

## Facts for the Ladies.

We are very happy to be able to recommend Wheeler & Wilson's Sewing Machines to all persons who may be wanting an article so useful as a Sewing Machine. After an experience of ten years, we are not only able to speak with confidence of their usefulness, but, also, of their great superiority over all other machines that we have tried in our establishment. These Sewing Machines have three advantages of great importance—rapidity of motion, adaptation to a greater variety of work and material, and little or no expense for repairs.

SISTER MARY,  
Sister of Charity.

Providence Nunnery, Montreal.

## You Cannot Do a Better Thing

For your Wife, on a washing day, than provide her a Doty Washer and Universal Wringer. It will keep aches from her back and arms, wrinkles from her forehead, and roughness from her hands. It will do the work of a hired woman, and save your linen from being scrubbed out and her temper from being chafed out.—(New York Weekly Tribune, March 22, 1870.)

## Many of the Largest Advertisers

In the country make all their contracts with newspapers through the Advertising Agency of Geo. P. Rowell & Co., No. 40 Park Row, New York. Their facilities for the transaction of the business are not excelled by those of any similar establishment in the world.

## 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 designed for the general interest and instruction of our readers, not for gratuitous answers to questions 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.

W. J. B., of N. Y., writing to ascertain what will remove walnut stains from the hands, is answered by

R. S., of Vt., who states that slices of ripe pears rubbed on the hands will remove such stains. This may be correct; but, if so, the action must, we think, be due to the malic acid contained in the fruit. If this view be correct, green apples, which contain a much larger proportion of malic acid, ought, it would seem, to be still more efficient. There are various organic acids that will remove vegetable stains. Of these oxalic acid is one of the most powerful, but it is very poisonous, and requires to be used with much care. Citric acid or lemon juice, which contains a large proportion of citric acid, is also very good for removing many kinds of stains, and is safe to use. When the hands are stained no soap should be used to wash them previous to the use of acids for taking off the stains, as the alkali of the soap acts as a mordant to render the stains permanent. Where any of the acids named are used, the washing should be completed with pure water.

D. H., of Mass.—India-rubber can be dissolved in turpentine, animal oil, ether, or benzole, by introducing the solvent in the form of vapor, into a vessel containing the india-rubber in small pieces; the vessel being then exhausted of air, and kept at a required temperature by means of steam. Or it will dissolve in these fluids by simple immersion in them, when heated, but more slowly and imperfectly. Benzole or benzene as it is commonly called, and other hydrocarbons of a similar character, dissolve it cold. Chloroform also dissolves it, but undoubtedly the best solvent for general purposes is benzole. We doubt if you will succeed in making finger-cots by this process. There are secrets of experience essential to success which manufacturers jealously guard.

G. D. F., of S. C.—The paragraph to which you refer, as going the rounds of the press, stating that the Little system of transmitting telegraph messages enables 400 words per minute to be sent from Washington to New York, is correct in that statement. We have ourselves been lately investigating this system, and have now in our possession a message of about six hundred words transmitted at that rate, and distinctly legible. Your idea that this system could be substituted for short hand reporting is not correct, as the messages have to be first prepared by puncturing strips of paper on a machine for that purpose, a much slower process than short-hand writing, and the transmission is effected by an automatic machine that can only speak what is put into its mouth on the punctured paper slip.

C. E. K., of Mich.—Many learn to run locomotives by commencing with a wheel, and so climbing through the post of fireman finally to engineer in charge. In fact, that is the apprenticeship usually practiced we believe in England. We believe, however, that the learning of the machinist's trade in a locomotive shop is the best beginning. Certainly, all other things being equal, he who knows how to build and repair a locomotive is best qualified to run it. Besides, all men having the requisite knowledge are not qualified by courage or strength of constitution to endure the hardship of a locomotive engineer's work. Having learned the machinist's trade, you would have something to fall back upon in case of failure.

J. W., of R. I.—There is no way that we know of, and india-rubber manufacturers tell us there is no practical way of fastening india-rubber to metal, except by dovetailing it in, or some kindred process, while the rubber is yet soft and previous to the vulcanizing process. If, in this time of many discoveries, a cement has been found that will cause rubber to firmly adhere to metal, we shall be glad to receive the formula from any of our correspondents who may chance to know it.

E. J., of Ill., says that the water from a certain well is raised by means of three buckets, and that it is proposed to add another. The question arose whether the use of the extra bucket would add one third more, or one fourth, to the volume of water discharged. The parties, unable to agree, wish us to decide. We answer the extra bucket increases the discharge one third.

J. S., of S. C.—It will not injure your plain cylinder boiler to drill an inch hole in the end in the top remote from the boiler, and insert therein a pipe to convey steam to the lint room of your gin-house, provided the work is done in a workman-like manner.

C. M. B., of D. C.—A wire of fifty miles in length of iron might without doubt be made so small that it could be wound on a single reel of not very exaggerated dimensions. There would be no difficulty about flexibility. The size of the coil would of course depend upon the diameter of the wire.

W. B., of Ca., wants to know how japanning is done by steam heat, the construction of the ovens, etc. We have never seen japanning done by steam heat, still it is quite possible it is so performed. Can any of our correspondents throw some light on this subject.

J. S. V., of N. H.—There are no depths in the ocean to which a body originally heavier than sea water would not sink, although there is a theoretical limit where water would become so compressed as to be heavier than iron or even lead. This limit is, however, far lower than any depth of water supposed to exist in the ocean.

Wm. L. C., of D. C., wishes to know how to give small steel blades, which have been discolored by being ground, and which are not polished, a color which will remove or cover the rust, and also give a uniform shade of, say, blue or green.

S. K., of Ind.—We have not been able to get the definite information you seek in regard to the oil of brick.

## Business and Personal.

The Charge for Insertion under this head is One Dollar a Line. If the Notice 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 1c. a line.

Parties in need of small Grey Iron Castings please address Enterprise Manufacturing Co., Philadelphia.

Excelsior Stump Puller & Rock Lifter. T. W. Fay, Camden, N. J.

For Sale—One half the interest in McGee's Patent Self-boring Faucet. Address T. Nugent, Morristown, N. J.

Knitting Machines.—Manufacturers will address R. Samuel, Walden, N. Y.

Ireland's Hand Fan Mover.—The Patent Right of this novel and valuable invention for sale for cash, or part cash, and a royalty. Address W. A. L., 4 Irving Place, New York.

For Sale—A very valuable Patent. Large Commission to Agents in selling my new and valuable invention. Address Peter Soule, Rochester, N. Y.

Stager's Automatic Boiler Feeder. For Rights and Machines apply to J. B. Smith, 417 Broadway, Milwaukee, Wis.

Double-barrel Breech-Loading Gun Manufacturers send circulars and Prices to F. Booker, Glass Box 196, Springfield, Ohio.

A Foreman Boiler Maker wishes a Situation to take charge of a Shop. Address "Boiler Foreman," care J. Kenworthy, 480 8th ave., N. Y.

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

Dickinson's Patent Shaped Carbon Points and adjustable holder for dressing emery wheels, grindstones, etc. See Scientific American, July 24th, and Nov. 20, 1869. 64 Nassau st., New York.

Peck's patent drop press. Milo Peck & Co., New Haven, Ct.

Pattern Molding Letters to put on patterns of castings. Wholesale and retail, by H. W. Knight, Seneca Falls, N. Y.

Propeller Engine Cylinders, 28 inches square, for sale cheap, by Daniel W. Richards & Co., 92 Manrin st., New York.

Foundry Cranes, ten and fifteen tons capacity, wanted. Address Box 2,348, Postoffice.

Foundry Cranes, thirty tons capacity, for sale cheap. Address Postoffice Box 2,348.

Pictures for the Drawing Room.—Prang's "Lake George," "West Point," "Joy of Autumn," "Prairie Flowers." Just issued. Sold in all Art Stores.

Roofing Materials, House Sheathing, Roofing Felts, & Psints, full directions for applying. Mica Roofing Co., 73 Maiden Lane, New York.

Edging or Profiling Machines, having a valuable improvement in device for cutting "formers," superior shaping, die sinking, spindle and cutter grinding machines are made by the Pratt & Whitney Company, Hartford, Conn.

A New Waltham Watch, made especially for Railroad Men and Engineers, is fully described in Howard & Co.'s Price List of Waltham Watches. Every one interested should send for a copy, which will be mailed to any address free. Address Howard & Co., 785 Broadway, N. Y.

Building Felt (no tar) for inside & out. C. J. Fay, Camden, N. J.

See advertisement of New Work on "Soluble Glass," published by L. & J. W. Feuchtwanger, 35 Cedar st., N. Y. Price \$3.20, mailed free.

Pumping Water without Labor or Cost, for railroads, hotels, houses, cheese factories, stock fields, drainage, and irrigation by our self-regulating wind-mill. Strong and well tested. Con. Windmill Co., No. College Place, New York.

Screw Wrenches.—The Best Monkey Wrenches are made by Collins & Co. All Hardware dealers have them. Ask for Collins Wrench.

Profitable Canvassing.—"Universal Sharpener," for Table Cutlery and Scissors. A correctly beveled edge can be obtained. See Advt.

Blind Stile Mortising and Boring Machine, for Car or House Blinds, fixed or rolling slats. Martin Buck, Agent, Lebanon, N. H.

Builders—See A. J. Bicknell's advertisement on outside page. The best selected assortment of Patent Rights in the United States for sale by E. E. Roberts & Co., 15 Wall st., New York. See advertisement headed Patentees. Sales made on Commission.

Best Boiler-tube cleaner—A. H. & M. Morse, Franklin, Mass.

"Your \$50 Foot Lathes are worth \$75." Good news for all. At your door. Catalogue Free. N. H. Baldwin, Laconia, N. H.

The Best Hand Shears and Punches for metal work, as well as the latest improved lathes, and other machinists tools, from entirely new patterns, are manufactured by L. W. Pond, Worcester, Mass. Office, 98 Liberty st., New York.

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

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

Keuffel & Esser, 116 Fulton st., N. Y., the best place to get 1st-class Drawing Materials, Swiss Instruments, and Rubber Triangles and Curves.

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

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.

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.

It saves its Cost every sixty days—Mitchell's Combination Cooking Stove. Send for circular. R. B. Mitchell, Chicago, Ill.

Incrustations prevented by Winans' Boiler Powder (11 Wall st., New York,) 15 years in use. Beware of frauds.

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.

## Recent American and Foreign Patents.

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

**PAINT MILL.**—John W. Masury, Brooklyn, N. Y.—This invention relates to improvements in mills for grinding paint and other wet substances, and consists in providing the upper stationary stone with an annular or other hollow open or closed space for the application of cold or hot water or steam to be kept in circulation, for regulating the temperature of the stones and the substances being ground, which space is designed to be formed in the cast metal which is to be used with thin slabs of stones attached to the grinding surfaces. The invention also consists in a novel manner of suspending the upper stone on the frame for delivering the ground substance at several points around the stone, and in providing a plurality of scrapers for taking off the ground paint, so that three or more vessels may receive the ground substance at the same time, thereby enabling one person to attend to several mills, the vessels not filling so fast or needing to be changed so often; and also in a manner of suspending the upper stone for greater convenience in raising it off the bed stone.

**GRAIN BINDER.**—William Lottridge, Charles City, Iowa.—This invention relates to improvements in grain-binding attachments to reaping machines, and consists in a twisting attachment to the grain board of the harvester for forming a rope of straw to make the bands, the said rope being conducted over suitable guide rollers to the binding apparatus; also in an arrangement of binding jaws, twister, tucker, cutters, and the operating devices for the twister for swinging back and forth to open and close over a trough to which the gavel is delivered by a reel receiving the straw from an endless carrier, the said jaws opening to admit and disconnect the driving gear of the twister, and closing the gavel, to engage the twister with its driving gear and to bind the gavel. The invention also consists in certain improvements in the construction, arrangement, and operation of the rope carrier, tucker, discharger, cutters, and the grain holding and delivering reel.

**NURSERY FOOTSTOOL.**—Levi Burnell, Milwaukee, Wis.—This invention relates to improvements in footstools, and consists in a combination with a base plate preferably mounted on short legs of an upper plate hinged to it at or near one edge, or to a piece rising a little above it, and supported at the opposite edge by springs or other elastic support, considerably higher than the hinged edge, thereby constituting a graduated springing stool on which the nurse may place her foot while holding an infant, and trot it with an easy and uniform motion, not attainable when the feet rest on the floor.

**HOISTING APPARATUS.**—Levi Burnell, Milwaukee, Wis.—This invention relates to improvements in apparatus for hoisting building materials for building houses, and consists in a combination of a hoisting car, a track, and a counterpoise weight, so arranged that the counterpoise weight may be raised by the weight of the attendant on the unloaded car, and then raise the loaded car, whereby the gravity of the attendant may be used to raise loads as heavy, or heavier, than he could carry, in a manner much less fatiguing than the common way of carrying up the material in hods.

**REED ORGAN.**—George Woods, Cambridgeport, Mass.—This invention relates to improvements in reed organs, melodeons, and other like instruments, and consists in the application to the said instruments, as now constructed, of an additional wind chest, with reeds and sounding-box, for increasing and varying the sounds, the said attachment being so arranged that the valves may be worked by the keys which work the principle valves, and they may be brought into or out of action instantly by a stop provided for the purpose.

**HEAD-BLOCK FOR SAW MILLS.**—Franklin W. Shelley, Muncie, Ind.—This invention relates to a new apparatus for imparting motion to the head-blocks of circular and other saw mills. The invention consists chiefly in the application of a series of friction levers, which are operated by a pair of sliding bars so as to impart the necessary intermittent forward motion to the block.

**ROOFING COMPOUND.**—Joseph V. Douglas, Philadelphia, Pa.—This invention has for its object to utilize the iron scales, shavings, and dust which constitute the waste of shops, foundries, rolling mills, etc., and consists in combining the same with adhesive ingredients, to produce a coating or paint for roofs.

**CORRUGATED AND METALLIC STREET PAVEMENT.**—George Wilkes, New York city.—This invention has for its object the application of the railway principle to common use on street or roads so that all vehicles may have the smooth tracks which are now exclusively provided for railroad cars.

**BALING PRESS.**—William Her, Shreveport, La.—This invention relates to a novel construction of mechanism for working the follower of a baling press, and consists in a new arrangement of friction clutches for working the follower downwardly, and also in a new construction of clutch.

**VELOCIPÈDE.**—John Eggert, New York city.—This invention relates to improvements in the construction of the driving, steering, and braking gear of a three or four-wheeled velocipede, and to a new manner of supporting the seat on the same.

**GRATE.**—Francis Glick and U. Keck, Allentown, Pa.—This invention relates to a new sectional grate, which is so constructed that it can be dumped without disturbing or wearing its supports on the fireplace.

**FENCE.**—James Comstock, Greenfield, Ind.—This invention relates to improvements in fencing, and consists in connecting the panels, which have broad posts attached to the ends, so that the longitudinal boards only extend to the centers, and are so arranged that at the meeting ends the parts of each panel will be on opposite sides to inclose the ends of both panels between them, by braces set on the ground and notched into the posts at the upper ends to support the whole above the ground, and tie bars, jointed at one end to the braces near the bottom, and extending through the board, by the edges of the posts, between the lower boards, and secured in blocks by keys in such a way that the weight of the fence serves to bind the whole together in a measure of permanence depending upon the weight of the fence.

**HAIR CURLER.**—J. W. Kenny and J. H. Adams, Albany, N. Y.—This invention relates to improvements in hair-curling instruments, and consists in making the cylinder hollow and of thin metal, with a small screw thread at the open end, and providing a heating iron with a handle for screwing into the said hollow curling cylinder or tube for heating the latter rapidly and uniformly, and providing a heat that will not burn the hair, by means of water contained in the tube into which the heating iron is placed. The invention also comprises the application to the tube of a thimble or ring for applying to the tube in a manner to confine the end of the lock of hair to be curled.

**DEVICE FOR SPREADING CIRCULAR SAW TEETH.**—W. H. Rudolph, Clarksville, Tenn.—The object of this invention is to facilitate the operation of spreading or expanding the points of circular saw teeth, so as to give a sharp cutting edge to the tooth and relieve the saw of friction, and it consists in a metallic plate provided with projecting ears for holding the tooth to be spread, and for holding the plate on the saw.

**MANUFACTURE OF ICE.**—J. F. Gesner, West Farms, N. Y.—This invention relates to improvements in the manufacture of ice and the refrigeration of air and all fluids, liquids, and solid substances which it may be desirable to reduce to a low temperature. By this improvement ice is produced or refrigeration obtained by the combined frigorific effect of the evaporation and heat conduction of liquid sulphurous anhydride or dioxide of sulphur (ordinarily called sulphurous acid), chemical symbol SO<sub>2</sub>, containing one equivalent of sulphur and two equivalents of oxygen.

**HORSE POWER.**—E. O. and C. B. Thompson, Thomasville, Ga.—This invention relates to improvements in horse power, and consists in an improved arrangement of the supporting frame and operating machinery calculated to provide a simple and cheap apparatus for use either on the floor or for attachment, so as to be suspended in an inverted position from the beams or frame of a gin house or other building.