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 t wenty-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; beside, as sometimes happens, we may prefer to address correspondents by mail.

aress correspondents by mail.

SPECIAL NOTE.—This column is designed for the general interest and instruction of our readers, not for graduitous replies to questions of a purely business or personal nature. We will publish such inquiries, howeverwhen paid for as advertisemets at \$1.00 a line, under the head of "Business and Personal."

** All reference 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. Afew 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 Octo ber of the same year. To Morse is undoubtedly due, however, the credit of inventing a telegraphic alphabet which has ever since been univer-
- 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 tem perature as will turn the oil black without burning. The stove should not be too hat 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 disternabove or below ground. If above ground, a wooden distern made of good pine answers a good purpose; if below, brick laid in good hydraulic cement, and smoothly plastered with the same or 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 $% \left(1\right) =\left(1\right) \left(1\right)$ by passing the water through two casks, one filled with fine gravel and e 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 dis-
- 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
- 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
- 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?
- W. P., of Oregon.-Patents have been obtained for sheepshearing 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 Lersonal.

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 processes, which is made from the serum of the blood. manufacture of any useful and saleable machinery. Will share profits as part compensation. Our facilities for easting 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 address, 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.

 $\mathtt{Man'f'rs}$ of grain-cleaning machinery and others can have sheet zinc perforated at 2c. per sq. ft. R. Aitchison & Co., 845 State st., Chicago. that description of table is greatly simplified.

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 eafety 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.

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 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. Feuch twanger, Chemists and Drug Importers, 55 Cedar st., New York.

If you want the real oak-tanned leather-belting, C. W. Arny 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, Analyti-

cal and Consulting Chemist, and Metallurgist. Materials for all Mechanics and Manufacturers, mineral sub-

stances, 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. Egleston 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, tinners, and workers of sheet metals read advertisement of the Parker Power Presses.

Diamond carbon, formed into wedge or other shapes for pointing antiedging tools or cutters for drilling and working stone, etc. Send stampforcircular. 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 Culivator in use. For terms address Isaiah Henton, Shelbyville, Ill.

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

Recent American and Foreign Latents.

Under this heading we shall publish weekly notes o, some of the more prom inent 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 ${\tt current\,produced\,by\,one\,set\,of\,radial\,wings\,being\,brought\,in\,conflict\,with}$ 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 inven tion 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

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 animprovement 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

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

MORDANT FOR DYEING AND PRINTING.-F. S. Dumont, New York city. This invention relates to a new mordant for all kinds of dveing and printing

MODE OF FASTENING ARTIFICIAL TRETH.-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 "scarfing" leatherin 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

CHLIVATOR.-Job McNamue Baker, Fayettavilla, Texas.-This invent. relates to new and useful improvements in machines for planting and cu tivating 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 To Inventors.—Garrison's Model and Exchange Rooms, for 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 thereknowledge of building and running a powder mill. Address "W," P. O. of, 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 cutter 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.

> CONE 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 ot 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.

> TWEER -J. W. Barron, Hillsborough, Ill.-This invention relates to im provements in tweers, 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 airchamber 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 cross heads, to give the saw a forwardoscillatorymovement at the same timethat the downward cutting action takes place; also, certain improvements in the adjustable guides for the sides of the saw; also, certain improvements in the 'giging back and feeding devices, and, 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 carof 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 gagerun under the body and the latter lowered uponit. The ap paratus 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 eleva ted or depressed to raise or lower the car bodies.

HAND TRUCK .- B. W. Tuthill, Oregon City, Oregon .- The object of this in rention 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

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 apply ng 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 press es 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 thatit may be easily adjusted to cut a straight ditch for laying tiles, or a tapering open ditch, as may be desired.

PLOW.-Moses Tessier, Cairo, Ill.-This invention has for its object to imrove the construction of plows, so as to make them more convenient, cffective 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, forplowing and cultivating plantsplanted in rows, when of such a character or size as to require to have the soil turned about the said plants

SAFETY ATTACHMENT FOR STREET RAILROAD CARS .- John Fogarty, Brooklyn, N. Y.-This invention has for its object to furnish an improved attachment for street railroad cars, which shall be so constructed and arranged as to prevent any person or thing that may be upon the track from being run over by the wheels, or from throwing the $\boldsymbol{c} ars$ from the track.

FURNITURE CASTER.- C. G. Wilson, Brooklyn, N. Y.-This invention has for its object to furnish an improved furniture caster, which shall be so constructed and arranged that it will allow the table, or other article to which it may be attached, to be moved freely in any direction, and which shall, at the same time, be simple in construction, strong, durable, and not liable to get out of order.

CORN HARVESTER .- G. W. S. Bell, Talulla, Ill. - This invention has for its object to furnish an improved corn harvester, which shall be so constructed and arranged as to cut two rows at a time and deposit it in bundles upon the ground, and which shall be simple in construction, effective in operation, and easily guided when at work.

Plow .- A. Boles, Kinder, Ind .- This invention has for its object to fur $nish\ \ an\ improved\ plow,\ simple\ in\ construction, strong,\ and\ \ durable,\ which$ may be readily adjusted for useas a single or double plow, and which may be attached to the framework of a buggy for use as a gang plow or culti vator.

CORN PLANTER .-- Henry Baughman, Columbus, Ohio. - The object of this nvention is to provide for public use a simple, and convenient corn planter which can be worked by hand or other power.

WATER WHEEL.-P. H. Lamey and A. J. Beachell, Port Treverton, Pa.-This invention consists in making the outer part of each of the buckets of a waterwheel a swinging gate hinged to the inner rigid part.

FLOATING VELOCIPEDE.-L. D. Bunn. Morristown, N. J.-This invention relates to a new floating velocipede, which consists of two floatsor vessels, that carry a platform on which the axle of the propelling paddle wheel, that fits between the two floats has its bearings, and that carry each a rudder at the stern end. The two rudders are connected with each other, and by means of ropes or chains with the steering lever, so that they will be moved in the same direction, thereby insuring greater certainty of action.

DEVICE FOR PUMPING BY THE MOTION OF THE OARS.—Robert R. Spedden and E. Clifford Spedden, Astoria, Oregon.—This invention has for its object to pump a boat by the motion communicated to the oars in the operation

CLOTHES DRYER.-T. C. Collins, Little Hocking, Ohio.-This invention relatesto a new and useful improvement in apparatus for drying clothes and consists in the construction and arrangement and combination of parts whereby the facilities usually afforded by clothes dryers are greatly

IRONING BOARD .- D. E. Crosby, South Vineland, N. J.-This invention reates to a new and useful improvement inironing boards for laundry use, and consists in so constructing the board that it may be adjusted to any or dinary table, and it also consists in attaching an additional ironing board o the main board.

OVEN .- Mrs. Clarissa Preston, Wheeling, W. Va .- This invention consists, first, in supporting the grates upon the doors of the ovens, whereby they may be withdrawn from the ovens when the doors are opened, and restored thereto when the doors are closed; secondly, in an arrangement of sliding grate, whereby it is prevented from falling from its supports when drawn out for the reception of the articles to be baked; and, thirdly, in cer tain arrangements of devices for handling the hot plates and pans.

Official List of Latents.

Issued by the United States Patent Office.

FOR THE WEEK ENDING SEPT. 7, 1869.

Reported Officially for the Scientific American

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SCHEDULE OF PATENT OFFICE FEES:	ı
On each caveat	ı
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For copy of Claim of any Patent issued within 30 years.

A sketch from the model or drawing, relating to such portion of a machine as the Claim covers from.

1 upward, but usually at the price above-named.

The full Specification of any patent issued since Nov. 20, 1866, at which time the Patens Office commenced printing them.

11-25

Afficial Copies of Drawings of any patent issued since 1836, we can supply at a reasonable cost, the price depending upon the amount of labor involved and the sumber of riens. the number of sieus.

Full information, as to price of drawings, in each case, may be had by address MUNN & CO.

Patent Solicitors, No. 37 Park Row, New York.

94,463.—Propeller for Vessels.—Adolphe Aubert, No 94,461.—Animal Trap.—F. P. Baker (assignor to himself and

J. R. Lowe), Boston, Mass. Antedated Sept. 4, 1869.
94,465.—COMPOSITION FOR WHITEWASHING.—James Baker,

94,405.—COMPOSITION FOR WHITEWASHING.—James Baker, Ijamsville, Md.
94,466.—Stomach Bitters.—Moses Becker, Philadelphia, Pa.
94,467.—Sewing Machine.—N. P. Bradish, Jerseyville, Ill.
94,468.—Spoke-Tenoning Machine.—F. H. Brinkkotter,

94,469.—HAND CAR FOR RAILROADS.—H. L. Brown, Adrian

Mich. 94,470.—Mechanism for Holding Bolsters in Spinning MACHINES.—E. S. Burlingame, Uxbridge, Mass.
94,471.—MANUFACTURE OF PIG IRON.—John Burt, Detroit Mich.

94,472.—Weather Strip.—H. W. Carew, Norwich, Conn. 94,473.—School-Desk and Seat.—Aaron Chandler, Daven

port, Iowa. 94,474.—Stovepipe Thimble.—E. C. Chapman, Lacon, Ill. —Apparatus for Emptying Sugar Kettles.

Collins and W. B. McClure, Alexandria, Va. 94,476.—Gas Burner.—J. W. Cremin, New York city.

94,477.—Stove-Polishing Brush.—L. C. Crowell, West Dennis, Mass. Antedated Aug. 25, 1869. 94,478.—SEEDING MACHINE.—N. C. Dawson, Steele's Post-

office, Ind.

94,479.—PROCESS OF PREPARING GRAIN FOR MASHING.—
F. W. De Spessbourg, Province of Normandy, France.
94,480.—HAY SPREADERS.—Norman Eaton, Woburn, Mass.
Antedated April 14,1869.

94,481.—COTTON CULTIVATOR.—Emile Enete, Catahoula,

parish, La. 94,482.—REVOLVING CULTIVATOR.—W.A. Estes, South China,

94,483.—Dumping Tub.—J. S. Evans, Berkeley, Mass.

94,484.—WRENCHES FOR ELEVATING PUMP TUBES.—J. A. Fleming, Shamberg, Pa. 94,485.—DUMPING WAGON.—D. S. Gardner, Bristol, Md. 94,486.—Extension-Table Slide.—S. J. Genung, Waterloo,

N. Y. 94,487.—Folding Baggage Check.—E. H. Graves, Chicago,

94,488.—Cotton Gin.—B. D. Gullett, Amite City, La. 94,489.—Corn Plow.—Lewis Guthrie, Waterloo, Ind. 94,490.—Double Corn Plow.—Lewis Guthrie, Waterloo,

94,491.— ANG PLOW.—F. A. Hill, Marysville, Cal.

94,492.—COATING IRON OR STEEL WITH COPPER OR BRASS, OR OTHER ALLOYS OF COPPER.—G. J. Hinde, Wolverhampton, England. Patented Feb. 26,1869. 94,492.—Coating Iron or Steel with Copper or Brass, or other Alloys of Copper.—G. J. Hinde, Wolverhampton, England. Patented Feb. 26, 1899.

94,493.—Roofing Material. — Benjamin Hinkley, Troy, N. Y.

94,494.—Car Ventilator.—Robert Hitchcock, Springfield, Mass.

94,495.—Plastic Cement.—George E. Hopkins, Harwich, Mass.

94,496.—Animal Trap.—John Hughson, Buffalo, N. Y.

94,498.—Steamer for Agricultural and other Purposes.

—A. T. Manly, Buffalo, N. Y.

94,498.—Waster Elevator.—D. A. Dunham, Pilatka, Fla.

94,581.—Compound to be Used as a Mordant in Dyeing And Printing.—F. S. Dumont, New York city.

94,582.—Water Elevator.—D. A. Dunham, Pilatka, Fla.

94,583.—Behtive.—Homer M. Dunham and Bishop Addington, Centreville, Ind.

94,584.—Still.—Charles K. Dutton, New Berne, N. C.

94,585.—Lock Nut.—W. P. Ewing and Isaac S. De Ford, Elk

101, Md.

94,587.—Safety Attachment for Street Railway Cars.

94,587.—Safety Attachment for Street Railway Cars.

94,587.—Safety Attachment for Street Railway Cars.

94,588.—Floating Vielocipede.—Wm. Frankel, Springfield

102,688.—Floating Velocipede.—Wm. Frankel, Springfield

94,499.—Standard to Royalect Total And Other Confession - A. T. Maniy, Buffalo, N. Y. 94,499.—Washing Machine.—M. S. Marshall, Somerville, assignor to J. T. and J. S. Folsom, Boston, Mass. 94,500.—Saw Frame.—Daniel Moore and Edwin Moore, Brooklyn, E. D., N. Y. 94,501.—Wash Tub.—Bernard Morahan, Brooklyn, N. Y.

94,502.—ANIMAL TEDDER.—Daniel Newton, Southington,

94,503.—RASP.—W. S. Nicholson (assignor to the Nicholson File Co.), Providence, R. I. 94,504.—HAND WEEDER.—A. F. Noyes and N. D. Beecroft,

94,504.—HAND WEEDER.—A. F. Noyes and N. D. Beecroft, Bangor, Me.
34,505.—SLEIGH SHOE.—H. C. Overman (assignor to himself J.Q. A. Crossby), Chicage III,
94,506.—CHURN.—R. D. Ozburn, Lena, III.
94,507.—PUMP.—Joel Patrick, Pitt county, N. C.
94,508.—APPARATUS FOR ASSAYING AND TESTING ORES AND METALS.—J. S. Phillips, San Francisco, Cal.
94,509.—PROCESS OF CONCENTRATING AND GRANULATING SACCHARINE LIQUIDS.—JohnPickles, Wigan, England.
94,510.—CONSTRUCTION OF SHIPS.—David Pierce, Woodstock, Vt.

94,511.—PAPER-BAG MACHINE.—J. P. Pultz, Plantsville, Conn.

94,511.—PAPER-BAG MACHINE.—J. P. Pultz, Plantsville, Conn. Antedated Sept. 1, 1869.
94,512.—DEVICE FOR AIDING COMBUSTION IN STEAM GENERATORS.—G. W. Rawson, Cambridgeport, assignor to himself and M. Hittinger, Somerville, Mass.
94,513.—BRICK KILN.—James V. B. Remsen, New York city. Antedated Aug. 27, 1869.
94,514.—PRUNING SHEARS.—Wm. Richard, Clyde, Ohio.
94,515.—WASHING MACHINE.—M. A. Richardson, Sherman, N. Y.
94,516.—RAILWAY RAIL SPLICE.—B. Robinson, Boston, Mass. Antedated Aug. 21, 1869.

Antedated Aug. 21,1863.
94,517.—PLATFORM SCALE.—Lyman M. Severance, Dixon,

94,518.—TREADLES FOR MACHINERY.—Jasper H. Singer, 94,518.—TREADLES FOR MACHINERY.—Jasper H. Singer, New York city.
94,519.—STAY AND GUIDE BAR FOR ELLIPCIC SPRINGS FOR VEHICLES.—J. E. Slegel and Eli Slegel, Reading, assignors to themselves and J. K. Herts, Lancaster county, Pa.
94,520.—BRAD SETTER.—C. E. Smith, Columbus, Ohio.

94,521.—CARRIAGE WHEEL.—T. R. Smith, San Francisco,

94,522.—TRUSS.—Henry Spillmann, New Orleans, La.

94,523.—GOVERNING DEVICE FOR STEAM ENGINES.—Peter A. Stewart, Lucesco, Pa. 94,524.—COMBINED KNOB LATCH AND LOCK.—W. H. Sullen-

berger, Harrisburgh, Pa. Antedated Aug. 25, 1869. 94,525.—RAILWAY CAR BRAKE.—J. W. Swales, San Francisco

94,526.—MAIL BAG.—Z. T. Sweet, Davisville, Cal. 94,527.—CLOTHES DRYER.—A. L. Taylor, Springfield, Vt. 94,528.—RAILWAY RAIL CHAIR.—A. B. Thompson, Owego,

94,529.—BRIDGE.—W. P. Trowbridge, Newtown, N. Y. 94,530.—RAILWAY CAR BRAKE.—Inglis Walker (assignor to himself and W. R. Barnard), Lynn, Mass. 94,531.—OVERSHOE.—A. G. Waterhouse, San Francisco, Cal.

94,531.—OVERSHOE.—A. G. WATETHOUSE, SAN FTANCISCO, CAI. 94,532.—METALLIC ALLOY FOR FILTERING OILS, AND FOR THE MANUFACTURE OF PAINTS, CEMENTS, ETC.—James Webster, Birmingham, Great Britain. 94,533.—LAMP BURNER.—J. H. Weeden, Waterbury, Conn., assignor to Scoville Manufacturing Co.

assignor to Scoville Manufacturing Co.
94,534.—BRIDGE GATE.—Alexander Weide, Chicago, Ill.
94,535.—LANTERN.—Wm. Westlake, Chicago, Ill.
94,536.—LANTERN.—Wm. Westlake, Chicago, Ill.
94,537.—ATTACHMENT FOR COOKING STOVES.—D. N. Allard,

94,537.—ATTACHMENT FOR COOKING STOVES.—D. N. Allard, Chester Hill, Ohio.
94,538.—GAS HEATER.—Boyd Allen (assignor to himself and S.C. Pratt), Boston, Mass.
94,539.—DITCHING MACHINE.—J. S. Anderson and James B. Cooley, Clark's Hill, Ind.
94,540.—HULLING MILL.—C. S. Bailey, New York city.
94,541.—RAILWAY C:OSSING FOR CONE WHEELS.—Hugh Baines, Manchester, England.
94,542.—CULTIVATOR.—Job McNamee Baker, Fayetteville, Texas.

Texas.

94,543.—Tweer.—J. W. Barron, Hillsborough, Ill.

94,544.—Machine for Making Railroad Spikes.—John W. Bartlett and David P. Bosworth, Harmar, Ohio.

94,545.—Apparatus for Lighting Gas by Electricity.—
Wm. W. Batchelder, Boston, Mass.

Wm. Watchelder, Boston, Mass. 94,546.—Corn Planter. — Henry Baughman, Columbus,

94,547.—RAILWAY CAR COUPLING.—R. W. Baylor, Norfolk, 94,548.—Table Leaf Support.—A. Belchambers, Ripley,

Ohio.
94,549.—Corn Harvester.—G. W. S. Bell (assignor to himself and H. C. Bell), Talulla, Ill.
94,550.—Ice Pitcher.—Wm. Bellamy, Newark, N. J.
94,551.—Washboard.—Wm. Bellus and C. Bowers, Fredo-

94,552.—BLANK BOOT HEELS.—H. H. Bigelow, Worcester, 94,553.—CHAIR SEAT.—Osmore A. Bingham, Gardner, Mass.

94,554.—PLOW.—Abram Boles, Kinder, Ind.
94,555.—MACHINE FOR BREAKING THE LEAVES AND STEMS
OF TOBACCO.—Nicholas H. Borgfeldt. New York city.
94,556.—SELF-CLOSING TELEGRAPH KEYS.—W. Clay Bowers,

Wheatland, Iowa. 94,557.—CLAMP.—M. V. Brigham, Mannsville, N. Y. 94,558.—Mode of Closing Paper Bags.—Morgan W. Brown,

New York city.

94,559.—FLOATING VELOCIPEDE.—Lewis I'. Bunn, Morristown, N.J.

94,560.—WARDROBE BEDSTEAD.—Sanford S. Burr, Dedham, and Levi Pierce, Charlestown, Mass.

94,561.—GRATE BAR FOR BOILERS.—David Byard, Sharon, Pa.

94,562.—CLOTHES DRYER.—Edward Carter, Rensselaer, N. Y. 94,563.—Stop Cock.—John C. Chapman, Cambridgeport, Mass. 94,564.—OIL CAN.—Charles Chinnock, Brooklyn, N. Y., assignorto I. Little Hyde, New York city, Angedated August 27, 1869.

94,505.—ULL CAR.—CHARLES CHIMICK, BROKETH, IV. 1., assistanto I. Little Hyde, New York city, Antedated August 27, 1869.
94,505.—VELOCIPEDE.—Wm. B. Clark, Whitefield, Me.
94,506.—BALANCED YALVES.—Daniel Collins, Girard Ala.
94,507.—CLOTHES DRYER.—T. C. Collins, Little Hocking,

Onio. 94,568.—MACHINE FOR PRESSING TOBACCO.—Thomas Cope and George Cope, Liverpool, England. 94,569.—FLY TRAP.—J. J. Craig, Knoxville, Tenn.

94,570.—REFLECTOR FOR STREET LAMPS.—Joseph W. Cremen, New York city.
94,571.—LOOM.—George Crompton, Worcester, Mass.
94,572.—IRONING BOARD.—D. E. Crosby, South Vineland, N. J.

94,573.—PROPELLING APPARATUS.—James S. Cunningham (assignor to himself and George Le Cronier), New York city.
94,574.—MEAL AND FLOUR DRYER.—Henry Cutler (assignor

(assignor to himself and George Le Cronier), New York city.
94,574.—MEAL AND FLOUR DRYER.—Henry Cutler (assignor to S. N. Cutler & Co.). Ashland, Mass.
94,575.—KNITTED STOCKING.—Anthony G. Davis and Charles W. Blakeslee, Watertown, and Ebenezer B. Beecher, New Haven, Conn. 94,576.—JACK SPOOL.—Daniel R. Day, Rindge, N. H., and John G. Folsom, Winchendon, Mass.
94,577.—BREECH-LOADING FIRE-ARM.—Faustino Valdes Diaz, New York city.
94,578.—WEED GATHERER FOR PLOWS.—Loyal M. Doddrige, New Mount Pleasant, Ind.

New York city.

1.578.—Weed Gatherer for Plows.—Loyal M. Dodarle, New Mount Pleasant, Ind.

1.579.—Railway Car Coupling.—Thomas B. Dora, Mattoon, Ill.

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1.579.—Railway Car Coupling.—Thomas B. Dora, Mattoon, Ill.

94,580.—Progressive Kiln. — Helmuth Dueberg, Balti-

-SULKY HARROW. - W. H. H. Frye, North Frye-94,589.-94,589.—SULKY HARROW. — W. H. H. Frye, North Fryeburg, Me. 94,590.—CUTTER HEAD.—John Gage, Henniker, N. H. 94,591.—MACHINE FOR FORMING SHELLS FOR DRY MEASURES.

—John Gage, Henniker, N. H.

94,592.—Sawing Machine.—Peter Geiser, Waynesborough,

94,593.—PARLOR STOVE.—John H. Goodfellow, Troy, N. Y. 94,594.—COMPRESSED AIR ENGINE.—Edwin H. Grant, Washington. B. C. 94,595.—CLOTHES DRYER.—Andrew Harbison (assignor to himself and Esli N. Houk), Neweastle, Pa. 94,596.—MANUFACTURE OF ILLUMINATING GAS.—George W. Harris, Elizabeth, N. J., and Henry Holdrege. New York city. 94,597.—BREAST LOOP FOR HAMES.—William B. Hayden, Columbus, Ohio.

Harris, Elizabeth, N. J., and Henry Holdesch, William B. Hayden, 94,597.—Breast Loop for Hames.— William B. Hayden, Columbus, Ohio. 94,598.—Clothes Rack.—V. M. Heath, Morristown, Vt. 94,599.—Window Blind.—Stephen Hebron, Buffalo, N. Y. 94,600.—Vegetable Cutter.—R. Hemenway, New Cassel,

94,601.—RAILWAY SPIKE.—C. L. Heywood, Boston, Mass. 94,602.—COTTON AND HAY PRESS.—J. J. Hines, Evergreen,

Ala.
94,603.—SPRING.—George Hopson and Joseph H. Mason,
Bridgeport, Conn.
94,604.—BURGLAR ALARM.—James J. Jackson, Curwinsville, Pa.
94,605.—COMPOSITION FLUX FOR MANUFACTURE OF IRON

AND STEEL.—Jacob Jameson, Philadelphia, Pa. 94,606.—HINGE.—Wm. Johnson, Cincinnati, Ohio. 94.607.—RAILWAY RAIL JOINT.—William Johnston, Have-

ock, Pa. 94,608.—HARVESTER GUARD.—J. Herva Jones and Miles S. Prentice, Rockford, Ill. 94,609.—PLOW.—A. C. Judson (assignor to himself and E. O. Judson), Grand Rapids, Ohio. 94,610.—Ferce Pump Having Concentric Pistons.—Peter

94,610.—FORCE FUMP HAVING CONCENTRIC LISTONS.—FORCE N. Kafer, Trenton, N. J.
94,611.—APPARATUS FOR DISTILLING AND RECTIFYING SPIRITS.—Gottlob Kaiser, New York etty.
94,612.—JOINT STANDARD SLED.—Isaiah Kingman, Waltham, Me.
94,513.—PERMUTATION LOCK.—W. F. Kistler (assignor to

himself and Joseph L. Hall). Cincinnati, •hio.

94,614.—TURBINE WATER WHEEL.—P. H. Lamey and A. J.
Beachell, Port Treverton, Pa; P.H. Lamey assigns to George Kuhn and
P.K. Knights.

94,615.—EXTENSION CHAIR.— Frederick William Lange, Chicago. II.
94,616.—MEDICAL COMPOUND.—David Langell, Apple Creek,

94,617.—Extension Table.—Charles Ph. Lenz, Poughkeep-94,017.—EXTENSION TABLE.—Charles Ph. Lenz, Poughkeepsie, N. Y.
94,618.—Apparatus for Properling Machinery.—E. J.
Leyburn. Lexington, Va.
94,619.—Churn.—A. Lloyd, Millersburg, Ill.
94,620.—Syringe.—H. D. Lockwood, Charlestown, Mass.

94,621.—FIRE KINDLER.—Augustus Lodeman and Meyer Desenberg, Kalamazoo, Mich.
94.622.—WAGON BRAKE.—John Ludeke (assignor to himself and Jacob Biehler), Griffin's Corners, N. Y.
94,623.—WALKING CULTIVATOR.—Edward P. Lynch and

and Jacob Biehler), Griffin's C.Iners, N. Y.

94,623.—Walking Cultivator. — Edward P. Lynch and Henry R. Raff, Davenport, Iowa.

94,624.—Wind Wheel.—A. I. Maxwell, Morrison, Ill.

94,625.—Coal Stove.—H. D. McGeorge, Rochester, N. Y.

94,626.—Preserving Wood from Decay and Mildew.—
A. R. McNair, New York city.

94,627.—Stove Grate.—John Moran, Washington, D. C.

94,628.—Plaiting Attachment for Sewing Machines.—
Aaron Morehouse and A. R. Heath, Danbury, Conn.

94,629.—Edging Tool for Harness Makers.—O. W. Morley, Tarrytown, N. Y.

94,630.—Die for Forging French Clips for Carriages.—
F. B. Morse, Plantsville, Conn.

94,632.—Printers' Inking Roller from Rubber Sponge.—
Stephen Moulton, Bradford-on-Avon, England. Patented in England May 9, 1863.

94,632.—Picture Frame.—A. A. Murfey, Montville, assignor to himself and N. D. Morgan, Norwich, Conn.

94,633.—Fan.—O. R. Nitsch, New York city.

94,634.—Plow.—Henry Nolte, Lincoln, Ill.

94,635.—Grain Mill.—James Norman, New Orleans, La.

94,636.—Plow.—O. Osborn, Trumansburg, N. Y.

94,637.—Plow.—W. F. Pagett, Springfield, ©hio.

94,638.—Circular Saw Mill.—Francis Parker, Cato, N. Y.

94,639.—Door Lock.—N. Petre, New York city.

94,640.—Spindle and Flyer.—Jean Joseph Jules Pierrard Reims, France.

94,640.—SPINDLE AND FLYER.—Jean Joseph Jules Pierrard Reims, France. 94,641.—WIND WHEEL.—William M. Piper, Blue Earth

Oly, Minn. 91,642. — Animal Trap.—Clark Polley, Shelbyville, Tenn. 94,643.—Oven.—Clarissa Preston, Wheeling, West Va.

94,644.—Horse Hay Fork.—Emanuel Raber, Roanoke, Ind. 94,645.—Churn.—J. L. Ressler, Ramsburg, Pa. 94,646.—Churn.—Edward Reynolds, Omro, Wis. 94,647.—PROJECTILE.—J. D. Richards, Muscatine, Iowa. 94,648.—Manufacture of Boots and Shoes.—E. P. Richards, Lawrence Musc.

94,649.—CLUTCH.—W. I. Risedorph, Albany, N. Y.
94,650.—MILLSTONE DRIVER.—D. B. Ritter, Glasgow, Ky.
94,651.—ASH SIFTER.—D. T. Robinson, Boston, Mass.
94,652.—RAHLWAY SIGNAL.—A. F. B. Rocke and W. H. McLeod, Jersey City, N. J.

94,653.—MACHINE FOR NAILING THE SOLES TO THE UPPERS

of Boots and Shoes.—J. F. Sargent, Melrose, assignor to Elmer Townsend, Boston, Mass. Patented in England Nov. 5, 1863.

94,654.—MACHINE FOR NAILING AND PEGGING BOOTS AND SHOES.—J. F. Sargent, Melrose, assignor to Elmer Townsend, Boston Mass. Patented in England Nov. 5, 1863.

94,655.—MILK HOUSE.—Fritz Schaller, Mattoon, Ill.

94,656.—Sofa Bedstead.—Adam Schwaab, New York city. 94,657.—Garden Plow.—Robert Scott, La Porte, Ind.

94,658.—Cooking Stove.—J. H. Shear, Albany, N. Y. 94,659.—Grain Measurer.—J. W. Smith and Heinrich Griesa,

North Cohocton, N. Y.

94,660.—Device for Pumping by the Motion of the Oars.

—R. R. spedden and E. C. Spedden, Astoria, Oregon.

94,661.—Cheese Hoop.—J. L. Sprague, Hermon, N. Y.

94,662.—CORN HARVESTER.—Lucas Stadler, Bowensburg, Ill. 94,663.—Plow.—James Stephens, Agency City, Iowa.

94,663.—PLOW.—James Stephens, Agency City, Iowa.
94,664.—Mode of Fastening Artificial Teeth.—E. C. Stone, Galesburg, Ill.
94,665.—Direct-Acting Engine.—John Storer, New York.
94,666.—Steam Generator. — James Stuart, San Fancisco, Cal.
94,667.—PLOW.—Moses Tessier, Cairo, Ill.
94,668.—Sawing Machine.—Hiram Thompson (assignor to Richard Ball and E. P. Halsted), Worcester, Mass.
94,669.—Gold-Digging Apparatus.—Denison Tisdale, Des Moines, Iowa.