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An Indian Shroud of Gold.

Hon. Thomas Ewbank, ex-Commissioner of Patents, communicates to the *National Intelligencer* some interesting information in regard to recent discoveries in the excavation of Peruvian tumuli. The information was received by Mr. Ewbank from W. W. Evans, engineer of the Arica and Tacna railroad in Peru. Mr. Evans states that in making excavations for the railroad at Arica hundreds of graves are demolished, in which are numerous Indian relics. The excavations are seventy feet deep, and the soil is loose sand. Among other interesting relics, an Indian was started out of his resting place rolled up in a shroud of gold. Before Mr. Evans had knowledge of the incident the workmen had cut up this magnificent winding-sheet and divided it among themselves. With some difficulty he obtained a fragment, and dispatched it to Mr. Ewbank. Mr. Evans notices as a remarkable fact that in hundreds of Indian skulls which he has examined not one has a decayed tooth. Mr. Ewbank thinks the weight of the entire shroud must have been eight or nine pounds, and had it been preserved would have been the finest specimen of sheet gold that we have heard of since the times of the Spanish conquest.

Decimal Currency in England.

Decimal currency is to be introduced into Great Britain. The pound will be retained as the unit, and divided into one thousand parts; the half-crown will be abolished—the shilling fifty, the sixpence twenty-five, and a new coin will be introduced representing five farthings, while the present farthing will be depreciated one twenty-fifth in value—that is, there will be a thousand to the pound sterling, instead of nine hundred and sixty.

Early Manufactures in Rhode Island.

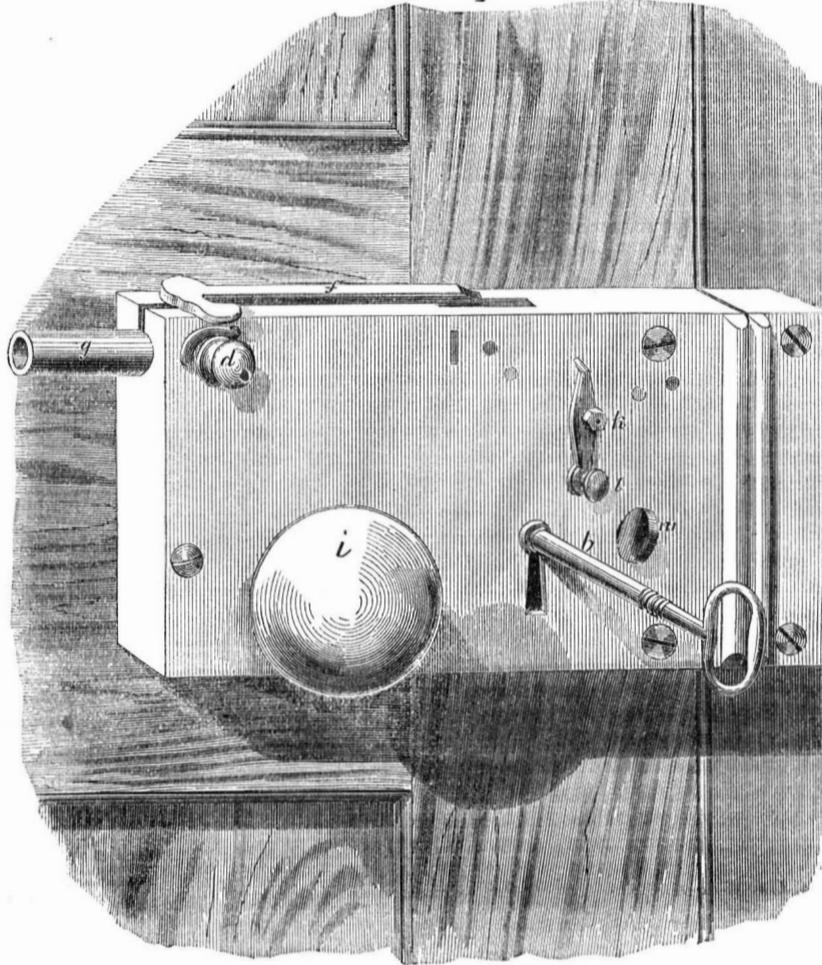
A correspondent of the Providence, R. I., *Journal* gives some curious information relative to the early manufactures of Scituate. One Charles Hopkins used to manufacture cedar pails there about 70 years since, some of which are still in use, and have been ever since they were made. These are pails worthy of the name. The most of those made at present are very cheap, but as poor in quality as their price is low. One Jabez Hopkins used to make iron smoking pipes there, and his son Ezekiel made excellent swords. In 1735 Samuel Waldo, a merchant of Boston, bought an iron mine in Scituate, and erected a foundry, in which iron cannon were afterwards cast that did good service during the Revolution.

New Beacon Light.

A new lighthouse and keeper's dwelling have been erected at Watch Hill Point, near Stonington, R. I. Instead of the present revolving light, a fixed white light will, on and after the first of February, 1856, to be shown from the new tower, which is fifty feet N. W. of the old site. The light will be 62 feet above mean low water, and will be visible from the deck of a coaster, about 12 1-2 nautical miles.

PATENT SAFETY AND ALARM LOCK.

Fig. 1



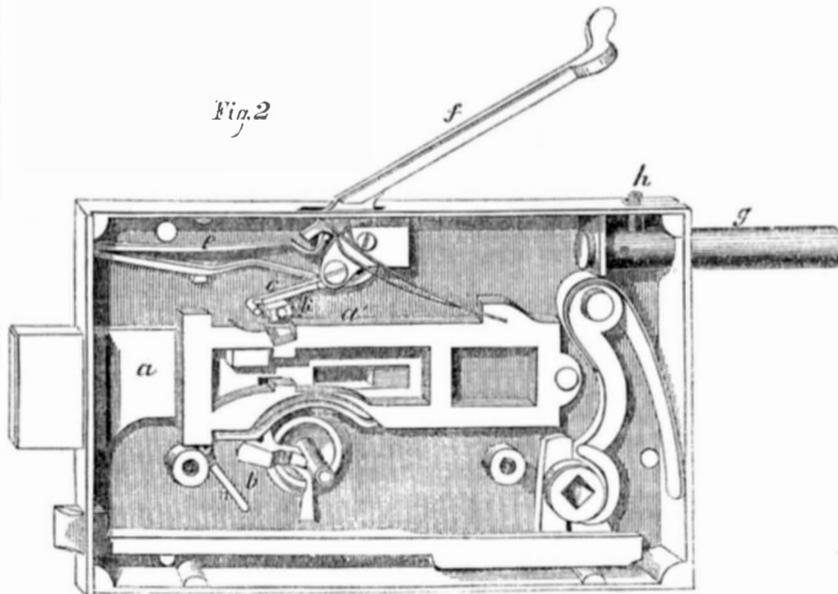
The accompanying engravings are illustrative of the ingenious Safety Alarm-Lock, patented by John Schneider, of Rochester, N. Y., May 1st, 1855.

The chief feature of novelty consists in the combination of a pistol with the interior parts of the lock, in such a manner that if a burglar should be so far successful as to introduce the proper shaped key, he will, by the very act of pushing back the bolt, cause the pistol to fire off, and thus instantly alarm the whole household, and perhaps neighborhood. The attachment and operation of the pistol is done

in a very simple manner, and the expense is quite small. There is, also, no alteration in the size or general form of the lock, as will be observed by a glance at the exterior view, fig. 1. A side view, showing the interior portions of the lock, is seen at fig. 2.

In fig. 1, *b* is the key, and *i* is the usual knob or handle; *g* represents a small pistol barrel having a cap nipple, *h*; *f* is the hammer for striking the cap on the nipple, to discharge the pistol. The inner end of the hammer, *f*, fig. 2, is provided with a curved plate through which a pivot passes into the case, thus form-

Fig. 2



ing a fulcrum pin on which it turns; it also has a projection which acts upon the end of a bent spring, *e*, similar to that of a gun lock. *c* is the trigger, resting upon a small dog, *k*. The tumblers, when the bolt moves back, turn the dog, and cause it to press up and discharge the trigger, *c*. The dog, *k*, is

connected with the button, *l*, seen on the exterior of the lock; the use of this button is to move the trigger by hand, and thus permit the hammer to be gently uncocked whenever desirable, as, for example, in the day time.—When the hammer is uncocked, the bolt is disconnected from the pistol, and operates like an

ordinary lock. The connection is instantly resumed, however, by simply cocking the hammer. *a* is the bolt, and *a'* represent three tumblers which are operated by the prongs or forks of the key, to throw them up, and in line to allow the bolt, to be moved back and forth to lock and unlock the door. The spring, *e*, under the heel of the hammer, holds the same in position, like the main spring of a gun lock; but when the key is inserted in the lock, the tumblers thrown up, and the bolt acted upon to unlock the door, the trigger, *c*, is slightly pressed up by the dog, *f*, as before described, which relieves the spring, *e*, the hammer, *f*, is tripped or set free, and comes down upon the cap, discharging the pistol, and causing an alarm that will put to flight the most ferocious and daring burglar. *d*, fig., is the breech-pin, which secures barrel *g*.

Independent of the alarm, the lock is a good one. For additional security it has a safety hasp, *n*, terminating in a button, *m*, on the exterior of the lock, as will be seen in fig. 1. By turning the button, the hasp, *n*, will be thrown up against and across the tumblers of the lock, in such a manner as to prevent any key whatever from moving the same. The knob is also arranged, if required, to operate the hammer of the pistol barrel, so that the lock can be set to give an alarm by the report of the pistol, either when locked, or simply fastened by the common catch bolt.

The above is a safe lock to the careful owner but a dangerous one to the thief.

More information may be obtained by letter addressed to the patentee, at Rochester, N. Y., by whom it is manufactured in various forms.

Belgian Broadcloth Works.

An English paper gives a very interesting description of the celebrated establishment of Messrs. Bolley, at Verviers, who were the first to give a world-wide reputation to Belgian broadcloths. Their works are driven by four water-wheels and five steam engines, and they employ between 1300 and 1400 laborers, many of them the most skilled in Europe. It is not easy for an artisan to obtain a situation in their establishment, but once employed, he is supported through all illness and infirmities to the end of his days, unless he forfeits his place by gross misconduct.

To Make Lard and Tallow Candles.

The following method of making the above-named candles is described in the *New England Farmer* by a correspondent:—"I kept both tallow and lard candles through the last summer, the lard candles standing the heat best, and burning quite as well, and giving as good light as tallow ones. Directions for making good candles from lard: For 12 lbs. of lard take 1 lb. of saltpeter and 1 lb. of alum; mix and pulverize them; dissolve the saltpeter and alum in a gill of boiling water; pour the compound into the lard before it is quite all melted; stir the whole until it boils, and skim off what rises; let it simmer until the water is all boiled out, or till it ceases to throw off steam; pour off the lard as soon as it is done, and clean the boiler while it is hot. If the candles are to be run, you may commence immediately; if to be dipped, let the lard cool first to a cake, and then treat it as you would tallow."

To Prevent the Alteration of Bank Notes.

Ulysses B. Vidal, of Philadelphia, proposes the following plan to manufacture bank bills, to prevent them from being altered from lower to higher denominations. "Fine floss silk is to be woven into open patterns, delineating the various denominations of the bills. A single pattern for each bill is then pressed into the paper during the process of the manufacture." This method of making bills, he believes, would insure the public against fraudulently altered bank notes. The lines of the floss silk must extend invariably across each bill.

Recent Foreign Inventions.

IRON BLOCK RAILWAY CHAIR—Mr. Stephen Reed, of South Northumberland, has directed his attention to the construction of iron railway chairs and sleepers, to be substituted for wood. In lieu of only a 4-inch bearing of the ordinary rail upon the sleeper, the bearing is increased to 21 inches with permanent stability so insured at the joints, that three chairs are enabled to be fixed instead of four, now required, according to the old method. Mr. Reed's block chair of cast iron spreads so as to occupy a resisting surface of 462 in. superficial, being 22 inches long by 21 inches in breadth, 3-8 in. in thickness, and turned up with a margin 3-8 in. high. The boss which carries the chair is hollow; the sides and brackets are 3 8 in. thick; the 21-inch bearing is 1-2 inch thick. The weight of the joint chairs is 1 cwt. 1 qr. 7 lbs. each, and that of the intermediate chairs 1 cwt. 0 qr. 26 lbs. The weight and size, however, can be modified according to circumstances. This system requires neither spikes, tie-bars, wood pins, or screw bolts. The permanent way may be made even of sand in the absence of ballast, and the chairs, once embedded, will continue firm and undisturbed in wet weather, or during frost or thaw. By a judicious arrangement of the permanent way, and the formation of a bed of sand below the sleeper, all rigidity is removed, and a smoothness of transit is afforded for the trains, which very considerably tends to the diminution of the tear and wear of the rolling stock. Time has tested the value of this mode of construction, it having been extensively used in the north of England, evidence of which has been supplied by the reports of Mr. P. Tate, the engineer of the Newcastle and Carlisle Railway; Mr. Wm. Horsley, resident engineer of the Blyth and Tyne Railway; as well as by the statement of the chairmen and directors of other companies. Timber laid lines require re-laying almost periodically, and although the cost of the iron chair in the first instance may be greater than wood, on the ground of durability, the advantage in the long run is with the iron sleeper.—[London Mining Journal.]

METALLIC FRAMES FOR PICTURES—E. Haseler, of Wolverhampton, England, has obtained a patent for a new method of framing pictures, &c., by thin strips of metal, such as brass, tin, &c. The inventor takes four strips of metal, having lengths equal, or nearly equal, to the four sides respectively of the picture, engraving, &c., to be framed. The strips of metal have a breadth somewhat greater than that which it is intended the finished frame shall have. That portion of each of the strips of metal which forms the front of the finished frame may be ornamented by pressure, or by any other suitable process. The drawing, engraving, &c., to be framed is covered with a glass, and a board is placed at the back of the drawing, picture, &c. The strips of metal are laid upon the glass, and bent round the edge thereof, so as to embrace or enclose the edge of the glass, drawing, and board, and thereby secure the whole together. The metal strips are held or secured in their places by corner pieces, placed at the angles, and in front of the frame. The corner pieces are furnished with eyes, which are joined together by wires, which pass across the back of the frame, and connect the opposite eyes in the corner pieces with one another, and thereby securely bind the several parts of the frame together. The corner pieces may be composed of metal, and ornamented.

WEAVING FIGURED PILE FABRICS—W. F. Norton, of Edinburgh, Scotland, has taken out a patent for weaving pile fabrics, embraced under the three following heads:—1. Certain modes of weaving printed warps for the production of a double-printed pile or velvet fabric, to be divided into two separate single fabrics after having been woven. 2. A mode of so arranging the beams of the ground warps that the two cloths shall be kept the requisite distance asunder during the weaving, and when cut, shall each have its requisite length of pile. 3. A mode of weaving double-printed pile or velvet fabrics, wherein two or more sets of printed warp threads are woven in alternately, so that each set of threads is only worked into the fabrics at intervals, and so that the pattern upon each set only requires to be elongated to

about the same extent that would be necessary were a single set of threads used.

The Cornish and Condensing Engine.

MESSRS. EDITORS—The object of my inquiry with regard to the relative economy of the Cornish and double-acting condensing engine, was to ascertain the cause of the superiority, if any existed, in the Cornish engine over the other, provided they were both encased alike, used steam of the same pressure, and expanded alike. Your correspondent, Mr. West, in a recent number of the SCIENTIFIC AMERICAN, has undertaken to enlighten us upon the subject, but I am at loss to conceive what could have been the nature of the experiments to which he alludes, to produce such results. Admitting, however, that he is correct in the principle which he advances, i. e., "the economy of the one is to that of the other as the diameter of one is to the diameter of the other." Suppose that, instead of reducing the diameter of the double acting engine to 35 3-8 inches, (which would give us nearer half the area than 38 3-8 in.) we use the same diameter, (50 inches) and half the stroke, which would give us the same amount of steam piston displacement in the double stroke of one as in the single stroke of the other. What, then, is the difference in the economy, and what would be the difference in the economy between two double acting engines of the same capacity of cylinder? The absurdity, therefore, of attributing the economy of the Cornish engine to the diameter of the cylinder, is at once rendered obvious. The cause of the superiority of the Cornish engine over the ordinary double acting engine, is alone traceable to the high expansion used, and the effectual method employed to effect radiation; and there is no earthly reason why the same means would not produce the same results in a double acting condensing engine.

H. HAINES

Petersburg, Va., Jan., 1856.

(For the Scientific American.)
Sweet Almond, Fig, and Olive.

ALMOND—It is a matter of much astonishment that the easy culture of this tree has been neglected. It will bear abundant crops in any State south of the Potomac. It flourishes in ordinary light soils, sandy or otherwise. The trees should be planted in orchards, at the distance of eight to ten feet apart, each way. The same culture as is given to the peach is all that is required for the almond. There are four principal varieties, that are articles of commerce: oval hardshell, long hardshell, softshell, and ladies thinsell. The climate of California is found to be very suitable for this tree, as well as the fig, olive, pomegranate, pistachia nut, &c.

FIG—This tree will flourish in almost any soil, is of vigorous growth, and usually produces two crops in a season. Indeed, many varieties do this invariably. It will support the winters at Baltimore with but moderate protection, and south of the Potomac will stand entirely unprotected. In orchards the trees should be planted at a distance of eight feet apart each way, and be formed into standards. The crops are very large, and our cities offer extensive markets for the fresh fruit, while the surplus product could be dried for after use. There are more than fifty varieties cultivated in the south of France and in Italy, but a selection of from six to ten varieties, ripening at different periods, would suffice for an orchard.

EUROPEAN OLIVE—In the vicinity of Wilmington, N. C., and south of it, this tree will withstand the winters and flourish. It may be trained as a low standard, the orchard being planted in rows about six feet asunder either way. As the fruit and the oil of this tree form important articles of commerce, our attention ought to be given to its culture.

WM. R. PRINCE.

Flushing, L. I., Jan. 4, 1856.

Restoring Rancid Butter.—Butter Towers.

MESSRS. EDITORS—The remedy I propose to effect a thorough revival of spoiled butter is the erection or use of elevated towers on the principle of shot towers. My plan is to build the towers of a considerable height; elevate the butter and warm it so that it will flow freely through webs of different fineness, and then let it fall into a cold and strong solution of salt, occupying the base of the tower, from which it

is to be taken out and washed in pure cold water, or a weak solution of salt, and then be packed for use. Various means of restoring butter are used by those in the trade, but they are only temporary in their influence or superficial in their action. The interior of the tower may be filled with some disinfecting or reviving gases, through which the butter in its molten and divided state falls, and thus serve still further to purify or revive it. When butter is fresh and brought immediately to market it brings the best price, but if it is indifferently prepared or packed it soon depreciates on the hands of the holder, who must sell it at more or less of a sacrifice. The treatment I propose for rancid butter, is destined to restore it to its original value to the trade. H. STRAIT.
Covington, Ky.

[The plan proposed by our correspondent to restore rancid butter is new to us; but is he positive that it will accomplish the object? It would have been well if he had given us some of his experience in prosecuting the process. If butter be heated, as proposed, care must be exercised not to raise its temperature to the boiling point, as at this heat it is liable to have its butyric taste destroyed.]

Paraffine Oil, Naphtha, and Paraffine from Coal.

Some varieties of coal, particularly those which afford the largest amount of illuminating gas, as the Parrot, Cannel, and Boghead coals, have been latterly distilled for the sake of the naphtha and oils which they afford at a low temperature. The coal principally employed in this manufacture is that found at Bathgate, in Scotland, and known as Boghead coal, the constitution or nature of which has recently given rise to a great difference of opinion among scientific men, some considering it a bituminous shale, while others view it as a true coal. Its average composition is as follows:

Earthy matter	20	to 25 per cent.
Total carbon	60	" 65 "
Hydrogen	7 1-2	" 9 "

Of the carbon, only from 6 to 16 per cent is fixed, or remains in the retort after distillation, owing to the large amount of hydrogen, which is greater in this than in any other variety of coal. In preparing the paraffine oil, now most extensively used for lubricating machinery, the coal is broken into small pieces, and distilled in an ordinary gas-retort, connected with a worm-pipe passing through a refrigerator, and kept at a temperature of 55 degs. Fah., by a stream of cold water. At a low temperature the pipe is liable to be clogged, in consequence of the solidification of the paraffine. The retort being charged, is gradually raised to a dull red heat, at which temperature it is kept as long as volatile products escape. An increase of temperature is prevented, which would convert the otherwise condensable products into permanent gases, which, to some extent, always escapes, and may be collected or burned.

The crude paraffine oil obtained in the distillation is heated to 150 degs. Fah., by means of a steam pipe, when water and mechanical impurities separate, and the oil, having been kept warm for twenty-four hours, can be run off into another vessel, leaving the foreign matters behind. The oil is then re-distilled in an iron vessel, and connected with a condenser kept at 55 degs. Fah., as before. Nearly the whole passes over, leaving a small carbonaceous residue. From the condenser the oil flows into a leaden vessel, where ten gallons of oil of vitriol are mixed with every 100 gallons, by constant agitation for an hour. It is then left at rest for twelve hours, during which time the acid, and the substances it has extracted, settle to the bottom of the vessel.—The oil is then drawn off into an iron vessel, and mixed with caustic soda of sp. gr. 1.3, 4 gallons of this solution being added to every 100 gallons of oil. Agitation is again kept up for an hour, and again the whole allowed to settle during six or eight hours, when the oil is removed from the alkaline solution, and again distilled with about half its bulk of water, which relative proportions are kept constant by the addition of water during the distillation. The steam carries over with it an oil or naphtha lighter than paraffine oil, which separates as it leaves the worm, coming to the surface of the condensed water. This oil or

naphtha may be employed for illuminating purposes. The oil remaining in the still is separated carefully from the water, and again treated in a leaden vessel, with about 2 gallons of oil of vitriol to every 100 gallons of oil, constant stirring being kept up for six or eight hours, and then left for twenty-four hours to allow the acid to settle down. This oil is agitated with chalk, ground up into a thin paste with water, 28 lbs. of the paste being added to every 100 gallons of oil. In this manner every trace of sulphurous acid, which is copiously evolved during the action of the vitriol, is removed, and the oil kept at 100 degs. F., for about a week. This is necessary, to separate the impurities. The oil is then fit for use, as a lubricating agent, or for illuminating purposes, either alone, or mixed with fat oils.

To obtain solid crystalline paraffine, which is contained in solution in this oil, the oil is cooled as much as possible, when crystals of paraffine are formed, and may be separated from the liquid oil by filtration through woolen cloths. The lower the temperature, the greater the amount of solid paraffine which separates. The crystals are collected and submitted to pressure, that the last portions of oil may be squeezed out. In order to obtain the substance perfectly pure, it must be treated once or twice with its own bulk of oil of vitriol, washed subsequently each time with caustic soda, and lastly with pure warm water. The solid substance thus obtained is admirably adapted for making candles; but the last processes of purification are too costly to admit of its being manufactured for that purpose at present.

[The above is taken from the most recent edition of "Knapp's Chemical Technology," which we noticed a few weeks since. This information respecting the manufacture of oil from bituminous coal, should stimulate some of our owners of cannel coal mines to commence its manufacture.]

At Buel, near Bonn, on the Rhine, there is a factory in which solid paraffine is made from a bituminous shale. It is sold for about half a dollar per pound, and made into candles which rival those made of wax. It is our opinion that a profitable business may be carried on at any of our cannel coal mines in the manufacture of coal oils, to be used for lubrication, illumination, and also for mixing with various kinds of paints.

Horse Flesh as Food.

The editor of the *Union Medicale* gives an amusing account of a dinner to which he was recently united in Paris, invited by M. Renault, Director of the great Veterinary School at Alfort. The object proposed was a comparative test of the qualities of beef and horse flesh. The horse flesh was obtained from a fat animal twenty-three years of age. The editor speaks in glowing terms of horse flesh soup, and it may be said that a new article of food has been added to the *French service*. The Tartar tribes eat horse flesh; the French are learning to be as civilized.

Creosote for Warts.

Dr. Rainey, of St. Thomas' Hospital, London, has written an article to the *Lancet*, detailing the effects of creosote applied to warts. He applied it freely to an obstinate warty excrescence on the finger, then covered it over with a piece of sticking plaster. This course he pursued every three days for two weeks, when the wart was found to have disappeared leaving the part beneath it quite healthy.—This is certainly a remedy which can be easily applied by any person.

By the return made to the Patent Office, it appears that between the years 1840 and 1850 three hundred thousand acres of land were added to those previously under improvement in Massachusetts, and during that time there was a reduction of one hundred and seventy seven thousand in the number of sheep and swine.

Wine Manufacture in Georgia.

The *Southampton Cultivator* states that the attempt to manufacture wine from a native grape has been successfully tried by Mr. A. Leary, of Monroe County, Ga. The grape it known as the "Warrenton" and the produce is at the rate of eight hundred gallons per acre

New Inventions.

Wealth of Atlantic Cities.

The Boston *Traveler* gives the following account of the wealth of certain cities:—"The wealth concentrated at the great commercial points of the United States is truly astonishing. For instance, one-eighth part of the entire property of this country is owned by the citizens of New York and Boston. Boston alone in its corporate limits owns one-twentieth of the property of this entire Union, being an amount equal to any three of the New England States, except Massachusetts. In this city is found the richest community, *per capita*, of any in the United States. The next city, in point of wealth, according to its population, is Providence, R. I., which city is one of the richest in the Union, having a valuation of fifty-six millions, with a population of over fifty thousand. The bare increase per annum of the wealth of Boston is equal to the entire valuation of many of the minor cities, such as Portland, Salem, New Bedford, Chicago, Louisville, &c."

Accumulating Power Press.

The engraving illustrative of the present invention has already been once published in the *SCIENTIFIC AMERICAN*, but in consequence of a misapprehension on the part of the editor in regard to the operation of the machine, an error was made in the printed description; we therefore deem it but an act of justice to the inventor to reproduce his drawing, and set him right before the public. By reference to fig. 2, on page 80, the arrangement and action of the small interior levers on the ends of the large levers, C C, confined between the standard plates, E, will be understood.

The nature of this invention consists in so arranging a series of horizontal and vertical knuckle joint levers below the screw and bed-plate, that a powerful pressure upward in a straight line, may be exerted upon the article under operation, by reason of its gravity, with that of the moving portion of the press.

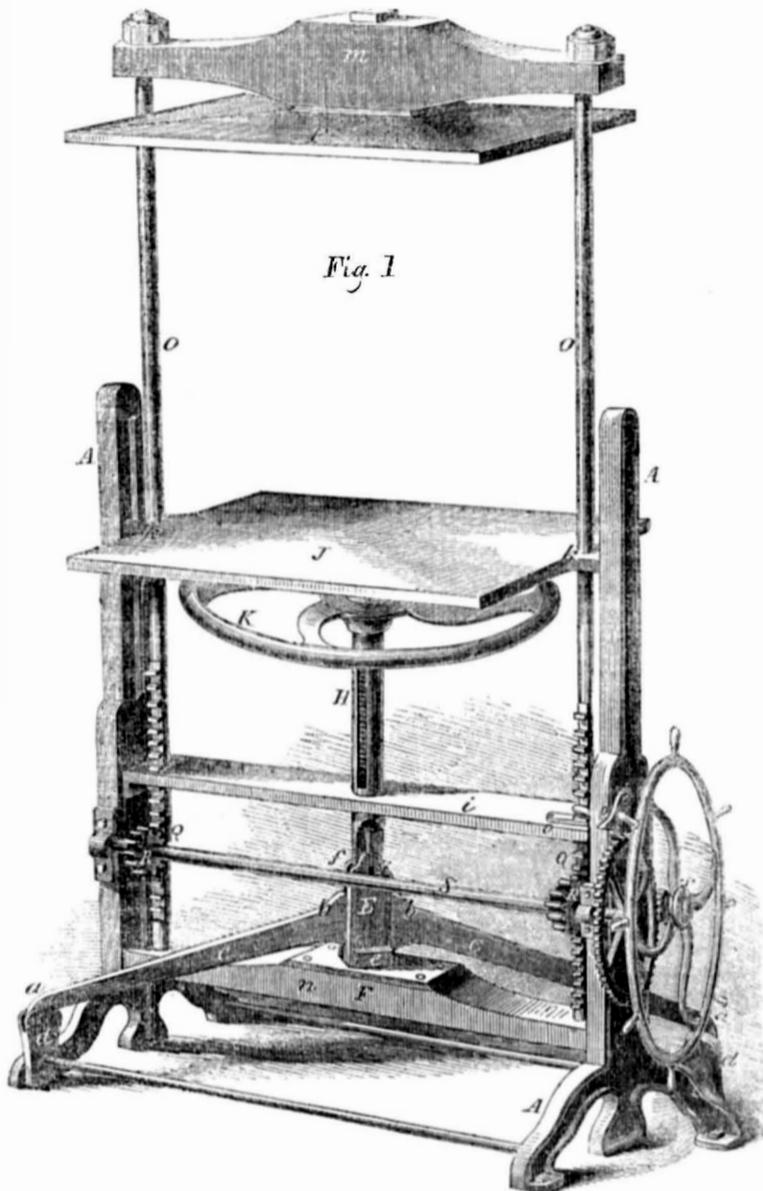
A A are standards which, connected by the cross-tie, *i*, and rods through their feet, constitute the permanent frame of the press. *m* is the top and F the bottom beams, connected by the side rods, *o o*, constitute a moving frame, which is supported by, and moves freely up and down within the permanent frame, holes being formed in the cross-tie, *i*, and the lugs, *k k*, of bed plate, J, through which the side rods, *o o*, and standard, H, may freely move. C C are the main levers, placed diagonally across the press, the inner ends, *b b*, have sockets formed in them at the top and bottom, those of the latter fitting snugly over, and resting upon semicircular projections on the bottom, *e*, and thus form socket joints. The outer ends, *a a*, have semicircular projections, which fit in sockets formed in the vertical levers, *d d*, and rest on them, these levers, *d d*, have sockets on their lower end, which fit over and rest upon semicircular projections on the bottom of the standards. The small vertical levers are formed with circular ends which fit snugly in the sockets formed in the top of the inner ends of the main levers, C C, and the standard, H, in which sockets are formed to receive them,—loose knuckle joints at all these points are formed. The standard, H, being made hollow, a portion of its length receives the screw (seen through the slot in H,) which carries the bed plate, J, to which it is secured—a recess or shoulder being formed on its underside.

The nut wheel, K, is made to rest, and turn freely on the top of the standard, H. By turning this wheel forward and back, the bed plate is raised or depressed at pleasure. The top platen, P, is secured to the top beam, *m*, by a ball socket joint bolt. E are plate standards, (one on each side,) secured to the bottom beam, F, between which the knuckle joint levers freely move. The side wheel, T, carries a pinion, which drives the gear wheel on the shaft, S, which is secured to the outside or permanent frame, A A. R R are pinions working in the racks, Q Q, on the rods, O O, of the inner or moving frame.

OPERATION—When the article to be pressed is placed on the bed plate, J, the inner or moving frame is raised by the side wheel, T, the

pawl, *o*, retaining it in position. This operation causes the main levers, *c c*, and the small levers between the plates, E, to assume angular positions. The bed plate, J, is also caused to recede from the top platen a considerable distance; by turning the wheel, K, forward, the bed plate is again raised, and the substance pressed as hard as convenient; the pawl, *o*, is then raised from the gear wheel, and the inner frame, together with the substance under operation, is sustained upon the outer ends, *a a*, of the main levers, C C, which are thereby

DAVIS' SELF-ACTING ACCUMULATING POWER PRESS.

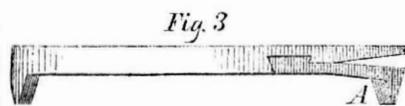
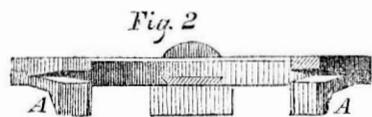
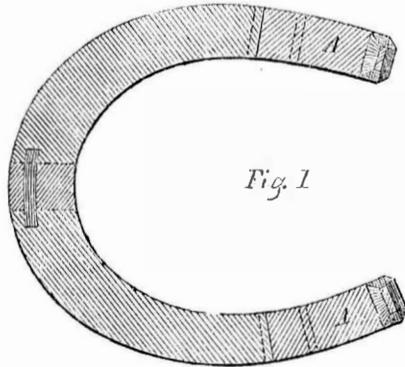


obtained, the movable frame is raised as before described, by means of the side wheel, T, the wheel, K, receives a few turns to block up the press, which brings the levers again into effective operation. When the operation is completed, the movable frame is raised sufficient to relieve the nut wheel, K, which may be turned back, the press let down, and the article removed.

The patentee says, "this press is particularly adapted to pressing books, paper, cloth, oils,

and all substances which are in themselves somewhat compact, but require a very severe power; it possesses decided advantages over the common screw press, and some advantages over any press in use, in that the power is constantly increasing as the substance under operation becomes more compact. A silver medal was awarded this press by the American Institute, at their 27th annual fair held at the Crystal Palace.

Improvement in Spring Heel Horse Shoes.



For the safety of horses, to prevent them slipping and falling, it is imperative that their

shoes should be well corked for traversing the streets of this and other cities, especially during frosty weather. And yet, it is a fact that there is nothing more painfully common just now than to witness horses falling and injuring themselves on our slippery streets, owing to their not being well shod with corked shoes. The cause of this is, no doubt, the great expense entailed in keeping the heel and toe pieces of the shoes in good order, because the shoes have to be taken off the animal for the purpose of corking them.

besides the advantage obtained by the elastic heel acting as a relief to the shock experienced by the horse in the violent planting or his feet on the ground.

Figure 1 is a view of the under part of a horse shoe, with the improvement attached. Fig. 2 is a view from the rear end of the shoe, showing the spring heels, A, on either side, and the detachable dovetailed toe in front, and fig. 3 is a side view of the shoe, showing the manner of attaching the spring heel, A.

It will be understood that the shoes are made with dovetailed or wedge recesses, as represented, and springs are made to fit firmly in these recesses, the heel corks being welded on the outer or flexible end of these springs. No further description is necessary to explain the invention.

We have been informed by the patentee that this improvement has been successfully applied to horse shoes, and has been very beneficial to horses, both as it respects the cheap and easy method of re-corking and the prevention of some horses stunning their limbs by plunging their feet violently, which is prevented by the spring heels, A.

Further information may be obtained by letter addressed to Messrs. Towers & Safford, (box 2000, post office, Philadelphia,) who have obtained favorable testimonials of this elastic horse shoe from veterinary surgeons and blacksmiths of the highest character.

Economy of Fuel.

"The expensive and wasteful manner in which most houses are warmed with coal calls loudly for reform. A moderate sized house, with a furnace in the cellar, a stove in the dining room, and a range in the kitchen, consumes from 15 to 17 tons of coal per annum, at a cost exceeding that at which such houses were warmed with wood before coal was thought of. True, our houses are warmer, and some persons think more comfortably now, than they were then; and so they ought to be at the increased expense. But if coal is to be as advantageous as it was at one time supposed it would be, then we should have our houses a little warmer and more comfortable than we had when wood was the fuel, and at a lower price. Cannot some of our ingenious mechanics invent a warming apparatus that shall possess all the necessary requisites, at a greatly reduced cost?"

In Russia, where the winters are much longer and colder than they are here, their houses are heated by a kind of furnace or stove called, if I remember right, a *peche*, by which a bundle of fagots, morning and evening, certainly not more than three times a day, introduced into the *peche*, will keep the rooms at a uniform temperature of about 70 degs. Fah. This would certainly be cheaper than our present mode of heating our houses by coal; but if some enterprising mechanic who has seen these Russian stoves and understands their construction, would erect something of that kind, only using coal instead of wood, it might become very popular, and thus induce families to use separate houses, which would encourage building, and enable many families to pass through the winter comfortably, who now almost dread to see cold weather approaching.

The man who will invent a cheap and efficient mode of warming moderate sized dwellings would make a fortune."

[The above is from a correspondent signing himself "Reflector," in the Philadelphia *Ledger* of the 10th inst. For his benefit (and others who may wish to obtain like information,) he will find one of the Russian furnaces described and illustrated on page 28, Vol. 5, *SCIENTIFIC AMERICAN*. The Russian furnaces are not peculiar to that country. They are easily built, and coal can be burned in them as well as wood.

Robert Fulton.

We are indebted to Messrs. Reigart and Delling, of Lancaster, Pa., for a handsome colored lithograph of the birthplace of Fulton. No doubt many of our readers would like to possess this picture as a memorial of this celebrated man. It can be had of the publishers as above.

A good newspaper is like a sensible and sound-hearted friend, whose appearance on one's threshold gladdens the mind with the promise of a pleasant and profitable hour.

Scientific American.

NEW-YORK, JANUARY 19, 1856.

Safety in Travelling.

When a person enters a railroad car, or a steamboat, to go on a journey, he places the safety of his person and property in the trust of those who have charge of the means by which he is to travel. When we consider how many thousands—yes, millions—of our people who travel by public conveyances, we can at once appreciate the great responsibility which rests upon the conductors of the common public means of travel—the railroad and steamboat. No country in the world has earned for itself such an unenviable reputation for reckless destruction of life as ours, by what are termed accidents. A few months ago, a terrible accident took place on one of the New Jersey railroads, by which a great number of persons were killed and wounded: and another nearly as fatal was noticed by us last week, as having occurred on the Pennsylvania and Ohio Railroad, by a collision. The sure prevention of such accidents would be hailed with delight by every person. Well, does any person doubt that the means to prevent them are known, and that they only require to be carried into execution to insure a consciousness of safety to every traveler? Double tracks on railroads would prevent direct collisions, and other known means of safety might be so applied, and conducted as to prevent almost every kind of accident whatever.

The steamboats on our Western rivers had become a terror to all travelers, on account of the frequent explosion of their boilers, and the destruction of human life, caused thereby. These explosions occurred so often, and were so disastrous in their effects, that many persons really believed they were caused by some unknown forces or agencies, over which man could exercise no control. But there were those who knew how such accidents were caused, and who were confident they could be prevented. Their labors to effect a reform in steamboat management, led to the enactment of a salutary law, by Congress, in 1852,—a law which has already been the means of rendering the character of Western steamboats as famous for safety, as they were but a few years since for danger. The different steamboat inspectors appointed under this law meet once every year, make reports and hold consultations. The last meeting was held at St. Louis in October, but the proceedings have not been published until now, for a copy of which we are indebted to Inspector B. Crawford, Esq., of the Seventh District. Only four explosions out of 1032 licensed vessels took place in the year, and by three of these only 25 lives were lost; by the other, in California, 80 lives were lost. This is very different from the reports of explosions four years ago, when they were then occurring almost every week on the Ohio and Mississippi rivers.

This law has operated well for the safety of life and property, by steamboat traveling, thus proving that the means of safety were well known, but only required to be called into requisition. And may we not say the same of railway traveling. The means to insure greater safety of life, on railways, are well known, and only require to be called into requisition. In view of these facts, the citizens of every State, should use their influence to get such laws enacted, as will render railroad traveling as safe as it is possible to make it,—the safety of life in traveling should ever be a prominent object of solicitude to our people and legislators.

Glycerine in Lung Diseases.

Our attention has been directed to an article on the above-named subject in the New Orleans Medical News, by Dr. J. L. Crawcour, who has devoted great attention to such diseases, and who has found glycerine not only a safe, but a most useful remedy in many cases. Cod liver oil has proved to be an invaluable agent in tuberculosis, but it is generally repugnant to patients, as it induces nausea. In phthisis, accompanied with dyspepsia, it is exceedingly difficult to restore the digestive organs to a healthy condition, hence it has become a mat-

ter of great importance to the physician to find some agent which, while it possesses the remedial virtues existing in cod liver oil, is free from its nauseating peculiarities. The medical superiority of cod liver oil is not due to it being simply an oil, for other oils do not produce the same effects; nor is it owing to its combination with "iodine," as has been proved, by these agents failing to produce the same effects when tried. One constituent which cod liver oil possesses in very large quantities is *glycerine*, and Dr. Crawcour states that the richer it is in this constituent, the more easily is it assimilated to the system into which it is introduced, hence he finds glycerine admirably adapted for assimilation by the human organism. He says, "glycerine forms the basis of all the fats of the human body, and lactic acid is found in all the juices of the body. If we examine the analyses of these two substances, we shall be struck by a chemical coincidence. Lactic acid is composed of C.6, H.5, O.5, (carbon, hydrogen, oxygen.) Glycerine is composed of C.6, O.5, H.7, the difference between the two being only two equivalents of hydrogen. Grape sugar, milk sugar, and starch, generally consists of C.12, H.12, O.12; or two equivalents of lactic acid, or two equivalents of glycerine, minus two of hydrogen. When sugar or starch is taken as food, they must be converted into lactic acid to be used in the economy of the human system. Lactic acid is decomposed by the respiratory process, and contributes to the heat of the body." Reasoning upon such premises, Dr. Crawcour comes to the conclusion that glycerine, which contains two atoms more of hydrogen than sugar or starch, must act more efficaciously than lactic acid. He says, "as one of the sources of lactic acid to the system is due to the destruction and metamorphose of muscular tissue, we may account for the wasting in phthisis, and for the remarkable benefit in the use of cod liver oil, without supposing that the power is due solely to the absorption of the fatty material of the body; or that the latter is due solely to the assimilation of the carbonaceous material of the oil."

In lung diseases, one object of treatment by physicians is the use of an agent or medicine on which the oxygen of the air may act instead of acting upon the tissues of the patient.—Starch, sugar, alcohol, &c., are of the class of combustible medicinal foods, but in pulmonary diseases the assimilating powers of the body are impaired, and it is a very important question to obtain that food most suitable for those who have weak digestive organs. Dr. Turnbull, of London, recommends sugar of milk as the best alimentary substance to be used by consumptive persons, because it is readily digested, and has a great affinity for oxygen, and during a long experience in the Hospital for Consumption in London, he had found it very useful. This distinguished physician had tried experiments with different kinds of oils in lung diseases, but all were unsatisfactory except cod liver and cocoa nut oils, which were very beneficial, and equally favorable in their results. The superiority of pure cocoa nut oil, as well as cod liver oil, Dr. Crawcour considers, is due entirely to the large amount of "glycerine" which they contain, and he advocates its adoption as a most valuable medicinal agent, because it has an agreeable taste, is easily assimilated by the system, and has the property of entering into combination with almost every article in the *materia medica*.

Any new information regarding the treatment of consumption is of great importance, because this disease is one of the most insidious and prevalent in our country. More persons die of it in New York than of any other single disease, and this is the case, we are informed, in all the cities in the States bordering on the Atlantic. Any new medicine or mode of treatment to ameliorate or arrest this disease, will be a boon to a very large number of afflicted persons. We hope that *glycerine* will prove to be a useful medical agent in its treatment, and that it will prove superior to any other heretofore used.

The Artizan Journal.

The attention of our readers is called to the advertisement, in this number, of the U. S. agent of this valuable publication.

Tin, and its Uses.

Every child in the land knows what tin-ware is, but the number of persons who have even seen a piece of pure tin, or are acquainted with its nature and various uses is not large. Tin or "stannum" is one of the ancient metals, and was known to the old Egyptians and Hebrews. It is found in the state of an oxyd in various countries—Spain, Hungary, South America, and the Indian Archipelago, but most abundantly in Cornwall, from which place it was obtained by the Phœnicians, when Tyre was mistress of the seas, and before Britain bore the impress of the Roman's heel. As a metal it has a white brilliant appearance, is very malleable, emits a crackling sound when bent, a peculiar odor when rubbed, and when cooled slowly from a molten state it crystallizes. The tin-stone of Cornwall is found in veins associated with copper ore, in granite and slate rocks, hence it is called "mine tin." The oxyd of tin is also disseminated through the rocks in small crystals; and in alluvial deposits it is found mixed with rounded pebbles, and is called "stream tin." When tin ore is mixed with copper—after being roasted—it is treated with sulphuric acid, which dissolves the copper but not the tin. After it is washed, the ore—then called "black tin"—and is ready for smelting. The common method of smelting the ore is in a reverberatory furnace with coal, the ore being mixed with powdered anthracite or charcoal. When very pure metal is required the smelting or reducing is conducted in a small blast furnace, powdered charcoal being used to mix with the ore, also a very small quantity of lime as a flux. After the first smelting of the ore, it generally requires two other smelting operations to purify it for use. All these demand great care and experience to conduct them economically. The refined and purest tin is that which is used in the manufacture of tin plate, the tin being used for this purpose in a molten state, and thin plates of iron dipped into it, just like dipping thin boards of wood into liquid varnish. The metal plates for tinning are made of the best charcoal iron. All the oxyd is first removed from them, then they are scoured bright, and kept in soft water ready to be dipped in the molten tin. The tin is melted in an iron pot over a fire, and its surface is covered with about four inches of molten tallow. The prepared plates are dipped in this, and left to steep for an hour or more, when they are lifted out with tongs, and placed on a rack. The plates generally have a surplus quantity of tin adhering to them when taken out of the first pot; this is removed by dipping them into a pot of molten tallow and brushed. Great care and experience are required in all these manipulations in order to cover the plates smoothly, and not have too thick or too thin a coating of tin. The covering of such an oxydizable metal as iron with tin, like a varnish, is one of the most useful qualities which this metal possesses, and renders it better adapted for making various vessels, such as our common tin-ware, than any other metal. Nails, bridle bits, and many small articles of iron may be covered with tin, by first scouring them to remove the oxyd, then dipping them into the molten tin.

The metal is so ductile that it can be rolled out into sheets of tin-foil as thin as writing paper. It is now much used for covering tobacco, for coarse gilding, for what is called "silvering looking glasses," and for bronzing powders.

Peroxyd of tin is used by jewelers as a polishing material; and fused with glass it forms a white opaque enamel. It is much used mixed with copper, to form various useful alloys of metal, such as gun-metal, the specula for telescopes, the bearings for shafting, the bronze of statues, and was used by the ancients for swords, spears, and armor; and it is said these were tempered by a process now lost to the arts.

Block tin is struck by dies into various vessels for drinking, such as cups, tea and coffee pots, and mixed with a little copper to give it hardness it forms the beautiful "Britannia ware." In the chemical arts tin is dissolved in acids, such as nitric and muriatic, and forms a common mordant for some of the most brilliant colors printed on calicoes, and those dyed on wool and silk. The uses of tin are more

various than those of any other metal, and it possesses very valuable properties. England is the greatest tin-producing country on the globe. She possesses the most abundant natural sources of this metal, and has long been the tin plate manufacturer of the world. The produce of the metal in Cornwall is about 10,719 tuns per annum, but it is used for so many purposes that it is the source of a vast amount of wealth to Great Britain. We cover our houses with tin plate, and we manufacture vast quantities of it into vessels of every description for domestic use. We have iron mountains, and innumerable beds of copper and lead; we have the greatest coal fields on this globe, and gold and silver exists abundantly in our hills and valleys. No country is so rich in useful minerals, but as yet no rich deposits of tin have been discovered. We have some faith in the existence of this metal in our rocks, and that it will yet be obtained in considerable quantities. We hope that more attention will be devoted to prospecting for it, as it is more valuable than copper, and far more useful.

We pay \$4,709,000 annually for tin plate and sheets; \$23,000 for tin foil; \$724,000 for tin in pigs and bars, and \$44,000 for unspecified tin manufactures.

Remonstrances Against Extending the Woodworth Patent.

We have received, with request to forward to Washington, a long petition from Bethlehem, Pa., remonstrating against the extension of the above thrice-granted patent. It is signed by nearly all the respectable citizens of that town. These names were obtained in a short time by Mr. Lewis Dotter, Jr. His success shows how well repaid will be the efforts of any person who chooses, in like manner, to lend his aid to the good work. We hear that the remonstrances are rapidly being filled up wherever they are presented. The subject is one of great importance; the public feeling is right in the matter, and the opportunity of giving expression to the same is all that is needed to insure the speedy downfall of an unjust and powerful monopoly. Come forward mechanics, and lend a helping hand. Copies of blank petitions can be had gratis at this office. Enclose two red stamps, for postage.

Foreign Patents.

Special attention is devoted by us to the obtaining of foreign patents. The facilities of business and communication with Europe are now so great that patents can be obtained abroad almost as easily as at home; and they are equally as valuable to the inventor. Information as to procedure, &c., can at all times be obtained at the SCIENTIFIC AMERICAN office.

Report on Explosion of the Steam Fire Engine.

The committee of the Common Council of Cincinnati appointed to inquire into the cause of the explosion of the steam fire engine *Joe Ross*, have made a report stating the causes to be too little water in the boiler, thus causing the too rapid generation of steam, and that the steam chamber was not sufficiently stayed. The Committee also reported in favor of the superiority in strength of Shawk's boiler over Latta's.

The boiler recommended is of a cylinder form, and of small diameter, and has thick heads well stayed. The exploded boiler had a square fire box, and consequently was not so strong.

Block Tin for Soldering Silver.

In a communication to the *Dental News Letter*, J. K. Rickey, of Keokuk, Iowa, states that he has found "block tin" superior as a solder for silver plates, to the ordinary solder, which is made of "brass and zinc." He puts on, with a brush, a little of the chloride of zinc to the parts he wishes to solder, then applies the soldering iron and solder. The employment of the chloride of zinc for the soldering of silver plates with block tin, we have no doubt is very useful, as it has been found to be so in soldering common tin plates.

Freezing of Gas Meters.

During very severe frosts, the water in gas meters is liable to freeze, and thus prevent the gas flowing through to the burners. This occurred in numerous instances in this city last week. By filling the meters with alcohol during cold weather they will be effectually prevented from freezing.

Science and Art.

Effects of Heat upon Meat.

A well-cooked piece of meat should be full of its own juice, or natural gravy. In roasting, therefore, it should be exposed to a quick fire, that the external surface may be made to contract at once, and the albumen to coagulate before the juice has had time to escape from within. And so in boiling. When a piece of beef or mutton is plunged into boiling water, the outer part contracts, the albumen which is near the surface coagulates, and the internal juice is prevented either from escaping into the water by which it is surrounded, or from being diluted or weakened by the admission of water among it. When cut up the meat yields much gravy, and it is rich in flavor. Hence a beefsteak or mutton chop is done quickly, over a quick fire, that the natural juices may be retained. On the other hand, if the meat be exposed to a slow fire its pores remain open, the juice continues to flow from within, as it has dried from the surface, and the flesh pines, and becomes dry, hard, and unsavory. Or if it be put in cold or tepid water, which is gradually brought to a boil, much of the albumen is extracted before it coagulates, the natural juices for the most part flow out, and the meat is served in a nearly tasteless state. Hence, to prepare good boiled meat, it should be put into water already brought to a boil. But to make beef-tea, mutton-broth, and other meat soups, the flesh should be put into cold water, and this afterwards very slowly warmed, and finally boiled. The advantage derived from "simmering"—a term not unfrequent in cookery books—depends very much upon the effects of slow boiling, as above described.

These are the views of Liebig and Professor Johnstone on cooking meat, and should be treasured up by every person who boils in a pot or fries in a pan.

Incense, or Odorous Fumigating Powder.

Take ground cloves and allspice, of each two ounces; gum benzoin, one ounce; ground cascarilla bark, half an ounce; cinnamon (in powder) half an ounce; orris root and sandalwood, of each one quarter of an ounce; and half a nutmeg, grated. Mix these ingredients well together, taking care that they are all in fine powder. This mixture forms a very fragrant incense; it is used by sprinkling a small quantity upon a very hot iron—a shovel, for instance; or if thrown upon a few hot cinders it diffuses in a room an exceedingly pleasant perfume, and, if not overdone, is very agreeable in a sick chamber. Under the name of incense, mixtures of this kind have been used from the earliest period; indeed, it is recorded in the 30th chapter of Exodus that the Lord commanded Moses "to confection" such a perfume, the ingredients of which are given in the 34th, 35th, and 36th verses. "Take unto thee sweet spices, stacte, and onycha, and galbanum; these sweet spices with pure frankincense; of each there shall be a like weight. . . . And thou shalt beat some of it very small. . . . Tempered together pure and holy." In the receipt we have given, any one or two of the materials may be omitted, if difficult to procure, without materially decreasing in odor.—[Piesse's Art of Perfumery.

How Life is Sustained During Intense Cold.

When Dr. Kane and his party were conducting their explorations in the Arctic regions, with the thermometer at 70 degs. below zero for several months, the ordinary daily allowance to each man was six or eight ducks, or an equivalent in several pounds of fat seal.

Fat contains a great amount of carbon and hydrogen, therefore the fat consumed by Dr. Kane's party kept up the heat of the human furnace by intense combustion. The food that is requisite to sustain life in the Arctic regions would cause premature death in the tropical regions.

In latitude 80 degs., Dr. Kane found the Esquimaux Indian, the reindeer, and many varieties of the floral world, principally of the Alpine species. The latter were numerous and diminutive. How far north the human race and animals exist, is not known, but Dr. Kane's observations clearly establish the fact, that the

extreme cold of latitude 80 degs. is not the limit to their northern migration.

The Esquimaux are a migratory people, and with sledges drawn by dogs, undertake journeys of hundreds of miles in extent, depending for their subsistence upon such nourishment as chance throws in their way, such as fat seals and sea fowls, which are very abundant.

Hunters' Lantern.



The accompanying figure represents a lamp for hunters, for which application has been made for a patent by the inventor, J. P. Schafer, of Anderson, Texas.

The bright light of a torch or lantern fascinates deer, and hunters employ this means to approach quite near to them, sometimes as close as twenty yards, when they can easily be shot. The light also enables the hunter to see the eyes of deer at a distance of from 150 to 200 yards, and thus they become prominent marks for the deadly rifle. The object of this lamp or lantern is the employment of a convenient means to hunt deer at night by taking advantage of the attraction which the light exercises on the animal, and to afford light to the hunter.

A represents a case, with sides and back made of sheet metal, and its front of glass. The back plate is curved to fit the front of the head, and inside there may be placed a reflector plate, to concentrate the rays, and send them to a greater distance. B is a lamp inside of the case. It has three wicks, *a a a*—more or less may be used. *b c* are vent tubes to admit air for combustion; they are of such a height as to prevent any spilled oil entering them. The smoke is allowed to escape by perforations at the top. At the lower sides of the case there is a curved strip of metal, *d*, at each side. To each of these a strap is attached, to tie behind, as shown. *f* is another strap attached to the upper part of the lantern case, and thence passing down the back, and is secured to the hunter's waist-belt. In this manner this lantern is snugly secured to the head of the hunter, and he can carry it quite conveniently. It is a very superior method for night hunting to the common plan of carrying a torch or light of any kind in the hand, as this allows the hunter the free use of both hands; and it serves him not only for a beacon, but also a lure for his prey.

More information respecting this hunting lamp may be obtained by letter addressed to Mr. Schafer.

Gold Bearing Rocks.

Evan Hopkins, the English geologist, states, that the auriferous veins likely to prove very productive are the auriferous pyrites, but the great productions of gold have hitherto been obtained from superficial deposits. The reason why it is generally conceived that quartz is the matrix which produces gold, is that the precious metal, after precipitation, adheres more strongly to quartz than to the other auriferous rocks. Although the quartzose bands produce occasionally large masses of gold, yet the quantity bears but a small proportion to

that which is obtained from the ferruginous and talcose slates.

Sir Roderick Murchison says, "When the Spaniards first visited America, gold, collected by the poor people with their sticks out of the gravel of the earth, was found in abundance, covering the palaces of princes, but it is now gone. What had been the case with Mexico and Peru, would yet be the case with Australia, but it will, no doubt, produce gold for many years to come."

Cure for Hydrophobia.

Any remedy for this terrible disease should be hailed as a blessing. The Elizabethtown (N. J.) *Post* comes to us marked by the editor to direct our attention to the following remarks and receipt for curing this scourge:

"Some three years ago we published in the *Post* a remedy for that terrible disease, but it seems credence was not given to our statement, for it was never copied, to our knowledge. Yet there are still living many evidences of its efficacy. It was first prescribed on a consultation of three physicians for an individual who had been bitten and badly torn by a dog known to be mad, and we believe, after the individual had one or two of the spasms of hydrophobia. The patient was cured, and lived many years. Of the three physicians but one still survives, a man of nearly 85 years, and he has had occasion to prescribe the same remedy, during a long term of fifty years' practice, for other persons bitten by rabid animals, and *always* with success. The last time was within our memory, between the years 1820 and 1824, we believe, when several children in the south part of Chesterfield, or north part of Willsborough, in this county, were bitten by a cat. Animals were bitten by the same cat, and went mad and died. We know not if any of the individuals bitten are still living in that neighborhood, but there are, undoubtedly, others who will remember the circumstances. A remedy so well-known to have been proved a cure, should be known to the medical profession and to the world; and we once more publish it, hoping that many others may imbibe a portion of the faith we ourselves have in it; and again prove its efficacy should an occasion unfortunately offer:

"Keep the sore running or discharging matter as long as possible with powdered verdigris dusted into the wound, and give one grain of mineral turpeth at a dose three times in the day in a little dry sugar rubbed very fine, and washed down with warm tea or water, until the mouth is slightly affected with the mercury, then stop till all the appearances of the affection in the mouth have disappeared; then repeat the course in the same way. Repeat the courses three or four times in the course of six weeks, when I consider the patient out of danger."

Ebony Wood.

Ebony wood is extremely hard, and susceptible of a very fine polish. Its color is black, red, or green. The black is most esteemed, and is imported principally from Madagascar and the Isle of France. Red ebony, so called, though its color is brown, striped with black, is less compact, and is also brought from Madagascar. The green is softer than either of the other kinds, yields a fine green tincture, which is employed in dyeing, and brought from the West Indies. The best kind is jet black, and free from knots or reddish veins. Ebony is imitated by subjecting the pear tree to a hot decoction of galls, and, when this is dry, applying black with a stiff brush. It is used for various mechanical and other purposes.

Cure for Cutaneous Affections.

A French physician recommends the use of pomade of proto-sulphate of iron as a remedy for all those diseases or affections of the skin which, in their essence are secreting, and which generally occur in lymphatic temperaments and constitutions. It is also stated that in the disease known as pyrosis, when it is unaccompanied by extensive ulceration, or organic malignant disease of the stomach, or by disease of the liver—the most marked benefit will follow the use of gallic acid.

Useful Receipt.

Wounds in cattle are quickly cured by washing several times a day with a mixture of the yolk of eggs and spirits of turpentine.—[Phila. Ledger.

To Clean Kid Gloves.

Take the gloves, place them on a clean board, and stretch out their fingers. Then take a mixture of alcohol, ten parts, and turpentine, two parts, in a cup, and rub them with this—using a soft sponge for the purpose.—This will remove the grease and dirt, but it injure the color. All the dirt and liquid must be pressed out of the gloves with the sponge by squeezing it in the hand, then rubbing it on the gloves to absorb the liquid, until no more can be taken up in this way. Both the outside and inside of the gloves should be treated in this manner. They are then set to dry in a moderately warm place, and during the time of drying the fingers are stretched from time to time, to prevent them from shrinking. Some dry them on artificial hands to keep the fingers stretched.

In cleaning gloves by this process, care must be taken not to approach too near a light or a fire. The liquid above, for cleaning the gloves, is the same as that commonly known by the name of "liquid spirit gas," used in lamps.

To Wash Silk.

To wash silk with great success spread it on a table, and then rub it with a sponge dipped in a mixture of equal parts of soft soap, brandy, and cane molasses. Rinse it thoroughly in three successive portions of water, and iron it before quite dry.

[The above we have noticed in two or three of our exchanges. It is not a good recipe.—Just think of using molasses for a soap. Weak liquid ammonia and whiskey make a much better wash for silk. Place the piece of silk to be cleaned on a smooth clean board, then take a sponge, and dip it into liquid ammonia diluted with one-half its measure of water, and rub the surface of the silk well on both sides. After this rub it in the same manner with whiskey, or dilute alcohol, then hang it over a cord until it is nearly dry; then iron it on the wrong side. This is the most simple way to clean silk dresses.



Inventors, and Manufacturers

ELEVENTH YEAR!

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