

1,351.—MACHINERY FOR POINTING AND FINISHING NAILS.—Sebastian Schilling, Boston, Mass. May 11, 1870.
 1,352.—GRATE BARS.—Jonathan Cone, Bristol, Pa., and John McEldery, Jersey City, N. J. May 12, 1870.
 3,610.—PROJECTILES.—A. F. Potter, San Francisco, Cal. May 12, 1870.
 1,345.—PADDLE WHEELS.—W. F. Knowlton and M. McComb, St. Cloud, Minn. May 11, 1870.

Universal Clothes Wringer.

But one invention has held its own in the household, and that is the Clothes Wringer. We have used one of those whose name heads this article, for ten years, and it has done good service during that time, although in weekly use. We consider the fact, that the frame and all parts of the machine are made of wood, to be in its favor. There can be no possibility of injury to the clothes by rust. Another advantage of this Wringer, is that of a patent stop, in the form of a screw, placed over the wheels, preventing them from getting out of gear. But the principal advantage of this wringer over others, is the patent double gear. This is the invention of the late Dr. Warren Rowell, and one of the best devices in mechanical movements that has come under our observation for a long time.—[N. Y. Mechanic, Dec. 1, 1869.]

Business and Personal.

The Charge for Insertion under this head is One Dollar a Line. If the Notices exceed Four Lines, One Dollar and a Half per line will be charged.

The paper that meets the eye of manufacturers throughout the United States—Boston Bulletin, \$4.00 a year. Advertisements 17c. a line.

Glass Cutters' Grindstones, made by machinery—Craigleith, 40c.; Newcastle and Nova Scotia, 8c. an inch. J. E. Mitchell, 310 York avenue, Philadelphia.

Catlin's Patent Self-closing Barrel Filler for filling packages with liquids of any kind. See other advertisement, and address, for circular, S. C. Catlin, Cleveland, Ohio.

Keane's Silver-plating Compound plates metals with pure silver instantaneously. Keane, Silver Plater, 75 Bleeker st., New York.

Rawhide Sash Cord has no equal for heavy windows or dumb-waiters. Makes the very best round belting. Darrow Mfg Co., Bristol, Ct.

Crampton's Imperial Laundry Soap, washes in hard or salt water, removes paint, tar, and grease spots, and, containing a large percentage of vegetable oils, is as agreeable as Castile soap for washing hands. "Grocers keep it." Office 84 Front st., New York.

Peck's patent drop press. For circulars, address the sole manufacturers, Milo Peck & Co., New Haven, Ct.

Millstone Dressing Diamond Machine—Simple, effective, durable. For description of the above see Scientific American, Nov. 27th, 1869. Also, Glazier's Diamonds. John Dickinson, 64 Nassau st., N. Y.

For Fourneyron and Jonval Turbine Water Wheels, Mill-work, Shafting, Pulleys and Hangers, apply to J. Cornell & Co., Sandy Hill, N. Y.

Machinists and others using Fine Tools, send for illustrated catalogue. Goodnow & Wightman, 23 Cornhill, Boston.

Scientific American.—Back Nos., Vols., and Sets for sale. Address Theo. Tusch, City Agent, 37 Park Row, New York.

Pictures for the Sitting Room.—Prang's latest Chromos, "Flowers of Hope," and "Flowers of Memory." Sold in all Art and Book Stores throughout the world.

Tempered Steel Spiral Springs for machinists and manufacturers. John Chatillon, 91 and 93 Cliff st., New York.

Shop, Town, County, or State Rights for sale, for Patent Coal Suttle. For circular, etc., address T. T. Markland, Jr., 1515 South st., Philadelphia, Pa.

Galvanized iron ventilating skylights, straight and curved extension lights, conservatories, etc., under patents dated 1869-70, are approved by every architect. For Rights address Geo. Hayes, 75 8th ave., New York.

Grindstones made by machinery, perfectly true, at reduced prices. Send 1/2 oz. sample of grit wanted, by mail, J. E. Mitchell, 310 York avenue, Philadelphia.

L. L. Smith, 6 Howard st., N. Y., Nickel Plater. First Premium awarded at the late Fair of the American Institute. Licenses granted by the United Co., 17 Warren st., New York.

One 60-Horse Locomotive Boiler, used 5 mos., \$1,200. Machinery from two 500-hp propellers, and two Martin boilers very low. Wm. D. Andrews & Bro., 414 Water st., New York.

Kidder's Pastilles.—A sure relief for Asthma. Price 40 cents by mail. Stowell & Co., Charlestown, Mass.

Pat. paper for buildings, inside & out, C. J. Fay, Camden, N. J. Stiff, heavy, powerful lathes, planers, shapers, slotters, and radial drills, in stock. E. & A. Betts, Wilmington, Del.

Second-hand donkey pumps, 12, 25, and 35-H. engines, leather hose, old style blowers, cocks, valves, etc., etc. Wm. D. Andrews & Bro., 414 Water st., New York.

Kitchen Grindstones, for sharpening table knives, Loring's pat., best article out. J. E. Mitchell, Agent, 310 York avenue, Philadelphia.

An experienced mechanical and railway engineer wishes a position as Master of Machinery, or Manager. Address "Engineer," Station "G," Philadelphia, Pa., Postoffice.

For solid wrought-iron beams, etc., see advertisement. Address Union Iron Mills, Pittsburgh, Pa., for lithograph, etc.

Keuffel & Esser, 71 Nassau st., N. Y., the best place to get 1st-class Drawing Materials, Swiss Instruments, and Rubber Triangles and Curves.

For tinners' tools, presses, etc., apply to Mays & Bliss, Plymouth, st., near Adams st., Brooklyn, N. Y.

Cutlers' Grindstones, made by machinery. Wichersly, Newcastle, or Nova Scotia, at 8c. an inch. J. E. Mitchell, 301 York ave., Phila.

Glynn's Anti-Incrustator for Steam Boiler—The only reliable preventative. No foaming, and does not attack metals of boiler. Liberal terms to Agents. C. D. Fredricks, 587 Broadway, New York.

To ascertain where there will be a demand for new machinery or manufacturers' supplies read Boston Commercial Bulletin's manufacturing news of the United States. Terms \$4.00 a year.

Cold Rolled—Shafting, piston rods, pump rods, Collins pat. double compression couplings, manufactured by Jones & Laughlins, Pittsburgh, Pa.

For mining, wrecking, pumping, drainage, and irrigating machinery, see advertisement of Andrews' Patents in another column.

Caldwell's Dryer dries Brick, Fire Brick, Tile, Peat, Whiting, etc., as fast as made. J. K. Caldwell & Co., Philadelphia.

Harvester Grinders—Loring's patent—grinds automatically, and any boy can sharpen a cutter perfectly. J. E. Mitchell, 310 York ave., Philadelphia.

Winans' boiler powder, 11 Wall st., N. Y., removes Incrustations without injury or foaming 12 years in use. Beware of Imitations.

Notice to the Purchasers and Manufacturers of Ice Machines.

As the holder of Letters Patent from the United States, under date April 12, 1870, I hereby caution all parties manufacturing or purchasing Ice Machines, operated with Chimojene, against infringements of said Letters Patent. This public caution is especially intended for the notice of the Arctic Ice and Refrigerating Company, of the City of New York and of parties who may contemplate the purchase from them of the Ice Machine at present manufactured by them, which clearly infringes my Letters Patent.
 D. L. HOLDEN, P. O. Box 6049, New York city.

Answers to Correspondents.

CORRESPONDENTS who expect to receive answers to their letters must, in all cases, sign their names. We have a right to know those who seek information from us; besides, as sometimes happens, we may prefer to address correspondents by mail.

SPECIAL NOTE.—This column is destined for the general interest and instruction of our readers, not for gratuitous replies to queries of a purely business or personal nature. We will publish such inquiries, however, when paid for as advertisements at \$1.00 a line, under the head of "Business and Personal."
 All reference to back numbers should be by volume and page.

R. R. S., of Va., and others.—We are receiving many inquiries upon the subject of cement for aquariums, not containing lead. Can anybody give us a good recipe of this kind? The following is highly recommended by a correspondent of the Boston Journal of Chemistry, but it contains the objectionable substance. Take 10 parts by measure of litharge, 10 parts of plaster of Paris, 10 parts of dry white sand, 1 part of finely powdered resin, and mix them, when wanted for use, into a pretty stiff putty with boiled linseed oil. This will stick to wood, stone, metal, or glass, and hardens under water. It is also good for marine aquaria, as it resists the action of salt water. It is better not to use the tank until three days after it has been made.

C. A. L., of Tenn., finds that his bolting cloths (No. 9) recently clog on all occasions, with good wheat flour properly ground on best French burrs. The cloths have been in use about twelve months. He wishes to ascertain, if possible, a way to prevent this. He says he has to stop and brush them off very often, and attributes the mischief (we think correctly) to having ground a very damp lot of wheat, which he thinks soured on the bolting cloths. He is a miller of long experience and served a regular apprenticeship at the business, but knows of no way to remedy the evil complained of. If any of our correspondents can prescribe a remedy, we shall be glad to hear from them.

C. D. C., of W. Va.—There are various proportions for speculum metal for reflecting telescopes. We give you four. First: copper 64 parts, pure tin, 29 parts; melt separately with the use of black flux, and mix. Second: copper, 2 parts, pure tin, 1 part; mix as before. Third: copper, 64, tin 29 to 33 parts. Fourth: according to Lord Rosse, the constructor of the great reflecting telescope which bears his name, the best proportions are, copper, 1,264 parts, tin, 589 parts. Sometimes a little arsenic is added to increase the whiteness of the alloy. These alloys are very difficult to manipulate, as they are likely to crack in cooling.

W. A. B., of Mass.—We do not believe mere age hardens stereotype metal. We think it probable, however, that plates which have been used in the press for some time would be somewhat more dense and hard than those fresh from the mold. In the cold state, and remaining at rest, all the change that could occur would, in our opinion, be a slight oxidation of the surface. It is barely possible, however, that a slow crystallization may go on in such metal, under favoring circumstances, analogous to that which is known to take place in other metals; but we do not think this very probable.

D. D. S., of Ill.—You may bleach beeswax by exposing it for a sufficient time to the action of the air and light after cutting it into thin shavings. A quicker way is to melt the wax and add for each pound two ounces of nitrate of soda, and one ounce of sulphuric acid diluted with nine parts of water. The latter should be added very slowly, while the melted wax is constantly stirred with a glass rod. It is then cooled and set aside after filling the vessel with boiling water. Washing the wax with boiling water until no trace of the acid remains completes the process.

W. R. B., of Va.—The combustion of a lamp may be kept up in a close vessel by forcing oxygen into the vessel, and the carbonic acid gas, expanded by heat, might be used as motive power. There would, however, be serious practical difficulties in applying this principle to the propulsion of machinery. This correspondent writes that the mountains about Waynesboro, Va., abound in the black oxide of manganese.

D. R., of N. B.—It is not good practice to make the induction pipe to a steam cylinder too large, as you thereby increase the area of radiating surface. We therefore answer that it is not just as well to make these pipes larger than necessary. Such kind of loose practice in anything relating to steam is intolerable at the present day, when the whole subject is reduced to a science.

C. L. P., of La.—We believe the best paper-hangers' paste, as well as a paste for general purposes, is simply wheat or rye flour beaten into cold water to perfect smoothness, and the whole just brought to a boil, while being constantly stirred to prevent burning. A little creosote, or carbolic acid, will make it keep much better. Any addition to this paste fails to improve it.

White Brass.—We are in receipt of numerous inquiries as to where the white brass described on page 348, current volume, can be obtained. Parties interested in its sale would do well to advertise it. We cannot answer these inquiries, as we know of no one in this country or in Europe who sells the article. We gave in the article referred to all the information we are in possession of in regard to it.

W. S. H., of N. Y.—One hundred and thirty revolutions per minute is a very low speed for a steam engine with cylinders of nine inches diameter and twelve inch stroke. If properly constructed in all respects, no economy would result from the reduction of speed. Reduction of the speed would reduce the power of the engine.

F. A. C., of Mass.—The best way to keep rain water sweet in a cistern, is to first collect it in a tank, and filter it before receiving it into the cistern below the surface. This will remove the organic matters, and prevent fermentation. Care should also be taken to prevent surface drainage into it.

F. H., of N. Y.—Gold plate may have its color restored without polishing after annealing, by dipping it for a moment in a solution of cyanide of potassium, and then washing it thoroughly in water. Care should be taken not to touch the hands with the solution, as it is a deadly poison.

D. L., of Vt.—The extent to which expansion of steam may be carried by the lap of the valve alone, with convenience and economy, does not exceed a cut off at one third of the stroke. It is better to use a cut-off valve, actuated by a second eccentric, than to use lap beyond this limit.

J. McF., of Pa.—The soft material that you send looks as if it had some resemblance to bauxite, but we could not determine with certainty without making a careful chemical analysis; expense, \$30. The other substance appears to be iron ore, perhaps of value.

L. M., of Mo.—The term regulus is an old name applied by the alchemists to metallic antimony, arsenic, cobalt, etc. Thus, regulus of antimony is metallic antimony, etc.

R. G. P., of Miss.—You will probably secure the business information you seek by a notice in our "Business and Personal" column.

Recent American and Foreign Patents.

Under this heading we shall publish weekly notes of some of the more prominent home and foreign patents.

WOOD PAVEMENT.—John W. Brocklebank, New York city, and G. W. Tubbs, Elizabeth, N. J.—This invention relates to improvements in wood pavements of that kind wherein blocks arranged vertically in rows across the road bed, either with or without spaces between, to be filled with gravel, etc., are placed upon a superstructure intermediate between the graded road bed and the blocks, and it consists in an arrangement of the said blocks on a foundation of sills laid across the road bed parallel with each other, on the graded surface, with spaces between filled with sharp sand, the said spaces being as wide as the thickness of the blocks which are set upon the sand; and they are supported at the edges, which are placed together in forming the continuous row, by short joists laid across the sills, the corners of the blocks being recessed for the purpose, each joist supporting two blocks.

MOWERS AND REAPERS.—Wm. Michael, Murrysville, Penn.—This invention relates to improvements in the driving mechanism for mowers and reapers, and consists, in an arrangement of the driving wheels on short, independent axles, concealed by adjusting screw caps, and gearing them with loose pinions on a counter shaft, having spring ratchet clutches, communicating the motion from both driving wheels together, or one independently of the other when moving in curved lines, so that one driving wheel goes faster than the other, the said clutches being held in gear by springs which allow them to slip when the machine is backed.

PAPER BOXES.—John Root, New Haven, Conn.—This invention relates to improvement in securing the parts of paper boxes together where they lap each other, and consists in fastening them by metal clasps consisting of strips of thin sheet metal bent over the edges, and pressed together so as to clamp the parts between them.

SHADES FOR GAS LIGHT.—Wm. Fullager, Brooklyn, N. Y.—This invention relates to improvements in shades for gas lights, and consists in the combination with the ordinary conical porcelain or other shades, which shade the lights at the sides, of a bottom shade of porcelain arranged for the support of the conical shade, and calculated to shade that part of the light thrown down, and not shaded by the present shades. The said upward shade may also be used with lamps, with slight changes in adaptation to the brass rings or supports, and is applicable without change of the form represented, to what are known as the student lamps.

SUBMARINE DRILLING APPARATUS.—Samuel Lewis, Williamsburgh, N. Y.—This invention has for its object to furnish an improvement in the apparatus for raising the boat, or other floating platform, from which a gang of drills is operated, so that it may be unaffected by the rise and fall of the tide.

STEAM PUMPING ENGINES.—S. D. Gilson, Syracuse, N. Y.—This invention relates to a new and important improvement in engines for pumping and forcing water, more especially designed as a steam fire engine, but applicable to other purposes, and it consists in such a construction and arrangement of parts that the motion of a reciprocating engine is duplicated by a simple crank movement from the shaft of an oscillating piston.

APPARATUS FOR PACKING PRESERVES, ETC.—C. T. Provost, New York city.—The object of this invention is to facilitate the packing of tomatoes and other vegetables or fruit in the preserving cans. At present vegetables are packed so loosely that in many cases the value of the can exceeds by far that of its contents. By means of this invention the cans can be thoroughly and closely packed, and the useless water removed, without improperly mashing the fruit or vegetables to be preserved.

SKATE FASTENING.—Thomas Almond, Fitchburg, Mass.—This invention relates to a new device for clamping and securing skates to the soles and heels of boots or shoes. The invention consists in the use of adjustable toe clamps and of a heel jaw all pivoted directly to the skate runner, so that the latter can be secured to the boot or shoe, without the use of straps or projecting levers.

REIN HOLDER.—J. R. Achenbach, Saddle River, N. J.—This invention has for its object to furnish a simple and convenient device for holding the reins when the team is standing, which shall be simple in construction, easily attached to the wagon, and which will hold the reins securely, and at the same time in such a way that they may be instantly detached when required.

ELECTRIC DECOMPOSITION OF COPPER AND BRASS.—Wm. Henry Walenn, London, England.—This invention consists in improvements in the electric deposition of copper and brass upon iron and other substances, to be made with less battery power, with greater economy, and more solidly and perfectly than has hitherto been done.

HOT BLAST OVENS.—Job Froggett, Youngstown, Ohio.—This invention relates to improvements in hot blast ovens, and consists, first, in inclosing the air pipe connections in the oven together with the main parts thereof; second, in providing two or more pipes or sets of pipes for dividing the blast, to lessen the friction; and third, in arranging air flues through the hot blast oven with holes admitting air immediately or directly to the gas where it enters the oven, or to the combustion chamber of hot blast ovens using other fuel.

SHEET METAL SPOON, FORK, AND OTHER HANDLES.—H. C. Milligan, Brooklyn, N. Y.—This invention relates to improvements in the construction of the handles of spoons, forks, and other implements made of sheet metal, or handles only made of sheet metal, and consists in making them with oblique corrugations stamped into them on one side and raised on the other, between the edges which are left plane for a narrow space, the said corrugations being made for strengthening and ornamenting the handles, and in the case of spoons is designed to produce a sufficiently strong handle from the thinnest sheet metal of which the bowl may be made.

BARK MILL.—Lewis N. Hermance, Kingston, N. Y.—This invention relates to an important improvement in the ordinary bark mill, and has for its object to facilitate the adjustment of every mill to fine or coarse work, and to allow the runners to be raised when they should have become dull by wear, so that by being brought nearer to the grinders they may again be made useful.

SEWING MACHINE POWER.—John W. Jordan, Lexington, Va.—This invention relates to improvements in means for propelling sewing machines, and consists in an apparatus for imparting rotary motion to a driving shaft mounted together with the sewing machine on a rocking or swinging frame, either by the rocking or swinging of the said frame to which motion is imparted by the operators mounted on the said frame in a suitable seat.

MOTION POWER FOR CARRIAGES.—George Kilner and F. H. Simmons, Sullivan, Ill.—This invention relates to improvements in motive power apparatus for land carriages, and consists in a combination of foot treadles, crank shaft, pinion master, wheel pinions, and cog rims, applicable to the propulsion of all land carriages, whether for road use or agricultural purposes, and applicable also for drawing other machinery. The invention consists in improved steering apparatus for the carriages to be propelled by the said improved motive power.

WARMING INSOLE FOR BOOTS AND SHOES.—Philipp Martin Ernst, New York city.—This invention relates to a new straw insole for boots and shoes, which, on account of its being a bad conductor of heat, serves to keep the feet warm without preventing their ventilation.

WINDOW BLIND.—Thos. Donato, New York city.—This invention relates to a new manner of securing pivoted slats in the frames of window blinds. The invention has for its object to provide a more secure fastening for the slats, and, at the same time, greater facility for removing the same for repair.

THRASHING MACHINE.—John S. Fulton, Gallatin, N. Y.—This invention relates to a new thrashing machine, into which the straw is fed transversely, so that it will not in the least be injured or broken by the thrashing process.