## Becent American and Loreign Latents.

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

COMBINED ORE CRUSHER AND AMALGAMATOR. - Lyman Griswold, Denver, Colorado.-This invention relates to a new ore crusher, which is so constructed, by being provided with a set of inclined copper plates, that it will also serve as an amalgamator for the matter reduced on its dies. The invention consists in a new manner of securing and retaining the amalgamating copper plates; also in a novel set of elastic clamps for the same, and in a novel connection of casing and shute.

LEGISLATIVE TELLER AND RECORDER. -Dr. Adam Weston, Keeseville, N. Y .- This invention relates to a machine intended specially for use in legislative bodies, and which enables each member, by pulling one knob when he intends to vote, to display the number of his seat, either in the aye or nay column, in a conspicuous manner, on a plate elevated in full view from all parts of the hall; and also in a mechanism for conspicuously displaying the footing up of the whole number of ages and noes, and in an apparatus for effecting the simultaneous printing of two separate and complete lists of

LIQUID MEASURER.-Dr W. M. Wright, Chambersburg, Pa.-This invention consists mainly of two separate chambers, or two chambers combined in one, and of different capacities, the same being provided with a cock, so contrived, that, when turned in one direction, both chambers receive a sup ply of liquid at the same time, and when reversed, the supply passage is closed, and one or other of the chambers opened. The invention also consists in locating the mouths of the passage, whence the liquid escapes from the chambers, at the center of the bottoms thereof, in order that all the liquid may escape from the chambers, even when they stand inclined.

FILING AND SETTING MACHINE.-T. L. Shaw, Omaha, Nebraska.-This.invention relates to a machine that accurately files, sets, and feeds a saw, and s provided with means for adapting itself to saws of any and all widths, and for giving the teeth a set of any required degree of inclination.

Combined Sad and Fluting Iron.-Frederick Myers, New York city.-This invention relates to improvements in combined sad irons and fluting irons, of that class in which two cast metal plates, consisting of a lower one and an upper one, are used, the lower one having a smooth sad iron face on the bottom, and a corrugated upper face, and the upper one being corrugated on the lower side, and both being provided with connecting devices, by which they may be connected together when the instrument is to be used as a sad iron, and discontinued when it is to be used for fluting. And the invention consists in the construction of the two plates with convex fluted surfaces, for acting on the goods by a rolling motion, and the employment, in connection therewith, of connecting apparatus, which will admit of such rolling or oscillating motion, and at the same time be capable of holding them firmly together when the instrument is used as a sad iron.

DAMPER.-L. S. Taylor, Sigel, Mo.-This invention relates to improve ments in dampers for stove-pipes and other flues, and it consists in a tube arranged transversely through the pipe or flue, open at both ends, and having slots opening into the pipe or flue, in which tube is placed an other, having corresponding slots, and arranged for rotating for bringing its openings into coincidence with those in the first-mentioned tube, or to close said openings.

MANUFACTURE OF PICTURE NAIL HEADS.-Leopold Wolf, Meriden, Conn. -This invention relates to improvements in the manufacture of the metallic cups for picture nail heads, and consists in shaping the said cups in hand or power drawing presses, by a drawing process, whereby the inventor is en abled to accomplish the work by fewer operations and annealings than is required by the common mode.

Composition for Staining Wood .- John Winger, Kansas City, Mo.-This invention relates to a new and useful improvement in a composition for for staining wood of the color of black walnut,

System of Balancing Vertical Reciprocating Masses. - William F. Durfee, Bridgeport, Conn. -This invention relates to a new and improved mode of balancing the weight of vertical reciprocating masses of matter, in order that the power applied to give such masses their vertical reciprocating movement may be no greater in their upward than in their downward di

WINE BASKET .- J. Roussillon, Epernay, France. - This invention relates to a new and useful improvement in willow baskets for holding and transporting bottles of wine and other articles, more especially intended as

WIRE SORREN. -Samuel Holdsworth, Maspeth, N. Y.-This invention re lates to anew and useful improvement in wire screens for masons' use in screening sand, and also for screening grain and coal.

WINDOW CURTAIN FIXTURE. - Thomas C. Williams, East Randolph, Wis -This invention relates to a new and useful improvement in mode of operating window shades or curtains of textile material or paper.

PLATENFEED GUIDES. -Edward L. Megill, Brooklyn, N. Y. -This invention has for its object to furnish an improved feed guide, for platen printing presses, which is designed to take the place of the inconvenient contriv ances, such as common pins, quads, reglets, cardboards, etc., generally em ployed upon such presses by printers for the purpose of registering sheet of paper or other material.

SAWING MACHINE.-Jacob Felton, Fairmount, Ind.-This invention re ates to a new drag saw, which is constructed with the object of avoiding excessive friction during the operation of sawing, and for permitting a ready

GREEN GLAZE FOR FLOWER POTS .- John E. Brooks, Yarmouth, Me. - This invention has for its object to furnish an improved green glaze for flower nots, which shall be so inexpensive as to adapt it for use upon common earthenware, while at the same time giving to the ware a beautiful finish.

LUBRICATOR FOR STEAM CYLINDERS. -Tapping Reeves, Little River, Cal. -This invention has for its object to furnish an improved lubricator for Steam cylinders, which shall be so constructed that it may be supplied with oil when the cylinder is under steam pressure, and which will enable the water of condensation to be readily blown off when it is necessary to replenish the reservoir with oil.

Animal Trap, -James D. Pell, New York city. -This invention has for its ct to improve the construction of the ordinary wooden animal trans. s as to make them more convenient in use, and more effective in operation.

MACHINE FOR COILING DOUBLE BED SPRINGS .- Matthew Van Viech Albany, N. Y.—This invention consists in the application of single or double winding cones, to two separate slides, the cones revolving in opposite direc tions to produce the right and left cones or coils of a double bed spring from

NAIL MACHINE.-Henry Reese, Baltimore, Md.-In our notice of this in Vention, in the issue of the 11th inst., we stated that the operation of the machine produces a "headless nail," and that "the head of the nail is ormed by a subsequent operation." This is not true. The nail is finished and cut from the rod by one operation.

BLIND WIRING MACHINE.-Elijah F. Dunaway, Cincinnati, Ohlo.-This invention relates to a new machine for wiring blind slats and rods, and has for its object to make the apparatus entirely adjustable for applying staples of suitable length to articles of various thicknesses.

HAY FORK .- Benjamin F. Brown, Catlin, Ind .- This invention relates to improvements in hay forks, and consists in a pair of bars, barbed at one end, and pivoted together so that the bars being closed against each other, the said barbed ends constitute one point which may be readily forced into the hay, after which they may be separated to hold it for elevating, in which position they are held by a pair of bars and a trip catch, one of which bars is connected to the lifting bars where they are pivoted, and the other to a part of toggle-pointed bars, pivoted to the said lifting bars, and this latter slides on the other as the litting bars open and close, and is held in one position, to keep them open, by the trip catch.

-This invention relates to improvements in Crompton, Chicopee, Mass. machines for weaving embroidery, and it consists in an improved arrange ment of adjustable corners and connecting rods with the needle bars and a a pattern wheel or former, having for its object the weaving of three distinct patterns simultaneously. It also consists in an arrangement of the driving gear for working the pattern wheel calculated to facilitate the setting of the pattern wheel back, or adjusting it with exactness to make the exact adjustments of the needles with the patterns, often required in case of accidents.

## Inventions Patented in England by Americans.

[Compiled from the Commissioners of Patents' Journal.]

APPLICATIONS FOR LETTERS PATENT.

533.—IMPROVED SAND, GLASS, OR EMERY PAPER OR CLOTH.—G. C. Taft, Worcester Mass., and J. H. Armbruster, Philadelphia, Pa. Feb. 28, 18 1. 549.—Apparatus for Regulating Pressure of Steam in Drying Cyl-inders. etc.—Benalah Fitts. Worcester. Mass. March 1, 1871. 575.—SUGAR MANUFACTURING APPARATUS.—Claus Spreckles, San Francis-co, Cal. March 3, 1871.

578.—Flexible Shafting and other Apparatus for Transmitting Power.—J. B. Morrison, St. Louis, Mo. March 3, 1871.

587.-LAMPWICKS.-H. O. Whipple, New York city. March 4, 1871. 590.—Measurement of Folded or Rolled Fabrics.—Edward Morgan, Washington, D. C. March 4, 1871.

596.—Gaseliers, Sliding Gas Pendants, and Sliding Gas Brackets.— John Horton, 620 Broadway, New York city, now residing at 113 Hagley Road, Edgbaston, per Birmingsan, #agriant.

600.—TTPE-DISTRIBUTING MACHINERY.—D. B. Thompson, Brooklyn, N. Y. March 6, 1871. 602.—COMBINED SAFETY VALVE AND WHISTLE.—G. H. Clemens, Chicago, Ill. March 6, 1871.

## Official List of Latents.

## ISSUED BY THE U.S. PATENT OFFICE.

FOR THE WEEK ENDING MARCH 21, 1871.

Reported Officially for the Scientific American

SCHEDULE OF PATENT FEES	210
On each Caveat On each Trade-Mark	\$25
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On issuing each original Patent	, 120
On appeal to Examiners-in-Chief	ינום. רנים
On appeal to Examiners-in-Chief On appeal to Commissioner of Patents. On application for Reissue	A SU
On application for Extension of Patent	350
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On filing a Disclaimer	DIO.
On an application for Design (three and a finit years)	915 915
On an application for Design (three and a haif years). On an application for Design (seven years). On an application for Design (fourteen years).	. 830
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## Patent Solicitors, 37 Park Row, New York.

-Composition for Pavements. -Nathan S. Abbott 112,765.—Вер Воттом. — John H. Allyn, Whitesborough,

112,766—Pressing and Baling Hay.—George H. Aylworth, Prighton, IL 112,767.—HAT AND CAP HOLDER.—Charles Beeny, Albany,

N. Y. 112,768.—Pump Piston.—Daniel W. Bell, St. Louis, Mo. 112,769.—HORSESHOE MACHINE.—Uriah Billings, Cambridge-

port, Mass. 112,770.—Piston-rod Packing.—James H. Blessing (assignor

112,770.—FISTON-ROD PACKING.—James H. Blessing (assignor to himself and Frederick Townsend), Albany, N. Y.
112,771.—TAP AND NOZZLE FOR OIL CANS.—J. A. Bostwick, New York city.
112,772.—GLASS-BLOWER'S MOLD.—Samuel R. Bowie (assignor to himself and William L. Libbey & Brother), New Bedford, Mass.
112,773.—HORSESHOE.—Joseph Brackett, Lynn, Mass.
112,773.—STRINGER LAND. GROUPE Broader, New York city.

112,774.—STREET LAMP.—George Brandon, New York city. 112,775.—MACHINE FOR UPSETTING BOLTS.—Benjamin Briscoe and Joseph A. Briscoe (assignors to the Michigan Bolt and Nut Coupany) Detroit Mich

G coe and Joseph A. Briscoe (assignors to the Michigan Bolt and Nut Company), Detroit, Mich. 112,776.—GREEN GLAZE FOR PLOWER POTS.—John E. Brooks,

Yarmouth, Me.
112,777.—Horse Hay Fork.—Benjamin F. Brown, Catlin, Ind. 112,778.—Device for Transporting Eggs.—A. H. Bryant,

112,778.—DEVICE FOR TRANSPORTING EGGS.—A. H. Bryant, Chicago, Ill. Antedated March 9, 1871.
112,779.—PNEUMATIC TELEGRAPH.—Edward A. Calahan, Brooklyn, and George B. Field, New York city.
112,780.—COMBINED GAGE AND TRY SQUARE.—Frederic Castle (assignor to himself and Newbury J. Eaton), Montana, Iowa. Antedated March 18, 1871.
112,781.—PEN HOLDER.—Benjamin Charles, Akron, Ohio.
112,782.—THRASHING MACHINE.—Francis G. Chesman, Lemont, Ill.

112,782.—I HRASHING FLACILLE.
mont, Il.
112,783.—THILL COUPLING.—Newton J. Clark (assignor to himself and Milton H. Clark), Clarkston, Mich.
112,784.—Egg and Fruit Carrier.—Wm. J. Clark, Lena,

112,785.—LAPPET LOOM.—Joseph Clough and Joseph Cromp ton, Chicopee, Mass.
112,786.—Coating Gas and Water-Pipe.—Nicholas Clute,

Schenectady, N. Y. 112,787.—BLOTTING PAD. - Alfred Q. Collins, Cambridge, -SAWING MACHINE TABLE.-Jonathan Creager, Cin-

cinnati, Ohio. 112,789.—Fire Shovel.—Isaac W. Denning, Allegheny City,

Pa.
112,790.—Washing Maching.—William James Dodge, Syracuse, N. Y., assignor to himself. Alanson T. Briggs, and Wm. H. Thrall, New York city. 112,791.—BLIND WIRING MACHINE.—Elijah F. Dunaway,

112,792.—BALANCING VERTICAL-RECIPROCATING MASSES.-Wm. F. Durfee, Bridgeport, Conn., assignor to himself and Jackson & Wiley, Detroit, Mich.

112,793.—ADJUSTABLE BEVEL.—Willard C. Ellis (assignor of

one half his right to Rufus A. Rassell), Springfield, Mass.
112,794.—SAWING MACHINE,—Jacob Felton, Fairmount, Ind.
112,795.—MAGAZINE FIREARM,—Harbert K. Forbis, Danville,

Ky. Antedated March 10, 1871. 112,796.—Churn.—David Frankfoder, Wakarusa, Ind. 112,797.—Horse-Collar Pad.—John Fraser (assignor to himself and John J. Hardy), Dowaglac, Mich.

112,799.—BIT BRACE.—Raymond French, Seymour, Conn. 112,800.—Loop for STIRRUPS.—J. B. Gathright, Louisville,

112,801.—Vise for Joiner's Use.—Jonathan Good, Lancaster, Pa. 112,802.—Machine for Sewing Boots and Shoes.—Chas

Goodyear Jr., New Rochelle, N. Y.
112,803.—BREECH-LOADING FIREARMS.—G. B. Gray and J.
H. Romans, Mount Vernon, Onio.
112,804.—COMBINED ORE CRUSHER AND AMALGAMATOR.—

Lyman Griswoll, Denver, Colorado Territory.

112,805.—RAILWAY-RAIL CHAIR.—Samuel M. Guest, Ypsilanti, 112,806.—Churn.—H. S. Gurney and Horace Merrill, Memphis,

MACHINES FOR WEAVING EMBROIDERY. - Joseph Clough and Joseph 112,807. - MOUSE AND ANIMAL TRAP. - George L. Hart, New 112,808.—APPARATUS FOR CUTTING THE ENDS OF CIGARS.—

Mathias Joseph Hinden (assignor to Adolph Freund), Detroit, Mich. 112,809.— SAND SCREEN.— Samuel Holdsworth, Maspeth, N. Y. 112.810.—Corò-Guide for Sewing Machines.—Henry Horn

(assignor to John O. Fairbairn). Milwaukee, Wis.
112,811.—THILL COUPLING.—Benjamin F. Horton, Ithaca

112,812.—Sash Holder. — Philo B. Hovey, New London

112,813.—BEE HIVE.—Washington J. Kelly, Commerce, Mich 112,814.—Curtain Fixtures.—Wm. C. Kennedy, Commerce 112,815.—CLOTHES WRINGER.— Alexander King, Philadel

phia, Pa.

112,816.—Drawer Pull.—Joseph Kintz (assignor to himself and P. J. Clark), west Meriden, Conn.

112,817.—SHAFT COUPLING.—Darius Knickerbocker and Samuel Knickerbocker, Allegan, Mich.

112,818.—RECTIFYING HIGH WINES.—Archibald K. Lee,

111,819.—Physician's Saddle-Bag.—A. M. Leslie, St. Louis,

Mo.
112,820.—WASHBOARD.—Charles Letterman, Syracuse, N. Y.
assignor to John W. Throop.
112,821.—PLANING MACHINE.—Charles Levey, Toronto,

Cahada. 2,822.—COTTON PRESS.—Eli W. Long and Isaac N. Patten, 112,822. Memphis, Tenn.
112,823.—Toy Puzzle.—Samuel Loyd, New York city.
112,824.—Boiler for Heating Purposes.—J. A. Maynard

Newtonville, Mass. 112.825.—HYDRANT.—John McCann, Albany, N. Y. Antedated March 2, 1871. 2,826.—RAILWAY SHIFTING TRUCK.—P. H. McWilliams, 112,826. Detroit, Mich.

112,827.—PLATEN FEED GUIDE.—Edward L. Megill, Brooklyn

112,828.—MANUFACTURE OF IRON AND STEEL. — John W.

112,829.—MANUFACTURE OF IRON AND STEEL.—John W. Middleton, Philadelphia, Pa. 112,829.—Crane.—John W. Middleton, Philadelphia, Pa. 112,830.—Peat Machine.—Herman Mielisch, Racine, Wis. 112,831.—APPARATUS FOR REFINING METALS.—Adolph

112,831. — APPARATUS FOR KEFINING METALS. — AUGIPH MIllochau, New York city.
112,832. — APPARATUS FOR REMOVING PAINT, VARNISH, ETC. — Theodore F. Moody, Toledo, Ohio. Antedated March 14, 1871.
112,833. — SASH HOLDER. — James B. Morgan, Davenport, Iowa assignor to himself and Maurice J. Keating, Rock Island, fil. 112,834. — WAGON SEAT. — Valentine Myers (assignor to him self and John M. Phelps), Cogan Station. Pa. 112,835. — ROAD SCRAPER. — William T. Nichols, Chicago, Ill 112,836. — Telegraph Apparatus. — Henry C. Nicholson, Mt Washington. Ohio.

Washington, Ohio. 112,837.—SWEEPING MACHINE.—George S. Norris, Baltimore,

112,838.—Machine for Grinding Saw Teeth.—John L.

Otis, Leeds, Mass. 112,839.—Preparing Tin Salts from Tinners' Waste.— Adolph Ott (assignor to New York Metal and Chemical Manufacturing Company), New York city.

112,840.—SHUTTER FASTENER.—Charles Pabst, Wilmington

112,841.—ELECTRO-MAGNETIC MOTOR.—Henry M. Paine, New ark, N. assignor to Mahlon S. Frost, New York city.

112,842.—BIT AND DRILL BRACE.—George G. Parker, and William P. Dodge, Prospect, New York.

112,843.—(ATE.—Noah Parker, Thimble County, Ky.

112,844.—ANIMAL TRAP.—James D. Pell, New York city.

112,845.—PREPARING SEED CORN.—John Meek Petit, Monroe Township, Ohio.
 112,846.—BROILER.—Edward B. Phelps and James P. Mc-

Lean, Brooklyn, N.Y.
112,847.—LUBRICATOR.—Tapping Reeves, Little River, Cal.
112,848.—MANUFACTURE OF NITRO-GLYCERIN.—Edward A.

112,849.—MANUFACTURE OF NITRO-GLYCERIN.—Edward A. L. Roberts, Titusville, Pa.
112,849.—MANUFACTURE OF NITRO-GLYCERIN.—Edward A. L. Roberts, Titusville, Pa.
112,850.—ELECTRIC AND OTHER FUSE HEADS.—Edward A. L. Roberts, Titusville, Pa.
112,851.—"CHAFE IRONS" FOR WHEELED VEHICLES.—Ed-

ward P. Roche, Bath, Me.
112,852.—Wine Basket.—Jean Roussillon, Epernay, France.
112,853.—Steam Engine.—Stephen P. Ruggles, Boston,

112,854.—HORSE HAY RAKE.—John H. Schoonmaker, Bethle-hem, assignor tohimself and Alexander Selkirk, Albany, N.Y. Antedated March 10, 1871.

112,855.—HOISTING MACHINE.—John Scott, Pontiac, Mich. 112,856.—HOISTING MACHINE.—William Sellers, Philadel-

112,856.—HOISTING MACHINE.—William Sellers, Philadelphia, Pa.
112,857.—BUCKLE FOR SUSPENDERS.—Abraham Shenfield, New York city.
112,858.—COMPOUND FOR TREATING CATARRH, ETC., BY INHALATION.—Dana Slade, Chicago, Ill.
112,859.—ELECTRIC FUSE.—Henry Julius Smith, Boston, Mass. Antedated March 7, 1871.
112,860.—HAND TOOL FOR CARVING AND ENGRAVING.—Geo. B. Soley, Philadelphia, Pa.
112,861.—GAGE FOR SAW TABLES.—Franklin L. Sprague, Keene. N.H. assignor to William H. Doane. Cincinnati, Ohio.

112.861.—GAGE FOR SAW TABLES.—Franklin L. Sprague, Keene, N.H., assignor to William H. Doane, Cincinnati, Ohio.
112,862.—CULTIVATOR.—William D. Stroud, Oshkosh, Wis.
112,863.—DAMPER.—Leonard S. Taylor, Sigel, Mo.
112,864.—STUMP EXTRACTOR.—Albert D. Tilyon, Norwich assignor to Cornelius A. Church, New Berlin, N.Y.
112,865.—BRAKE FOR RAILWAY CARS.—Lewis W. Tracy (assignor to himself and James E. Granniss), New York city.
112,866.—TWEER.—Eben Trasy, Vermontville, Mich.
112,867.—ROLL FOR THE MANUFACTURE OF PLANTERS' HOES.—John T. Tyler, Pittsburgh, Po.

112,867.—ROLL FOR THE MANUFACTURE OF PLANTERS HOES.—John T. Tyler, Pittsburgh, Po.
112,868.—MACHINE FOR COILING BED SPRINGS.—Matthew Van Vleck, Albany, N. Y.
112,869.—COMBINED HARROW, SEEDER, AND ROLLER.—
Joseph Vessot, Sr., and Samuel Vessot, Jr., Joliette, Canada.
112,870.—COMPOUND POTATO PLANTER AND DIGGER.—James

Joseph vessot, St., and Samuel Vessot, Jr., Joliette, Canada.

112,870.—COMPOUND POTATO PLANTER AND DIGGER.—James Carroll Walker, Farmington, Mich.

112,871.—HAND STAMP.—John Walters, Norfolk, Va., as signor to William O. Hickok, Harrisburg, Pa.

112,872.—VEGETABLE GRATER.—Jacob Wehrle and William Wittlinger, Cincinnati, Ohio.

112,873.—MACHINE FOR GRINDING CARRIAGE SPRINGS.—Hebron Mayhew Wentworth, Gardiner, Me.

112,874.—FINISHING PAPER BOXES.—Seth Wheeler and Edgar Jerome, Albany, N.Y. Antedated March 16, 1871.

112,875.—BARREL.—Henderson Willard, Grand Rapids, Mich.

112,876.—WINDOW CURTAIN FIXTURE.—Thomas Charles Williams, East Randolph, Wis.

112,877.—GLASS FOR THE MANUFACTURE OF SPECTACLES.—Thomas Atwood Willson, Reading, Pa.

112,878.—BOLSTER BLOCK, AND PIER OR ABUTMENT PLATE FOR BRIDGES AND ROOF TRUSSES.—Joseph M. Wilson, Philadelphia Pa.

112,879.—COMPOSITION FOR STAINING WOOD.—John Winger.

112,879.—Composition for Staining Wood.—John Winger,

112,879.—COMPOSITION FOR STAIRING WOOD.

Kansas City, Mo.
112,880.—MECHANISM FOR MANUFACTURING HEADS FOR PICTURE NAILS.—Leopold Wolf (assignor to the Meriden Malleable Iron Company), Meriden, Conn.
112,881.—STEAM HEATER.—Charles J. Wood, Baltimore, Md.
112,882.—RUFFLING ATTACHMENT FOR SEWING MACHINES.—

Frederick B. Zav. Findlav. Ohlo.

Frederick B. Zay, Findlay, Ohio. 112,883.—SAW MILL.—Emanuel Andrews, Williamsport, Pa. Antedated March 10, 1871.

112,884.—CLOTHES WRINGER.—Alfred M. Balley (assignor to "The Metropolitan Washing Machine Company), Middlefield, Conn.
112,885.—ROCK DRILL.—Albert Ball (assignor to Sullivan Machine Company), Claremont, N.H.
112,886.—SASH HOLDER.—William Thomas Bausmith, Aberdeen, Md.

112,887.—Iron Railing.—Samuel S. Bent, Port Chester, N.Y. 112.888.—Clevis Hook for Double Trees.—Warren W. Bentley, Lee Township, Mich.

112,889.—ATTACHMENT FOR HARNESS,—William A. Blundell, St. Louis, Mo., assignor to himself, William P. Nelson and Mathew C Tully.

112,890.—Advertising Lamp.—Emil Boesch, San Francisco, 112,891.—Whip Stock.—John J. Bohler, Westfield, Mass. 112,892.—MOWING MACHINE.—Aaron Bolander, Akron, Ohio. 112,893.—PORTABLE RAILWAY.—Theodore Bootsman, Tompkinsville, i 112,894.—CORN PLANTER.—Richard A. Boulware, Doniphan, 112,895.—DEVICE FOR OPENING OYSTERS.—Michael C. Boyer, Norristown, Pa. 112,896.—Apparatus for Tempering Sand.—Joh C. Broadmeadow, Bridgeport, Conn.

112,897.—RAILWAY CAR TRUCK.—Chauncey S. Buck (assignor to himself and James Lovett), St. Louis, Mo.

112,898.—ROOFING BRACKET.—Jonathan W. Cadwell, Spring-112,898.—ROOFING BRACKET.—Jonathan W. Cadwell, Springfield, Mass.
112,899.—VALVE GEAR FOR STEAM ENGINE.—A. S. Cameron,
New York city.
112,900.—STILL.—James A. Campbell, Dayton, Va., assignor
to himself, A. K. Layman, and L. W. Myers.
112,901.—THREAD GUIDE FOR WINDING MACHINES.—D. M.
Church, Holyoke, Mass.
112,902.—SHOEMAKERS, HAMMER.—Arthur Clarke Boston 112,902.—SHOEMAKERS' HAMMER.—Arthur Clarke, Boston, 112,903.—Door Bell.—John P. Connell, Kensington, Conn. 112,904.—GATE.—Peter S. Crawford, Union, Ill. 112,905.—CARRIAGE GEARING.—Cornelius Custer, Norristown, 112,906.—HARNESS ROSETTE.—W. D. Davis, C. W. Blakeslee, and J. C. Peck, Watertown, Conn.

112,907.—CALL BELL.—H. A. Dierkes and John Fretts, New York city; John Fretts assigns his right to H. A. Dierkes.

112,908.—CIRCULAR SAW BENCH.—B. F. Dunklee, Concord, N. H. N. H.
112,909.—ADJUSTABLE MILL FEED.—Wm. T. Duvall, Washington, D. C.
112,910.—LOCKED COCK.—Henry Essex, Meadeville, Pa.
112,911.—SAND SCREEN.—G. W. Fair, Dayton, Ohio.
112,912.—BED BOTTOM.—Matthew Faloon, Bloomington, Ill. 112,913.—PLOW.—L. F. Frazee, Jersey City, N. J. 112,914.—Tweer for Blast Furnaces.—John Fry, Salisbury, Conn.
112,915.—CENTER POINT TRIMMING.—Ansel Hecht, New York city.
112,916.—CULINARY VESSEL.—Levi Hermance (assignor of one half his right to P. J. Marsh), Lansingburgh, N. Y.
112,917.—PENCIL CASE.—W. S. Hicks, New York city.
1,2,918.—ORE SEPARATOR.—Wm. Hooper, Ticonderoga, N. Y. Antedated March 10, 1871.
112,919.—ORE SEPARATOR.—Wm. Hooper, Ticonderoga, N. Y. Antedated March 10, 1871. Antedated March 10, 1871.

112,920.—MEDICAL COMPOUND OR SALVE.—Martha Huddles-112,921.—FAN AND FLY DRIVER.—Frank M. Hunt, Clinton, Ga.
 112,922.—CATTLE TIE.—Seth T. Hutchins, North Anson, Me.
 112,924.—ROLLING MILL.—Asa Johnson, Brooklyn, N. Y., assignor to himself and W. H. Johnson, New York city.
 112,925.—Hollow TILE WALL.—G. H. Johnson, New York 112,926.—Hollow Tile Floor.—G. H. Johnson and Bal-112.926.—HOLLOW TILE FLOOR.—G. H. Johnson and Balthasar Kreischer, New York city.
112.927.—RESERVOIR FOR GRAIN AND OTHER MATERIALS.—G. H. Johnson and Balthasar Kreischer, New York city.
112.928.—FIRE ESCAPE.—C. P. Kenyon (assignor to himself and J. W. Sharp), Selma, N. C.
112.929.—COMPOSITION TILE FOR FIRE-PROOFING BUILDINGS.—Balthasar Kreischer, New York city.
112.930.—HOLLOW 'I'ILE.—Balthasar Kreischer, New York city. 112,931.—Stovepipe Shelf and Clothes Drier.—Geo. W. Langdon (assignor to himself and Lewis Seneare), Greene, N, Y. 112,932.—Bell Hanging.—A. L. Sas Slyhens, near Ostend, 112,932.—BELL HANGING.—A. L. Sas Slynens, hear Oscena, Belgium.
112,933.—LEGGOTYPING.—W. A. Leggo, Montreal, Canada.
112,934.—HINGE.—M. R. Lemman, Hamilton, Ohio.
112,935.—WOOD SCREW.—Andrew B. Lipsey, West Hoboken, 112,936.—Base-burning Stove.—Lyman Litchfield, Gouverneur, N. Y., assignor to himself and H. K. Osborne, Arlington, Mass. 112,937.—Traveling Trunk.—John C. Locke, Rochester,

112,939.—BOAT-LOWERING APPARATUS.—George W. Mallory, 112,983.—SOAP DISH.—J. M. Thatcher, Bergen, N. J. Mystic Bridge, Conn. 112,984.—BOOK SUPPORT.—S. M. Thompson, Providence, 112,940.—HARVESTER RAKE.—John P. Manny, Rockford, R. I. 112,941.—HARVESTER RAKE.—John P. Manny, Rockford, 112,943.—SAW WITH DETACHABLE TEETH.—T. P. Marshall,
112,948.—SAW WITH DETACHABLE TEETH.—T. P. Marshall,
112,948.—APPARATUS FOR MANUFACTURING
Mason (assignor to T. L. Carnenter). New York of the Marshall Mason (assignor to T. L. Carnenter). New York of the Marshall Mason (assignor to T. L. Carnenter). New York of the Massignor to T. L. Carnenter). Mason (assignor to T. L. Carpenter), New York city. 112,945.—WOOD PAVEMENT.—G. A. May, Chicago, Ill. 112,946.—BRAIDING MACHINE.—John McCahey and Stephen B. Salisbury (assignors to the New England Butt Company), Providence, R. I. 112,947.—Buckle.—Duncan McMillan and Abram Rowan, Webster City, Iowa.

112,948.— STEAMING ATTACHMENT FOR KEROSENE STOVES.

—R. B. Mitchell, Chicago, Ill.

112,949.— MOLDING PLANE.—Ellis H. Morris, Canton, Ohio.

112,950.— KEEP AND BRACE FOR FIFTH WHEELS.—Francis

B. Morse (assignor to H. D. Smith & Co.), Plantsville, Conn.

112,951.—PENCIL SHARPENER.—Elias P. Needham, New York city. 112,951.—PENCIL SHARPENER.—Elias P. Needham, New York city.
112,952.—ANKLE BRACE.—Jacob S. Niswander, Oakland, 112.953.—PIE CASE.—H. H. Olds, New Haven, Conn. 112,954.—CAR BRAKE AND STARTER.—Joseph Caradis (assignor to himself and Sarah Parker), Brooklyn, N. Y.
112,955.—LIFTER FOR FRUIT JAR.—S. R. Pinckney, New 2,956.—GATE FOR TURBINE WATER WHEEL.—Samuel A. 112,956.—GATE FOR TURBINE WATER WHEEL.—Samuel A. Prescott, Sutton, Mass.
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112,958.—PIPE COUPLING.—J. B. Ramp, Cuyagoga Falls, 112,959,—PRESSED FRUIT LIFTER.—Ennis A. Raymond, Waterloo, Iowa.

112,960.—BROOM.—C. L. Reid, Louisville, Ky.

112,961.—PORTABLE FURNACE.—Jesse Reynolds, Philadelphia, Fa.

112,962.—REVERSIBLE BOOT HEEL.—Frederick Richardson and Francis Hacker (assignors to Reversible Boot Heel Co), Providence, R. I. 112,963.—FRUIT DRIER AND FOOD WARMER.—Seelye Richmond (assignor of one half his right to Joseph E. Dickson), Annapolis, 112,964.—TILE STOVE.—E. Y. Robbins, Cincinnati, Ohio. Autedated March 13, 1871 112,965.—PORTABLE FURNACE.—W. D. Robertson, Knoxville, 112,966.—HAY AND COTTON PRESS.—C. A. Robinson, Florence Ind. 112,967.—MACHINE FOR HUSKING CORN.—Jacob Russell, 112,968.—End Gate for Wagons.—J. F. Sener, Lancaster, 112,969.—HYDRAULIC NOZZLE,—Henry Shaw, Nevada City, 112,970.—SAW-SET AND FILER.—T. L. Shaw, Omaha, Neb. 112,971.—TURNING LATHE.—S. D. Sheldon, Fitchburg, Mass. 112,972.—SHAFT Coupling.—James Sherry, Watertown, 112,973.—MANUFACTURE OF EYELET STOCK.—S. N. Smith, Providence, R. I. 112,974.—HOLDER FOR DRINKING GLASSES.—J. V. Snider, Philadelphis, Pa. 112,975.—Gas Machine.—T. G. Springer, St. Louis, Mo. Antedated March 10, 1871. 112,976.—WHISK BROOM.—Greenleaf Stackpole, Elizabeth, 112,977.—Cheese Hoop.—William Sternberg, Bridgeport, 112.978.—HINGE FOR SEWING MACHINES.—R, H. St. John, Bellefontaine, Ohio.

112,979.—SAW GUMMER.—N. F. Stone, deceased (Amanda Stone and Benjamin Holbrook, administrators), Chicago, Ill. Antedated March 14, 1871.

112,980.—NEEDLE FOR SEWING MACHINES.—Edwin Strain,

197.

Newton, Mass. 112,981.—Hydrocarbon Gas Apparatus.—M. H. Strong and W. I. Reid, Brooklyn, N. Y. 112,982.—FIRE ESCAPE.—T. L. Summeril, Juda, Wis.

112,985.--Sash Holder.-Alexander Thomson, Champaign, 112,986.—FIRE-PLACE GRATE.—J. W. Thorniley, New Brigh-112,989.—THILL COUPLING.—Charles Twombly, Boston, Mass.

112,990.—WALKING CULTIVATOR.—John Vanluvanee and HughSmith, Moine, Ill.

112,991.—APPARATUS FOR CONVERTING RECIPROCATING INTO ROTARY MOTION.—Franz Wagner, New York city.

112,992.—METER.—Franz Wagner, New York city.

112,993.—COOKING STOVE.—G. W. Walker, Boston, Mass.

112,994.—CULTIVATOR.—F. N. Welden, Rockford, Ill.

112,995.—FUEL AND KINDLING WOOD.—W. E. Wertenbaker, washington, D. C.

112,996.—ZINC BOARD FOR STOVES.—William Westlake, Chicago, Ill.

112,997.—BREECH LOADING FIRE-ARM.—Eli Whitney. New

112,997.—Breech loading Fire-Arm.—Eli Whitney, New Haven, Conn.

112,998.—RAILWAY RAIL AND CHAIR.—W. E. Winby, Edgbaston, England.

112,999.—SHIP'S COMPASS.—G. W. Wood (assignor to M. A. Wood), Brooklyn, N. Y.

113,000.—TYING BROOMS AND BRUSHES.—J. H. Anderson, Terre Haute, Ind., assignor to Thomas Marston, Jr., W. L. Peck, and C. I. Peck, Chicago, Ill. Antedated Feb. 14, 1871.

### REISSUES.

4,305.—SEWING MACHINE.—C. O. Crosby, New Haven, assignor to N. A. Baldwin, Milford, Conn.—Patent No. 21,745, dated October 12, 1858. ber 12, 1888.
4,306.—COPYING PRESS.—E. W. Frost, New York city, assignee of Francis Hovey.—Patent No. 42,141, dated March 29, 1864.
4,307.—SEED DRILL.—F. H. Manny, Rockford, 111., assignee of M. C. Younglove.—Patent No. 20,603, dated June 15, 1858.

### DESIGNS.

4,721.—CARPET PATTERN.—Jonathan Crabtree (assignor to Leedom, Shaw & Stewart), Philadelphia, Pa. 4,722.—ORNAMENTAL CHAIN LINK.—Virgil Draper (assignor to O. M. Draper), Attleborough, Mass. 4,723.—CHAIN LINK.—Virgil Draper (assignor to O. M. Draper), Attleborough, Mass. 4,724.—Show Case.—W. H. Grove, Philadelphia, Pa. 4,725.—SIDE FRAME OF SCHOOL DESKS.—A. F. Old (assignor

per), Attleborough, Mass. 4,724.—Show Case.—W. H. Grove, Philadelphia, Pa. 4,725.—Side Frame of School Desks.—A. F. Old (assignor

to J. A. Bancroft & Co.), Philadelphia, Pa.
4,726 and 4,727.—TYPE.—W. H. Page (assignor to W. H. Page & Co.), Norwich, Conn. Two patents.
4,728.—TYPE BORDER.—W. H. Page (assignor to W. H. Page

& Co.), Norwich, Conn. 4,729.—WHISK BROOM.—Greenleaf Stackpole, Elizabeth,

J. J. Sword.—E. S. Warren, Springfield, Mass. 4,731.—HANDLE FOR SPOONS OR FORKS.—George Wilkinson (assignor to Gorham Manufacturing Co.), Providence, R. I.

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