

Facts for the Ladies.

I have used my Wheeler & Wilson Sewing Machine ten years without repairs, not only for family sewing, but for all the stitching I could get to do, from the heaviest beaver to the finest muslin. In six months I made alone on the machine twenty-five coats, seven vests, ten pairs of pants twenty-four shirts, and a number of cloaks, etc. MISS L. HARRIS. North East, Pa.

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 replies to questions of a purely business or personal nature. We will publish such inquiries, however, when paid for as advertisements at \$100 a line, under the head of "Business and Personal."

All references to back numbers should be by volume and page.

T. E. K., of La.—Timber may be rapidly seasoned by steaming, but it is unnecessary to do it under enormous pressure; in fact, high pressure, and, consequently, high temperature, are injurious to the wood. Sufficient vent should be allowed to keep the steam down to 212 degrees, which is hot enough. The steaming is carried far enough when the sap has been converted into steam and driven out of the wood. A few days exposure to the air after taking the timber from the steam box will render the wood fit to work. If the operation is performed according to these directions the steaming box need not be very strong; it should, however, be tight enough to hold the steam, which should, at least the greater part of it, escape as steam, not as water through the vent.

W. D., of N. Y.—The first complete electric telegraph of which we have any knowledge, was established in the year 1798, between Madrid and Aranguez, in Spain, by an electrician named Betancourt. This was, however, not at all on the principle of the modern telegraph, as electro-magnetism was not discovered till 1819. Wheatstone's telegraph was patented in England in June, 1837, and Morse filed his first caveat in October of the same year. To Morse is undoubtedly due, however, the credit of inventing a telegraphic alphabet which has ever since been universally used.

J. H., of N. Y.—To japan castings, clean them well from the sand, either in a "tumbler" or by other convenient means, then dip them in or paint them over with good boiled linseed oil. When the oil has become moderately dry, put them in an oven and heat them to such a temperature as will turn the oil black without burning. The stove should not be too hot at first, and the heat should be raised gradually to avoid blistering. The slower the change in the oil is effected the better will be the result. The castings, if smooth at first, will receive a fine black and polished surface by this method.

L. B., of Ohio.—You do not inform us whether you wish to construct your cistern above or below ground. If above ground, a wooden cistern made of good pine answers a good purpose; if below, brick laid in good hydraulic cement, and smoothly plastered with the same on the inside, answers a good purpose. Of all the filters we have tried, we like the working of none better than that of gravel and charcoal, effected by passing the water through two casks, one filled with fine gravel and the other with coarse charcoal powder.

T. B. McC., of Del.—The mineral you send is a poor specimen of graphite, or plumbago. It is composed chiefly of carbon, with which impurities, consisting of earthy matters, are mixed. Plumbago is principally used in the manufacture of crucibles and lead pencils, also for electro-plating, polishing stoves, castings, etc. The refining and preparing of the article for use is attended with considerable labor.

R. C., of Del.—We do not wish to open our columns to the discussion you propose.

J. B. C., of Mich.—You can set two 60-horse power boilers to run with a single furnace and grate, but the plan would not, in our opinion, be economical. To blow off one of two boilers thus set while the fire was maintained to keep up steam in the other, would be likely to lead to overheating the boiler. We advise building a separate furnace for each. This can easily be done so as to have the boilers stand side by side as you desire.

A. H. S., of Hayti.—The action of the sour cane juice upon iron pipes in scaling them, is a difficulty met with on all plantations. An old plantation engineer informs us that he used, when in Cuba, to scale the pipes by letting cold water into them while hot. We do not know that this would answer with you. Should it fail we are not aware of anything better than the old practice.

R. W. of Pa.—The depth of the artesian well of Grenelle, at Paris, is 1,791½ feet. Respecting the water, it was ascertained that it does not contain the least trace of air, and was for that reason considered unfit for use. To obviate this defect the water descends from the top of a tower in innumerable threads, which exposes it to the air.

S. C., of Colorado.—Malachite is brought chiefly from a single mine in the Ural Mountains in Russia, and indicates the near presence of copper. Its value is estimated in weight at about one fourth that of silver. It is not at all probable that you have found malachite in your section.

H. T., of Mich.—So far as we are aware, the Norwegian cooking apparatus is not made in this country. It is sold in England to some extent, and appears to be a useful apparatus for the purpose.

E. H. S., of Mass.—Will forcing a cold blast into a chimney above the fire box increase the draft to the same extent and aid in combustion as much as though forced directly into the fire box below the fuel?—Answer, No.

W. P., of Oregon.—Patents have been obtained for sheep-shearing machines, but we are not aware that any of them have yet come into use. The field appears still to be open.

S. A. K., of Ohio.—We know of no cement that is generally and economically applicable to all cases where iron and stone are to be united.

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.

Send or Agents' Circular—Hinkley Knitting Machine Co., 176 Broadway.

We desire to contract with patentees and capitalists for the manufacture of any useful and saleable machinery. Will share profits as part compensation. Our facilities for casting and finishing are unsurpassed. Address Stevenson & Sears, Machinists, Upper Sandusky, Ohio.

All Steam Engine Manufacturers send circular and price list to W. A. Helms, Shady Hill, Tenn.

Cockle dealers and consumers, with price, Andrews & Godfrey, Greeneville, Tenn.

Manufacturers of small brass articles, such as tape lines, etc., etc., please send their address to G. H. Dean, 14 Catharine st., New York.

Wanted—A contract for the manufacture of specialties, either hardware or tools. C. N. Trump, Machinist, Portchester, N. Y.

Man'rs of grain-cleaning machinery and others can have sheet zinc perforated at 2c. per sq. ft. R. Aitchison & Co., 845 State st., Chicago.

The great scarcity of water in our large cities is mainly caused by the enormous quantity wasted, which can be prevented by using the Boston safety Faucet (self-closing), the saving of water in one building in this city being over 200,000 gallons in three months. For sale by Joseph Zane & Co., 81 Sudbury st., Boston, Mass.

Bartlett's Needle Factory Depot 569 Broadway, New York.

To Inventors.—Garrison's Model and Exchange Rooms, for exhibition of models and sale of rights, No. 5 Arcade Court, Chicago, Ill. We advertise new inventions extensively.

Wanted—To communicate with any party who has a practical knowledge of building and running a powder mill. Address "W," P. O. Box 5,692, New York city.

Send for a circular on the uses of Soluble Glass, or Silicates of Soda and Potash, fire and water-proof. Manufactured by L. & J. W. Feuchtwanger, Chemists and Drug Importers, 55 Cedar st., New York.

If you want the real oak-tanned leather-belt, C. W. Army manufactures it. See advertisement.

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

Excelsior Turbine Water Wheel.—The patentee of this superior wheel desires to enter into arrangements with millwrights and manufacturers with a view to having them manufacture and sell the cheapest, most durable, and powerful wheel used in this country. Full particulars given by circular. Address Isaac S. Roland, Reading, Pa.

Minn. State Fair.—To Advertisers. Send for Circular to Post, Rochester, Minnesota.

S. S. Pollard's celebrated Mill Picks, 137 Raymond st., Brooklyn.

Chas. P. Williams, No. 327 Walnut st., Philadelphia, Analytical and Consulting Chemist, and Metallurgist.

Materials for all Mechanics and Manufacturers, mineral substances, drugs, chemicals, acids, ores, etc., for sale by L. & J. W. Feuchtwanger, Chemists, Drug, and Mineral Importers, 55 Cedar st., New York. Postoffice Box 3616. Analyses made at short notice.

Ulster Bar Iron, all sizes, rounds, squares, flats, ovals, and half-ovals, for machinery and manufacturing purposes, in lots to suit purchasers. Ecleston Brothers & Co., 166 South st., New York.

Mill-stone dressing diamond machine, simple, effective, durable. Also, Glazier's diamonds. John Dickinson, 64 Nassau st., New York.

Leschot's Patent Diamond-pointed Steam Drills save, on the average, fifty per cent of the cost of rock drilling. Manufactured only by Severance & Holt, 16 Wall st., New York.

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

Machinists, boiler makers, tanners, and workers of sheet metals read advertisement of the Parker Power Presses.

Diamond carbon, formed into wedge or other shapes for pointing and edging tools or cutters for drilling and working stone, etc. Send stamp for circular. John Dickinson, 64 Nassau st., New York.

The "Compound" Wrought-Iron Grate Bar is the best and cheapest. Send for circular. Handel, Moore & Co., 12 Pine street. Postoffice Box 5,669.

For sale by State or County the Patent Right for the best Cultivator in use. For terms address Isaiah Henton, Shelbyville, Ill.

Hackle, Gill Pins, etc., at Bartlett's, 569 Broadway, New York.

Recent American and Foreign Patents.

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

CHURN.—Miles Fisk, Adrian, Mich.—This invention relates to an improvement in churns, and has for its object to provide a dasher which shall, by one simple movement, throw the cream in different directions, the current produced by one set of radial wings being brought in conflict with the one next above, and so on successively.

CLOTHES RACK.—Andrew Harbison, New Castle, Pa.—The object of this invention is to provide for public use a neat, simple, cheap, and convenient clothes rack, so constructed and operating that it can be opened or expanded into different shapes to adapt it to different positions in the room, such as standing in a corner, near the stove, in an open room, etc.

ANIMAL TRAP.—C. Polley, Shelbyville, Tenn.—The object of this invention is to provide for public use a simple, cheap, convenient, and effective trap which, being set near the holes of burrowing animals, will destroy them with certainty.

PARLOR STOVE.—John H. Goodfellow, Troy, N. Y.—This invention relates to that class of coal stoves in which the gas is consumed by the introduction of external air.

PLOW.—W. F. Pagett, Springfield, Ohio.—In this invention the plow is constructed in a peculiar manner, and so attached to the standard and beam that it can readily and easily be detached and removed, and a simple cultivator tooth, scraper, shovel, or other form of plow, be attached and used in its place.

COTTON AND HAY PRESS.—J. J. Hines, Evergreen, Ala.—This invention is an improvement upon those presses in which toggle joint levers are employed to raise and lower the platen; and it consists in a novel and simple application of such levers in combination with the means for actuating them.

SEEDING MACHINE.—D. C. and G. W. Van Brunt and H. Barber, Horicon, Wis.—In this invention the construction of the frame is greatly simplified and better adapted for its purpose, and a novel method of holding the teeth is employed, whereby they retain their proper position when working in tillable soil, but yield to immovable obstacles.

WAGON BRAKE.—John Ludeke, Griffin's Corners, N. Y.—This invention relates to a new wagon brake, which is so arranged that the driver can, when he applies the brake, let go the lever without thereby releasing the brake.

MORDANT FOR DYEING AND PRINTING.—F. S. Dumont, New York city.—This invention relates to a new mordant for all kinds of dyeing and printing processes, which is made from the serum of the blood.

MODE OF FASTENING ARTIFICIAL TEETH.—E. C. Stone, Galesburg, Ill.—This invention relates to a new and useful improvement in the method of fastening artificial teeth to the plate when metal and rubber or vulcanite are used in combination; and consists in the use of staples passing through the plate and fastened without soldering.

EDGING TOOL.—O. W. Morley, Tarrytown, N. Y.—This invention relates to new and useful improvements in tools for "edging" or "scaring" leather in the process of making harness, and for similar purposes, whereby accuracy in the width and depth of cut, as well as a great saving of time, is secured.

TABLE.—A. Belchambers, Ripley, Ohio.—This invention relates to a new and useful improvement in tables with folding leaves, and consists in the mechanical arrangement for supporting the leaf.

EXTENSION TABLE.—Charles P. Lentz, Poughkeepsie, N. Y.—This invention relates to new and useful improvements in extension tables, whereby that description of table is greatly simplified.

CULTIVATOR.—Job McNamee Baker, Fayetteville, Texas.—This invention relates to new and useful improvements in machines for planting and cultivating the soil, and consists in such a construction and arrangement of parts that the machine is adapted to all the purposes for which planting, cultivating, and ridging machines are usually employed.

SOFA BEDSTEAD.—Adam Schwaab, New York city.—This invention consists of an arrangement, whereby the upholstered part of the back may be swung forward out of the frame, on hinged arms, and arranged alongside and in the same horizontal plane with the seat, to form a bed.

VEGETABLE CUTTER.—R. Hemenway, New Cassel, Wis.—This invention consists in the application, on a suitable bench, and between the table thereof, and a hopper above the table having transverse fixed knives across a passage through it, of a slide provided with a lateral two-edged knife cutting both ways, and a series of knives below the said double-edged cutting which receive the slices therefrom, cutting them into smaller pieces which are again cut by the fixed knives in the table below; the said slide is arranged to be worked either by one or two persons.

PLOW.—A. C. Judson, Grand Rapids, Ohio.—This invention relates to improvements in plows, and has for its object to provide a detachable cutter at the junction of the mold board and landside to facilitate removal for sharpening, also to provide an improved construction of beam-wheel attachment and drawing attachments.

WINDOW AND OTHER BLINDS.—Stephen Hebron, Buffalo, N. Y.—This invention relates to improvements in blinds for windows, doors, etc., whether for outside or inside use, and consists in an improved construction of the same for the adaptation thereto of mosquito bars.

LIFTING FLATS IN SELF-STRIPPING CARDING MACHINE.—Benjamin Dobson and W. Slater, Bolton, England.—This invention consists in lifting the top flats by a bowl on the lifting wheel, acting on a curved surface on the slides, which are drawn down by springs as soon as the bowls have passed. By this means the top flats are rapidly raised and lowered again into their proper working place, and thereby better work is produced and time saved. Another part of this invention consists in the application of a ratchet wheel to the cross-driving shaft, and a catch to the radial arm, to prevent the said shaft from moving in the wrong direction.

COKE WHEELS AND CROSSINGS FOR RAILWAYS.—Hugh Baines, Lancaster, England.—This invention consists in forming car wheels with more than one tread so as to adapt them to tracks of different gages and in providing crossings adapted thereto.

STEAM GENERATOR.—James Stuart, San Francisco, Cal.—The object of this invention is to provide an improved arrangement for marine steam generating boilers, calculated to make a better application of the heat and to afford better facilities for working within the boiler, for repairing, etc.

WASHBOARD.—Wm. Bellus and C. Bowers, Fredonia, Ohio.—This invention consists in forming the metallic rubbing surfaces by placing a sheet of zinc, or other suitable metal, on a wood base and driving large round headed tacks through the same into the board, so that the round or oval heads, together with the sheet metal plate, form the rubbing surfaces.

TWEED.—J. W. Barron, Hillsborough, Ill.—This invention relates to improvements in tweeds, and has for its object to provide an arrangement to simplify the labor of removing the slag and cinder from the fire, and for stirring the fire to enliven it, as is required, and which is now commonly done with a hand poker at considerable labor. The invention also comprises a weighted valve arrangement for opening, in case of explosion of gas in the air chamber to prevent damage to the same.

MULEY SAW MILL.—R. F. Wolcott, Claremont, N. H.—This invention relates to improvements in muley saw mills, and has for its object to provide an improved arrangement of the guides for the crossheads, to give the saw a forward oscillatory movement at the same time that the downward cutting action takes place; also, certain improvements in the adjustable guides for the sides of the saw; also, certain improvements in the friction feed apparatus calculated to facilitate the regulation of the friction.

CAR BODY ELEVATOR.—Reuben Wells, Jeffersonville, Ind.—This invention relates to an improved apparatus for elevating car bodies off the trucks for transferring them from one truck to another, as a means of transferring freight to roads of different gages, instead of unloading it from the cars of one road to those of another, the bodies being adapted to trucks of various gages; and tracks of various gages are placed over the apparatus, so that a car of one gage may be run upon the apparatus and have the body lifted off and suspended, until the truck may be run away and truck of another gage run under the body and the latter lowered upon it. The apparatus consists of elevating tables, preferably four in number, suitably adjusted to take under the four corners of the trucks, and resting upon four levers having fixed rests at one end, with their moving ends converging upon the vertical moving table of a hydraulic elevator, located centrally between the first-mentioned elevating tables, by which the latter are elevated or depressed to raise or lower the car bodies.

HAND TRUCK.—B. W. Tutthill, Oregon City, Oregon.—The object of this invention is to construct the frame-work of hand trucks of metal tubes, preferably of gas tubing, to be joined together in a cheap, simple, and inexpensive way, by which they can be readily made tight and taken apart for repairs.

MILL STONE DRIVERS.—D. B. Ritter, Glasgow, Ky.—The object of this invention is to provide improvements in the drivers used on the mill stone, spindles for imparting rotary motion, whereby they are adapted for applying the power more evenly on both sides of the spindle than can be done by the driver as now arranged.

CHEESE PRESSING APPARATUS.—James L. Sprague, Hermon, N. Y.—This invention relates to improvements in cheese hoops, and the followers for the same, and in the arrangement for connecting the screws of cheese presses with the followers.

PROPELLING WHEELS.—James S. Cunningham, New York city.—This invention consists in an improved arrangement of the buckets for governing their position while dipping and escaping from the water, and also for holding them against the resistance of the water.

WATER ELEVATOR.—D. A. Dunham, Pilatka, Fla.—This invention relates to improvements in devices used for raising or injecting water by a jet of steam, the object of which is to provide a more simple device than any now in use, and adapted for drawing water from the bottom of the vessels containing it, and it consists in a peculiar arrangement of steam and water conducting pipes with throat and water-receiving passage.

MILK HOUSE.—Fritz Schaller, Mattoon, Ill.—This invention consists in an arrangement, on a brick or stone base, of A-shaped sides and vertical ends, the sides being hinged at the base to swing open in a vertical plane, and the triangular ends being divided at the center and hinged to swing horizontally; the walls are made double, with spaces between, and provided with ventilating passages.

CYLINDRICAL HULLING MILL.—Charles S. Bailey, New York city.—This invention has for its object to furnish a simple, convenient, and effective hulling mill, designed especially for hulling cotton seed, but equally applicable to hulling other seeds, and which, while doing its work thoroughly, shall be so constructed that the knives may be easily, quickly, and conveniently taken out and adjusted.

DITCHING MACHINE.—James S. Anderson and James B. Cooley, Clark's Hill, Ind.—This invention has for its object to furnish a simple, convenient, and effective ditching machine, which shall be so constructed and arranged that it may be easily adjusted to cut a straight ditch for laying tiles, or a tapering open ditch, as may be desired.

PLOW.—Moses Tessler, Cairo, Ill.—This invention has for its object to improve the construction of plows, so as to make them more convenient, effective and durable, enabling them to be readily adjusted to run at a greater or less depth in the ground or to cut a wider or narrower furrow.

PLOW.—Henry Nolte, Lincoln, Ill.—This invention has for its object to furnish an improved plow, simple in construction, and effective in operation, for plowing and cultivating plants planted in rows, when of such a character or size as to require to have the soil turned about the said plants