- H. W. P., of Vt.—Carbolic acid will not remedy the odor arising from concrete walks, in which coal tar is an ingredient.
- R. & B., of Conn.—The knitting machine to which you refer is we believe more generally used than any other.
- L. F. M., of Mass.—The "Patent Claims" are now issued weekly, in pamphlet form, by the Patent Office, at \$5 per annum.
- been dealt with according to law. They were humbugs, no doubt
- that marks the difference between hot and cold, warm and cool. It is a
- H. C., of Pa.—We cannot admit any further discussion of the subjectinto our columns. The subject is stale, fiat, and unprofitable.
- D. T. Jr., of Pa.-We recommend you to get the "Silver Sunbeam" as the best work for you on photography.
- S. F. M., of Ill.—Small pieces of brass can be melted in a sand crucible with a coal fire, but the crucible must be kept covered. You would be likely also to lose a large portion of the zinc. The best way to use up scrap brass is to melt it in with new brass, putting it in with the zinc after the copper is melted.
- C. E. H., of Iowa.—The researches referred to as more recent than those of Joule, Rumford, Tyndall, etc., in the article entitled. "Waste and Economy of Fuel," are those of Auguste Langel, Victor Delacour, Hirn, Zeuner, Bede, Emile Martin, and Scholl, and other able en gineers, including the author of the article in question.

Business and Lersonal.

- 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.
- Velocipedes cheap.—Specifications and elaborate lithographic drawings, by the aid of which any mechanic may construct a velocipede, together withfull instructions for learning to ride, sent for 25cents. Ad dress M. M. Roberts, Box 3481, Boston Postoffice.
- Wanted A Wilmot portable sawing machine. Address Sawver, Box 773, New York
- Velocipedes.-Working drawings, scale 3 in. to the foot, with plans and specifications in detail, enabling any one to construct one of the best two or three-wheeled velocipedes at less than one third usual cost. Price 50 cents. G. F. Perkins & Co., Holyoke, Mass.
- For State and county rights for best portable fire extinguisher, address Postoffice Box 3,983, Boston, Mass.
- 3d, page 212 of this paper, I challenge all other machines for speed and ease of locomotion. Address L. H. Soule, Albany Postoffice, N. Y.
- circulars and price list to A. J. Shotwell, Washington, Ind.
- An experienced patent-right salesman, about starting out, will sell a first-class article, not interfering with his own, on commission. Ad dress, with full particulars, Box 311, Elwood, N. J.
- See A. S. & J. Gear & Co.'s advertisement elsewhere.
- Wanted—Parties to manufacture the spring-jaw wrench illustrated in this paper Nov. 18, 1868. Address Bradshaw & Lyon, Delphi, Ind
- Peck's patent drop press. Milo Peck & Co., New Haven, Ct. For the best velocipede, and other small forgings, address
- R. A. Belden & Co., New Haven, Conn. The new method for lighting street lamps! For illustrated for its object to furnish an improved cover for coal holes, scuttles, hatchcircular, with letter from President Manhattan Gas Light Co., and Sup't of Lamps and das of the City of New York, addiess J. W. Bartlett, Patentee,
- 569Broadway, New York. For the latest improvement see the Inventors and Manufactu rers' Gazette. The cheapest illustrated paper in the world. \$1 per year. Published by Saltiel & Co., Postoffice box 448, or 37 Park Row, New York
- For sale—The best propelling wheel forcanal boats or boats of shallow or swift waters. Address H. T. Fenton, Water st., Cleveland, O.
- at 14 cents per lb. Sweet, Barnes & Co., Syracuse, N. Y. Rare chance for agents. D. L. Smith, Waterbury, Conn.
- The Tanite Emery Wheel.—For circulars of this superior wheel, address "Tanite Co.," Stroudsburgh, Pa.
- Money Plenty-To patent and introduce valuable inventions
- for an interest in them. National Patent Exchange, Buffalo, N. Y. One hundred horse power Corliss steam engine for sale in good
- order. Address W. B. Le Van, Machinist, 24th and Wood sts., Philadelphia The manufacture and introduction of sheet and cast metal small
- wares is made a specialty by J. H. White, Newark, N. J The Magic Comb will color gray hair a permanent black or brown. Sent by mail for \$1.25. Address Wm. Patton, Treasurer Magic
- Comb Co., Springfield, Mass. For coppered iron castings address J. H. White, Newark, N. J
- W. J. T.—We think the patent asbestos roofing manufactured by H. W. Johns, of this city, is the best substitute for tin or slate. It is cheap and easily applied.
- Cliff st., New York.
- For solid wrought-iron beams, etc., see advertisement. Address Union Iron Mills, Pittsburgh, Pa., for lithograph, etc.
- Iron.—W. D. McGowan,iron broker,73 Water st., Pittsburgh,Pa
- Machinists, boiler makers, tinners, and workers of sheet metals
- read advertisement of Parker Brothers' Power Presses
- Winans' boiler powder, N. Y., removes and prevents incrusta tions without injury or foaming; 12 years in use. Beware of imitations.
- The paper that meets the eye of all the leading manufacturers throughout the United States-The Boston Bulletin. \$4 a year

Recent American and Loreign Latents.

- Under this heading we shall publish weekly notes of some of themore prom inent home and foreignpatents.
- SCROLL-SAWING MACHINES.-August M. Schilling, Chicago, Ill.-This in vention has for its object to furnish an improved scroll-sawing machine, which shall be so constructed and arranged that holes may be sawn with facility and accuracy, without its being necessary to stop the saw to introduce the material to be sawn.

BROADCAST SEEDER. - Matthew Sackett, Monticello, Iowa, - This invention has for its object to furnish an improved broadcast seeder, designed especially for sowing timothy, clover, and other small seeds, and which be simple in construction and convenient in use.

CORN PLANTER.-Peter Rogers, Sharon, Ohio.-This invention has for its object to furnish an improved machine for planting corn, which shall besimple in construction, reliable and accurate in operation, and conven-S. A. H., of Conn.—Gumbridge & Co., to whom you refer, have ient in use; being so constructed and arranged that the dropping device may be readily thrown out of gear, allowing the machine to be turned or H. H., of N. J.—There is no particular degree or dividing line backed without dropping the corn, and which may be turned in a small space.

> STOVEPIPE SHELF .- John P. Sherwood, Fort Edward, N. Y .- This in vention has for its object to furnish an improved detachable and adjustable shelf for attachment to stovespipes, which shall be simple in construction, and easily attached, detached, and adjusted.

> RAKING ATTACHMENT FOR REAPERS.—Charles Barns, Oskaloosa, Iowa. This invention has for its object to furnish an improved raking attachment for reapers, which shall be so constructed and arranged as to take the grain, as it crops from the cutters, and deliver it to the binders or upon the ground, as may be desired, and which shall, at the same time, be simple in construction and effective in operation.

> Horseshoe Nail Clincher.-E. E. Fisher and William H. Mack, Indianola. Ill.—This invention has for its object to furnish a simple, convenient and effective instrument for turning down and clinching horseshoe nails, o as to obviate the necessity for the use of the rasp, hammer, and clinching iron, while doing the work neater and better.

CULTIVATOR .- John Powell, Sullivan, Ill .- This invention relates to improvements in cultivators, or gang plows, and has for its object to provide either of the old ones.

a more simple and convenient arrangement of means for vibrating the

REFERENCE OF THE STATE OF THE plows laterally, adjusting than to vary the distance apart, and to govern their depth of cutting.

SOLDERING APPARATUS .- Conrad Seimel, Greenpoint, N. Y .- This invention relates to a new apparatus for soldering the upper and lower edges of sheet-metal cans of cylindrical, prismatic, or other shape. It consists in providing an adjustable cover for the annular or other vesselin which the older is kept, so that by forcing the said cover down, by means of suitable levers, the solder will be forced into the soldering pan, wherein it will rise to a suitable desired hight to surround the edge of the can to be soldered. When the levers are released, the covers will be raised by spring or weight, and will draw the solder back into the closed vessel in which it is protected from the injurious influences of the air. The soldering pan is endless, either round, square, or oblong, or of other suitable form, according to the shape of the box to be soldered.

COMBINED KNIFE AND FORK.—Arthur W. Cox, Malden, Mass.—The object of this invention is to provide a combined knife and fork, better adapted for the double use than any now made, and intended more especially for use by persons who have but one hand.

ADJUSTABLE REAMERS.-Henry James, Hudson, N. Y.-This invention re-I wish to make arrangements with a manufacturing establish-lates to improvements in adjustable reamers, whereby it is designed to ment for the manufacture of my improved velocipede, illustrated April provide an improved arrangement of two or more cutters, upon a stock to be adjusted by screwing a nut forward and back upon the shank of the stock.

Manufacturers of brick machines and machinists' tools send | Machinery for Ginning Cotton.-B. Dobson and Wm. Slater, Bolton, England.—This invention consists, first, in applying to saw gins, which are provided with one or two sets of saws, a treadle lever, by which the feeding hopper may be agitated to clear the teeth of the saws, and to | For copy of Claim of any Patent issued within 20 years..... discharge the seeds and impurities, so that, when such treadles are used, A sketch from the model or drawing, relating to such portion of a machine the hands of the operator may remain at liberty; secondly, in applying to saw gins which are provided with one or two sets of saws, a fan, and two perforated metal cylinders, in which a partial vacuum is formed by the fan, to withdraw dust and other impurities from the ginned cotton passing over said cylinders; thirdly, in applying to, and in the aforesaid perforated cylinders, stationary dampers, by which the action of the vacuum is destroyed on those parts of the cylinder which deposits the cotton upon a feed apron, or other suitable apparatus.

> SELF-LOCKING COVER FOR COAL HOLES, SCUTTLES, ETC.-Morison Hoyt, Brooklyn, N. Y., and G. Van Cleef, New York city.-This invention has vays, etc., which shall be so constructed as to fasten itself when dropped into place without the possibility of failure, and in such a way that the cover cannot be removed from the outside.

PAINT MILLS. - John A. Berrill, Waterville, N. Y .- This invention has for its object to improve the construction of paint mills, so that the ground paint may be more conveniently collected from the mill and guided into the receiving vessel.

PORTABLE FENCE. - Joseph Richard, Columbiaville, Mich. - This invention has for its object to furnish an improved portable fence, which shall be simple in construction, strong, and durable, easily put up, taken down, or 200 bars 1-in. octagon tool steel, best quality, for sale.—The lot | moved from place to place, and which can be easily and readily repaired when required.

> Horse Collar.-B. W. McClure, Wyoming, Iowa.-This invention has for its object to furnish a simple, convenient, and cheap horse collar, which shall be so constructed that it may be used without harness.

> CORN SHELLER.—S. S. Cole, Henryville, Ind.—This invention has for its obect to furnish an improved corn sheller, which shall be so constructed and arranged as to do its work quickly and thoroughly, while, at the same time, it may be manufactured at small expense, and thus brought within the reach of all farmers, even those of limited means.

BRICK AND MORTAR HOD .- E. B. Black. Joseph Hinkle, Jr., and T. S. White, Columbia, Pa.—This invention has for its object to furnish an improved hod for carrying brick and mortar, which shall be stronger, more durable, less expensive, and equally as light as, or lighter than the ordinary wooden hod.

ATTACHMENT FOR ADJUSTING CORDS FOR HANGING PICTURES, ETC .- R d'Heureuse. New York city.-This invention has for its object to furnish an improved attachment for cords for hanging pictures, glasses, and for other purposes, by means of which the cords may be easily and quickly taken up and let out, for adjusting the hanging of the suspended object, without forming knots in the cords or untying knots previously formed.

FOUNDERYFLASKS FOR SUGAR KETTLES.—George Walworth, Peekskill, 88,284.—RAILWAY TRACK.—Marmont B. Edson, New York Tempered steel spiral springs. John Chatillon, 91 and 93 | N.Y.-This invention relates to a new and useful improvement in flasks formaking certainkinds of castings, but which has more particular reference to the molding and casting of sugar kettles

> COMBINED FOOT-STOOL AND FOOT-WARMER .- Jacques Jacquet, Newark, N. J.—The object of this invention is to produce an apparatus for travelers and others, which shall at once serve as a convenient foot-stool, and also as a foot-warmer in winter.

> Boiler Scraper.-Monroe Morse and Charles H. Morse, Franklin, Mass —This invention relates to a new self-adjusting boiler scraper, which is composed of a bent platehaving straight sides, so that all its edges will form cutting edges within the tube to be cleaned. Thereby quicker operation is obtained with simpler apparatus than with the devices heretofore

> -William Loofbourow, Fayette, Wis. - This invention relates to a new building for drying and storing hops; it being so arranged that the hops therein can be easily handled and conveniently conveyed in the building from the cooling to the drying, and thence to the storing room

> WHIPS .- Edgar Easton, Ashland, Ill .- This invention relates to improvementsin the construction of driver's whips, having for its object to provide an improved means of securing the lashes to the handles or stalks. It consists in forming a knob on the end of the stalk and braiding the lash thereon in a manner to form a swivel connection.

> AUTOMATIC RAKER. -C. Lidren, La Favette, Ind. -This invention relates to a new and useful improvement in the method of operating automatic rakers for reaping or harvesting machines, whereby the mechanism for operating such rakes is very much simplified.

DEVICE FOR PRACTICING THE HANDLING OF VIOLINS AND BOWS.—Stephen Upson, New York city.—This invention has for its object to teach beginners the manner of handling the bows of violins and equivalent instruments, and the mode of using the fingers and practicing the shifts on the fingerboard of the instrument without producing any noise, and without exposing valuable instruments to the risk of being spoiled by the practitioners.

SKATE. - Moses Kinsey, Newark, N. J. - This invention relates to a new ad justable skate, which can be applied to larger or smaller feet, and conveniently attached and taken off. The invention consists, chiefly, in the application of two plates, which are pivoted to the front of the skate, and which extend to the rear of the same, they being adjustable at any angle to each other by means of a screw. These plates carry the front and heel fastening clamps, which are moreover laterally adjustable on them. The invention also consists in the use of adjustable wedge-shaped heel clamps, which are adapted to firmly secure heels of all sizes and shapes to the skate.

COMBINED SPINNING WHEELAND CHURN.-Morgan A. McAfee, Talbotton, Ga .- The object of this invention is to provide an arrangement whereby a common spinning wheel may be economically and conveniently arranged for employment as a propelling medium for a churn; also to provide certain improvements in churns.

CAR COUPLING. - I. L. Vansant, Glasgow, Del. - The object of this invention is to provide a simple, cheap, and effective automatic car coupling, constructedso as to avoid the use of springs of any kind.

WATER ELEVATOR .- Charles F. Woodruff, Newbern, Tenn .- This invention is an improvement upon the devices patented by the same inventor February 4th and September 15th, 1868, and consists in a combination in one machine of the main features covered by said two patents, thereby produ- $\ensuremath{\text{cing}}$ a more simple and permanent, and $\ensuremath{\text{less}}$ expensive water elevator than

BREECH-LOADING FIREARM - Wm. Golcher, St. Paul, Minn. - In this invention, by moving a single lever, the breech of the barrel is thrown up, the gun cocked and held in that position, and the old cartridge shell retracted; by returning the lever to its original position, the barrel is brought down to its proper position for firing, and the gun is left cocked and instantly discharged. The whole apparatus is exceedingly simple, cheap, and not liable to get out of order, and its use will enable the gun to be fired much more rapidly and with less labor thanheretofore.

Official List of Latents.

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FOR THE WEEK ENDING MARCH 30, 1869.

Reported Officially for the Scientific American

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In addition to which there are some small revenue-stamp taxes. Reside	зut
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The full Specification of any patent issued since Nov. 20, 1866, at which time the

a reasonable cost, the price depending upon the amount of labor involved and the number of views.

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

Patent Solicitors, No. 37 Park Row, New York

88,261.—REVERSIBLE KNOB LATCH.—Alonzo Aston (assignor to Russell and Erwin Manufacturing Company), New Britain, Conn. 88,262.—SCREW MACHINE.—E. A. Bagley, Worcester, Mass. 88,263.—MECHANISM FOR CONNECTING HORSES TO VEHICLES.

Daniel Belcher, Easton, assignor to himself and Alvin Colburn, Lynn, Mass.

88,264.—EDGE PLANE.—Charles P. Bigelow, Clinton, Mass.

88,265.—MUCILAGE BRUSH.—Douglas Bly, late of Macon, Ga. 88,266.—WASHING MACHINE.—Jacob Brinkerhoff, Auburn

88,267.—Machine for Fitting Felloes to Wheels.—Fred 88,267.—MACHINE FOR FITTING FELLOES TO WHEELS.—Freuerick H. Brinkkotter, Callahan's Ranch, Call.
88,268.—BOBBIN FOR SPINNING MACHINE.—Wm. M. Brisben Philadelphia, Pa.
88,269.—LAST.—Thomas Bullivant, Newark, N. J.
88,270.—HAY SPREADER.—Hiram M. Burdick, Ilion, N. Y.
88,271.—"TINKERS' POT."—Gustav Burkhardt, Homer, Ill.
88,272.—CISTERN TOP.—T. M. Bush, Hastings, Mich.

88,273.—FASTENING FOR BREAST PINS.—Calvin G. Cahoone. and Bela E. Brown. Providence, R. I. Antedated March 15, 1869. 88,274.—CAR FOR BRICK DRYERS.—Cyrus Chambers, Jr., Philadelphia, Pa. 88,275.—GARDEN CULTIVATOR.—James F. Chapman, New-

ton, Iowa. 88.276.—Welted Seam-finishing or Reducing Machine.

-John H. Cole, North Bridgewater, Mass. 88,277.—Dumping Wagon.—John Craig, San Francisco, Cal. 88,278.—Steam Engine.—Archibald C. Crary, Utica, N. Y.

88,278.—Steam Engine.—Archibald C. Crary, Utica, N. Y.
88,279.—CLAMP BAR FOR HOLDING THE CUTIERS OF MOWING
MACHINES WHILE BEING GROUND.—MUNSON C. Cronk, Auburn, N. Y.
Antedated March 19, 1869.
88,281.—GANG PLOW.—Artemas Davison, San Leandro, Cal.
Antedated March 20, 1869.
88,281.—IRONING TABLE.—Henry T. De Montigny, West
Troy, N. Y.
88,282.—SEWING MACHINE.—Charles F. Dunbar, Eric, Pa.
88,283.—CHANNELING TOOL.—George D. Edmands, Saugus, Mass.

city. Antedated March, 18, 1869. 88,285.—APPLICATION OF AN ELECTRICAL CURRENT TO STEAM BOILERS.—Moses G. Farmer, Salem. Mass.

BOILERS.—Moses G. Farmer, Saiem. Mass. 88,286.—VELOCIPEDE.—Alonza Farrar, Boston, Mass. 88,287.—VAPOR BURNER.—Louis Fischer, Brooklyn, N. Y. 88,288.—STEAM GENERATOR. — Addison C. Fletcher, New

York city, 88,289.—Churn.—John Geiger, Peoria county, Ill. 88,290.—PNEUMATIC TOOTH MALLET.—George F. Green, Ka-

lamazoo, Mich. 88,291.—MANUFACTURE OF COLORS AND PIGMENTS.—Eber-

hard Harrsch, New York city. 88,292.—WATER WHEEL.—Orrin L. Hart, Millville, Wis.

88,293.—Wagon Brake.—D. Healey, Dansville, N. Y. 88,294.—METALLIC STUDDING FOR FIRET-ROOF WALLS.—ISAAC

V. Holmes, New York city. 88,295.—POTATO DIGGER.—John R. Hopper, Rochester, N. Y. 88,296.—FRUIT JAR.—Daniel Hughes, Henry E. Shaffer and William S. Thompson (assignors to Henry E. Shaffer and William S. Thompson), Rechester, N. Y. 88,297.—CHAIR.—George Hunzinger, New York City.

88,298.—Device for Securing Bed Clothes.—George In-88,390.—PEVICE FOR SECURING BEE CHARLES. Wood, San Francisco, Cal.
88,299.—PROCESS AND APPARATUS FOR MAKING IRON AND STEEL.—Jacob Jameson, Philadelphia, Pa.
88,300.—FLEA POWDER.—Charles E. Jaycox, San Francis-

88,301. -Portable Field Harrow.—Jacob D. Johnson, Ty-

88,302.—RAILWAY SAFETY SWITCH.—Richard M. Johnson and Ezra Stiles, Bridgeport, Conn.

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88,303.—STUMP EXTRACTOR.—Wm. R. Johnson, Bingham- 88,394.—HARVESTER RAKE.—C. Lidren, La Fayette, Ind., as 88,490.—Combination Lock.—H. S. Leland, Mount Union,
ton, N. Y.

88.304.—HORSESHOE.—James Jorey, Westville, Conn.

88.305.—Dancing Motion for Toys.—James M. Keep, New York city. Antedated September 30, 1868.

88.306.—CLAPBOARD MACHINE.—Oscar R. Kendall and Lemu-
                                                                                                                                                                                                                                                                    signor to himself and R. Jackson. 88,395.—Hop Dryer.—Wm. Loofbourow, Fayette, Wis.
                                                                                                                                                                                                                                                                   88,396.—Grain Separator.—Leonard Low, Peoria, III.
88,397.—Horse Hay Fork.—A. W. Lozier, New York city.
                                                                                                                                                                                                                                                                     88,398.—FLOOD GATE.—Andrew Main, Delaware, Ohio.
                                                                                                                                                                                                                                                                    88,399.—CHURN.—Morgan A. McAfee, Talbotton, Ga. 88,400.—HORSE COLLAR.—B. W. McClure, Wyoming, Iowa. 88,401.—FENCE.—J. W. McCormick, Youngstown, N. Y. 88,402.—Vyvyyy James E. Form For Programmer Prog
  el C. Kendall, Groton, N. H.
88,307.—Belt Fastening.—Gebhard Koeb and Louis Houcke,
    Springfield, Ohio.
88,308.—WASHING AND WRINGING MACHINE.—John Lamb,
88,308.—WASHING AND WEINGING MAND JEFFERDER — Nathen F. Mathewson, Barring-Wosen, William B. Young, and G. H. Laughton). Chicago, Ill. 88,310.—HEEL FOR BOOTS AND SHOES.—Rufus Lapham, Boston, Mass. Antedated March 11, 1898. 88,311.—CULTIVATOR.—James R. Little, Galesburg, Ill. 88,312.—HORSE COLLAR.—J. C. Mahaffey, Little York, Ill. 88,313.—COOKING STOVE.—John F. Marvin and Samuel E. Vose, Milwaukee, Wis.
                                                                                                                                                                                                                                                                    88,404.—BOTTLE CORKING APPARATUS.—Giacomo A igliavac-
ca, Napa, Cal. Antedated March 19, 1889.
88,405.—BOILER FLUE CLEANER.—Monroe Morse, and Chas.
H. Morse, Franklin, Mass.
   Vose, Milwankee, Wis.
88,314.—HAY SPREADER.—Nathan F. Mathewson, Barring-
 88,314.—HAY SPREADER.— No. 101, R.I.
88,315.—BEEHIVE.—T. F. McCafferty, Columbus, Ohio.
88,316.—BRICK KILN.—J. M. McCarthy, Canal Dover, Ohio.
88,317.—Tool FOR SHEARING SHEEP.—David McCarty and J. F. Beek, Tiffin Township, Ohio.
88,318.—SASH LOCK.—George McGregor and George Voll, Cincinnati, Ohio.
    S8,318.—SASH LOCK.—George Medregor and de
Cincinnati, Ohio.
88,319.—GUN LOCK.—John C. Miller, Danville, Ky.
                                                                                                                                                                                                                                                                      Conn. 88,412.—FENCE.—Joseph Richard, Columbiaville, Mich.
   88,320.—CHURN.—Morgan B. Miller, Peoria county, Ill.
88,321.— APPARATUS FOR COMPOSING AND EXHIBITING
GROUPS OF CARD PICTURES.—Sarah F. Mills, San Francisco, Cal.
88,322.—STOP MOTION FOR LOOMS.—George E. Milroy, Low-
                                                                                                                                                                                                                                                                     88,413.—GANGAND TRENCH PLOW.—J. G. Robinson, Spring-
                                                                                                                                                                                                                                                                      field, III. Antedated March 23, 1809.
88,414.—TRENCH PLOW.—J. G. Robinson, Springfield, III.
Antedated March 22, 1869.
   ell, Mass.
88,323.—FARM GATE.—A. T. Morris, Seal, Ohio.
88,324.—AERIAL CAR.—William Morrow, San Francisco, Cal.
88,325.—DRAG RAKE.—H. F. Morton, West Sumner, Me.
   ell, Mass.

88,323.—FARM GATE.—A. T. Morris, Seal, Ohio.

88,324.—AERIAL CAR.—William Morrow, San Francisco, Cal.

88,325.—DRAG RAKE.—H. F. Morton, West Sumner, Me.

88,326.—GAS PURIFIER.—Peter Munzinger, Philadelphia, Pa.

88,327.—EXTENSION BASKET.—Addison Norman, Rochester,

N. Y.

Antedated March 22, 1869.

88,415.—CORN PLANTER.—Peter Rogers, Sharon, Ohio.

88,416.—BROADCAST SEEDER.—Matthew Sackett (assignor to self and John Filson), Monticello, Iowa.

88,417.—SCROLL-SAWING MACHINE.—A. M. Schilling, Chicalogo, Ill.

88,428.—WASHING MACHINE.—Adolph Schlingman, West Alexandria. Ohio.
                                                                                                                                                                                                                                                                                     Alexandria, Ohio
                                                                                                                                                                                                                                                                    88,419.—Soldering Furnace.—Conrad Seimel, Greenpoint,
    88,328.—TREMOLO REGULATOR FOR REED MUSICAL INSTRU-
MENTS.—Isaac T. Packard, Chicago, Ill.
88,329.—GRAPE CRUSHER AND STEM SEPARATOR.—Turner C.
                                                                                                                                                                                                                                                                    88,420.—Stovepipe Shelf.—J. P. Sherwood (assignor to himself and B. S. Burnham), Fort Edward, N. Y.
88,421.—GAME.—A. G. Slagle, Memphis, Tenn.
88,422.—WATER WHEEL.—J. E. Stevenson, New York city.
88,423.—Device For Violin Practice.—Stephen Upson,
     Purington, Lincoln, Cal. 88,330.—SECURING SHIPS' HATCHES.—John R. Rich, Tremont,
    Me, assignort ow J. Stockbridge, Gloucester, Mass.

88,331.—MACHINE FOR MAKING JOINTS IN TABLE LEAVES.—
John Richards, Cincinnati, assignor to himself and J. N. Brittingham Columbus, Ohio.
                                                                                                                                                                                                                                                                     New York city.

88,424.—CAR COUPLING.—I. L. Vansant, Glasgow, Del.

88,425.—Flask for Molding Kettles.—George Walworth,
Peekskill, N. Y.

88,426.—Velocipede.—Edward Whitehead, Cincinnati, Ohio.

88,427.—Portable Fence.—H. C. Wilson, West Elkton,
    88,332.—MILK COOLER.—Cyrus L. Sabin, Barnard, Vt. 88,332.—JUURNAL BOX.—E. W. Skinner, Madison, Wis, 88,334.—HARVESTER.—Wm. D. Slack, Lewisburg, Pa. 88,335.—CROQUET WICKET.—Friend W. Smith, Jr., Bridge-
     port, Conn.

88,335.—STUMP EXTRACTOR.—Henry Smith, 3d, North Chili, 88,428.—Water Elevator.—Chas. F. Woodruff, Newbern,
     88,335.—SPUMP EXPRACTOR.—Itemry Simith, out, Noted Chilis, N. Y.
88,337.—RAILWAY CAR COUPLING.—O. L. Smith, Providence, 188,338.—SAFETY TOGGLE FOR WATCH CHAINS.—P. C. Smith (assignor to himself E. S. Dodge, and L. A. Kotzow, Providence, R. I. (88,339.—FARM GATE.—R. M. Smith, Lafargeville, N. Y.
88,340.—ANIMAL SHEARING MACHINE.—R. T. Smith and J.K. Priest) assignor to themselves, Wm. Earle, Jr., and J. G. Blunt), Nashau, N. H.
88,341.—TURBINE WATER WHEEL.—W. H. Snyder, Phelps, 28,432.—WANIKIN, WITH FGFUS, ETC., FOR ILLUSTRATING THE PRACTICE OF OBSTERICS.—B. H. Aylworth, Oxford, N. Y.
88,341.—TURBINE WATER WHEEL.—W. H. Snyder, Phelps, 28,432.—EXTENSION TABLE.—Henry Bachman, Philadelphia, 29,432.—EXTENSION TABLE.—Henry Bachman, Philadelphia, 2
       88,341.—TURBINE WATER WHEEL.—W. H. Snyder, Phelps,
    88,341.—TURBINE WATER WHEEL.—W. H. Snyder, Phelps, N. Y.
88,342.—CAR COUPLING.—Henry Soggs, Columbus, Pa.
88,343.—AUTOMATIC FAN.—G. C. Steinhauer, Indianapolis, Ind.
88,344.—SHOVEL PLOW.—U. T. Stewart, Fayette county, Tenn.
88,345.—STEAM GENERATOR.—Joel Tiffany, Albany, N. Y.
88,346.—GRAPPLING FOR ANCHORS.—A. S. Trafton and T. J.
Trafton, Portsmouth, N. H.
88,347.—VELOCIPEDE.—J. A. Vander Waag (assignor to T.
Van Skelline, for one-half of stild the vention), Brooklyn, N. Y.
88,348.—PREPARATION OF AERATED DRINKS FOR MEDICINAL
PURPOSES.—P. H. Vander Weyde and J. Matthews, Jr., New York city.
Antedated March 18, 1883.
88,349.—CABBAGE CUTTER.—F. S. Vogel, and J. R. Albright.
                                                                                                                                                                                                                                                                          88,434.—Apparatus for Distilling Spirits.—Eli D. Ban-
                                                                                                                                                                                                                                                                    88,434.—APPARATUS FOR DISTILLING SPIRITS.—EII D. Ban-
nister, St. Louis, Mo.
88,435.—IRON BEDSTEAD.—Jabez Bayston, Chicago, and Geo.
W. Nicholson, Naperville, Ill.
88,436.—BREECH-LOADING FIREARM.—Hiram Berdan (assign-
or to the Berdan Fire Arms Manufacturing Company), New York city.
88,437.—IRONING MACHINE.—Laurent Berenger, Paris, France.
88,438.—CAR BRAKE.—A. A. Bliven, Jersey City, N. J.
88,439.—MODE OF PREVENTING CORROSION IN METALLIC
                                                                                                                                                                                                                                                                     CAPS.—L. R. Boyd, New York city.
88,440.—CAR COUPLING.—W. L. Braddock (assignor to him-
      Antedated March 18, 1869.

88,349.—Cabbage Cutter.—F. S. Vogel, and J. R. Albright, 88,441.—Spike for Overshoes.—G. W. Bradley, Weston,
     88,349.—Cabbage Cutter.—F. S. Vogel, and J. R. Albright, 12 Carpons.
Lancaster, Pa. 12 Carpons.
13 Cong. 14 Carpons.
14 Carpons.
15 Carpons.
16 Cong. 16 Carpons.
16 Cong. 17 Carpons.
18 Cong. 18 Carpons.
18 Car
                                                                                                                                                                                                                                                                     88,444.—PERTILIZER.—S. A. BURKHOIDER AND G. W. WISON, Bendersville, Pa.
88,444.—DRYING FURNACE AND OVEN.—J. K. Caldwell, Allegheny City, Pa.
88,445.—HEDGE FENCE.—S. N. Caldwell, Pilot Grove, Ind.
88,446.—IRON BRIDGE.—F. E. Canda, Chicago, Ill.
88,447.—RAILWAY CAR BRAKE AND STARTER.—R. R. Carpenter, Tippecanoe, Ohio.
     object.—METHOD OF MARING INASTANDS, ETC.—Relify Wills ney, East Cambridge, Mass. 88,355.—Grate Bar.—Jas. Yocom, Jr., Philadelphia, Pa. 88,356.—AXLE BOX BEARING.—A. B. Allen (assignor to himself and J. D. Allen), Rutland Vt. 88,357.—CHEESE CUTTER.—S. R. Bailey, Bath, Me.
                                                                                                                                                                                                                                                                        ter, Tippecanoe, Onio.
88,448.—Printing Press.—Wm. H. Chandler, Winchester
                                                                                                                                                                                                                                                                           Mass.
88,449.—Umbrella Cover.—J. C. Clime, Philadelphia, Pa.
      89,358.—Harvester Rake.—Chas. Barns, Oskaloosa, Iowa. 88,359.—Fire Extinguisher.—W. H. Bate, Medford, and G.
                                                                                                                                                                                                                                                                          88,450.—Spinning Mule.—B. C. Coldwell, Wyoming, Pa.
                                                                                                                                                                                                                                                                        88,451.—Button.—Isaac Cole, New York city.
88,452.—Lathe.—Terrence Collins and Asher Castiel, St.
     88,361.—BRICK AND MORTAR HOD—E. B. Black, Jos. Hinkle, Jr., and T. S. White, Columbia, Pa.
88,362.—WATER METER.—J. A. Bradshaw, and W. H. Brown, Lowell, Mass.
88,363.—COMBINED HARROWAND CULTIVATOR.—G. W. Bressler, La Fayette, Iowa.
88,364.—RAILWAY HOSE BRIDGE.—Jas. Burson, Yates City, Bl., assignor to James and Geo. B. Waterhouse, New York city.

88,452.—LATHE.—Terrence Collins and Asher Castiel, St. Louis, Mo.
88,453.—HARVESTER.—G. T. Coolman and C. M. Young, Corry, 88,454.—MAKING NAILS.—J. M. Cooper, Philadelphia, Pa. 88,455.—WOODEN PAVEMENT.—John R. Cushier, New York city.
88,456.—MOUSE TRAP.—A. G. Davis, Watertown, Conn. 88,457.—SLED.—Constantine de Bodisco St. Potersburgh
        F. Pinkham, Cambridge, Mass. 88,360.—PAINT MILL.—J. A. Berrill, Waterville, N. Y.
                                                                                                                                                                                                                                                                        88,456.—Mouse Trap.—A. G. Davis, Watertown, Conn.
88,457.—Sled.—Constantine de Bodisco, St. Petersburgh,
Russia.
88,458.—Sign.—W. P. Delaplain, Peoria, Ill.
88,459.—Skate Fastening.—Patrick Dooley, Newark, N. J.
88,460.—Machine for Cutting Screws.—John Dougherty,
San Francisco, Cal.
88,461.—Bell.—W. T. Downs, St. Louis, Mo.
88,462.—Sad-Iron Heater.—H. C. Drexel, Baltimore, Md.
88,463.—Toy Gun.—E. C. Edmonds. Albany, N. Y. Antedated May 1, 1859; reissue 3,355.—Reciprocating ed March 25, 1869.
88,465.—Seeding Machine.—J. J. Esler, Belleville, Ill.
     III., assignor to James and Geo. B. Waterhouse, New York city.

86,365.—Take-up Mechanism for Looms for Weaving Ir-
BEGULAR FABRICS.—Hugo Carstaedt, New York city.

88,366.—Velocipede.—J. M. Case, Worthington, Ohio.

88,367.—Corn Sheller.—S. S. Cole, Henryville, Ind.
                                                                                                                                                                                                                                                                       88,460.—MACHINE FOR CUTTING SCREWS.—John Dougherty, San Francisco, Cal.
88,461.—HEEL.—W. T. Downs, St. Louis, Mo.
88,462.—SAD-IRON HEATER.—H. C. Drexel, Baltimore, Md.
88,463.—TOY GUN.—E. C. Edmonds. Albany, N. Y. Antedated March 25,1869.
88,464.—COTTON GIN.—H. L. Emery, Albany, N. Y.
88,465.—SEEDING MACHINE.—J. J. Esler, Belleville, Ill.
88,466.—FERTILIZER.—L. S. Fales, New York city.
88,467.—SLATE FRAME.—J. H. French, Albany, N. Y.
98,468.—PERFIGERATOR—R. S. Godfrey (assignor to himself,
         88,368.—SPADING MACHINE.—F. C. Cone, San Francisco, Cal.
        88,369 — MUSIC BINDER.—Lewis B. Covert, Brooklyn, N. Y. 88,370.—COMBINED KNIFE AND FORK.—A. W. Cox, Malden,
        88,371.—PIS'TON VALVE FOR STEAM AND OTHER ENGINERY.
-Robert Creuzbaur, Brooklyn, N. Y.
88,372.—TRUSS.—L. P. Dayton, North Buffalo, N. Y.
       88,373.—ATTACHMENT FOR ADJUSTING CORDS FOR PICTURES, ETC.—R. d'Heureuse, New York city.
89,374.—COTTON GIN.—Benj. Dobson and Wm. Slater, Bolton,
                                                                                                                                                                                                                                                                          88,468.—REFRIGERATOR.—R. S. Godfrey (assignor to himself, Thomas Baner, and J. C. Hires), Philadelphia, Pa. 88,469.—PORTABLE FENCE.—W. P. Goff, Yorkville, Wis.
      England.

88,375.—Whip.—Edgar Easton, Ashland, Ill.

88,376.—Carriage Axles.—T. H. Elder, Chicago, Ill.

88,377.—Chuck.—G. B. Fairman (assignor to John Telfor
                                                                                                                                                                                                                                                                           88,470.—Breech-Loading Firearm.—Wm. Golcher, St. Paul,
      Rochester, N. Y.

88,378.—HORSESHOE NAIL CLINCHER.—E. E. Fisher and W.
H. Mack, Indianola, Ill.

88,379.—APPARATUS FOR DISCHARGING COAL.—E. F. Flood,
                                                                                                                                                                                                                                                                           88,471.—Sash Balance.—Lewis Goodwin, Bangor, Me.
                                                                                                                                                                                                                                                                         88,472.—OVEN.—G. Y. Gray, Niles, Mich.
88,473.—WEATHER STRIP.—A. J. Harmon, Charlestown, Mass., assignor to himself, W. H. Howland, and J. E. Hasseltine.
88,474.—CHURN.—John Harper, Hillsborough, Iowa.
88,475.—METER.—James Harris, Boston, Mass.
       88,379.—APPARATUS FOR Chicago, III.
88,380.—METALLIC BOOT STRAP.—David Forrest (assignor to himself, and James Eldridge), Eastport, Me.
88,381.—HARVESTER.—W. F. Goodwin, East New York, N. Y.
88,382.—COMBINED MARKER AND PLANTER.—R. A. Green, Martinaville. Ohio.
                                                                                                                                                                                                                                                                          88,476.—MILK COOLER.—L. T. Hawley, Salina, N. Y. 88,477.—HORSE HAY FORK.—G. W. Heath, Burlington, Pa. 88,478.—WASHING MACHINE.—C. W. Hermance, Schuyler-
         88,383.—MODE OF LETTERING SIGNS, ETC.—Alonzo Griffin, Meshoppen, Pa. Antedated March 25, 1869.
88,384.—ACOUSTIC STAGE.—Troutman Grob, San Francisco,
                                                                                                                                                                                                                                                                         88,478.—WASHING MACHINE.—C. W. HERMARCE, SCHUYIER-
ville, N. Y.
88,479.—PUDDLING PROCESS FOR THE MANUFACTURE OF
WROUGHT IRON.—Chas Hewitt, Hamilton Township, N. J.
88,480.—MANUFACTURE OF IRON AND STEEL, AND FURNACE
AND APPARATUS THEREFOR.—Geo. J. Hinde, Wolverhampton, England,
and T. C. Hinde, Ynispenliwch, near Swansea, Wales.
88,481.—WAGON SEAT.—Edgar Hitt, Poundridge, N. Y.
88,482.—PICTURE FRAME.—C. A. Hodgman, Tuckahoe, N. Y.
88,483.—HARVESTER.—G. M. Jackson, North Hector, N. Y.
          88.385.—Lock Nut.—J. W. Hilton, Bradford, Pa.
      88,385.—LOCK NUT.—J. W. Hilton, Bradford, Pa.
88,386.—VAULT COVER.—Morison Hoyt, Brooklyn, and G.Vancleef (assignor to themselves, and J. T. Lockhatt), New York city.
88,387.—WASH BOILER.—P. H. Inman, and C. B. Withington, Janesville, Wis. Antedated March 27, 1869.
88,388.—COMBINED FOOT-STOOL AND FOOT-WARMER.—Jacques Jacquet, Newark, N. J.
88,389.—ADJUSTABLE REAMER.—Henry James (assignor to himself and W. H. Gifford), Hudson, N. Y.
88,390.—CLOTHES PIN.—Peter Johnson, Wauconda, Ill.
88,391.—LAND ROLLER.—E. O. Jones, Brandon, Mich.
88,392.—PRESERVING WOOD.—Chas. Karmrodt and Nicholas Thilmany, Bonn, Prussia.
88,393.—SKATE.—Moses Kinsey, Newark, N. J.
                                                                                                                                                                                                                                                                         88,485.—HARVESTER.—G. M. Jackson, North Hector, N. 1.

88,484.—APPARATUS FOR HEATING AND SEPARATING LIME FROM WATER—S. F. Jackson and J. A. Davis, Eureka, Ill.

88,485.—WATER CLOSET.—Henry James and Edward Drewett, Weybridge, England. Patented in England, Nov. 21, 1867.

88,486.—PLOW CARRIAGE.—W. L. Jeffries, Lancaster, Ohio.

88,487.—DEVICE FOR HOLDING PLATES OF GLASS.—Thomas Jones, New York city.

88,488.—PLANO LOCK.—R. J. Jordan, New York city.
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Ohio.
88,491.—Tide Power.—J. R. Leon, Havana, Cuba.
88,492.—VELOCIPEDE.—H. W. Libbey, Cleveland, Ohio.
88,493.—Machine for Making Bolts.—Edwin B. Locke Exeter, N. H.
88,494.—INSOLE.—R. O. LOWICH, Salem, N. Y.
88,495.—STEAM ENGINE GOVERNOR.—J. A. Marden (assignor to J. H. and C. E. Abbott), Boston, Mass. 88,400.—HORSE COLLAR.—B. W. McClure, Wyoming, Iowa.
88,401.—FENCE.—J. W. McCormick, Youngstown, N. Y.
88,402.—VENTILATING FAUCET FOR DISCHARGING LIQUIDS.—
J. W. McKee (assignor to himself and John Gibbs), Brooklyn, E. D. N. Y.
Antedated March 13, 1869.
88,403.—CATTLE TIE.—Achille F. Migeon, Wolcottville, Conn.
88,403.—CATTLE TIE.—Achille F. Migeon, Wolcottville, Conn.
88,403.—STEAM ENGINE GOVERNOR.—J. A. Marden (assignor to C. E. and J. H. Abbott), Boston, Mass.
88,403.—CATTLE TIE.—Achille F. Migeon, Wolcottville, Conn.
88,403.—STEAM ENGINE GOVERNOR.—J. A. Marden (assignor to C. E. and J. H. Abbott), Boston, Mass.
88,403.—CATTLE TIE.—Achille F. Migeon, Wolcottville, Conn.
88,403.—STEAM ENGINE GOVERNOR.—J. A. Marden (assignor to C. E. and J. H. Abbott), Boston, Mass.
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88,403.—STEAM ENGINE GOVERNOR.—J. A. Marden (assignor to C. E. and J. H. Abbott), Boston, Mass.
88,403.—CATTLE TIE.—Achille F. Migeon, Wolcottville, Conn.
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88,403.—STEAM ENGINE GOVERNOR.—J. A. Marden (assignor to C. E. and J. H. Abbott), Boston, Mass.
88,403.—CATTLE TIE.—Achille F. Migeon, Wolcottville, Conn.
88,403.—STEAM ENGINE GOVERNOR.—J. A. Marden (assignor to C. E. and J. H. Abbott), Boston, Mass.
88,403.—CATTLE TIE.—Achille F. Migeon, Wolcottville, Conn. 88,501.—FASTENING FOR CURTAINS AND CARPETS.—Purches Miles, New York City. 88,405.—BOILER FIDE CHEATER.—W. A. McDonaid, Aina, Me., asH. Morse, Franklin, Mass.
88,406.—GOVERNOR FOR STEAM AND OTHER ENGINERY.—D.
F. Mosman, Chelsea, Mass.
88,407.—WIND WHEEL.—C. W. Palmer, Riga, N. Y.
88,408.—CIGAR ASH-HOLDER, ETC.—Adolph Philipp, Manchester, Great Britain.
88,409.—CULTIVATOR.—John Powell, Sullivan, Ill.
88,410.—SOLDERING APPARATUS.—Chas. Pratt, New York
city,, and Conrad Seimel, Greenpoint, N. Y.
88,411.—TINMAN'S MACHINE.—C. H. Raymond, Southington,
Conn.

Conn.

Conn.

88,500.—CHEESE CUTTER.—W. A. McDonaid, Aina, Me., assignor to F. G. Cooker, for one half his right.
88,501.—FASTENING FOR CURTAINS AND CARPETS.—Purches
Miles, New Yorkcity.
88,502.—ADJUSTABLE DOOR SILL.—John H. Morris, Philadelphia, Pa.
88,504.—VAULT COVER.—G. H. Palmer (assignor to William
Conn.
Dale, New Yorkcity.
88,505.—MACHINE FOR STRETCHING FABRICS.—I. E. Palmer,
H. Mores, Franklin, Mass.
88,407.—WILL.—W. A. McDonaid, Aina, Me., assignor to F. G. Cooker, for one half his right.
88,501.—FASTENING FOR CURTAINS AND CARPETS.—Purches
Miles, New Yorkcity.
88,502.—ADJUSTABLE DOOR SILL.—John H. Morris, Philadelphia, Pa.
88,503.—LOOM.—Benjamin Oldfield and Edwin Oldfield, Norland Control of the Con Hackensack, N. J. 88,506.—WATER ELEVATOR.—William M. Palmer, Middle-88,506.—WATER ELEVATOR.—William M. Palmer, Middlebush, N. J.
88,507.—VELOCIPEDE.—T. R. Pickering, New York city.
88,508.—CORN PLANTER.—N. M. Powers, Kirksville, Mo.
88,509.—FIREPLACE.—C. S. Rankin, Cincinnati, Ohio.
88,510.—CORPSE PRESERVER.—A. G. Reed, Philadelphia, Pa.
88,511.—HARVESTER.—M. H. Ripley and W. N. Temple, Minapolis, Minn. Antedated March 25, 1869.
88,512.—STEAM PUMP.—W. H. Roberts, Mauch Chunk, Pa. 88,513.—Folding Chair.—A. M. Rodgers, Brooklyn, N. Y 88,514.—Mosquito Canopy.—Samuel Roebuck and John Roebuck, New York City.
88,515.—PAPER STOCK, BOX BOARD, ROOFING PAPER, ETC.—
R. W. Russell, New York City. 88,516.—FIBROUS-COMPOSITION SLABS AND PANELS FOR ROOFS, FLOORS, WALLS, TANKS, AND FOR OTHER PURPOSES.—R. W. Russell, New York City.

88,517.—VALVE OF STEAM-FIBER GUNS.—R. W. Russell, New York city.

88,519.—FIBROUS-COMPOSITION TUBE.—R. W. Russell, New York city.

88,519.—MANUFACTURE OF PAPER FOR PROTECTING GOODS FROM BEING INJURED BY MOTHS, ETC.—Robert W. Russell, New York city.

88,520.—GAS COOLER AND WASHER.—Richard Salter (assignor to himself and J. B. Davis), Cincinnati, Onio.

88,521.—CONSTRUCTION OF SAFES.—Benj.Sherwood and Daniel Fitzgerald, New York city.

9,529. Physiopeners Agreemy. D. H. Shiplay Roston Magazine. Fitzgerald, New Yorkcity.

88,522.—PIANOFORTE ACTION.—D. H. Shirley, Boston, Mass.

88,523.—PORTABLE FENCE.—S. C. H. Smith, Belpre, Ohio.

88,524.—MANUFACTURE OF STEEL DIRECT FROM THE ORE.—

R. S. Stenton, Brooklyn, N. Y. Antedated March 25, 1869. 88,525.—Machine for Sowing Grass Seed.—Henry Springer, 88,525.—MACHINE FOR SOWING GRADES Brady, Mich.
88,526.—ANIMAL TRAP.—J. J. St. Ledger, Philadelphia, Pa. Antedated March 25, 1869.
88,527.—HAT VENTILATOR.—C. C. Stremme, Austin, Texas.
88,528.—STREET LETTER BOX.—Samuel Strong, Washington, city, D. C. 88,529.—Churn.—J. A. Tice, Windsor, assignor to T. C. South, 88,529.—CHURN.—J. A. TICE, WINUSOF, ASSIGNOR TO T. C. SOULL, Mattoon, Ill.
88,530.—BREECH-LOADING FIREARM.—A. L. Varney, Watertown, assignor to A. B. Ely, Newton, Mass.
88,531.—BREECH-LOADING FIREARM.—A. L. Varney, Watertown, assignor to A. B. Ely, Newton, Mass.
88,532.—RENEWING ROLLS FOR PRINTING, CALENDERING AND LIKE PURPOSES.—C. E. Wilson, New York city.
88,533.—HARVESTER.—G. W. N. Yost, Corry, Pa.
88,534.—TIRE SHRINKER.—Joseph Adkins, Warrenton, Ga.

REISSUES.

79,730.—Dated July 7, 1868; reissue 3,342.—Steam Fire Engine.—E.R. Cole and H. S. Cole, Pawtucket, R. I.
51,387.—Dated Dec. 5, 1865; reissue 3,343.—Hand Pegging Machine.—R. W. Drew, Lowell, Mass., assignee of Louis Goddu.
59,957.—Dated Nov. 27, 1866; reissue 3,344.—Machine for Applying Reinfording Patches to Button Holes of Collars.—G. W. Ray and Y. N. Taylor, Springfiels, Mass., assignees, by mesne assignments, of J. T. Bruen and G. M. Jacobs.
38,190.—Dated April 14, 1863; reissue 3,345.—Machine for Making Covered Cord.—John Turner, Norwich, Conn., for himself, and assignee of I. E. Palmer.
85,149.—Dated Dec. 22, 1868; reissue 3,346.—Tube for Steam Generators.—G. E. Van Amringe, New Yorkcity.
83,345.—Dated Oct. 20, 1868; reissue 3,347.—Binding Books.
—F. B. Wells, for himself, and J. H. Cook (assignee of one half of said invention), Fishkill on the Hudson, N. Y.
51,680.—Dated Dec. 26, 1865; reissue 3,349.—Harvester.—C. Aultman, Canton, Olio, assignee, by mesne assignments, of Henry Fisher. 52,968.—Dated March 6, 1866; reissue 3,350.—Wrench.—A. G. Coes, Worcester, Mass. 22,549.—Dated Jan. 11, 1859; reissue 3,351.—SODA-WATER AP-

DESIGNS.

3,431.—TRADE MARK.—J. H. Ackerman, New York city. 3,432.—CENTER PIECE.—Henry Berger, New York city. 3,433.—TRADE MARK.—S. W. Dexter and D. S. Dexter, Pawtucket R. I.

3,434.—OH, CUP FOR JOURNAL BOXES.—Isidore Dreyfus, New
York city. York city.

3,435.—TRADE MARK.—J. A. Hamlin and L. B. Hamlin, Elgin, III.

3,436.—LAMP CHIMNEY.—Robert Hemingray, Cincinnati, Ohio.

8,487.—FRONT OF A CLOCK CASE.—Elias Ingraham, Bristel 5,451.—FRONT OF A CHOCK CASE.—Elas Agenta, 101, Conn.
3,438.—BIRD HOUSE.—John Murdock, Jersey City, N. J., assignorto JohnSavery's Sons, New York City.
3,439.—TABLE CASTER STAND.—Wm. Parkin (assignor to Reed & Barton), Taunton, Mass.

3,440.—FRUIT TAZZA.—Wm. Parkin (assignor to Reed & Barton), Taunton, Mass.

Inventions Patented in England by Americans.

[Compiled from the "Journal of the Commissioners of Patents."] PROVISIONAL PROTECTION FOR SIX MONTHS.

570.—MECHANISM FOR MAKING CIRCULAR TENONS AND MORTISES.—W. A Ives, New Haven, Conn. Feb. 24.1869. Ives, New Haven, Conn. Feb. 24, 1869.

577.—Harvesting Machine.—Cyrus Newhall, Hinsdale, N. H. Feb. 24, 1869. 586.—FURNACES AND APPARATUS FOR OXIDIZING AND DESULPHURIZING IRON AND OTHER ORES.—W. H. Reinoehl, Pine Grove, Penn. Feb. 25, 1869. 625.—LAWN MOWING MACHINE.—Samuel Coit, Hartford, Conn. March1, 1869. 1693.—IMPROVEMENT IN NAVIGABLE VESSELS.—John Howe, Jr., Boston, Mass. March 2, 1869.

595.-Ships and other Vessels for Carrying Liquid Cargoes.—W. C Hibbard, West Roxbury Mass. Feb. 26, 1869.

88,489.—TRACE BUCKLE.—E. M. Kinne, Cuba, N. Y.

612.—MEANS FOR EFFECTING THE MIXTURE OF MOLTEN CAST IRON WITH SOLIO OXIDES AND OTHER BODIES.—T. S. Blair, Pittsburgh, Pa. Feb. 27, 1869.

651.—WATER CLOSETS.—John Keane, New York city, and G. H. Brown, Washington Hollow, N. Y. March 4, 1869.

656.—PROCESS FOR CASTING CHAIN.—C. C. E. Van Alstine and J. C. Hofer, New Haven, Conn. March 3, 1869. 707.—APPARATUS FOR CONVERTING A RECIPROCATING MOTION INTO A ROTARY MOTION.—C. L. Spencer, Providence, R. I. March 9, 1869.

709.—OPERATING TILT HAMMERS.—T. T. Prosser, Chicago, Ill. March 9, 1869. 718.—TTREBINE WHEELS.—William Foos and J. W. Bookwalter, Springfield, Ohio. March 9, 1869.

730.—Devices for Rendering Gas Burners Self-Lighting.—Samuel Gardner, Jr., New York city. March 10, 1869.
750.—Cases for Holding Cigars. etc.—H. B. Wheatcroft, S.B. Guernsey, and F. J. Terrell, New York city. March 11, 1869.

759.—Spinning Machinery Materials.—Thomas Mayor, Providence, R. I. March 11, 1869.

Facts for the Ladies.

I purchased a Wheeler & Wilson Sewing Machine about ten years ago, and while learning to use it, without instruction, broke one needle; after that for more than nine years. I had the machine in almost daily use, doing all my family sewing, and very much for friends and others, and instructed seven persons in the use of the machine, without breaking a needle. My machine has never cost one penny for repairs. I have sewed hours with a worrisome babe in my lap, working upon fabrics of the most delicate texture, as well as upon men's and boys'clothes of the heaviest material. I have made garments for the cradle, the bridal, the hospital, and the funeral. Entering into every vicissitude of life, my machine has become, as it were, a part of my being. Mexico, N. Y. MRS. M. L. PECK.

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For a period of nearly twenty-five years Munn & Co. have occupied the position of leading solicitors of American and European Patents, and during this extended experience of nearly a quarter of a century, they have examined not less than fifty thousand alleged new inventions, and have prosecuted upwards of thirty thousand applications for patents, and, in addition to this, they have made at the Patent Office over twenty thousand Preliminary Examinations into the novelty of inventions, with a careful report on the same.

This wide experience has not been confined to any single class of inventions but has embraced the whole range of classification, such as Steam and

Manufactures, Agriculture and Agricultural Implements, Builders' Hardware, Calorifics, Carriages, Chemical Processes, Civil Engineering, Brick Making, Compositions, Felting and Hat Making, Fine Arts, Fire-arms, Glass Manufacture, Grinding Mills, Harvesters, Household Furniture, Hydraulics and Pneumatics, Illumination, Leather Manufactures, Mechanical Engineering, Metallurgy, Metal Working, Navigation, Paper Making, Philosophical Instruments, Presses, Printing and Stationery, Railroads and Cars, Sports, Games, and Toys, Stone Working, Surgical Apparatus, Wearing Ap-

parel, Wood Working.

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Those who have made inventions and desire to consult with us are cordially invived to do so. We shall be happy to see them in person, at our office, or to advise them by letter. In all cases they may expect from us an honest opinion. For such consultation, opinion, and advice, we make no charge. A pen-and-ink sketch and a description of thein ventionshould be sent. Write plainly, do not use pencil or pale ink.

If a SPECIAL SEARCH at the Patent Office is required, which embraces a personal examination of all patented inventions and a report in writing, a fee of \$5 is charged. This examination is only advised in doubtful cases.

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