Motter (matter) that the matter of hats, silk, machinery, air-brakes, etc. Here is the State for the Criminal Insane. Pop. 6727.

Matsushima, a pine-clad archipelago Matter (mat'er), that which occupies space, and through which force is manifested. It is also that which sidered one of the three natural wonders asked the three natural wonders asked the work to us by our bodily sidered one of the three natural wonders. sidered one of the three natural wonders senses, though there is believed to exist one kind of matter at least which is too Matsuyama, a town in the w. part subtle to be perceived by the senses, mailes by railroad from its port, Mitsu, lar ether, the light-conveying element. has a large feudal castle. Pop. 44,000. Roughly speaking, matter exists in one of Matsuye, a town in an inlet of the three states, solid, liquid, or gaseous, but Japan Sea, 149 miles w. by these are not marked off by any distinct line. It is believed to consist of minute plants. Gold, diamonds and other gems particles termed atoms, which collect into are obtained. Little of the soil is as yet small aggregates known as molecules, under cultivation. Pop. (exclusive of Inthese being the basic elements of the dians) 118,025.—The city of Mattochemical bodies and of all material Grosso, formerly the capital of this provthese being the basic elements of the chemical bodies and of all material masses. Matter is commonly regarded as the antithesis of mind.

See Cervin. Matterhorn.

pheus; previous to his call a publican or and other railroads. It has large grain officer of the Roman customs, and, according to tradition, a native of Nazactories, reth. After the ascension of Christ we find him at Jerusalem with the other tile factories, etc. It is central to the apostles, but this is the last notice of great broomcorn belt of central Illinois, him in Scripture. Tradition represents him as preaching fifteen years in Jerusalem, then visiting the Ethiopians, Macedonians, Persians, Syrians, etc., and finally suffering martyrdom in Persia. We bank of Lehigh River, 89 miles N. W. His gospel has been supposed by some of Philadelphia. It is picturesquely siterities to have been originally written in uated in a narrow valley or ravine becritics to have been originally written in

an old English chronicler, a Benedictine monk of the Abbey of Westminster, who lived in the fourteenth century. His chronicle, extending from the creation to 1307, was entitled by him Flores Historiarum ('Flowers of Histories'), whence his name of Florilegus. The work is very freely transcribed from Matthew Paris.

Mauna Loa (mou'nă lô'ă), a celebrate volcano near the Maulii: height 13.650 feet die.

supplies of the finest timber, and yield French mathematician and philosopher valuable gums, balsams and medicinal born at St. Malo in 1698. After four

ince and of much importance in connection with the gold diggings, has dwindled in population from 20,000 to 1000.

Matterhorn. See Cerem.

Matthew (math'û), St., evangelist pheus; previous to his call a publican or and other railroads. It has large grain officer of the Roman customs, and, ac-elevators, railroad repair shops and found

vania, capital of Carbon county, on the w. bank of Lehigh River, 89 miles N. w. of Philadelphia. It is picturesquely situated in a narrow valley or ravine between steep hills, which contain an abun-Hebrew, or rather Aramaic, but it is only found in Greek. The chief aim of this dance of anthracite coal. A railway Gospel is evidently to prove the Messianic character of Jesus. Sec Gospel. Matthew of Westminster, tracting many visitors during the summer. Pop. 4029.

Maulmain. See Moulmein.

Maulmain. See Moulmein.

Maulmain. See Moulmein.

Mauna Loa (mou'nă lô'ă), a celebrated transcribed from Matthew Paris.

Matthias Corvinus (ma-thi'as corvetrus), King of Hungary, second son of John Hunniades. The enemies of his father kept him imprisoned in Bohemia, but in 1458, at the age of sixteen years, he was called to the throne of Hungary. He maintained his position against Frederick III, repelled the invading Turks, and between 1468 and 1478, conquered Silesia, Moravia and Lusatia; he was also victorious over the Poles, and took the greatry part of Austria, including Vienna, from Frederick, and held all his extensive conquests till his death. He encouraged science and scholarship, and collected a great library (afterwards destroyed by the Turks) at Buda. He died in 1490.

Matto-Grosso (măt'to-grōs'so: Great twestern and second largest province of Brazil, bordering on Paraguay and Bolivia; area, 532,445 square miles. The dense forests which cover a great part of the surface abound with inexhaustible sumplies of the finest timber, and yield valuable gums, balsams and medicinal

years' service in the army, he was in eral volumes of sermons, and treatises on 1723 received into the Academy of Sci-various subjects. ences. He then visited England and Switzerland, and became a pupil of New-ton. In 1736 he conducted a scientific expedition to Lapland for the purpose of measuring an arc of the meridian. In 1740 he accepted an invitation from the King of Prussia to settle at Berlin, where, in 1746, he was declared president of the Academy of Sciences. He died at Basel in 1759.

Maura, SANTA. See Leucadia.

Maurepas (mor-pa), Jean Frédéric Phélippeaux, Count de, a French statesman, born in 1701. At the age of twenty-three years he be-Αt came minister (by inheritance) of the French marine. An epigram on Madame de Pompadour led to his banishment from the court in 1749, but Louis XVI recalled him in 1774, and placed him at the head of his ministry, and he retained the confidence of the king till his death the confidence of the king till his death, in 1781. The restoration of the parliaments was the principal measure of his later ministry.

Maurice, of Saxony, Count. See

Maurice (ma'ris), John Frederick Denison, an Anglican divine and prominent leader of the Broad Church party, son of a Unitarian minister, was born in 1805, at Normanston, Suffolk. In 1823 he entered Trinity College, Cambridge, where he declined a fellowship on the ground that he could not sign the Thirty-nine Articles. In 1828 he settled in London, and applied himself to literature, his first work of any extent being Eustace Conyers, a novel (1834). He also contributed, along with John Sterling, to the Athenœum, then recently started. A change in his religious sentiments, however, induced him to become a clergyman of the Church of England (1835), and in 1836 he was appointed chaplain to Guy's Hospital, a post which he kept for ten years. In 1840 he became professor of modern history and English literature in King's tory and English literature in King's College, London, and in 1846 professor of ecclesiastical history, but in 1853 the publication by him of an essay on future punishment, necessitated his resignation of both chairs. In 1854 he founded the at Cambridge, a position which he held until his death in 1872. Besides the books above mentioned, he published sev- by the Arabs.

Maurice of Nassau, Prince of Prange stadtholder of the Netherlands, the youngest son of William the Silent, was born in 1567. He was elected stadtholder of the provinces of Zeeland and Holland on the assassination of his father in 1585, and subsequently of Utrecht, Overyssel and Gelderland; and as commander of the army of the Netherlands he carried on war against the Spaniards with extraordinary success, driving them entirely out of the United Provinces. Previous to the truce of twelve years, concluded in 1609, when Spain was compelled to acknowledge the United Provinces as a free republic, about forty towns and several fortresses had fallen into his hands. He had defeated the of the provinces of Zeeland and Holland into his hands. He had defeated the Spaniards in three pitched battles, besides the naval victories which were gained by the vice-admirals of the republic on the coasts of Spain and Flanders. In 1621 the war with Spain was renewed, but the superior force under Spinola compelled Maurice to act upon the defensive only. He died at The Hague in 1625, and was succeeded by his brother Frederick Henry.

Mauricius (marish'i-us), Flavius TIBERIUS, one of the greatest Byzantine emperors, was born about 539 A.D. He distinguished himself in war against the Persians, obtaining, by his complete victory over them in by his complete victory over them in 581, the honor of a triumph at Constantinople. On the death of the Emperor Tiberius, whose daughter he had married, he ascended the throne (582). The war with the Persians continued with varying success, but was brought to a close in 591 by the appeal of the Persian king. Chospose, to the Eventines for aid king, Chosroes, to the Byzantines for aid against a rebel general. A defeat of the Byzantines by the Avars, and the massacre of the Byzantine prisoners, whom Mauricius declined to ransom, led to a revolt of his troops on the Danube. They marched on Constantinople under Phocas, who was proclaimed emperor (602), and Mauricius was seized and executed in 603.

Mauritania, or MAURETANIA (maname of the northwestern portion of Affirst workingman's college in London, of rica, corresponding in its area to the which he became principal. In 1860 he present Morocco and the western part of was appointed perpetual curate of St. Algeria. The ancient boundary of Mauri-Peter's, Vere Street, Cavendish Square, tania on the south was the Atlas. In and in 1866 professor of moral philosophy A.D. 40 it became a Roman province. A.D. 40 it became a Roman province. From 429 to 534 A.D. it was held by the Vandals, and in 650 A.D. it was conquered Mauritia Maverick'

long foot-stalks. It grows in marshy spots. From the juice of the stem and of the fruit a sweet vinous liquor is prepared. The fruit is of the size of a mauser Rifle (ma'sèr), a breech-loading rifle named the fan-palm of the Orinoco (M. ficx-uosa), which furnishes the Guarani Indians of the Orinoco region with all the bore. See Rifle. necessaries of life.

Mauritius (ma-rish'i-us), or Isle or France, an island in the Indian Ocean, a colony of Great Britain, 400 miles east from the island of Madagascar. It is of an oval form, about 40 miles long from northeast to southwest, and 25 miles in breadth, and is surrounded by coral reefs. It is composed chiefly of rugged and irregular mountains, the highest, the Montagne de la Rivière Noire, 2700 feet, and the isolated rock Peter Botte, 2600 feet. Between the mountains, however, and along the coast, there are large and fertile plains and valleys, having a rich soil of black vegetable mold or stiff clay. The climate is pleasant during the cool season, but oppositely better the cool season the coo pressively hot in summer, and the island is occasionally visited by severe epidemics. In its vegetation Mauritius resembles the Cape in the number of successional successions and the sumber of successions are successively and the summer of successions. culent plants, cactuses, spurges, and aloes. The principal objects of cultivation are sugar, rice, maize, cotton, coffee, manioc and vegetables. The exports include sugar (much the largest), rum, vanila, aloe fiber, cocoanut oil. The imports consist of rice, wheat, cattle, cotton goods, haberdashery, hardware, etc. The government is vested in a lieutenantgovernor and legislative council. The island has two railways crossing it, in all 87 miles. Mauritius was discovered in by the French it was captured by Britain in 1810. Principal towns, Port Louis and Mahebourg. Pop. 371,023, twothirds of whom were originally coolies or their descendants imported to work the sugar estates. French is the language chiefly spoken.

Maury (ma'ri), Matthew Fontaine, naval officer and hydrographer, was born in Virginia, in 1806, and entered the United States navy in 1825. In 1839 he was lamed by an accident, and quitted active service affoat for sci-

Mauritia (ma-rish'i-a), or BURITI entine more tory. He wrote valuable papers on the called also the Brazilian wine palm, one Gulf Stream, ocean currents, great cirof the tallest of the palms, rising to a cle sailing, etc., and his Physical Geogneight of 100-150 feet with a diameter raphy of the Sea, published in 1856, gave of only 2 feet, and bearing an imposing him a wide reputation. In 1861 he resigned his appointment at the Washing-ton Observatory and entered the Confedton Observatory and entered the Confederate service, in which he obtained the rank of commodore. He died in 1873.

Mausoleum (ma-sõ'li-um; Greek, mausoleion), a sepul-chral monument, so named from Mausō-lus, a king of Caria, to whom his wife Artemisia erected a monument which became so famous as to be esteemed the seventh wonder of the world, and to give a generic name to all superb sepulchers. From Pliny we learn that its height was 140 feet. In modern times the term is applied generally to a sepulchral edifice erected for the reception of a monument, or to contain tombs.

Mauvaises Terres (m ō - v ā s tār; b a d lands'), the name given to desolate tracts of land in various parts of the North-central United States; more especially to a barrev region in Dakota along the White River an affluent of the Missouri. Here the elevated clayey ground has been eroded by the rains until it presents many curi-ous effects, resembling those of ruined architecture.

Mauve (may), a beautiful purple dye obtained from aniline, used for dyeing silks, etc. In silk and wool the colors are permanent without the use of mordants.

Maverick (mav'er-ik), the name given in the cattle ranges of the Western United States to un-branded animals, which the finder often brands for himself or his employer:— 1505 by the Portuguese. The Dutch took hence, something dishonestly appropriated possession of it in 1598, and named it On these ranges the cattle of different own after Prince Maurice. After occupation ers herd together and must be branded to prove ownership. If a calf strays away from its mother before being branded, it may be illegally branded, and thus be-come a mayerick. The name is also applied to the unbranded animals driven in at the general round-up and equitably di-vided among the owners. The word came from Samuel Maverick, a Texan cattleman, who distinguished his animals by leaving them unbranded, and when they became mixed with other herds claimed all unbranded animals as 'mavericks.

See Thrush. Mavis.

Mavrocordato (m a v-ro-kor-da'to), ALEXANDER, PRINCE, a Greek politician and diplomatist, born at Constantinople in 1791; died in 1865. He took part in the Greek movement for freedom (1821); prepared the declara-tion of independence; became president of the Executive Council; and success-fully defended Missolonghi (1822). When Otho was placed on the Greek throne by the European powers Mayrocordato became his financial minister, and he was afterwards ambassador to Munich, London and Berlin. During the insurrection of 1843-44 he was president of the Constitutional Assembly, and at the outbreak of the Crimean war he became head of the Greek government.

Maxentius (maks-en'shi-us), M. Au-RELIUS VALERIUS, a Ro-man emperor, 306-312 a.D., son of Maxim-ianus, and son-in-law of Galerius, whom he deposed. He reigned along with his father for a short time; was defeated by Constantine in 312, and in the retreat was drowned in the Tiber.

Maxilla (maks'il-a; Latin, maxilla, a jaw), the term applied in comparative anatomy to the upper jaw-bones of Vertebrates, in contradistinction to the mandible or lower jaw: and in Invertebrata to the second or lesser pair or pairs of jaws. Thus in insects, spiders, crustaceans, etc., the maxillæ form definite and important organs in the tritura-tion and division of food.

Maxim (maks'im), HIRAM STEVENS, inventor, born at Sangerville, Maine, in 1840. He worked as coach builder and engineer and took out patents for various inventions, chief among them being the Maxim machine gun, in which the force of the recoil is used for reloading. He also invented cordite, a smokeless powder, and was one of the first to experiment with flying machines. He lived in England after 1888. Died Nov. 24, 1916. Maximianus (maks-im-i-ā'nus), MARCUS AURELIUS VALERIUS HERCULIUS, a Loman emperor,

who became colleague of Diocletian in the empire in 286 A.D. He endeavored to murder his rival Constantine, to whom he had given his daughter Faustina in marriage, and being frustrated by the fidelity of the latter, strangled himself 310. He was the father and contemporary of Maxentius.

Maximilian I (maks-i-mil'yan), Emperor of Ger-

Romans, and emperor in 1493. He first became an independent prince by his marbecame an independent prince by his marriage with Mary of Burgundy, the daughter of Charles the Bold, who was killed in 1477. This match involved him in a war with Louis XI, king of France, in which he was successful, though he was defeated at a later period by the Milanese. He died in 1519, and was succeeded by his grandson, Charles V. See Germany.

Marinilian II. Emperor of Germany. Emperor of Ger-Maximilian II, i n

many, born 1527; died in 1576. He succeeded his father, Ferdinand I, in 1564; was tolerent of the Part of the Par erant of the Reformation, but did not join

the Protestant church.

Emperor of Mexico, Maximilian, known in his earlier life as FERDINAND MAXIMILIAN JOSEPH, Archduke of Austria, born at Vienna in 1832, was the younger brother of Francis



Maximilian, Emperor of Mexico

Joseph I of Austria. In 1863 he was induced by the Emperor Napoleon III, and also by a deputation of Mexican notables, to accept the throne of Mexico. With this intention he entered Mexico in June, 1864. Maximilian was at first extremely popular; yet he failed to con-ciliate either the church party or the republicans, and the latter, under Juarez, rose in revolt. Having become involved in financial and political difficulties, Maximilian, with the approval of Napoleon, resolved to abdicate (1866), and he had proceeded to Orizaba when he was induced to return by the Conservative party in the state. The fighting which followed culminated in the capture and execution of the emperor and two of his chief generals, June 19, 1867.

Maximilian Joseph, King of Bamany, son of the Emperor Frederick III in 1756; died in 1825. He married his and of Eleonora of Portugal, was bern in daughter to Eugene Beaubarnais, son of 1459; in 1486 was elected him of the Napoleon's wife Josephine, and had his

duchy raised to a kingdom in 1806. In Society, 1847-61; also of the American 1813 he joined the league against France. Anti-Slavery Society. He was a regular Maximinus (maks-i-mi'nus), Calus contributor to the *Liberator* and other Julius Verus, a Ro- anti-slavery literature. Maximinus (maks-i-mi'nus), Calus Julius Verus, a Roman emperor, the son of a peasant of Thrace. He entered the Roman army under Septimus Severus before 210, and gradually rose in rank until, on the death of Alexander Severus, he caused himself the author of A Treatise on the Law, to be proclaimed emperor, A.D. 235. He Privileges, Proceedings, and Usage of Parwas successful in his German campaigns, liament (1844); The Constitutional Hisbut his acts of barbarity and tyranny provoked an insurrection, in the attempt to quell which he was assassinated by his own soldiery, in A.D. 238. He is represented as being of immense stature and strength.

Maximum (mak'si-mum), the great-est quantity or degree fixed, attainable, or attained, in any given case as opp sed to minimum, the smallest. In mathematics and physics maximum is west Indian island of Porto Rico. Pop. 16,563.

Maxwell (maks'wel), JAMES CLERK, born at Kirkcudbright in 1831; died in 1879. He was educated at Edinburgh and Trinity College, Cambridge, where in 1854 he was second wrangler. He held the professorship of natural philosophy in Marischal College, Aberdeen, in 1856-60; afterwards the chair of physics and astronomy in King's College, London, 1860-68, and the professorship of physics in Cambridge from 1871 until his ceath. He published treatises on Electricity and Magnetism, The Theory of Heat, Matter and Motion, etc., and won high esteem among scientists for his powers of deduction and mathematical analysis. used also for the value which a varying analysis.

May (mā), the fifth month in the year, but third it the old Roman calendar, has thirty-one days. The Romans riages during its course—a superstition and the first of May the old Celtic peoples residence of the Allsa family. Shoeheld a festival called Beltane (see Belane). In former cays outdoor sports Mayyone (mā'yāns). See Mainz. tane). In former cays outdoor sports and pastimes on the first of May were very common, and are not yet entirely given up. They included the erection of a May-pole decorated with flowers and foliage, round which young men and maidens danced, one of the latter being

maidens danced, one of the latter being Maine; area, 1996 square miles. The chosen for her good looks as gueen of the surface is rather hilly or broken, but the festival, or 'Queen of the May.'

May, Samuel, Reverend, abolitionist, soil is good and yields corn, flax, hemp. apples, etc. Coal and slate are obtained in small quantities. Laval is the capital. Pop. 297,732.

at Harvard in 1829; was pastor of a Unitarian church, 1834-46; was general agent of the Massachusetts Anti-Slavery river of the same name, 17 miles N. N. E. of

May, THOMAS ERSKINE, born in 1815; died in 1886. He became assistant

Mayaguez 🙌

(må-yä'g wes), seaport town on the west coast of the West Indian island

(barberries). It is a native of North lum pellatum).

America, and its lum peltatum). creeping rootstalk affords an active cathartic medicine known as podophyllin. The yellowish pulpy fruit, of the size of a pigeon's egg, is slightly acid, and is

Mayas (ml'az), a race of Indians inhabiting Yucatan and the adjacent regions of Mexico and Central America, believed to be the descendants of those who built the great ruined cities

residence of the Ailsa family. Shoemaking is the chief industry. Pop. 5892.

Mayence (ma-yans). See Mainz.

mayenne (ma-yen), a department of northwestern France, named from the small river Mayenne, which joins with the Sarthe to form the Maine; area, 1996 square miles. The surface is rather hilly or broken, but the soil is good and yields corn, flax, hemp, apples, etc. Coal and slate are obtained in small quantities. Laval is the capital. Pop. 297,732. Mayenne (ma-yen), a department of

Laval. It has a picturesque old castle, iron foundries, etc. Pop. 9961.

Mayfield, acity, county seat of Graves quadrangle, the latter a fine Gothic Co., Kentucky, 26 miles s. structure.

of Paducah. Has woolen and flour mills, foundry, machine shops, and large grain interests. Pop. (1920) 6583.

Mayo (ma'yō), a western maritime country of Ireland, in Connaught; area, 2157 sq. miles. The country of Ireland, in Connaught; area, 2157 sq. miles.

LEGE, the chief college of the Catholic Mayotte, or MAYOTTA (mä-yot'ta), University of Veland, was founded in 1795 by an act of the Irish parliament, Ocean, one of the Comoros, at the north-1795 by an act of the Irish parliament, for the education of the Irish Roman Catholic clergy. The annual vote from the British parliament for its maintenance was changed in 1845 to a permanent endowment of £26,000, and a sum of £30,000 for new buildings granted, while this again was commuted by the Irish Church Act (1869) for a lump sum of £372,276. All the students are destined for the priesthood, and all are residuely considered to the Mozambique Channel, and a French colony. It is about 30 miles long by 20 miles broad, and some of its volcanic reaks are nearly 2000 ft. high. Pop. 11,640.

Maysville (mās'vil), capital of Mason. Co., K en tucky, on the Ohio River, 65 miles above Cincinnati. It is an important shipping point for total color of the Mozambique Channel, and a French colony. It is about 30 miles long by 20 miles broad, and some of its volcanic reaks are nearly 2000 ft. high. Pop. 11,640.

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Mayflower, the small ship (180 tons) is in many parts extremely mountainous, its highest summit reaching 2680 feet. grim Fathers from Southampton, England, The principal river is the Moy, and the to Plymouth, Mass., December 22, 1620, after a voyage of 63 days.

Mayflower Descendants, Society and barley, Of, a parts extremely mountainous, its highest summit reaching 2680 feet. It have a respect to the mount of the society of the society

scendants of the Pilgrims who came over pasturage is more attended to than tiling the Mayflower in 1620, including all signers of the compact. Its objects are to preserve the memory and records of the Principal towns, Castlebar (the county Mayflower Pilgrims.

Mayhew (mā'hū), Henry, born at 199,168.

Maynew London in 1812; died in 1887. He was educated at Westminster school and entered the law office of his father; joined the literary profession as author of the farce, The Wandering Minsauthor of the Wandering Minsauth Maynard (ma'nard), Edward, inventor of the crew of the dispatch boat Dolphin at many surgical instruments; but is best whaleboat. He became a dentist and was the inventor of many surgical instruments; but is best whaleboat. He became commander into a transition of the U.S. Atlantic Fleet in 1917, ented in 1851, and the forerunner of the modern improved rifle.

Maynard, a town (township) in Mayor (ma'ur), the chief magistrate of a city of a ci

modern improved riffe.

Mayor (ma'ur), the chief magistrate of a city or corporate town in the United States and the British islands setts, containing a manufacturing village and colonies; in Scotland called provost. of same name. 26 miles w. of Boston. In the United States the mayor is elected It has large woolen and powder mills. by the qualified voters of the city or town Pop. (1920) 7086.

The power of a certain term of years. Maynooth (mā/nōth), a market town of Kildare, Ireland, 13 ing given to them by local regulations, miles w. N. w. of Dublin. It has a vary in different places. The Mayors of Protestant and a Roman Catholic church, and the well-known college of St. Patrick (see next article). Pop. about 1400.

Maynooth College, or St. Patrick (lord mayor); the Lord Mayor of London, York and Dublin are each called don having the further title of 'right honorable,' first allowed in 1354 by Edward III.

factures, including cotton, shoes, cigars, pulleys, etc. Pop. 6107.

Mav-weed. a European plant (Antherpolicy of Richelieu in foreign affairs;

mills, etc. Pop. 14,764.

Mazanderan (ma-za n-der-an), or covered in the library of Cardinal Mazanice of Persia, bounded on the north by the Caspian. Along the Caspian Sea the land is flat and fertile, but southward it rises rapidly into the spurs of the Elbruz Mountains. Sugar-cane, rice, cotton and mulberry trees grow luxuriantly. The capital is Sari, and the population of the province is estimated at 300,000.

Mazarrón (ma-thar-rôn'), a town of Southern Spain, province on which it has a harbor. It has capital is Sari, and the population of the province is estimated at 300,000.

Mazarin (må-za-ran), JULES, or GIULIO MAZARINI, first minister of Louis XIV and cardinal, an Italian by origin, born in 1602; died in 1681. He was educated at Rome by the Jesuits, thence proceeded to the Univerand imports considerable quantities of sity of Alcala in Spain; entered the pope's military service, and distinguished himself by diplomatic ability, for which he was rewarded with two canonries, and 1645. He became page to the king of the appointment of nuncio to the court of with a Polish lady of high rank Marsenne (1634-38). Here he sained the with a Polish lady of high rank Marsenne Jesuita, thence proceeded to the University of Alcala in Spain: entered the pope's military service, and distinguished himself by diplomatic ability, for which he was rewarded with two canonries, and France (1634-36). Here he gained the favor of Richelieu; accepted service from favor of Richelieu; accepted service from the king, and became a naturalized citi-by her husband, and cast loose. He was sen of France; was made a cardinal in found and released by some peasants, and recognition of his diplomatic services in afterwards joined the Cossacks, where Savoy; and in 1642, when Richelieu died, promptly succeeded him. On the death in the position of hetman in 1687. He gained the confidence of Peter the Great, tria, became regent for her young son, who made him prince of the Ukraine; but Louis XIV, and it was thought that having entered into a treasonable in Mazarin would be dismissed; but instead trigue with Charles XII he suffered dehe gained over the queen-regent, and made himself master of the nation. Two tawa, fied to Bender, and there died in parties in the state rebelled against this parties in the state rebelled against this usurpation of supreme power by the car-dinal. The parliament of Paris denounced his increasing taxation, while the nobility dreaded his supremacy, and the combination of these malcontents resulted in the civil war of the Fronde (which see). As the immediate result of the conflict, Mazarin had to go into exile, but
through means of intrigue he formed a

Azzara (mat-sa'ra), a seaport and
through means of intrigue he formed a

cathedral town of Sicily, on powerful royal party in the state, gained General Turenne to his cause, and finally returned to his position at court in 1653. 20,130.

May-weed, a European plant (Anthemosphere), and difficult to eradicate.

Maywood, a village of Cook Co., Illinois, on Des Plaines River, nois, on Rive

Mazarine Bible, an edition of the Latin Vulgate dis-Mazanderan (mā-zan-der-ān'), or covered in the library of Cardinal Maza-MAZENDERAN, a prov- rin. It was from this that John Gutten

Mazatlán (mä-sat-län'), a seaport in Mexico, in the state of Sinaloa, at the entrance into the Gulf of California. It forms the outlet for the

with a Polish lady of high rank, Mazeppa was bound naked upon an untamed horse by her husband, and cast loose. He was 1709. He is the hero of a poem by Lord

Mazurka, or Mazourka (ma-zör'-ka), a lively Polish round dance in % or % time and generally danced by four or eight pairs. It is quicker than the polonaise. The name is also applied to the music.

the south coast of the western extremity, surrounded by Moorish walls. Pop. Mazzarino Sicily, province Caltanissetta. Pop. 15,266.

(mut-se'ne), GIUSEPPE, an Italian patriot, born at Mazzini Genoa in 1805; died at Pisa in 1872. His father was a physician and a professor in the university, and Mazzini studied with a view to follow this profession, but afterwards took a new bent and was gradafterwards took a new pent and was grau-uated (1826) in law. While he was an advocate he turned his attention to lit-erature, his first significant essay being Dante's Love of Country. As his writ-ings grew more distinctly liberal in their politics the government suppressed the Indicatore Genovese and the Indicators Livornese, the papers in which they appeared. He afterwards joined the Carbonari, and was imprisoned in Savona for some months. On his release (1832) he was exiled to Marseilles, but he was compelled by the French government to retire into Switzerland. During the following five years he planned and organized various unsuccessful revolutionary movements, until, in 1837, he was expelled by the Swiss authorities and sought refuge in London. During the revolu-tionary movements of 1848 he proceeded to Italy; served for a time under Garibaldi, and when the pope fled from Rome he became president of its short-lived re-public and made a heroic defense of the public and made a heroic gerense of the capital against the French, until compelled to surrender. From that time he continued to organize various risings in Italy, and the successful Sicilian expedition of Garibaldi in 1860 was due largely to his labors. When Italian unity was compelied under a managery Mazzini accomplished under a monarchy Mazzini accepted the results with reserve. The latter part of his life was spent chiefly between London and Lugano. He was buried at Genoa.

Mazzola (mat-so'la), or Mazzuoli (mat-su-o'la), GIBOLAMO FRANCESCO MABIA (called Il Parmigiano, the Parmesan), a painter of the Lombard school, born at Parma in 1503; died in 1540. His earliest works were in the style of Correggio, but in his twentieth year he went to Rome, where he came under the influence of Raphael and Michael Angelo, and was patronized by Clement VII. After the sack of Rome in 1527 he went to Bologna. His paintings are numerous, both fresco and easel. He was the earliest Italian etcher, and many of his engravings yet exist.

McAdam (mak-ad'am), John Louis the contract of the southwest, and
is the center of much cotton and industrial
is the center of much cotton and industrial
is the center of much cotton and industrial
activity. Pop. (1920) 12.095.

method of road construction known as
macadamizing, was born in Ayr, Scotand, in 1756, emigrated with his father ville, on St. Louis, Brownsville & Mexican

(mut-sa-re'no), a town of to America in 1770, and favored England in the War of the Revolution. Returning to his native land he interested himself in road building and in 1815 was appointed superintendent of roads in Bristol, England. Here he had an opportunity to put his road-making improvements into practice. He was so successful in this that the House of Commons presented him with a sum of two thousand pounds (\$10,000), and the macadamized road became general throughout Britain. method consists in covering the highway or forming the road crust with small broken stones to a considerable depth, and consolidating them by carriages working upon the road, or by rollers so as to form a hard, firm and smooth surface. See Road.

(māk-a-dōō'), WILLIAM McAdoo McAdoo Gibbs, American lawyer, cabinet officer and railroad official, was born in Marietta, Ga., in 1863. He was educated at the University of Tennessee and studied law in Knoxville while supporting himself as a deputy clerk in the United States Circuit Court for the Southern Division. In 1884 he was admitted to the bar and learned transporta-tion while counsel for the Richmond and Danville Railroad. Going to New York he formed a law partnership with William McAdoo. He became interested in a par-tially completed tunnel under the North River, connecting the New Jersey shore with the metropolis, and developed the scheme into a \$70,000,000 project of scheme into a \$70,000,000 project of which the Hudson and Manhattan Railroad Company and the Hudson Terminal buildings were the two main parts. His success brought him into public notice and he was strongly favored for the gubernatorial nomination in 1910 by the progressive wing of the Democratic party. sive wing of the Democratic party. As sive wing of the Democratic party. As a delegate to the Democratic National Convention in 1912 he was indefatigable in his support of Woodrow Wilson, and after Wilson's nomination he was appointed vice-chairman of the National Committee, and was practically director of the successful campaign. He became Secretary of the Treasury in President Wilson's cabinet in 1913; Director-General of Railroads, 1917.

McAlester (mak-al'es-ter), county seat of Pittsburg Co., Oklahoma, 62 miles s. of Muskogee, on main lines of Missouri, Kansas & Texas and Chicago, Rock Island & Pacific railroads. It is the coal capital of the Southwest, and

R. R., in a cotton, sugar cane, corn, alfalfa and major general in 1901. He reand truck-raising district. Pop. (1920) in 1909 and died September 5, 1912.

wrote a book entitled 'Society as I Have McClintock, John, an American the Found It' (1890), which did much to weaken his influence.

born in Philadelphia in 1814; died in 1870 in Philadelphia in Philadelphia in 1870 in Philadelphia in Philadelphia in 1870 in Philadelphia in Phil

began his career as a rodman on canal 1834 he was ordained priest and in 1844 work at Carbondale, Pa. After a number was made coadjutor of the diocese of New of engagements on rivers, canals and York. In 1847 he was transferred to the railways he became engineer in charge of many important public and private water systems, including those of Broadler was appointed exactled private water systems, including those of Broadler was appointed exactled private water systems. many important public and private water archbishop of New York and in 1875 he systems, including those of Brooklyn, Montreal, Philadelphia, New York and others. He became engineer of the United States Bureau of Yards and Docks and as such had charge of the construction of the great stone dock of the Brooklyn McCook, acity of Pike Co., Mississuch had charge of the construction of the great stone dock of the Brooklyn McCook, New York (1852-54) and a railroad commissioner of that state (1854-56). He was State Engineer of New York (1852-54) and a railroad commissioner of that state (1854-56). He was connected with many railroads in an engineering capacity, being engineer and vice-president of the Eric (1858), the Galena and Chicago (1857), the Ohio and Mississippi, 1861-63, besides being engineer-in-chief of many other projects. He found time to write a number of important papers on engineering subjects McCormick (ma-kormik), Cybus H.,

5331.

McAllister (m'-kàl'is-tèr), Ward, an American McAllister (m'-kàl'is-tèr), Ward, an American Social leader, born in Savannah, Ga., in 1830; died in He served as a volunteer in campaigns 1895. Coming to New York he devoted himself to social life and became the most the war of 1812 he was made colonel of conspicuous leader of New York society. an Ohio volunteer regiment and promoted He is best remembered by his remark that to brigadier-general in 1813. In 1814 he smart society' in New York included was put in command of the Army of the only about 400 persons. From this the West. He was a member of the Ohio term of New York's 'Four Hundred' State Legislature from 1815-21, a member arose. He contributed much to the press of Congress, 1823-25 and governor of Ohio. 1831-32

portant papers on engineering subjects and was a member of many engineering societies both in the United States and abroad.

McArthur,

ARTHUR, soldier, born in Massachusetts in 1845; served throughout the Civil war, and entered the regular army as lieutenant after writer and clergyman, bors

tered the regular army as lieutenant after the war. He served in the Spanish war in 1772; died in 1835. He studied in in the Philippines, was promoted briga-Edinburgh University; was licensed as a dier-general in the regular army in 1900 preacher by the Antiburghers; and in

1795 became minister to a congregation in Edinburgh. He contributed a series of papers on the Reformation (1802-06) to the Christian Magazine, and in 1811 published his well-known Life of Knox. This was followed in 1819 by the Life of Ansaccountry of the Reformation in 1819 by the Life of Ansaccountry of the Reformation in Italy (1827) and the History of the Reformation in Italy (1827) and the History of the Reformation in Spain (1829), besides a volume of Sermons, etc.

McDowell, Irvin, soldier, born in Sylvania, at the confluence of the Monon-Franklin county, Ohio, gahela and Youghiogheny rivers, 14 about 1818; died in 1885. He was graduated at West Point, served in the Mexican war, and as brigadier-general in the prosperity. It has large blast furnaces,

uated at West Point, served in the Mexican war, and as brigadier-general in the prosperity. It has large blast furnaces, regular army, commanded the Union forces immense tube works, employing several at the battle of Bull Run in 1861. He thousand hands, railroad construction commanded a corps in the second battle works, and manufactures of iron, steel, of Bull Run, 1862. He was promoted glass, etc. Natural gas is found here. major-general in 1872; retired in 1882.

Pop. (1910) 42,694; (1920) 45,975.

McGill University, an instituing at Montreal, Canada, founded in of Dallas. It has large cotton mill, com1821 under a bequest from James Mc1821 under a bequest from James Mc1822 under a bequest from James Mc1823 under a bequest from James Mc1824 under a bequest from James Mc1825 under a levators, livestock pa1826 under a bequest from James Mc1826 under a bequest from James Mc1827 under a bequest from James Mc1828 under a bequest from James Mc1829 under a bequest from James Mc1829 under a bequest from James Mc1829 under a bequest from James Mc1820 under a bequest from James Mc1820 under a bequest from James Mc1820 under a bequest from James Mc1821 under a bequest from James Mc1820 under a bequest fr

at the battle of Bull Run in 1861. He thousand hands, railroad construction commanded a corps in the second battle of Bull Run, 1862. He was promoted works, and manufactures of iron, steel, of Bull Run, 1862. He was promoted glass, etc. Natural gas is found here. major-general in 1872; retired in 1882.

McGee (mak-ge'), Thomas D'Arcy, thousand hands, railroad construction works, and manufactures of iron, steel, of Bull Run, 1862. Housand hands, railroad construction works, and manufactures of iron, steel, of Pop. (1910) 42,694; (1920) 45,975.

McKees Rocks, a borough of Allemannian to Pop. 16,713. Tailroad center. Here are steel and iron works, car shops, with natural gas fuel. Coal and lumber are shipped. Pop. 16,713. underwent a change; he became an ardent royalist; went to Canada, and entered parliament in 1857. In 1864 he became States, was born at Niles, Ohio, in 1844. president of the executive council and He served in the Civil war, attaining the parliament in 1831. In 1804 he became states, was born at thies, Onlo, in 1842, president of the executive council, and the served in the Civil war, attaining the up till near his death took a prominent rank of major, and was afterward attorpart in the measures of the day. Obnoxious to the Fenians, he was assassinated by a member of that body in 1868.

Chapter of the ways and Means Committee when the wall known too. The ways and Means Committee when the wall known too. McGee, W. J., ethnologist, born in mittee when the well-known tariff bill lows in 1853. He made ex-bearing his name was enacted. In 1884 tensive explorations in connection with and 1888 he was chairman of the Plattensive explorations in connection with and 1888 he was chairman of the Platthe U. S. Geological Survey, and in 1893 form Committee in the Republican Nawas placed in charge of the Bureau of tional Convention. He was elected Gov-American Ethnology. Resigned to take ernor of Ohio in 1891, and reëlected in charge of the ethnologic section of the St. 1893. In 1896 he was the Republican Louis Exposition in 1903; director of St. candidate for President, and was elected, Louis public museum 1905-07; on the Inserving as the national executive through land Waterways Commission since 1907. the Spanish war. In 1900 he was re-Has written much on ethnologic and elected by a kregely increased majority other subjects.

Wassis To Massis** T McGill (mak-gil'), James, born at J. Bryan. On September 6, 1901, while Glasgow, Scotland, in 1744: attending the Pan-American Exposition died at Montreal in 1813. He emigrated at Buffalo, he was shot by an anarchist to Canada, and ultimately became one of the chief merchants in Montreal. He treatment for the injuries caused by the left property valued at \$150,000 (now two entering bullets, the President died enormously increased in value), and \$50,000 (ash to found the university in Montreal which bears his name. Ohio. Theodore receded him as President.

McKinney, county seat of Collin Co., Texas, 32 miles N. by E.

ulmaria, nat. order Rosacese. It grows the scene of St. Patrick's first preaching in damp places, has pinnate leaves, and of ('hristianity. Pop. 67,497. stems two feet high bearing corymbs of white fragrant flowers.

Meaux (mō), a town of France, department Seine-et-Marne, on the little state of the little state.

between New York and Chicago. It is the center of a rich agricultural country and Mecca. or Mekka (mek'ka), a city of Arabia, about 60 miles from

came a civil engineer, and in 1883 was in Waterford, Ireland, in 1823; died at made professor of American history in Fort Benton, Montana, in 1867. He was the University of Pennsylvania. He is a popular leader in the 'Young Ireland' well known for his able History of the party; found guilty of high treason, was People of the United States (8 vols.), sentenced to death, but transported to covering the period from the formation van Diemen's Land. In 1861 he joined of the Constitution to the Civil war. well known for his able History of the party; found guilty of high treason, was People of the United States (8 vols.), sentenced to death, but transported to covering the period from the formation of the Constitution to the Civil war.

Mead (mēd), Larkin Goldshith, but the Union army; organized the Irish Brigade, was engaged in the seven days' batseuptor, born at Chesterfield, the union army; organized the Irish Brigade, was engaged in the seven days' battles before Richmond, at Manassas and New Hampshire, in 1835. He studied the art of sculpture, and in 1862 went to Florence for study. In 1865 he exhibited several works in New York city. Prominent among his productions are the statue of Lincoln on the monument at Springfield, Illinois, the statue of Ethan Allen Allen of from ten to fourteen days after in the capitol at Washington, and the

in the capitol at Washington, and the contagion, symptoms of the disease begin colossal statue of 'Vermont,' made for to appear in sneezing, watering of the the statehouse at Montpelier, and seveys, hoarseness, a hard cough and high eral other colossal statues and groups. colossal statue of 'Vermont,' made for the statehouse at Montpelier, and several other colossal statues and groups.

Meade (méd). George Gordon, soldier, was born in Cadiz, S pa i n, where his father was United States consul, in 1815. He served in the Mexican and Seminole wars. In the Civil war he was especially distinguished. In 1863, as be dreaded are inflammations of the muccommander of the Army of the Potomac, at Gettysburg, he checked Lee's invasion of Pennsylvania, winning one of the most important battles of the war. When Grant assumed control of the Army of the Potomac he left the command of it, as far as possible, to General Meade. He was in every battle but two fought by the Army of the Potomac. He died in 1872.

Meadowlark, an American icteroid sturnella. The S. magna is the best-known species and is brownish, or grayish above, with black and yellow beneath, and with a black crescent on the chest of the male. It is more correctly called the American starling, has a very sweet to the Gulf of Mexico.

Mocalour surest a well-known herba-

to the Gulf of Mexico.

are one or two woolen factories. Principal towns, Navan and Kells. Meath conceous plant Spiræa tains the royal seat, 'Tara of the kings,'

Meadville (med'vil). a city, seat the Marne, 24 miles E. N. E. of Paris. It vania, 36 miles s. of Erie, on the main palace, town-house, college, diocesan sem-

center of a rich agricultural country and has numerous and varied industries, including the main shops of the Erie railroad. The city is the seat of Allepheny College (Methodist) and Meadville world. It stands in a narrow, sandy valTheological College (Unitarian). Pop.
(1910) 12,780; (1920) 14,568.

Meagher (mā'her, or mā'er), Thomas
Francis, soldier, was born ram ('the inviolable')—the great mosque

Méchain Medallion

enclosing the Kaaba, occupying a square dividing the upper from the lower town. The city is annually filled at the time of the Hajj or pilgrimage to the Kaaba province of and 14 miles S. S. E. of Ant-(which see), when apartments in almost werp. Its principal edifices are its catheevery house are hired to strangers. This pilgrimage, enjoined by Mohammed on all his followers, is the sole foundation of Mecca's fame, and the only source of its

measurement of a degree of the meridian is indented by several inlets, and lakes

structed; they are the lever, the wheel and axle, the pulley, the inclined plane, the wedge and screw. See those terms.

Mechanics (me-kan'ikz), the term originally used to denote the general principles involved in the construction of machinery. Subsequently the term became divorced from all direct connection with practical applications, and dealt entirely with abstract questions in which the laws of force and motion were involved. In this sense mechanics is usually divided into dynamics, which treats of moving bodies and the forces which produce their motion: and statics, which which treats of forces compelling bodies to remain at rest. See Dynamics and

It has manufactures of knitted goods, pulp and paper, brick, shirts, dresses, etc. Pop. (1920) 8166.

Mechitarists (me-chit'a-ristz), an important section of Armenians acknowledging the authority of the pope, but retaining their own ritual printed the best editions of Armenian classics. The name originated from Mechitar Da Petro, who founded a religious society at Constantinople for the purpose of disseminating a knowledge of the old Armenian language and literature.

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werp. Its principal edifices are its cathedral, an ancient Gothic structure; the church of Notre Dame, the church of St. Peter and St. Paul, and the archbishop's palace. The manufactures, which are

Mecca's fame, and the only source of its wealth and occupation. A number of the inhabitants claim to be Sherifs, or direct descendants of Mohammed, and the city is under a grand Sherif. It is dangerous for an infidel to visit Mecca, but R. F. Burton visited it in disguise in 1853. The Burton visited it in disguise in 1853. The pop. is estimated at about 50,000, with the periodical addition of from 100,000 Baltic Sea, elsewhere chiefly by Prussia and Mecklenburg-Strelitz: area, 5135 Méchain (må-shan). PIERBE FRANCOIS ANDRÉ, a French assurface is flat, except where a ridge of tronomer, born in 1744; died in 1804. low hills forms the watershed between the Elbe and the Baltic. The sea coast measurement of a degree of the meridian measurement of a degree of the meridian is indented by several inlets, and lakes in order to get a natural basis for the new French decimal system of weights and measures.

Mechanical Powers (me-kan'i-kal) the simple instruments or elements of which every machine, however complicated, must be constructed; they are the lever, the wheel lenburg-Straits Each duchy has a general inlets, and lakes are very numerous. The stream flow partly to the Elbe, partly to the Baltic.

The chief products are corn, peas, beans, potatoes, beets and turnips. Both horses and cattle are exported. Distilling is structed; they are the lever, the wheel lenburg-Straits Each duchy has a general inlets, and lakes in order to get a natural basis for the are very numerous. The streams flow partly to the Elbe, partly to the Baltic.

The chief products are corn, peas, beans, potatoes, beets and turnips. Both horses and cattle are exported. Distilling is structed; they are the lever, the wheel lenburg-Straits. lenburg-Strelitz. Each duchy has a separate legislative body, but both meet annually, and legislate for the whole of Mecklenburg. Pop. (1910) 639,879.

Mecklenburg-Strelitz (strā'litz), a grandduchy of the German Empire; capital, Neu-Strelitz. It consists of two larger and several smaller districts; the former the practical applications, and and several smaller districts; the former rely with abstract questions in separated by the interposition of Mecklaws of force and motion were lenburg-Schwerin, and the latter existing In this sense mechanics is in separate patches. The whole area is ivided into dynamics, which estimated at 1052 square miles. The moving bodies and the forces physical features and general character duce their motion; and statics, of this duchy are similar to those of at so forces compelling bodies (1905) 103,451.

Meconic Acid (me-kon'ik), an acid with which morphia is combined in opium. When pure, me-Mechanicville, a city of Saratoga is combined in optim. When pure, methe Hudson River, 20 miles N. of Albany. conic acid (CH4Or), forms small, white It has manufactures of knitted goods, pulp crystals. Its aqueous solution forms a and paper, brick, shirts, dresses, etc. Pop. (1920) 8168.

Meconic Acid (me-kon'ik), an acid with which morphia is combined in optim. When pure, meaning acid (CH4Or), forms small, white It has a queous solution forms a and paper, brick, shirts, dresses, etc. Pop. (1920) 8168.

the old Armenian language and literature. oval, and sometimes square, tablet, bear

ing on it objects represented in relief, as part of the Persian Empire, and shared figures, heads, animals, flowers, etc.

Medals. See Numismatics.

Medea (me-de'a), in Greek mythology, (me-di-as-ti'num), the membranous sep-daughter of Æetes, king of tum of the chest, formed by the duplica-Colchis. She fell in love with Jason the ture of the pleura under the sternum, and Argonaut and enabled him to obtain the dividing the cavity into two parts. celebrated golden fleece (which see), and lived with him for ten years, until he dividing the cavity into two parts. In the dividing the cavity into two parts. dividing the cavity into two parts. Creusa, daughter of King Creon. In re- Medicine. venge she sent Glauce a bridal robe which enveloped her in consuming slame, and thereafter she slew her own children by continued to combine the career of mer-Jason. There are many versions of this Greek myth, and it has been a favorite theme alike with painter and dramatist. Euripides wrote a well-known tragedy of this name. See also Jason and Argo-

Medellin (me-del-yēn'), a city of Co-lombia, capital of the de-partment of Antioquia, 150 miles N. w. of Bogota. Pop. 71,004.

Medford (med'furd), a city of Middle-sex Co., Massachusetts, on the Mystic River, 5 miles N. N. W. of Boston. It is the seat of Tufts College, and contains several historical buildings, the Craddock House dating from 1677. It has large print works, and manufactures of machinery, calico, etc. Pop. (1910) 23,150; (1920) 39,038.

Medford, a city of Jackson Co., Oregon, 8 miles E. of Jackson Co.

ville; a wholesale and jobbing center, with farming, orchard, mining and timber interests. Pop. (1920) 5756.

Media (mē'dia), an ancient kingdom in Western Asia, corresponding nearly to the northwestern portion of modern Persia. According to the Greek historians, Deioces, B.C. 708-655, was the first native king, but the true founder of the great Medean monarchy was Cyaxares, 633-593 B.C. He extended his dominion over the highlands of Southern Armenia and Asia Minor as far as the Halys, overthrew the Assyrian monarchy, and in conjunction with Nabopolassar, king of Babylon, destroyed Nineveh 607 or 606 B.C. Astyages, the successor of Cyaxares and the last king, reigned for thirty-five years, B.C. 593 to 558, when he was overthrown or deposed by Cyrus. He is supposed by some authorities to be the Darius the Mede mentioned in the Book of Daniel as reigning over Babylon after its conquest by the Persians. The Medes and Persians, from their near resemblance to each other, appear to have amalgamated readily after the conquest or revolution which gave the ascendency to the latter. Media henceforward formed

Mediastine. Mediastinum

Medical Jurisprudence. See Fo-

Medici (mā'di-chē), a Florentine family who rose to wealth and in-



Cosmo de' Medici.

chants and bankers with the exercise of political power, a princely display of private munificence, and a liberal patronage of literature and art. The Medici were associated with the history of the Florentine republic from an early period, but they first became prominent in the person of Salvestro, who became gonfalonier in 1378.—GIOVANNI DE' MEDICI (1360-1429) amassed great riches by trade; rendered great services to the city, and in 1421 became gonfalonier. He was succeeded by his son Cosmo (the elder, 1389-1464), surnamed the father of his country. Cosmo acquired immense wealth and influence, and laid the foundation of his reputation by the munificent patronage of art and letters, and the conjunction of consummate statesmanship with his commercial enterprise. He was for thirtyfour years the sole arbitrator of the re-

public and the adviser of the sovereign nouses of Italy.—His grandson, Lorenzo THE MAGNIFICENT (1449-92), was the second great man of the house of Medici. second great man of the house of Medici. He governed the state in conjunction with his brother Giullano (1453-78) till the latter was assassinated by the Pazzi, a rival Florentine family. Escaping from this massacre he sustained a war with Ferdinand of Naples, with whom he signed a definitive peace in 1480. The rest of Lorenzo's reign was passed in peace and in those acts of profuse liberality and magnificent patronage of arts erality and magnificent patronage of arts and sciences in which he rivaled or excelled his grandfather. He left three sons—PIERO (1471-1503), GIOVANNI (afterwards Pope Lee V) and GIULIAN sons—FIEBO (1471-1503), GIOVANNI (afterwards Pope Leo X), and GIULIANO, law has created a special branch—medically of Nemours. Piero succeeded his father, but was deprived of his estates when the French invaded Italy in 1494. At first all diseases, in common with the finished his career in the service of France. His eldest son, LORENZO, came to power by the abdication of his uncle Given the service of the se power by the abdication of his uncle, Giu-liano, who became Duke of Urbino. He died in 1519, leaving a daughter, the fa-mous Catherine de Medici, queen of mous Catherine de Medici, queen of France. After several reverses in the family, Alessandro, an illegitimate son of the last named Lorenzo, was restored to Florence by the troops of Charles V, and by an imperial decree he was declared head of the republic, and afterwards Duke of Florence. The next name of importance in the family is that of of importance in the family is that of Cosmo 'the great,' in 1537 proclaimed Cosmo 'the great,' in 1537 proclaimed Duke of Florence and afterwards Grandduke of Tuscany. A learned man himself, he was a great patron of learning and art, a collector of paintings and antiquities. He died in 1574.—Francisco Maria, his son, obtained from the Emperor Maximilian II, whose daughter, Joanna, he had married, the confirmation of his title of grand-duke in 1575, which continued in his family until it became extinct in 1737 on the death of Giovanni tinct in 1737 on the death of Giovanni Gasto, who was succeeded by Francis, duke of Lorraine. See Tuscany, Catherine de Medici, Marie de Medici.

Medicine (med'i-sin), the science of diseases, and the art of preventing, healing, or alleviating them. It deals with the facts of disease, with the remedies appropriate to various diseases, with the results of accident or injury to the human body, with the causes that af-fect the origin and spread of diseases, and with the general laws that regulate the health of individuals and the health of communities. It is broadly divided disease. Anything that interferes with into two great sections, surgery (which the free and healthy action of any part see) and medicine proper. A department of the body produces a state of disease, related to both is obstetric medicine or and the symptoms of the disturbance midwifery, dealing with childbearing and manifest the disease, For instance, is

with the diseases peculiar to women. With this department is closely connected that which comprehends the diseases of children. There are also departments dealing with special organs, such as those relating to diseases of the eye, of the ear, of the throat, of the skin, etc., each of which occupies its own domain of knowledge, and is represented by highly-trained specialists. The treatment of the insane, as it is concerned with nervous diseases and correlated states of other organs, is an integral part of medical prac-tise. War also has given rise to special developments of medical and surgical sci-

by ceremonies, prayers and adjurations. In course of time it was recognized that diseases were natural phenomena, but at the same time each was held to be a principle or entity distinct from its effects, and each disease was supposed to have a specific remedy—something that would actually cure the disease. Such views led to the adoption of various systems of treatment. Several of these are of recent development. For instance, one school development. For instance, one school holds that only vegetable remedies are appropriate to the treatment of diseases. Another school upholds the hydropathic system, or the virtues of the bath in one or other of its forms, as a universal panacea for all human ills. A third maintains the application of the homeopathic principle that similars are queed by similars. the application of the homeopathic principle that similars are cured by similars, that is to say, diseases are cured by substances having, in small doses, an action on the body similar to that of the disease, so that one might treat diseases by a series of fixed and specific formulæ all depending on this single principle. A fourth, of late origin, maintains the curative powers of skilful manipulation of the honer myseles and newes. Finally the bones, muscles and nerves. Finally, even in orthodox medical circles, there is a strong disposition to attribute success of treatment to particular drugs, and to simply act on a principle contrary to that of homeopathy, viz., that diseases are cured by contraries, that is, by remedies having an action on the body the reverse of that of the disease. Most of these opinions depend on a mistaken view of disease. Anything that interferes with the case of zymotic diseases, they are caused by the entrance into the body of living germs which grow and multiply in the blood and tissues, and interfere with the various organs. These germs are, however, not the disease, but the cause of the disease. Again many diseases are due, not to something that has entered the body, but to a breaking down of a certain part of the system. In these the physician seeks to restore as far as possible the conditions of healthy action; to remove if he can the cause of the disease, to relieve pain, and to control symptoms so as to direct them towards recovery. In germ diseases, treatment by

various sorts of diseases, their origin and symptoms, and strives to arrange diseases according to a scientific classification. Pathological anatomy deals with the mechanical alterations and changes of structure. Therapeutics is the science of the cure of diseases according to a scientific classification. Pathological anatomy deals with the mechanical alterations and changes of the cure of diseases. structure. Therapeutics is the science of the cure of diseases, often divided into general, treating of the subject of cure in general, its character, etc.; and special, of the cures of the particular diseases. Surgery treats of the mode of relieving derangements by operative means. Obstetrics treats of the modes of facilitating delivery. Materia medica is the science of medicines, thei external appearance, history and effects on the human organ-ization. Pharmacy teaches how to preserve drugs, etc., and to mix medicines.

Clinics applies the results of all these sciences at the bedside of the patient.

(See the various medical articles under

Black medick (M. lupulina), so called from the black color of the ripe pods, is also known, from the color of its flower, as yellow lucerne. There are about forty species, natives of Europe, Western Asia and Northern Africa.

Medina (me-di'na; Arabic Medinah-el-Nebi, 'The Prophet's City'), a city in Arabia, containing the tomb of Mohammed, about 250 miles north by west of Mecca, in the most fertile spot of all Hejaz. The Mosque of the Prophet, which is the only building of importance, tised, the oldest example of it being that of vaccination in smallpox.

The chief departments of medical science of health is called hygiene, or as far as it relates to the regulation of the diet. dietetics. Pathology is the science of disease, of that in which it consists, its origin, etc. Nosology treats of the various sorts of diseases, their origin and symptoms, and strives to arrange diseases according to a scientific older. contains the sacred tomb, enclosed with a screen of iron filagree. Though the pilgrimage to the tomb is not considered

town of Egypt, capital of the Fayoum, about 25 miles west of the Nile, a place of active trade. Pop. about 40,000.

Mediterranean Sea (med-i-ter-rā'-n ō-a n; Lat. Mare Internum), the great inland sea between Europe, Asia and Africa, about 2200 miles long and 1200 in extreme breadth. It communicates on the west with the Atlantic Ocean by the Strait of with the Atlantic Ocean by the Strait of Gibraltar, and on the northeast with the Black Sea through the Sea of Marmora and the Straits of the Dardanelles and Constantinople. It is very irregular in shape, and is divided, near its center, into two distinct and not very unequal portions on eastern and a western, the lat-(See the various medical articles under two distinct and not very unequal porseparate heads.) Among names famous two distinct and not very unequal porseparate heads.) Among names famous two distinct and not very unequal porseparate heads.) Among names famous two distinct and not very unequal porseparate heads.) Among names famous two distinct and not very unequal porseparate heads.) Among names famous two distinct and not very unequal porseparate heads.) Among names famous two distinct and not very unequal porseparate heads.) Among names famous two distinct and not very unequal porseparate heads.) Among names famous two distinct and not very unequal porseparate heads.) Among names famous two distinct and not very unequal porseparate heads.) Among names famous two distinct and not very unequal porseparate heads.) Among names famous two distinct and not very unequal porseparate heads.) Among names famous two distinct and not very unequal porseparate heads.) Among names famous two distinct and not very unequal porseparate heads.) Among names famous two distinct and not very unequal porseparate heads.) Among names famous two distinct and not very unequal porseparate heads.) Among names famous two distinct and not very unequal porseparate heads.) Among names famous two distinct and not very unequal porseparate heads.) Among nearly names famous two distinct and not very unequal porseparate heads. The largest and most important subvisions are the Adriatic Sea or Gulf of Vesalius, Venice, and the Ægean Sea or Archilatore, and the Ægean Sea or Archilato main ocean there is very little tide; though on parts of the African coast, etc., a rise of more than 6 feet sometimes occurs. The Mediterranean abounds with fish, and also furnishes the finest coral and sponges. It is a great highway of

Medium (me'di-um), the name given to one who professes to be able to communicate with the spirits of the departed and bring messages from them to friends on earth; usually known

as a spiritual medium.

Medjidie (med-jid'i-ā), a Turkish or-der of knighthood, instituted in 1852, and conferred on many British

which is remarkable for its acerbity when first gathered. It loses this acerbity after a few weeks' keeping.

Medoc (me-dok'), a district of Western the Gironde. It is celebrated for its wines. See Bordelais Wines.

Medulla (me-dul'a), or Marrow, in the Ganges, 3 It is surroun animals, the highly vascular connective tissue, interspersed with adipose or fat-cells, which fills up the hollarges in Ind low shafts or medullary canais of long man Catholic low shafts or medullary canals of long which the bone is composed. The medulla oblongata is the upper enlarged portion of the spinal cord, while the medulla spinalis is the continuation downwards of the brain matter. In vegetable physiology the medulta is otherwise known as the pith. See Botany.

Medu'sa.

Medusidæ (me-dū'si-dē), the jelly-fishes or sea-nettles, a canals, and a number of tentacles depend great size. from its margin. A number of the medusæ formerly believed to be distinct animals have been shown to be really the (meg'a-li-thick), large unhewn, or partly free, generative buds of other Hydrozoa. hewn, stones, or structures of such Medway (med'wā), a river of Engstones erected in prehistoric times, either land, which flows in a wind-as burial monuments or for religious or ing course across Kent, past Tunbridge other purposes. Monuments of this kind and Maidstone, to Rochester and are numerous, being found most abun-

Chatham, where it spreads out into a broad estuary, joining that of the Thames. It is navigable to Maidstone; length 70 miles.

Meehan (me'han), Thomas, botanist, born in England in 1826; removed to Philadelphia at an early age, and became prominent among American botanists for active research. He was botanist of the Board of Agriculture of Pennsylvania. He died in 1901.

Meerane (mā'rā-ne), a town in the kingdom of Saxony, 12 miles N. N. E. of Zwickau, with manufactures of woolens, dye-works, etc. It has grown recently from an insignificant country

worth about \$4.50.

Medlar (med'lar), a tree of the genus nesium, consisting of 60.9 parts silicate. Mespilus, the M. germanica, found wild in several parts of Central ring as a fine white compact clay. It is Europe, and cultivated for its fruit, which is remarkable for its acerbity when first gathered. It loses this acerbity after a few weeks' keepins.

Meerut (me'rut), or Mirat', a city, cantonment, and administrative center of the Northwest Provinces of India, situated between the Jumna and the Ganges, 36 miles northeast of Delhi. It is surrounded by a dilapidated wall enclosing narrow streets and wretchedly-built houses. The church is one of the largest in India, and there is also a Roman Catholia characteristics. man Catholic chapel, government schools, hospital, etc. Meerut was the scene of ishment for the inner osseous material of the first great outbreak among the Sewhich the bone is composed. The medulla oblongata is the upper enlarged 500 feet above the sea, it is an agreeable portion of the spinal cord, while the meand salubrious residence. Pop. 118,642.— The DISTRICT OF MEERUT occupies an area of 2379 square miles, and is the most fertile territory in the region known as the Doab.

Megaceros. See Elk (Irish).

Megæra (me-jē'ra), one of the Furies (which see).

name given to coelenterate animals of the class Hydrozoa, being free and oceanic animals, the most typical of which consist of a single nectocaly or swimming-acceptance by large smooth, but minutely bell, from the roof of which one or sev-punctured, enameled scales, some of eral polypites are suspended. The necto-which have been found as large as 5 calyx is furnished with a system of inches in diameter, indicating a fish of

Megalithic Monuments

dantly in North Africa, Europe, and India. They also exist in South, but not in North America. They embrace four classes: (1) Menhirs, tall, massive pillars, or monoliths, standing upright in the ground or with their bases imbedded. (2) Alignments, monoliths arranged in lines. (3) Dolmens, chambers formed of upright stones roofed over by one or more capstones, forming a tumulus or cavern. (4) Cromlechs, circular, oval, or irregular enclosures formed by monoliths standing at some distance apart. Many examples of all of these exist, some remarkable for the great size of the stones handled.

Megalonyx (meg-a-lo'niks), a genus mals, allied to the sloth, but adapted for a terrestrial instead of an arboreal life, found in the upper tertiaries of America. Megalosaurus (meg-a-lò-sa'rus), a fossil reptile found in the Oolite and Wealden strata. Its length has been estimated at between 40 and 50 feet. Its powerful, pointed and trenchant teeth indicate its carnivorous habits, and from its gigantic size and strength it must have been very destructive to other animals.

Megalotis (meg-a-lo'tis), the generic name of the fennecs.

Megaphone (meg'a-fon), an instru-ment invented by Thomas A. Edison for carrying the sound of the voice long distances without the aid of wires. It consists of two large funnels which collect the waves of sound and transmit them to the ears by means of tubes. It is used in connection with or tubes. It is used in connection with the telephone to convey sound through a large hall. The word is also applied to an open-mouthed trumpet which enables the sound of the voice to be distinctly heard at a considerable distance.

Megapodius (meg-a-pô'di-us), a genus of rasorial birds, type of the family Megapodidæ, the best known and most remarkable species of which is the Australian jungle-fowl (M. tumūlus), a large bird remarkable for practing considerable memorial converses. erecting considerable mounds, composed of earth, grass, decayed leaves, etc., some-times 15 feet high and 150 in circumfer-ence, and in the center of which, at a depth of 2 or 3 feet, it deposits its eggs, leaving them to be hatched by the heat

Megaris (meg'a-ris), a small district or state of ancient Greece, partly in Northern Greece, partly on the Corinthian isthmus. The only important town was Megara, situated a mile from the sea. Megaris had flourishing colonies at an early period, but afterwards became annexed to Attica.

Megatherium (meg-a-the'ri-um), a fossil genus of edentate mammals, allied to the sloths, but having feet adapted for walking on the ground, found in the upper Tertiary or pampas deposits of South America. It



Megatherium restored.

was about 8 feet high and its body 12 to 18 feet long. Its teeth prove that it lived on vegetables, and its forefeet, about a yard in length and armed with gigantic claws, show that roots were its chief objects of search.

Megna (meg'na), a river or estuary of Bengal, which carries the waters of the Ganges and the Brahmath putra to the sea. Its most noteworthy characteristic is the 'bore' or tidal wave which advances swiftly at the height of 20 feet.

Megrim (me'grim), the term applied when a horse reels, stands for a minute dull and stupid, or falls to the ground, lying for a time partially in-sensible. Such attacks are also called vertigo. They come on suddenly, and are most frequent during hot weather, and when the animal is drawing up hill. They indicate weakness of heart action, or dis-turbance of brain circulation by the pressure of tumors.

of the fermenting vegetable mass. The leipoa and tallegalla are akin.

Megaptera (me-gap'tér-a), a genus Kavala, in Macedonia, in 1769; died in 1849. He entered the Turkish army, and served in Egypt against the French; rose rapidly in military and political importance; became pasha of Cairo, Alexandria, and subsequently of all Egypt. Ir

commenced a war of six years' duration against the Wahabees of Arabia, which was brought to a successful conclusion by was brought to a successful concusion by his son Ibrahim (q. v.), and greatly ex-tended his dominions. By means of a vig-orous domestic policy Mehemet reduced the finances to order; organized an army and a navy; stimulated agriculture, and Porcelain (in the royal porcelain factory encouraged manufactures. In 1824-27 he near the town) is the staple manufacture. assisted the sultan in endeavoring to reduce the Morea, which led to the destruction of his fleet by the allied European powers at Navarino (1827). Subsequently he turned his arms against the ter, born in Lyons in 1815; went to Paris sultan and in his efforts to secure do: in 1830; first picture exhibited. The View. sultan, and in his efforts to secure do-minion over Syria by armed invasion he was so far successful that the European powers had to interfere and compel him to sign a treaty in 1839, which gave him the hereditary pashalic of Egypt in lieu of Syria and Crete.

seph, and other operas to the number of the seventeenth and eighteenth centuries) forty-two. Méhul gained considerable in conversation, single quiescent figures, fame by his musical setting of Chenier's and battle scenes or military subjects. patriotic songs, le Chant du Départ, etc. Great accuracy of draughtsmanship, keen (më'en), Arthur, Premier observation, and the sharp accentuation of Canada, born in 1874, in of the important note in the picture distinguished in the province of Ontario. He was gradu-tinguish all his works. Among his nice the province of Ontario. He was graduated from the University of Toronto in 1896, practiced law at Portage la Prairie, and entered the House of Commons in 1908. Although a Conservative in his political affiliations, he was always somewhat radical in his opinions; but it was radicalism of the safe and sane type. He was a spirited opponent of the government in the reciprocity campaign of 1911, and when his party came into power as the result of the defeat of the Laurier government, Arthur Meighen's power began to be felt. In 1913 he was appointed Solicitor General; in 1915 he was made a Privy Councillor with a seat in the cabirrivy Councillor with a seat in the cabinet; in 1917 he became Secretary of State, and later Minister of the Interior, (produ becoming Premier in 1920, the youngest man to hold that office, and the first to be specifically sworn in as Prime Minister.

Meiningen (mi'ning-en), a town in Germany, capital of Saxe-Mainingen in a parrow and nicturesque Tihet

1811 he massacred the Mamelukes and I, in 922-933, 14 miles w. N. w. of Dres-I, in 922-933, 14 miles w. N. w. of Dresden, at the influx of the Triebisch into the Elbe. On a height above the town stand a noble Gothic cathedral, founded in the thirteenth century, and an extensive castle in the late Gothic style, belonging to the fifteenth century, recently restored and decorated with frescoes.

in 1830; first picture exhibited, The Visitors, 1834. He first became known as an illustrator of books, but rapidly became famous for the singular perfection of his art. His pictures, which, whether in genre or in portraiture, are almost without exception upon a small scale, are Méhul (mā-ul'), ETIENNE HENRI, mu-sical composer, born at Givet ecution and high finish, but are at the in 1763; died in 1817. He studied under same time not less remarkable for their In 1665; then in 1611. He studied under same time not less remarkable for their Gluck; made his début as a composer at excellence in composition and breadth of the Paris Opéra Comique with his opera treatment. They have the force of ap-Euphrosine and Corradin (1790), and peal of large works. The greater number followed up his success with Irato, Jo- of them are groups of figures (chiefly of seph, and other operas to the number of the seventeenth and eighteenth centuries) of the important note in the picture distinguish all his works. Among his pictures, which possess an astonishing market value, may be mentioned, The Smoker (1839); La Partic des Boules (1848); Napoleon III at Solferino (1864); the Cavalry Charge (1867), sold for 150.000 francs; the picture entitled 1807 (1875), one of his largest works, representing Napoleon I in the battle of Friedland, sold for 300,000 francs; Jena (1889). He died in 1891.

Micropringer (mis'ter-zing-er), the

Meistersinger (mis'ter-zing-er), the name given to the burgher poets and musicians of Germany who succeeded the Minnesingers (q. v.) in the 14th and later centuries. Wagner's opera, Die Meistersinger, von Nurnberg (produced in 1868) gives a fair picture of the Meistersinger's art. See Master-

MEKHONG. (mā'kong), MEKHONG, or CAMBODIA, the longest of all Mekong Meiningen, in a narrow and picturesque valley, on the Werra, 40 miles s. s. e. of Erfurt. The castle contains a picture gallery, cabinet of coins, public and private library, etc. Pop. 17.200.

Meissen (mi'sen), an ancient town of Saxony, founded by Henry (april 1988). Cambodia and French Cochin-China, and enters the Chinese Sea by several mouths; length estimated at 2700 miles. It is of comparatively little use for inland navigation, its channel being obstructed by rapids. Mekran Melbourne

meia geographer who flourished during the first century after Christ, and is the author of a treatise, De Situ Orbis, containing a concise view of the state of the world as known to the Romans.

Melaleuca. See Cajeput.

Melancholia, Melancholy. See

Melanchthon (me-langk'thon; Ger. (me-langk'ton), PHIL-IP, a German reformer, born at Bretten, in the Palatinate, in 1497; died at Wittenberg in 1560. His father was an armorer, and his original German name was Schwarzerd, which he Grecized into Melanchthon, or Melanthon. denote 'black earth.' Both names After having After studied at Pforzheim he removed to Heidelberg University, where he took his bachelor's degree, and afterwards to Tübingen University, where he attained the degree of master, and became a lecturer. In 1518, at the instigation of Luther and Reuchlin, he was invited by Frederick, elector of Saxony, to fill the chair of Greek in the recently founded University of Wittenberg. In 1519 he accompanied Luther to Leiving in order to dienute of Wittenberg. In 1519 he accompanied species are medical plants, as colonical Luther to Leipzig, in order to dispute white hellebore. with Dr. Eck, and in 1521 he published his famous Loci Communes, an exposition of Protestant dogmatics, which ran igneous rock, consisting of a matrix through some sixty editions in his life-labradorite and augite, in which are ettime, and was followed by other influenbedded crystals of the same minerals, at tial writings, such as the Epitome Docsometimes uniaxial mica, hornblende at trinæ Christianæ (1524). There is no iron pyrites. It is essentially a basalt. doubt that many of the plans carried out by the reformers were the result of Melan (mel'ba), Mme. née Nellie Mitchell), Australian operlanchthon's wise suggestions. His Greek atic soprano, born in Melbourne, capital scholarship was also of inestimable ad- of Victoria, Australia, in 1861. Her vantage to Luther in his work of translat- mother was of Spanish descent; her ing the Bible. In 1530 Melanchthon was father, Scotch. She was educated at the appointed to draw up the general Confes- Presbyterian Ladies' College, Melbourne, sion which was presented to the emperor and studied in Paris under Mme. Marat Augsburg (hence known as the Augs- chesi. She made her operatic début in formers, and after that event Melanchthon lost in some measure the confidence
of a section of the Protestants and was
involved in painful controversies, being
accused by one party of a too great leanaccused by one party of a similar
accused by another of a similar
accused by one party of a too great leaning to Calvinism, by another of a similar
water) from Port Philip Bay, upon which

Mekran (mek-rän'), a maritime district of Southern Asia, form of Capricorn, and including New Britain ing part of Persia and of Beluchistan. Archipelago (with the Admiralty Istis mostly arid and barren, but there are fertile tracts along the river valleys lotte or Santa Cruz Islands, New Heyielding excellent dates.

Mela (mel'a), Pomponius, a Roman geographer who flourished during Tables (mel'ansign) the condition

Melanism (mel'an-izm), the condition of abnormal blackness, or a tendency to blackness, in the hair or plumage of animals. It is the opposite of albinism, or whiteness. Black squir-

rels, leopards, etc., are examples.

Melanite (mel'an-it), a lime-iron variety of garnet, of a velvet black or grayish black, occurring always in crystals of a dodecahedral form. See Garnet.

Melanorrhœa (mel-an-o-rē'a), a genus of very large Indian trees, belonging to the nat. order Anacardiacese. It includes M. usitatissima, or black varnish tree—which yields when tapped a varnish much valued for lacquering.

Melanthaceæ (mel-an-thā'se-ē), a nat. order of poison-ous endogens, consisting of bulbous, tuberous, and fibrous rooted plants, with or without stems, and having parallel-veined leaves. There are about 130 spe-cies, natives of all parts of the world, some of which resemble crocuses and some small lilies. The most important species are medical plants, as colchicum,

Melaphyre (mel'a-fir), a compact igneous rock, consisting of a matrix of labradorite and augite, in which are embedded crystals of the same minerals, and sometimes uniaxial mica, hornblende and

at Augsburg (hence known as the Augs- chesi. She made her operatic début in burg Confession, which see), and he also Rigoletto at Brussels in 1887 and apwrote the Apology for it. Before Luther's peared in Lucia in New York in 1893. death, in 1546, a certain difference of She was a favorite on the concert stage. view developed itself between the two re- In 1918 she was made a Dame Commander

leaning to Catholicism.

Melanesia (mel-a-ne'she-a), a group of islands stretching from large and commodious piers; while Hob-

son's Bay (the northern extension of principal towns of the Australian conti-Port Phillip Bay) and Port Phillip Bay nent. The chief industrial products are itself affords unlimited anchorage for the leather, clothing, furniture, flour, ales, largest vessels. Melbourne was founded cigars, fronwage, woolens, etc. The Aus-in 1836 during the premiership of Lord tralian centenary was commemorated at Melbourne, after whom it was named. It Melbourne in 1888 by an international ex-wage incorporated in August 1842, and hibition. Here the first federal portion

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lating, with the Yarra winding Yarra winding through it, the city proper, on the north bank of the Yarra, being the cen-tral and most important business part of the whole. Here the principal streets are about a mile long and 99 feet wide, and run at right angles to one another, being lined with handsome and substantial edifices. Beyond the city

lingswood, North Melbourne, Fitzroy, came member of parliament for Leomin-Carlton, Brunswick, Prahran, Richmond, ster. During the ministry of Canning he Hawthorn, St. Kilda, Kew, South Yarra, was secretary for Ireland; in 1830 he betc. The public buildings of Melbourne as a came home secretary in the Grey administration and succeeded to the pramise whole are handsome and substantial, and quite on a par with those of cities of like size in Europe. Among them the most remarkable are the houses of parliament, the treasury, the law courts, the free library, containing over 110,000 volumes; the mint, a very handsome quadrangle; the university, with an admirable mu-seum attached; the Ormond Presbyterian college; the town hall, capable of seating 4000 perions; the post-office; the exchange; the atheneum; the theaters; the Anglican and Roman Catholic cathedrals and numerous churches, etc. There are several public parks, a finely laid-out botanical garden, and a splendid race course. There is access to the center of course. There is access to the center of community as are Roman Catholics. the city for vessels of considerable size Melchizedek (mel-chize-dek), a perby means of the river Yarra, the navigation of which has recently been much improved. The shipping trade is large, both in exports and imports, the chief of the former being wool, of the latter manufactured goods. Most imports are subject to a heavy duty. By its railway systems Melbourne is connected with all the

was incorporated in August, 1842, and hibition. Here the first federal parlia-in 1849 erected into an episcopal see. ment was inaugurated by George V, then The city and its suburbs occupy an exten-sive area, which is mostly hilly or undudesignated as the temporary capital of the

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n e w common-wealth, until the selection of a site for a permanent federal capital in New South Wales. Canberra is now the capital city, 429 miles from Melbourne. Pop. of Greater Mel-bourne 628,430.

Melbourne,

WILLIAM LAMB, VISCOUNT, an English statesman, born in 1779; died in 1848. Educated at Eton and Cambridge, he

proper are the became a bar-far more extensive suburbs, such as Col- rister, but relinquished the law and beistration, and succeeded to the premier-ship when it was overthrown in 1834 on the Irish question. He continued to lead the Whig party with varying success until 1843, when he resigned and retired from public affairs. His political career is chiefly remarkable for the wise counsel and judgment with which he guided the young Queen Victoria on her accession in 1837.

Melchites (mel'kitz), an Eastern body of Christians who, while adhering to the ceremonies and liturgy of the Greek Church, acknowledge the authority of the pope. The name is also given to such members of the Greek community as are Romen Catholics.

Gen., xiv, 18, as king of Salem and a priest of the most High God. Referred to again Ps., cx, 4, and Heb., v, vi, vii. As to his personality and character nothing is known.

Meleager (me-le-a'ger), in Greek mythology, the son of

Œneus, king of Calydon. He distinguished himselt in the Argonautic expedition and more particularly at the Caly-donian hunt, killed the boar, and gave its skin as the highest token of regard to his beloved Atalanta.

Meleagris (me-le-ag'ris), the genus of birds to which the tur-key belongs, type of the family Meleagridæ.

Melegnano (mel-e-nyā'nō). See Ma-

Meles (mē'lēz), the genus to which the badger belongs.

Melfi (mel'fē), a town of Southern Italy, province of Basilicata, or Potenza, on a lofty volcanic height, 75 miles E. N. E. of Naples, surrounded by dilapidated walls. Its chief trade is in an excellent wine. Pop. 14,649.

Melia (me'li-a), a small genus of trees, type of the nat. order Meliaces, natives of tropical Asia and Australia. M. Azadirachta, the neem tree or margosa, is a native of the East Indies. Its bark yields a bitter used as a tonic, its seeds yield a valuable oil, and its trunk a tenacious gum. M. Azadarich, sometimes called Persian lilac, pride of India, and bead tree, is a native of the north of India, now cultivated in the United States, as well as in southern Europe.

Meliaceæ (mel-i-ā'se-ē), a nat. order of polypetalous dicotyle-dons, distinguished by their stamens being united into a tube. See Melia.

Melilla (mā-lēl'ya), a rocky promontory on the north coast of Morocco, about 140 miles east of the Straits of Gibraltar, held by Spain since 1496, and now strongly fortified. In 1893 1496, and now strongly fortified. In 1893 a conflict between the Spaniards and Riff-Moors around its defenses resulted disastrously to the latter.

Melilot (mel'i-lot; Melilotus), a genus
of laguminous plants

order Papilionacese, differing from the clovers in having racemose flowers. White Melilot has been recommended as a fodder plant under the names of Cabul and Bokhara clover.

Melinda (me-lin'da), a seaport of Eastern Africa, on the Zanzibar coast, formerly a place of importance.

Melinite (mel'i-nīt), an explosive prepared from picric acid and the solid residue from the evaporation of collodion.

Meliphagidæ (mel-i-fag'i-dē), the honey-eaters or honey-

belongs M. officinalis, or common balm, used in medicine as a carminative, stomachic and corrector of flatulence.

Mel'ita. See Malta.

Melkart (mel'kart), the national god of the ancient Phœnicians, a god of the sun.

Mellite, Mellilite (mel'It), honeystone, a mineral of a honey-yellow or brownish color and resinous luster.

Melocca, Melucco (mel-ō'ka), a genus of plants of the nat. order Basellacese. M. tuberosa, a species of the genus, is cultivated in Peru, Bolivia and New Grenada, on account of its esculent tuberous roots.

Melocactus (mel-o-kak'tus), a genus

Cactacese, characterized by the flowers being produced in a hemispherical or cylindrical head at the top of the plant. The plants themselves consist of simple fleshy stems of a globular or conical form, with numerous prominent ribs armed with fas-cicles of stiff spines placed at regular distances.

Melodrama (mel-u-drama), originally and strictly, that species of drama in which the declamation of certain passages is interrupted by music, but now the term has come to designate a romantic play, generally of a serious character, in which effect is sought by startling incidents, striking situations, and exaggerated sentiment, aided often by splendid decoration and music. Melody (mel-u-di), in the most general sense of the word any successive connection or series of tones; in a narrower sense, a series of tones which please the ear by their succession and variety; and in a still narrower sense, the particular air or tune of a musical piece.

Meloe (mel'o-e), a genus of beetles be-longing to the family Cantharidæ; otherwise called oil-beetles.

Melon (mel'un; Cucumis Melo), a well known plant and fruit of the nat. order Cucurbitacese or gourds. It is an herbaceous, succulent, climbing or trailing annual, cultivated for its fruit in hot eastern countries from time immemorial. There are many varieties, as the Cantaloupe, which is reckoned the best, the Egyptian. Salonica, and Persian melons, etc. The watermelon (C. Citrullus) is much cultivated in the warmer parts of the world on account of its re-Melitta, the genus of The musk-melon is a variety of Cucumic Melo. Melos (mē'lōs), now Milos or Milo, an island belonging to Greece, in the Grecian Archipelago, in the southeast of the Gulf of Ægina, one of the Gy-clades; area, 64 sq. miles. Pop. 12,774. In



Melpomene (mel-pom'e-nē), the muse who presides over tragedy, daughter of Zeus and Mnemosyne. She is generally represented as a young woman, with vine leaves surrounding her head, and holding in her hand a tragic mask.

Melrose (mel'rōz), a town of Scotland, in the county of Roxburgh, 31 miles s. s. E. of Edinburgh. Its celebrated abbey was founded by King David in 1136; destroyed by Edward II in 1322; rebuilt by Bruce in 1326, and partly demolished by the English in 1545. Pop. 2195.

Melrose, a city of Middlesex Co., Massachusetts, 7 miles N. of Boston. It has manufactures of rubber shoes. Pop. (1910) 15,715; (1920) 18,204. a village of Cook Co., Illinois, 12 miles w. Melrose Park, of Chicago. Pop. (1920) 7147.

Melting Point. See Fusing-point.

Melton Mowbray (mel'tun mō'brā), a town of Leices-tershire, England, in valley of Eye and Wreak. Noted for its pork pies and Stil-

Paris. It is regularly built, and has handsome quays and fine promenades. Pop. (1906) 11,219.

Melville (melvil), Andrew, a Scottish reformer, born near Montrose in 1545; died at Sedan in 1622. He was educated at St. Andrew's; studied at the University of Paris, 1564-66; became a professor at Poitiers, and afterwards at Geneva; returned to Scotland in 1574, where he was appointed successively principal of Glasgow and of St. Andrew's universities. In 1582 he presented a petition to King James against the undue interference of the court in ecclesiastical affairs, for which he only escaped imprisonment by going into England. Returning in 1585 he resumed his duties at St. Andrew's, and became moderator of the General Assembly in 1587, 1589, 1594. In 1606 he was summoned to London by the king to confer on church matters, but because of his outspokenness he was committed to the Tower, and there remained until 1611. He then retire, to France, and became He was educated at St. Andrew's; studied Melon (Cucămis Melo).

Melon (Cucămis Melo).

Melon (Cucămis Melo).

Melville, George Wallace, naval officer, born at New York in Milo, now placed in the museum of the Louvre at Paris.

Melpomene (mel-nom/a-x) 1841. He entered the United States navy in 1861, rising through the various grades to that of chief of the Bureau of Steam Engineering. He engaged in Arctic discovery as a member of the Jeannette expedition of 1878, and the Hall and Greely relief expeditions, and headed the expedition which recovered the resulting which recovered the second that the second the expedition which recovered the remains of the Jeannette party. He was appointed rear-admiral in 1899, retired in 1903, and then became engaged as an engineer in Philadelphia, where he inwented an important method of gearing the turbine engine as to reduce the speed of the propeller. He died March 17, 1912.

Melville. VISCOUNT. See Dundas. Melville,

Melville Island. 1. An island in the Polar Sea, north of America. Captain Parry discovered it, and passed the winter of 1819-20 there.—
2. An island off the north coast of Australia; area, about 1800 square miles. Membrane (mem'brān), in anatomy, a texture of the animal body, arranged in the form of laminæ. which covers organs, lines the interior of cavities, or takes part in the formation of the walls of canals or tubes. Membrane is generally divided into three kinds, mucous, serous, and fibrous. The lining of the nose, trachea, cesophagus, stomach, intestines, is of the first kind; the serous membranes form the lining of Melun (mé-lun), a town of France, capital of the department of Seine-et-Marne, 27 miles southeast of abdomen, etc.; the fibrous membranes are

Memel (ma'mel), a Baltic seaport in Prussia, at the north end of and near the entrance to the Kurisches Haff, 75 miles northeast of Königsberg. It has various manufacturing and other

It has various manufacturing and other industries, but the great source of its prosperity is its trade, which is very extensive, and consists chiefly of timber, corn, flax, hemp, potash, linseed and colonial produce. Pop. (1905) 20,687.

Memling (mem'ling), or MEMLING, HANS, a distinguished Flemish painter, born probably about 1430; died probably in 1495. He lived at Bruges, of which town he was a prosperous citizen, but little is known of his life. He was especially famous as a religious

Homeric poems as the beautiful son of Eos (the morning), and in the post-Homeric accounts as the son of Tithonus and nephew of Priam, whom he assisted at the siege of Troy. He slew Antilochus, but was himself slain by Achilles. His mother was filled with grief at his death, which Zeus endeavored to soothe by mak-ing her son immortal. The name of Memnon was afterwards connected with Egypt, where it was given to a statue Egypt, where it was given to a statue still standing at Thebes, being one of two known from their size as 'the Colossi.' This statue, known as 'the vocal Memnon,' was celebrated in antiquity as emitting a sound every morning at the rising of the sun—perhaps through the craft of the priests, though some think craft of the priests, though some think it was owing to expansion caused by heat. Both statues seem originally to have been about 70 feet high.

Memorial Day. See Decoration Day.

Memory (mem'u-ri), the power or the capacity of having what was once present to the senses or the understanding suggested again to the mind, ac companied by a distinct consciousness that it has formerly been present to it; or the faculty of the mind by which it enables us to treasure up and preserve time he dedicated himself solely to lit-

tough, inelastic, and tendinous, such as for future use the knowledge which we the dura mater, the pericardium and the capsules of joints.

The pericardium and the great foundation of all intellectual improvement. The word memory is some-times used to express a capacity of re-taining knowledge, and sometimes a power of recalling it to our thoughts when we have occasion to apply it to use, the latter being more correctly called recollection. See Mnemonics.

LIENTLING, and is ting u is hed first king of Egypt. It was a large, rich and splendid city, and after the fall of Thebes became the capital of Egypt. At Bruges, of which town he was a prosperous citizen, but little is known of his life. Cambyses (524 B.C.) it was the chief the was especially famous as a religious commercial center of the conquest of Egypt by conscitizen, but little is known of his life. Cambyses (524 B.C.) it was the chief the was especially famous as a religious commercial center of the country, and painter, and his works display a singular tenderness, ideality, and elevation. They are generally extremely well preserved.

Memmingen (mem'ing-en), a town of Bavaria, on the Arabs in the seventh century by the Arabs in the seventh century personage.

Memnon (mem'non), a mythological statue of Sakkson statue of Sak Memphis (mem'fis), an ancient city of Egypt, on the left bank of the Nile, some 20 miles south of Cairo,

Memphis, a city and port of Tennessee, capital of Shelby Co., on the Mississippi, just below the junction of Wolf River, 200 miles w. s. w. of Nashville. It stands upon a bluff about 30 feet above the river in its highest floods, and is fronted by a fine esplanade. Its rapid growth is due to its favorable position for trade, which is largely carried on by rail and river, chiefly in cotton. The river is here deep enough to float the largest vessels and the shipping trade is very large, this city being the leading interior cotton mart of the United States, also a large producer of cottonseed-oil and oil products. It is also a large lumber market and has extensive manufactures. market and has extensive manufactures. The river here is crossed by a magnificent iron railroad bridge. The city has various interesting institutions, educational and others. Pop. (1900) 102,320; (1910) (1910) 131,105; (1920) 162,351.

Menado Dutch residency of same name in the northeast peninsula of Celebes. The town has a population of about 15.000

15,000.

Ménage (mā-nāzh'), GILLES, a Fiench man of letters, born in 1613 at Angers; died in 1692. After finishing retains the knowledge of past events, or his early studies he was admitted as ar ideas which are past. The word memory advocate, but, disgusted with that professis not employed uniformly in the same sion, he entered the church, and through precise sense, but it always expresses the favor of Cardinal de Retz and Mazasome modification of that faculty which rin obtained several benefices. From this

erary pursuits. His principal works are erary pursuits. His principal works are Dictionnaire Etymologique, ou Origines de la Langue Française; Origines de la Langue Italienne; Miscellanea, a collection of pieces in prose and verse.

Menai Strait (men'ā), a strait about ½ mile across, between the island of Anglesea and the coast of Wales. For the bridges over it

see Bridge.

Menam (mā-nām'), the chief river of Siam, rising in the Laos country, and flowing generally southward to enter the Gulf of Siam below Bangkok;

by his mother with such success that the left unfinished the oratorio of *Christus* approbation contained in the phrase 'the and the opera of *Lorlei*.

mother of Meng' has become proverbial.

Mendès (men-dez), CATULLE, a Mencius was one of the greatest of the French poet, born at Borearly Confucians.

Mendaites.

IVANOVICH, a distineral novels and plays, the latter includinguished Russian chemist; born at Toing Le Capataine Fracasse, Le Chatibolsk in 1834; died in 1907. He became ment and Framette. He died in 1909. professor of chemistry in the University of St. Petersburg in 1866. Of his many discoveries the most notable is his discoveries the most notable in his many discoveries.

1786. He studied hard under adverse circordilleras, is a beautiful, well-built cumstances to acquire a knowledge of town; partly destroyed by carthquake in Jewish and modern literature; became 1861. Pop. 60,000. bleeo Huartado de (1503-and tutor to his family. In 1754 he formed a friendship with Lessing, who and author. Besides some fine verse, he made him the hero of his Nathan the wrote a history of the insurrection of the Wise, while he in turn defended his friend Moors, Guerra de Granada. Reputed aufrom the attacks of Jacobi, who accused thor of the Life of Lazarillo de Tormes, Lessing of being a Spinosist. The chief dealing with the adventures of rogues.

works of Mendelssohn are a treatise on metaphysics; Phadon, a dialogue on immortality (1767); Jerusalem (1783); and Morgenstunden (1785).

Mendelssohn-Bartholdy (men'-dels-son bar-tol'dē), Felix, distinguished composer, born at Hamburg in 1809; died at Leipzig in 1847. He was the son of a wealthy Jew, who, recognizing his son's talent for music, had him carefully trained. In his ninth year he publicly appeared in Berlin as a musician, and in carefully appeared in Berlin as a musician, and in his sixteenth year he publicly appeared in Berlin as a musician, and in his sixteenth year he produced the well-known overture to the Midsummer Night's Dream. In 1829 he began an extensive writer of the new comedy, born at Athens in 324 B.C.; died in B.C. Italy, and on his return to Germany he 201. He was the pupil of Theophrastus, an intimate friend of Epicurus, and wrote comedies to the number of 100, of which only a few fragments remainded. comedies to the number of 100, or which without success; and when he left that only a few fragments remain. Terence's city in 1835 he became conductor of the comedies were adapted from Menander.

Menasha (mēnash'a), a city of Win-Leipzig—a position which he maintained nebago Co., Wisconsin, at with several slight interruptions until his the north end of Winnebago Lake, and death. In 1841 he was appointed musion the government canal, 88 miles N. N. cal director to the King of Saxony; was w. of Milwaukee. There is here abundant afterwards summoned to Berlin by the water-power, utilized in the manufacture King of Prussia to become director of mucof iron and wooden wares, paper, woolen sic at the Academy of Arts: and jourwater-power, utilized in the maintracture Aing of Frussia to become director of introf iron and wooden wares, paper, woolen sic at the Academy of Arts; and jourgoods and flour, also in tanneries, pulley neyed repeatedly to England, where he works, etc. Pop. (1920) 7214.

Menoius (men'shi-us), the Latinized Birmingham. Of his musical composiname of Meng-tse, a Chinese tions the best known are the oratorios teacher, who was born about 370 B. C., Elijah and St. Paul; the overture to Ruy and died about 288 B. C. He was educated Blas; and his Songs Without Words. He by his mother with such success that the left unfinished the oratorio of Christian.

has become proverbial Mendes (men-dez), CATULLE, a of the greatest of the See Christians of St. Roman d'une Nuit, led to his imprisonment. Other notable poems are Hesperus Mendeleeff (men'de-le-ef), DMITHI and Le Soleil de Minuit. He wrote sev-IVANOVICH, a distineral novels and plays, the latter includ-

discoveries the most notable is his mendoza (men-do'sa), a province of periodic law of atomic weights, one of the Argentine Republic, in the leading modern chemical theories. Mendelssohn (men'delz-zon), Mosss, section being occupied by the slope of the a German philosopher, Andes; area, 56,502; pop. 247,848.—born of Jewish parents in 1729; died in Mendoza, the capital, at the foot of the 1786. He studied hard under adverse circordilleras, is a beautiful, well-built Andes; area, 56,502; pop. 247,848.— Mendoza, the capital, at the foot of the Cordilleras, is a beautiful, well-built