

The interior of the house is often cooler during the heat of the day than it is outside, hence a current naturally flows down the chimney and out under the door. This downward current often gives trouble when the fire is being started. If the "upward currents on the outside of the house, arising from the heated surface of the roof and walls, draw the air outward by friction through cracks, open doors, etc.," why do they not draw it out of the chimney also, thus increasing rather than diminishing the draft?

It seems to me that the diminished draft of chimneys in very hot weather is due, first, to the tendency of the air in contact with the cooler surfaces within the house, to flow out under the doors, thus creating a draft down the chimney; second, to the diminished relative difference between the specific gravity of the air outside and that of the rising column of hot air within the chimney—the force of the draft depending entirely on such difference. Just as, other things being equal, a balloon will rise with the greatest force when there is the greatest difference between the specific gravity of the inclosed gas and that of the outside atmosphere.

J. W. PIKE.

Windham Station, Ohio.

Fire and Sunshine Experiments.

MESSEES. EDITORS:—Our furnace No. 1 weighed 11 lbs., 6 oz. No. 2, 11 lbs., 10 oz. They were both of the same pattern and by the same maker. We dried in an oven 24 lbs. of charcoal, allowed 12 lbs. to each furnace, used 12 oz. of wood and shavings, and half an ounce of spirits of turpentine to each furnace for kindling. The furnaces were open on the top. We started the fires simultaneously at 11 o'clock, A. M.; thermometer 96 degs. in the shade; the day was calm. Furnace No. 1 was placed in the direct rays of the sun, and No. 2 in the shade. Both furnaces were placed on benches 14 inches from the ground.

No. 2 was re-weighed at 11 o'clock and 27 minutes. No. 1 at 11 o'clock and 29 minutes. No. 2 consumed 15 oz. more fuel in the shade in 27 minutes than No. 1 did in the direct rays of the sun in 29 minutes.

The next day being favorable, the experiments were reversed. Thermometer 96½ in the shade. No. 1 furnace was placed in the shade, and No. 2 in the direct rays of the sun, and the experiments were carefully repeated, with the same results.

We conclude, therefore, that the cause of the difference in the consumption of fuel arises from the rarefaction of the air, there being even less oxygen in a given bulk in the sunshine than in the shade. The electrical state of the air may have something to do with these experiments, but we have no facts at present to prove it.

It is often said that when the fire burns brightly the family of the house are cheerful and happy. These two effects are produced by one cause, viz., the density of the air. Our lungs are physical furnaces; and the health and natural heat of our bodies depend as much upon the consumption of oxygen, as they do upon the consumption of food. The lungs, therefore, receive more oxygen with every inspiration in cold weather, than in warm. When, therefore, the air is cold, dry, and dense, fires will burn brightly and freely, and man will feel cheerful, and be more genial in his conduct.

As you published Prof. Horsford's experiments on this subject, I am induced to beg the same favor, so that we may draw out similar facts from other experimentalists.

JAMES QUARTERMAN.

New York City, July 18, 1866.

[From our own Correspondent.]
FOREIGN SCIENTIFIC NEWS.

LONDON, Aug. 18, 1866.

Scientific news during the past week has been at a minimum. The Nottingham meeting seems still to absorb public interest, and in the general paucity of such information we are anxiously looking forward to the Congress of the Social Science Association, to be held at Manchester in the early part of next month. Great preparations are being made for this meeting, and highly interesting proceedings are anticipated.

The complete success of the Atlantic cable has occasioned the formation of several rival companies,

designed to break up this monopoly, as it is even now characterized by many. In addition to the projected line over Behring's Straits, and another from Spain to Florida, via the West Indies, both of which are owned by Americans exclusively, there is the new English enterprise of completing telegraphic communication by means of several short lengths of cable between Scotland, the Faroe Islands, Iceland, Greenland, and Labrador. The route has been thoroughly and efficiently surveyed, and a contract has been made for duplicate cables for the whole distance of nearly four thousand miles.

One of the results incident to the successful recovery of the lost cable, is the fact lately published that the *Great Eastern* is thereby entitled to a large amount of salvage money, so that at last even she may prove a profitable invention and enrich her stockholders.

It is stated that the directors of the cable company are about completing a contract for a term of years with the Associated Press whereby the American papers are to be furnished with a daily telegram of forty words, for which the neat little sum of \$110,000 in gold is to be paid annually, that is, \$350 is daily to be paid for what can easily be printed in five lines.

The project of Mr. Hawkshaw, for tunneling the channel—which plan, by the way, is nothing new, but has been regularly proposed at intervals for many years past—meets with a counter project in a proposed international railway bridge, composed of pontoons, reaching from Calais to Dover, a distance of twenty-two miles. The bridge is to have several draws to allow the passage of vessels, is to be two hundred and fourteen feet in width, and to be constructed at a cost not exceeding sixteen millions of pounds sterling.

The water supply of London justly occupies a large share of public attention, for it is a most important subject for public consideration. The most feasible plan for furnishing the city seems to be the one proposed by Mr. Fuller, an English engineer of note. By his plan water is to be conveyed from near the source of the river Wye, in North Wales. The area of water shed of this river is one hundred and eighty thousand acres, with an available rainfall of sixty inches per annum. Mr. Fuller estimates the total cost at seven millions of pounds sterling.

M. A. C.

An Opportunity for American Gun Makers.

From our foreign advices we learn that Victor Emanuel, having failed in obtaining the Prussian needle gun for his army, has decided to invite inventors and manufacturers of fire-arms throughout the world to present their systems and specimens for trial, whether they relate to an entirely new weapon, or the conversion of the present musket. A special commission is to be appointed to test, examine and report upon the models, and decide which shall be adopted.

This is certainly an excellent opportunity for our inventors to achieve a fortune for themselves and reflect credit upon American enterprise and ingenuity. This trial, in connection with the great French Exposition, will furnish a means of introducing to Europeans many of our improvements, and of giving us the position, as a mechanical and manufacturing people, which our progress deserves. Probably the details of the applications will soon be made public, and we hope to see our inventors and manufacturers improve the opportunity.

The Grasshopper Scourge.

The Kansas farmers in Brown county and the adjacent territory, appear to have been lately subjected to a plague similar to those inflicted on Pharaoh. The obstinate grasshoppers appeared in countless numbers, covering a track twelve miles in width, and consuming almost all vegetation. The *Marysville Enterprise* says:—

"They alighted upon fields, gardens, fruit trees, and everything green or eatable, and, like a march of two hundred and fifty army corps, devoured every thing they touched. This whole country has been taken by them, and the rear guard is still with us, guarding what vegetables and green leaves the army has left. Farmers are seriously alarmed lest the corn will be totally devoured. They seem to be passing in a southwest direction."



S. N. T., of Md.—The adhesion of the metal in electroplating, depends mostly on the careful cleaning of the matrix. Some electro-platers give the article to be plated a thin coating of quicksilver before immersion in the cyanide. For coating with quicksilver, the carefully cleaned article is immersed for a moment in a weak solution of nitrate of mercury, and is then well rinsed in water. Failures in plating are often due to a want of harmony between the strength of solution, intensity of the battery, etc.

M. C. B., of Ill.—Shellac will probably prove to be the best cement for your purpose. If you can use it without dissolving, the joint will be more perfect.

S. M. H., of N. Y.—The substitute for nitric acid in Grove's battery, to which you refer, is a strong solution of bi-chromate of potash to which has been added sulphuric acid.

W. S. P., of N. Y.—First, We prefer to express no opinion in regard to the reliability of the paper to which you refer. Second, Brass, if burnished after polishing, will retain its luster better than if only polished. Still, it will tarnish in time, however close the particles of the surface. Third, Eight ounces of madder, four of fustic, and three ounces of logwood infused in one gallon of water applied hot; then an infusion of two ounces of nutgalls in one quart of water, after the first application is dry, will stain an imitation of black walnut. The proportions may be varied at will. Fourth, A dealer in metals could furnish you the number of the thinnest steel of commerce

—, of N. Y.—Send to Henry Carey Baird, 406, Walnut street, Philadelphia, stating the sort of mechanical books you need, and he will furnish you with what you want.

T. M. R., of Ala.—A vessel filled with hydrogen gas is heavier than one whose interior is a perfect vacuum.

R. C. N., of Ky.—Coal oil, or petroleum, is totally unfit for a hair dressing. By reference to page 397, Vol. XIV, current series, you will find a reply to a similar query.

A. V., of Pa.—We know of no depilatory preparation that is not injurious to the skin. Sulphuret of arsenic, a rank poison, is sometimes used, and so is lime, perfumed. Both are hurtful.

G. A. A., of Mass.—If you wish to convey steam 175 feet under ground, protect your pipe with hair felt and inclose the whole in a board box, packing the pipe in spent tan, sawdust, straw, or fine charcoal.

R. E. C., of vt.—The advertisement you refer to appears to be a catch-penny affair. Send to H. C. Baird, 406 Walnut street, Philadelphia, for catalogue of books.

W. E. S., of Conn.—In our issue of Sept. 15th, we gave all the information we possessed in relation to the "Zopissalron cement." At present its ingredients are a secret.

NEW INVENTIONS.

The following are some of the most prominent of the patents issued this week, with the names of the patentees:—

CARD CASE.—F. A. LAMONTAGNE, Montreal, Canada.—This invention consists in the construction of cardcases with a combination of springs and slides for the discharge of a card at a time without opening the lid, by simply pressing a slide on the top with the finger. It is designed for the use of ladies especially.

MACHINERY FOR WASHING WOOL.—JOHN PETRIE, Rochdale, Eng., and JAMES TEAL, Towerby, Eng.—This invention relates to that class of machines for washing wool and other fibrous materials, in which the said materials are placed upon a feed apron by which they are delivered into a vat or other vessel and are agitated therein, at the same time being moved forward to the other end of the said vessel, where they are lifted out of the fluid by a drum, armed with movable prongs, which at the proper moment retreat so as to deliver the material into an endless apron, from whence they are taken by a pair of squeezing rollers.

CIPHERING MACHINE.—SAMUEL J. KELSO, Detroit, Mich.—This invention relates to a machine which can be used for adding, subtracting and multiplying figures of any desired magnitude, with the greatest ease and facility.

PUMP.—LOUIS DRESCHER, Matanzas, Cuba.—The object of this invention is to construct a pump which can be used in a very deep well, and which is so arranged that it is not liable to burst from the high pressure to which it will be exposed, and that it does not become choked by stones or other material dropping down in it. It is also so constructed that it can readily be raised out of the pump, and that easy access can be had to its valves.

ARTIFICIAL LIMB.—JOSHUA MONROE, New York City.—This invention consists in the arrangement of elastic straps in combination with an artificial leg or arm, to be secured to a stump below the knee or elbow joint in such a manner that the side irons can be dispensed with, and thereby the weight of the limb is reduced, and furthermore said straps can be readily so adjusted that the limb is drawn uptight in any position to which the joint is brought.

BORING ATTACHMENT TO TURNING LATHES.—C. E. MCBETH, Hamilton, Ohio.—This invention is an improvement in boring attachment to turning lathes, by means of which holes can be made round, smooth and straight. And it consists in combining a thimble, bush, and cap with each other, with the hollow spindle, and with the mandrel of the lathe.

MANGER.—JONATHAN JOHNSON, Kent, Ind.—This invention has for its object to furnish an improved manger, which may be kept

free from short hay, chaff, etc., and by which the grass seed may be separated from the short hay and chaff, so that it will be ready for sowing when taken from the manger.

BUTTON AND FASTENING.—ARTHUR WM. BROWNE, Brooklyn, N. Y.—This invention has for its object the construction of a button and fastening, in such a manner that the button may easily be attached to a dress, and be firmly held thereon, without the use of sewing; and that it may be detached at will from the cloth by simply pressing upon a small stud projecting above the surface of the button, thus preventing the tender and fine wire spring fastening from being easily destroyed.

SADIRON HANDLE.—FR. REHORN, New York City.—This invention relates to a movable handle for sadirons, said handle being attached to the iron by a dovetail socket, and held in position by a lever catch which is pivoted to one of the standards of the handle, and which, when the handle is in position, catches over a cam and locks the handle firmly to the body of the iron. The main part of the handle is cast in one piece, the standards being united by a cross-bar, to which the wooden handle is secured by simple pins, whereby the construction of the whole is greatly simplified and its cost is reduced to proper limits.

LAMP BURNER.—GEORGE J. CAPEWELL, West Cheshire, Conn.—This invention relates to that class of lamp-burners which are provided with draft chimneys, and has for its object the lighting of the wick without the necessity of removing the chimney from the burner, and at the same time have the wick tube, when the lamp is lighted and in use, in the proper relative position with the cone or deflector, so that a proper illuminating flame may be obtained.

GAS APPARATUS.—N. TREADWELL, New York City.—This invention relates to a method of fitting dry diaphragm gas holders, and distributing the gas throughout a boat. It consists in pumping the gas directly into the holder without the use of atmospheric air, and by a simple change of valves use the same pipe for forcing the gas to the burners throughout the boat, so that the pump acts as a regulator as well as a pump, and thereby the possibility of the lights being put out by any motion or jar of the boat is prevented.

STEAM VALVE.—DAVID SEXTON, San Gabriel, Cal.—This invention consists of a thimble-shaped valve, provided with a transverse partition and fitted on a central spindle, which is held in position by a suitable temper screw, in combination with a cylindrical valve chamber and with suitable steam and exhaust ports situated on opposite sides of the transverse partition in such a manner that by said partition the pressure is separated from the exhaust end of the valve and thrown entirely on a center or pivot, and a valve is obtained which works free and easy, and the position of which can be regulated from the outside.

BROADCAST SEEDING MACHINE.—W. S. COFFMAN, Coldwater, Mich.—This invention relates to a broadcast seeding machine of that class which are designed to be carried by the operator and worked by him while being carried.

BALING PRESS.—C. C. CONVERSE, New York City.—This invention relates to a press designed for compressing substances for baling, more especially cotton. The object is to obtain a press which will be simple in construction, economical to manufacture, and quite portable or of limited dimensions, and still operate with great power and efficiency, without injuring the fiber of cotton or other substances operated upon.

DEVICE FOR SOWING MANURES.—H. S. PALMER, Norvell, Mich.—This invention relates to a device for sowing plaster and other pulverulent manures, and it consists of a shaft provided with a right and left screw, and fitted in a suitable box, having a slide at its bottom for the purpose of regulating the discharge of the manure, a hopper being placed on the box, and the latter secured to the rear end of a wagon, whereby the manure, as the wagon which contains it is drawn over the field, may be sown or distributed upon the soil in an even manner, and with very little labor.

RESPIRATOR.—T. A. HOFFMAN, Beardstown, Ill.—The object of this invention is to provide a convenient and economical article or apparatus for filtering the air which is inhaled in breathing.

PRUNING INSTRUMENT.—G. F. WATERS, Waterville, Me.—This invention consists in the employment, in connection with a proper shaped hook for catching hold of the twig or branch, of an eccentric cutter operated by a hand lever suitably connected therewith.

ROOFING.—WM. GILBERT, Detroit, Mich.—This invention consists in the employment of a layer of long fibers of swamp grass, hemp, straw, or any other tough, fibrous material placed between the layers of felt, the raw fibers not to be woven into cloth, but spread in so as to form a net work, and put together by a cement. It also consists in the employment or use in the making of roofs of a cement consisting of distilled coal tar and common slacked lime.

REFLECTOR FOR LANTERNS.—W. A. BUTLER, New York City.—This invention consists in a novel combination and arrangement of reflecting surfaces for lanterns, whereby the reflection of light through the glass or open front of the lantern case is greatly augmented and more concentrated than with the ordinary mode of arranging such reflecting surfaces.

HAY AND STRAW KNIFE.—DANIEL FASIG, Rowsburg, Ohio.—This knife or cutting device is for cutting hay and straw from the stack, and is designed as an improvement over the angular knives now in use for such purpose.

BRICK MACHINE.—COLLINS B. BAKER, Troy, N. Y.—This invention relates to a mechanism for scraping off and leveling their upper surfaces after the molds have been shoved from underneath the press box. Its object is to obtain a simple device for the purpose and one which may be operated rapidly and in a perfect manner; the clogging of the strike, which has a reciprocating movement, being effectually prevented and the strike only allowed to act upon the molds in one direction so as to scrape the superfluous clay off from the molds at the end of the machine.

DEVICE FOR MOVING CARS ON THE TRACK.—J. W. PETTINGILL, Rockford, Ill.—This invention relates to a device for moving cars on the track, and is designed to supersede the pinch bar, the implement now used for such purpose.

CORN PLANTER. J. S. RINKEL, Geneseo, Ill.—This invention relates to a device for dropping and covering corn, and it consists in a corn-dropping mechanism applied to a coverer, in such a manner that by a simple manipulation on the part of the operator theseed may be dropped and covered at the points where the furrows intersect each other, the field being furrowed both ways previous to the dropping or planting of the corn.

WATER WHEEL.—SIMON SHERMAN, Weston, Mo.—This invention relates to a horizontal water wheel of that class which are operated under the direct and reacting power or force of the water, and it consists in a peculiar construction of the scroll and buckets, and in the manner of applying the buckets to the wheel.

CAR WHEEL.—E. S. ROBINSON, New York City.—This invention has for its object the obtaining of a strong and durable car wheel by a very simple and economical mode of construction. It consists in having the body or main portion of the wheel of cast iron and composed of two plates of disk form, the convex surfaces being at the outer side, said plates being connected at their peripheries by cross pieces, the two plates and cross pieces being all cast in one piece. The tire or tread of the wheel is of wrought iron or steel, and is secured up on the body or main portion by means of rivets.

SHEEP HOLDER.—D. R. REED, Orangeville, N. Y.—This invention relates to a machine for holding sheep while being sheared. It consists in using, in connection with a stationary or fixed bed piece, on which the body of the animal rests while being sheared, two clamp wheels placed on screw shafts and a head rest, whereby the sheep may be readily adjusted in proper position and turned as required during the operation of shearing.

SEEDING AND SOD-CUTTING MACHINE.—J. M. CARR, Omaha City, Neb. Ter.—This invention relates to a combination of a seeding and sod-cutting machine, whereby the seed may be sown and the sod cut and the earth pulverized so that a fine friable mold will cover the seed.

TWEED IRON.—BENJAMIN FISH, Mechanicsburg, Pa.—This invention furnishes an improved tweed iron for blacksmiths' use, by means of which the size of the fire may be regulated, according to the requirements of the work; to which the cinders will not adhere, and which will not leak.

LADY'S SKIRT.—DWIGHT M. CHURCH, Derby, Ct.—The object of this invention is to furnish a lady's skirt the lower part of which may be detached when soiled, and replaced by a clean part, without its being necessary to wash the entire skirt every time its lower part becomes soiled.

STUFFING BOX AND PISTON-ROD PACKING.—CHARLES P. BENOIT, Detroit, Mich.—This invention relates to the packing of the piston and valve rods, plungers, etc., and consists of an arrangement of several novel devices which operate together effectively in preventing the escape of steam, water, or air, by keeping the packing next the rod smooth and in good order, while in constant use for a long time, without the trouble and expense of the frequent renewal of the packing generally required.

PAPER SHIRT COLLARS.—L. M. CRANE, Ballston Spa, N. Y.—This improvement consists in having a crane layer or sheet of gutta-percha or other material impervious to water, interposed between the layers of paper of the collar, whereby moisture is prevented from striking through the same, and the tearing of the fabric or material around the button-holes prevented in putting on and taking off the collar.

MACHINE FOR WASHING AND WRINGING CLOTHES.—EDWIN CHESTERMAN, Roxbury, Mass.—The object of this invention is to produce a machine for washing and wringing clothes which shall be compact in form, simple in operation, and easily operated. The invention embraces several particulars, one of which relates to the form of the cam by which motion is communicated to the working or pressing rollers of the machine.

ROTARY CULTIVATOR.—ANDREW THOMPSON, Ottumwa, Iowa.—This invention consists in so constructing a pulverizer that the teeth revolve upon the ground, and is so constructed that the cylinder in which the teeth are secured can be elevated or lowered, thus gagging the teeth to any desired depth.

ATTACHMENT TO PLOWS.—WILLIAM WEBER, Shingle Creek, N. Y.—The nature of this invention consists in constructing a device and attaching it to a plow, so as to prevent it from clogging under the beam, or in front of the colter.

COMBINED BOOT-JACK AND BLACKING CASE.—BERNARD DOUGLAS, New York City.—This invention relates to a very simple apparatus which will especially recommend itself to travelers, as it confines within a very small area a blacking box and brush, and when opened receives the shape and properties of a boot-jack of the common style.

Inventions Patented in England by Americans.

[We intend publishing hereafter a weekly report of all English Patents taken out by American citizens, all applications for the same, and such matters of interest as we may obtain from the "Commissioners of Patents' Journal!"]

APPLICATION FOR LETTERS PATENT.

2,115.—METHOD OF STORING PETROLEUM AND OTHER OILS, NAPHTHA AND OTHER PRODUCTS OF DISTILLATION CONTAINING ESSENTIAL OILS.—A communication by Seth Haskell, New Bedford, Mass. August 27, 1866.

2,215.—MODE OF PREVENTING OXIDATION OF LEAD BALLS IN FIXED AMMUNITION.—A communication from Barton Howard Jenks, Bridesburg, Pa. August 28, 1866.

2,224.—REPEATING FIRE-ARM.—A communication from Oliver Fisher Winchester, New Haven, Conn. August 29, 1866.

2,229.—LOOM.—A communication from Thomas Robjohn, of New York City. August 29, 1866.

2,231.—BREECH-LOADING FIRE-ARM.—A communication from Barton Howard Jenks, Bridesburg, Pa. August 29, 1866.

2,233.—LIFTING JACK.—A communication from Augustus Bryant Childs, Rochester, N. Y. August 30, 1866.

2,236.—SOFTENING, DISINTEGRATING, AND BLEACHING VEGETABLE FIBERS.—James Montague Mellor, New York City, chemist. August 30, 1866.

2,242.—MACHINERY FOR HULLING AND CLEANING COFFEE AND OTHER BERRIES OR SEEDS.—A communication from William Van Vleck Lidgerwood, a citizen of the United States, now Charge des Affaires at Rio de Janeiro, in the Empire of Brazil. August 30, 1866.

2,247.—APPARATUS FOR BORING BOILER TUBE HEADS, DRILLING ANGLE HOLES, OR CUTTING CIRCULAR GROOVES IN METALLIC SUBSTANCES.—A communication from James Miller, New York City. August 31, 1866.

2,251.—MACHINE FOR MAKING EYELETS.—Thomas Garrick, Providence, R. I. September 1, 1866.

2,261.—DETACHING BOATS FROM THEIR DAVITS.—A communication from Thomas Huntington, New York City. September 3, 1866.

2,264.—HOOP SKIRT.—A communication from Augustus James Colby, New York City. September 3, 1866.

PATENTS SEALED.

696.—ROTARY STEAM ENGINE.—Aaron Charles Baldwin, Boston, Mass. March 7, 1866.

704.—DREDGING AND ELEVATING MACHINERY.—Sylvester Franklin Schoonmaker, New York City. March 8, 1866.

719.—PUMP.—A communication from Asher Burr, Middletown, Conn. March 9, 1866.

720.—WEIGHING SCALES.—A communication from Daniel Hand Wilcox, New Haven, Conn. March 9, 1866.

827.—PROCESS OF AND APPARATUS FOR DISTILLING PETROLEUM AND OTHER MINERAL OILS.—A communication from Edward Braggins, Matthew Patrick Ewing, and Hiram Bond Everett, Rochester, N. Y. March 20, 1866.

874.—HOISTING APPARATUS.—A communication from Samuel Munson Longley and Andrew Conkey Getty, Hudson, N. Y. March 24, 1866.

1,164.—MACHINERY FOR MAKING TWIST DRILLS.—A communication from Andrew Reynolds Arnold, Newark, N. J. April 25, 1866.

PROVISIONAL PROTECTION FOR SIX MONTHS.

1,958.—ROTARY ENGINES.—A communication from Truman Merriam and James Cushing, Waterloo, Wis.

1,995.—IMPLEMENT FOR THE USE OF BOOT AND SHOE MAKERS.—A communication from David Henry Barber, Cambridge, N. Y., and George Mellen Wells, Chicago.

1,997.—APPARATUS FOR RAISING AERIFORM AND OTHER FLUIDS.—A communication from Jeremiah William Foard, San Francisco, Cal.

2,001.—MACHINERY FOR CUTTING DOVETAIL JOINTS.—A communication from Frederick Woolcot Armstrong, Plainfield, N. J.

2,007.—MODE OF SECURING COCKS AND STOPPERS IN THE NECKS OR MOUTHS OF BOTTLES, JARS, AND OTHER VESSELS.—A communication from Arthur Barbarin, New Orleans, La.

2,017.—SEWING MACHINE.—A communication from George Lynden Jenks, Florence, Mass.

2,033.—APPARATUS OR MACHINE FOR REMOVING SEEDS OR STONES FROM RAISINS OR OTHER DRIED FRUIT.—A communication from William Emerson Baker, Boston, Mass.

2,156.—PROCESS FOR BLEACHING WITH THE AID OF HYDROSTATIC AND PNEUMATIC PRESSURE, CONJOINTLY OR SEPARATELY, WOOD, STRAW AND OTHER FIBROUS MATERIAL, FOR THE MANUFACTURE OF PAPER PULP, AND FOR BLEACHING FLAX, HEMP, THREAD, YARN, FELTS, CLOTHS, AND OTHER FIBROUS AND TEXTILE MATERIALS.—A communication from Henry Jones and Duncan Farquharson, Rochester, and Isaac Cowles Cotton, Buffalo, N. Y.

PATENTS HAVING BECOME VOID.

1,941.—MACHINERY OR APPARATUS FOR CUTTING CORE, PART OF WHICH IS ALSO APPLICABLE TO CUTTING PAPER, CAOUTCHOU AND OTHER SUBSTANCES.—Amos Pierce Chamberlain, New Orleans. August 25, 1859.

2,072.—MANUFACTURE OF CARTRIDGES.—Communicated from Albert Hook, New York City. August 20, 1853.

THE MARKETS.

The continued inflation of the currency, with the consequent want of confidence in the permanence of present values, and the knowledge that the governmental deposits of gold are increasing, have tended to delay the expected activity of the Fall trade. Purchasers confine their demands to stocks for immediate use, as do the people at large. Gold has risen about one per cent., but without exerting a very marked influence on prices generally. Breadstuffs have advanced, principally from the injury to crops at the West by the late storms. There are indications, however, of a reaction in the prices of these articles.

ASHES.—Pots are in demand, but the supply is limited. Prices, \$9 50 @ \$10 bbl. Pearls are nominal.

BRICKS.—Common Hard, \$10 50 @ \$11 50. Croton and Philadelphia are \$16 @ \$17 for the former, and \$40 @ \$45 for the latter.

COAL.—Foreign scarce and in demand. Liverpool Orrel, \$18; Cannel, \$20, delivered from yard, 12 high, at Elizabethport, \$7 50. Cumberland, at Georgetown, D. C., \$5 50. Freight on Cumberland \$2 25. Stove retails at \$7 50 @ \$8 50.

COFFEE.—Demand for Rio, Laguayra, 28 1/2 @ 19c., gold; 26c., currency. Costa Rica, 20c. Java, 25 1/2c.

COPPER.—Detroit, 31 @ 31 1/2c.; Portage Lake, 31 1/2c.

COTTON.—There has been a continued active speculative and spinning demand, and prices have further advanced 1/2 @ 3/4c., and in some instances still higher prices have been paid. Ordinary, 30 @ 31c.; Middling, 33 1/2 @ 34c.; Good Middling, 41 @ 42c.

FLOUR.—Prices have materially advanced. Common brands rule from \$10 50 @ \$12 10; Ohio fancy brands \$12 15 @ \$12 20; Genesee extra, \$12 60 @ \$14 50.

GRAIN.—Wheat advanced slightly. Milwaukee, \$2 25 @ \$2 31 Amber, \$2 @ \$2 28. Rye—\$1 05 @ \$1 08 for No. 1 Western; \$1 25 for Canada. Barley, \$1 35. Oats—50 @ 55c. for Chicago; 55 @ 59c. for Milwaukee; 57c. for Ohio. Corn—85c. for inferior Western mixed; 90 @ 91c. for shipping, 96c. for choice White.

IRON.—The market for Pig continues very firm, with moderate supplies and a steady fair demand for home use. The sales are 500 tons Gartscherric Scotch at \$47 50 @ \$48 ex ship, and \$50 from yard; 500 do. Glengarnock, from yard, \$48; and to arrive \$46 50; 600 do. No. 1 American, \$48 @ \$49; 100 do. No. 2 Allentown, \$47 at Elizabethport. Trenton refined bar, \$105 @ \$107 50 @ ton cash. Swedes, in store, \$170 @ ton.

LATHS.—Are firm, with sales of Eastern at \$4, three months.

LEAD.—Pig is steady, with a fair demand; prices unchanged.

LEATHER.—The market for Hemlock Sole is active, and prices are very firm. We quote Rio Grande and Buenos Ayres Light Weights, 38 @ 34 cents; Middle do., 45 @ 36; Heavy do., 36 @ 37; California Light, 31 @ 32; Middle do., 38 1/2 @ 39 1/2; Heavy do., 34 @ 35; Orinoco, etc., Light, 31 @ 32; Middle do., 34 @ 35; Heavy do., 28 @ 32; Slaughter Upper in Rough, 31 @ 33. Oak Sole is in light stock, and the market is firm. French and American Calf Skins are firm with a fair demand.

LIME.—The market for Rockland is steady, with sales of 4 450 bbls., at \$1 70 for Common, and \$2 10 for Lump, cash. Rosendale Cement, \$1 75, cash.

LUMBER.—The market for Eastern Spruce and Pine is moderately active, with sales at \$21 @ \$22 50, usual terms.

MOLASSES.—Centrifugal and Claved Cuba, part mixed, at 42 @ 46c.; 204 hds., 27 tocs, and 26 hbls. Cuba Muscovado, 48 @ 51 1/2c.; 474 hds., 15 tocs., and 15 hbls. Barbadoes, at or about 58; 87 hds. Trinidad, P. S., 45; 177 hds. Demerara, 50 @ 72; and 65 hds. and 50 bbls. Porto Rico, 62 1/2 @ 70, four months.

NAILS.—Cut may be quoted @ 7 1/2c. the lower rates for lots of 500 kegs and over—8d., 10d., 5d., and 3d. Fine are very scarce—Cinch, 8 1/2 (3d are very scarce); forged horse, 32; pressed do., 22 @ 24; copper, 50; yellow metal, 52; zinc, 20; and wrought ship and boat spikes, 7 @ 8, cash.

SUGAR.—Prices unchanged from former quotations.

WOOL.—The demand for low and medium fleece has been moderately active, but at the low prices previously current, and the market is rather weak for all kinds, except those suitable for combing, which are scarce and wanted at slightly improved quotations.

ZINC.—9 1/2c. less 4 per cent. for gold; 13 1/2c., currency, for Lehigh.