

Recent American and Foreign Patents.

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

SCYTHES.—Charles E. Griffin, Roseville, Ill.—This invention consists in the application of a weight to the outer end of a scythe, to serve as a counterpoise for the same and thereby greatly facilitate and lessen the labor of mowing.

ANTI-FRICTION BOX.—Jeremiah McIlvain, Churchville, Md.—This invention relates to a new and improved box for the shafting of machinery, and it has for its object the reduction of friction.

COTTON SEED PLANTERS.—A. J. Going, Clinton, La.—This invention relates to a new, simple, and useful device for agitating cotton seed in the hoppers of cotton seed planters, so as to insure the separation of the seed one from the other, and thereby prevent the clogging or chocking up of the hopper and effect a proper distribution of the seed from the same.

SCREW PEG FOR BOOTS AND SHOES.—J. M. Estabrook, Milford, Mass.—The object of this invention is to facilitate the attachment of soles to the uppers of boots and shoes, and consists in the use of screw or notched pegs, which can be by means of hammers be forced through the leather instead of being turned into the same as heretofore made.

ELASTIC LANYARD.—J. E. Jones, Wiretown, N. J.—This invention has for its object the construction of an elastic lanyard by which the stays of a ship's rigging can be most conveniently connected with the dead eyes or some other fixed part of the vessel, the lanyard being elastic so that the rigging will be in some degree yielding. The straining of the mast, as well as that of the rigging, will thus be most advantageously avoided.

POTATO WASHER.—L. B. Sherwin, Hyde Park, Vt.—This invention relates to a new and improved method of washing potatoes, and other articles, and it consists in agitating the potatoes in the vessel in which they are placed by revolving a horizontal bar or agitator with inclined sides or blades on the bottom of the vessel.

DUMPING CART.—Joseph H. C. Applegate, Bridgeton, N. J.—This invention relates to an improvement in the method of dumping cart bodies, and it consists in attaching to the front of a cart a catch of novel construction which is operated from the rear end of the cart.

MEDICAL COMPOUND.—J. M. Hughes, Menomonee, Wis.—This invention consists in a compound of matter, which as an external application is advantageous in treating many complaints in cattle.

WINDOW FRAMES.—Samuel Myers, Hogestown, Pa.—This invention has for its object to improve the construction of window frames so that the sashes may be easily and conveniently removed without its being necessary to remove the parting bead, which is usually a troublesome operation, frequently breaking the bead, injuring the paint, and defacing the frame.

WATER REGULATOR FOR PAPER PULP MACHINES.—David Hunter, North Bennington, Vt.—The object of this invention is to produce an automatic attachment to paper pulp machines for regulating the flow of the water which enters the machine so as to prevent the overflow of the water and the consequent loss of pulp. It also consists in the use of a float by which the valves controlling the water supply are held open or closed according to the height of water in the tub.

SLATE-RULING MACHINE.—John H. French, Albany, N. Y.—This invention relates to a new machine for ruling slates, of that class in which the lines are formed by scratching the surface of the slate with a pointed or sharp instrument. It consists chiefly in arranging a series of sharpened or pointed tools in one head, and in drawing them at once in the required direction across the slate, or in moving the slate over them, so that by one motion of the slate or tool a whole series of parallel lines can at once be produced.

RAILROAD TICKETS.—H. E. Alexander, New York city.—This invention relates to improvements in tickets for use upon railroads, steamboats, and conveyances, for passengers, but is particularly adapted for street cars or other vehicles where a fixed rate of fare is to be collected, the object of which is to prevent fraud or embezzlement on the part of those who collect the fare.

ROOFING.—Philip A. Brown, Indianapolis, Ind.—This invention consists in forming roofing from clay of any suitable kind, in molds of peculiar form, into blocks, so shaped in sections as to be readily joined together by lapped joints, and form a waterproof roof composed mainly of one thickness of material.

TOOL HOLDER.—Charles H. Reid, Danbury, Conn.—The object of this invention is to provide a simple, convenient, and effective stock or tool holder for machinists' use, and which is available both as a tool holder for lathes and planing machines, and also for holding a boring tool for such shallow work as is capable of being bored out in the chuck of a lathe.

CAR COUPLING.—H. W. Boileuillet, Savannah, Ga.—This invention has for its object to furnish an improved car coupling which shall be so constructed and arranged as to be self-coupling, and so as to be adjustable to support the link at any desired elevation to enter the bumper of the adjacent car when the cars are run together.

MOWING MACHINE.—F. A. Geisler, Bristol, R. I.—This invention consists, first, in certain improvements in the arrangement of the main shoe and bar off the ground; third, in a method of readily gearing and ungearing the cutter operating mechanism; fourth, an improved arrangement of the finger bar and the guard fingers; and fifth, in the arrangement of a mold board at the outer end of the finger bar, for throwing the fallen grass away from the uncult grass.

WASH BOILERS.—H. P. Bemiss, Milan, Ohio.—This invention relates to improvements in that class of wash boilers wherein currents of water are caused to flow from bottom to top and vice versa. It also consists in an arrangement of the same designed to be more effectual in producing the said flow.

CULTIVATORS.—J. W. Jessop, Harveysburgh, Ohio.—This invention has for its object to furnish an improved cultivator, which shall be so constructed and arranged that it may be easily adjusted for use, to cultivate corn or cover wheat, as may be desired, and which shall at the same time be simple in construction and effective in operation.

MACHINE FOR MAKING PAPER BOXES.—William Gates and David J. Lloyd, Frankfort, N. Y., and Samuel Miller, South Hammond, N. Y.—This invention relates to a new and improved machine for making paper boxes, such as are of square or rectangular form in their transverse sections. The invention is an improvement on a machine for the same purpose patented by R. L. Hawes, April 24, 1855, and the object of the present invention is to obviate several difficulties attending the operation of the original machine, a practical use of which for a number of years having suggested a number of improvements.

FAUCET CLAMP FOR PLUMBER'S USE.—James Elliott, New York city.—This invention relates to a new and improved clamp designed to facilitate the securing or soldering of faucets in lead pipes, and also forming the connections of branch pipes to a main pipe.

DOOR FASTENER.—J. H. McElroy and J. H. Holley, Warwick, N. Y.—The object of this invention is to provide a means of fastening doors from the inside and is intended as a fastening for sleeping rooms so that burglars may not enter without forcing the door and alarming the occupant of the room.

PROPELLER.—Henry F. Roberts, Pittsburgh Pa.—The object of this invention is to provide a substantial and easily operating apparatus for propelling vessels, so constructed that its action can be readily reversed without reversing the action of the engine or motive power.

HORSE HAY FORK.—John S. Yinger, Manchester, Pa.—The object of this invention is to provide for public use a horse having the pivoted jaws so constructed and operating that they can readily be opened and closed to receive or discharge the hay.

SEPARATOR FOR THRESHERS.—Tobias Crumling, Cross Roads, Pa.—This invention is intended for an attachment to a threshing machine and has for its object to separate straw from grain after both have passed through a thresh-

er. It consists of the common form of straw cutters that are composed of alternate vibrating, reciprocating beam, operated by crank shafts, in combination with a reciprocating winnowing board, and a series of suspended fingers, between said beams, for the purpose of preventing the escape of straw in the wrong direction.

PILL MAKING MACHINE.—Thomas Bushby, Manchester, England.—This invention consists in constructing a pill making machine, to which the mass or substance from which the pills are formed is supplied in a layer or sheet and fed in beneath a reciprocating knife, which cuts the strip into sheets or bars. These bars or strips then fall down between a segmental grooved stationary plate and a grooved roller, by which they are formed into pills.

WEATHER STRIP.—Charles Bean, Ionia, Mich.—In this invention a rubber strip is attached along the middle of the edge of a door or window, by means of a clamping rod which presses one edge of the rubber strip into a groove in the door or window prepared for the purpose. The clamping rod is fastened in place by screws, and its outer edge is sunk below the surface of the edge of the door, leaving a recess into which the projecting edge of the rubber folds back, when the door is closed.

MOTIVE POWER.—H. Crumlish, Keokuk, Iowa.—This invention relates to a new method of making the power obtained from steam, available, and consists broadly in the employment of a Giffard injector in connection with a wheel, the arrangement being such, that the latter is caused to revolve by the action of the former.

HOSE.—Edward L. Perry, New York city.—This invention consists in constructing the ends of rubber hose of the proper size and form internally to be stretched over the ends of metallic coupling joints on the nozzles of fire plugs, and providing the said ends externally with rings or other suitable fastenings which may be forced over the said ends after they have been so stretched on the said parts, and thereby press the yielding material of the hose into the said threads or grooves of the said parts making water tight joints; the said ends of the hose being tapered to cause the said rings or fastenings to more effectually produce tight joints. It also consists in constructing the nozzle for the hose in one piece and of the same material of which the hose is composed.

SLEIGH ATTACHMENT TO WHEELED VEHICLES.—Joseph Stonebanks, College Point, N. Y.—The object of this invention is to produce a simple device, whereby carriages, wagons, and all other kinds of wheeled vehicles, even street cars, can be readily converted into sleighs or sleds, so that such vehicles can be used on snow as well as on the ground, as may be required. The invention consists in fastening flanged runners to the wheels, said runners having grooved spring holders, by means of which they are secured to the felloes and prevented from turning.

MACHINE FOR MAKING NUTS.—Ferdinand Rheydt, Chicago, Ill.—The object of this invention is to construct a machine on which screw-nut blanks can be shaped on and cut from prismatic bars, which have already the requisite hexagonal, octagonal, or other desired cross-section of the nuts to be made. The tedious and laborious process of forming the nuts between dies is hereby dispensed with and a neater work produced.

CHAIR SEAT.—George Buckel, Detroit, Mich.—This invention relates to a new chair seat, which is so arranged as to be of the most convenient form and easily made. The invention consists in producing a semi-cylindrical seat of tape lines, that are crossed and interwoven so as to form a substantial fabric.

HOT AIR OVEN.—Mathias Schlegel, St. Jacob, Ill.—The object of this invention is to produce a hot air oven in which the largest possible amount of cold air is heated by the products of combustion, so that proportionately more heat than usual is produced by an equal amount of fuel. The invention consists in such an arrangement of smoke and air channels and conduits that the desired object is obtained by a very simple apparatus.

FURNACE FOR SMELTING AND REFINING STEEL.—Alois Thoma, New York city.—This invention relates to a new furnace for smelting steel and iron and for producing all kinds of cast-steel and other metal. The invention consists in the construction of a new apparatus for feeding the material to be melted into the furnace, also in a new manner of arranging and operating the receptacle for the steel or iron. This receptacle is one solid open pan, which forms the bottom of the smelting oven, and which is, by means of vertical screws, supported and upward adjustable.

PORTABLE FENCES.—C. S. Coolidge and J. A. Rollins, Jersey Mills, Pa.—This invention relates to portable fences and consists chiefly in a new manner of joining the panels to the uprights or posts.

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J. H. White, Newark, N. J., will make and introduce to the trade all descriptions of sheet and cast metal small wares, dies and tools for all kinds of cutting and stamping, patterns, etc., etc., for new and experimental work.

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Official List of Patents.

Issued by the United States Patent Office.

FOR THE WEEK ENDING DECEMBER 29, 1868.

Reported Officially for the Scientific American.

SCHEDULE OF PATENT OFFICE FEES.

Table with 2 columns: Description of fee and Amount. Includes fees for filing, issuing, and extending patents.

In addition to which there are some small revenue-stamp taxes. Residents of Canada and Nova Scotia pay \$500 on application.

Patents and Patent Claims.—The number of patents issued weekly having become so great, with a probability of a continual increase, has decided us to publish, in future, other and more interesting matter in place of the Claims. The Claims have occupied from three to four pages a week, and are believed to be of interest to only a comparative few of our readers. The publication of the names of patentees, and title of their inventions, will be continued; and, also, as heretofore, a brief description of the most important inventions. We have made such arrangements that we are not only prepared to furnish copies of Claims, but full Specifications at the annexed prices:

Table with 2 columns: Description of patent service and Price. Includes fees for copies of claims and specifications.

85,264.—LIFTING JACK.—W. F. Arnold, New Britain, Conn.

85,265.—DEVICE FOR SHARPENING RAILS.—James Ayres, Branchville, N. J.

85,266.—PITMAN.—Earle C. Bacon, New York city.

85,267.—HYDRANT.—Harry J. Bailey, Pittsburgh, Pa.

85,268.—BRECH-LOADING FIREARM.—Salmon Belden and John Franklin Crabtree, Visalia, Cal.

85,269.—EXPANSION WAGON WHEEL.—Salmon Belden, Visalia, and Johnson P. Ford, Santa Clara, Cal. Antedated Dec 24, 1868.

85,270.—PUMP.—Samuel Benson, Allegheny city, Pa.

85,271.—FLOOD FENCE.—David P. Bird, Richwood, Ohio.

85,272.—CHURN.—C. W. Brewer, Racine, Wis.

85,273.—METHOD OF ROLLING BARS OF METAL.—William Buntun, Pittsburg, and John Davis, Birmingham, Pa.

85,274.—HARVESTER.—George E. Burt, Harvard, Mass.

85,275.—HORSE RAKE.—George E. Burt, Harvard, Mass.

85,276.—WRENCH.—John Burt (assignor to himself and Wilet M. Slocum), Fall River, Mass.

85,277.—PILL-MAKING MACHINE.—Thomas Bushby, Manchester, England. Antedated December 17, 1868.

85,278.—STEAM PORT OF STEAM ENGINE.—Hampton R. Campbell (assignor to himself, John H. Fitz Simmons, and George Boyd), Susquehanna Depot, Pa.

85,279.—DERRICK.—Angus Campbell, Downieville, Cal.

85,280.—MARBLE-SAWING MACHINE.—Duncan McDougald Campbell and John Stevens, Oswego, N. Y.

85,281.—GAME, CALLED VINCO.—J. Carlin, New York city.

85,282.—REVOLVING HARROW AND CULTIVATOR COMBINED.—S. D. Carpenter, Madison, Wis.

85,283.—BLACKSMITHS' FORGE.—Thos. S. Clark, Lena, Ill.

85,284.—SEED AND FERTILIZER SOWER.—Elisha H. Cook, Clarendon, Mich.

85,285.—PORTABLE FENCE.—Charles S. Coolidge and Joseph A. Rollins, Jersey Mills, Pa.

85,286.—DISTILLING APPARATUS.—William Corfield, Philadelphia, Pa.

85,287.—DISTILLING APPARATUS.—William Corfield, Philadelphia, Pa.

85,288.—STOP VALVE FOR STEAM AND OTHER ENGINEERY.—Joseph H. Davis, Allegheny, Pa.

85,289.—STEAM ENGINE EXHAUST VALVE.—Thomas S. Davis, Jersey City, N. J. Antedated December 23, 1868.

85,290.—SHUTTER FASTENER.—Le Grand Dodge, Syracuse, N. Y.

85,291.—CONCRETE BLOCK MACHINE.—Lewis Dodge and Lewis J. Magnusson, Chicago, Ill.

85,292.—CULTIVATOR.—William A. Dryden (assignor to himself and John M. Turnbull), Monmouth, Ill.

85,293.—MACHINE FOR DRILLING AND BORING FLANGES OF PIPES AND CYLINDERS.—Henry S. Fairbanks, Central Falls, R. I.

86,294.—HANGING SAWS.—Amos Felker, Bay City, Mich.

85,295.—CURTAIN FIXTURE.—Henry Fininley, New York city.

85,313.—FOOD FOR ANIMALS.—Joseph S. Kirk, Pittsburg, Pa.  
 85,314.—STAGING.—J. E. Lang, Norway, Maine.  
 85,315.—WASHING MACHINE.—John Leib, Akron, Ohio.  
 85,316.—SHINGLE.—John Lewis, New York city.  
 85,317.—STONE-QUARRYING MACHINE.—Curtis O. Luce and Cyrel W. Green, Brandon, assignors to themselves and Cyrenius M. Willard, Castleton, Vt.  
 85,318.—BREAST PUMP.—Morris Mattson, New York city.  
 85,319.—STREET SWEEPER.—Robert Y. McConnell and George Pringle, Rochester, N. Y.  
 85,320.—SHIELD FOR PUDDLING FURNACES.—Hugh McDonald, Pittsburg, Pa.  
 85,321.—DOOR FASTENER.—J. H. McElroy and J. H. Holly, Warwick, N. Y.  
 85,322.—HYDRAULIC PRESSURE REGULATOR.—Theodore J. McGowan, Cincinnati, Ohio.  
 85,323.—CARRIAGE SPRING.—John M. Miller, Cincinnati, Ohio.  
 85,324.—CORN AND COTTON PLOW.—James W. Milroy, Galveston, Ind., assignor to himself and S. B. Shaner, Xenia, Ohio.  
 85,325.—GRAIN CLEANER.—Joseph Montgomery, Baltimore, Md. Antedated December 22, 1868.  
 85,326.—CAR BRAKE.—Joseph H. Moore and Joseph E. Gary, Chicago, Ill.  
 85,327.—TANNING HIDES AND SKINS.—Cesare Osmani, Tolentino, Italy. Patented in England, January 23, 1868.  
 85,328.—COMPOSITION FOR PRESERVING EGGS.—Nancy Patton, Kansas, Ill.  
 85,329.—TOOL HOLDER.—Charles H. Reid, Danbury, Conn.  
 85,330.—MILK COOLER.—Charles G. Riggs, Turin, and Homer C. Markham, West Turin, N. Y.  
 85,331.—STEAM STREET CAR.—Thomas C. Robinson and Geo. P. Clark, Boston, Mass.  
 85,332.—BRIDGE.—Robert W. Rogers, Pittsburg, Pa.  
 85,333.—LAND ROLLER.—Roger Sandford, Joliet, Ill.  
 85,334.—EXPANDING DRILL.—J. L. Sayles, Gloucester, R. I.  
 85,335.—HOT-AIR FURNACE.—John Siddons, Rochester, N. Y. Antedated Dec. 15, 1868.  
 85,336.—MACHINE FOR MAKING RINGS.—John Siddons, Rochester, N. Y. Antedated Dec. 17, 1868.  
 85,337.—VELOCIPEDE.—Samuel M. Skidmore, Brooklyn, N. Y.  
 85,338.—MACHINE FOR MAKING CLOTHES PINS.—John B. Smith, Sunapee, N. H.  
 85,339.—COFFEE POT.—J. B. Smith, Milwaukee, Wis., assignor to himself and George R. Chittenden, Chicago, Ill.  
 85,340.—CLAY MOLD FOR CASTING METALS.—John Joseph Charles Smith, Philadelphia, Pa.  
 85,341.—CASTING BEARINGS FOR MACHINERY.—Henry F. Snyder, George S. Snyder, and William N. Jones, Williamsport, Pa.  
 85,342.—PLOW.—P. H. Starke, Richmond, Va.  
 85,343.—SEEDING MACHINE.—Adam Sternberg, Nettle Lake, Ohio.  
 85,344.—APPARATUS FOR PRESSING CIGARS.—George Studer, Richmond, Ind.  
 85,345.—SASH STOP AND LOCK.—W. H. Sullenberger (assignor to himself and J. C. Martin), Harrisburg, Pa.  
 85,346.—CORN PLANTER.—Emma Thrall (administratrix of the estate of George W. Thrall, deceased), and William L. Rayment, of Burlington, Mich.  
 85,347.—RAILWAY RAIL CHAIR.—William VanAnden, Poughkeepsie, N. Y.  
 85,348.—STOVE FOR RAILROAD CARS.—A. P. Winslow, Cleveland, Ohio.  
 85,349.—HARVESTER.—George W. N. Yost, Corry, Pa., assignor to Corry Machine Company.  
 85,350.—REVOLVING FIRE-ARM.—John Adams, the Strand, England. Patented in England, July 23, 1866.  
 85,351.—RAILROAD TICKET.—H. E. Alexander, New York city.  
 85,352.—DOOR BELL.—William Allport, New Britain, Conn.  
 85,353.—DUMPING CART.—J. H. C. Applegate, Bridgeton, N. J.  
 85,354.—QUARTZ CRUSHER.—Hosea Ball, New York city.  
 85,355.—WASHING AND WRINGING MACHINE.—Eli Bartholomew, Cleveland, Ohio.  
 85,356.—DEVICE FOR OPERATING WINDOW SASH.—Fred. Baumgartner, Brooklyn, N. Y. Antedated Dec. 17, 1868.  
 85,357.—RAILWAY CHAIR.—G. W. R. Bayley, Algiers, La.  
 85,358.—WASH BOILER.—H. P. Bemiss, Milan, Ohio.  
 85,359.—CAR COUPLING.—H. V. Boifeuillet, Savannah, Ga.  
 85,360.—FENCE POST.—Richard E. Bowen, Colden, N. Y.  
 85,361.—FURNITURE PROTECTOR.—George F. Boyden, Providence, R. I.  
 85,362.—MOLD FOR FORMING ROOFING TILES.—Philip A. Brown, Indianapolis, Ind.  
 85,363.—CHAIR SEAT.—George Buckel, Detroit, Mich.  
 85,364.—CLOTH GUIDE FOR SEWING MACHINES.—Wm. Carpenter, Fairbury, Ill.  
 85,365.—BALING PRESS.—M. D. Cheek, Memphis, Tenn.  
 85,366.—TOY.—Asa H. Church, Hubbardtown, Mass.  
 85,367.—BILL HOLDER.—J. A. M. Collins, Keokuk, Iowa.  
 85,368.—SEPARATOR FOR THRESHING MACHINES.—Tobias Crounley, Cross Roads, Pa.  
 85,369.—RAILWAY CAR BRAKE.—Charles D. Culver, Mauch Chunk, Pa.  
 85,370.—MANUFACTURE OF CHLORINE.—Henry Deacon, Appleton House, Appleton, England.  
 85,371.—QUICKSILVER FURNACE AND CONDENSER.—Thomas W. Dresser, San Francisco, Cal.  
 85,372.—PIPE AND FAUCET CLAMP.—James Elliott, New York city.  
 85,373.—SAFETY LAMP.—A. H. Emery, New York city.  
 85,374.—SCREW-PEG FOR BOOTS AND SHOES.—J. M. Estabrook, Milford, Mass.  
 85,375.—TREADLE.—Albert Fontayne, Cincinnati, Ohio.  
 85,376.—MACHINE FOR RULING SCHOOL SLATES.—John H. French, Albany, N. Y.  
 85,377.—STEAM-PIPE COUPLING FOR RAILROAD CAR HEATERS.—George A. Fullerton, Lynn, Mass.  
 85,378.—MOWING MACHINE.—Fred. A. Geisler, Bristol, R. I.  
 85,379.—COTTON SEED PLANTER.—A. J. Going, Clinton, La.  
 85,380.—SCYTHE.—Chas. E. Griffin, Roseville, Ill.  
 85,381.—LOCK NUTS.—Wm. Hamilton, Toronto, Canada.  
 85,382.—FASTENING AND STRENGTHENING FOR HORSE COLLARS.—Eli Harbaugh, Washington, Iowa.  
 85,383.—SEED SOWER.—James House, Turin, N. Y.  
 85,384.—HOE.—Chas. P. Howell, Covington, Ky.  
 85,385.—MEDICAL COMPOUND.—J. M. Hughes, Menomonee, Wis.  
 85,386.—WATER REGULATOR FOR PAPER-PULP MACHINES.—David Hunter, North Bennington, Vt.  
 85,387.—CULTIVATOR.—J. W. Jessop, Harveysburg, Ohio.  
 85,388.—ELASTIC LANYARD.—J. E. Jones, Wiretown, N. J.  
 85,389.—VALVE FOR STEAM AND OTHER ENGINERY.—Paul H. Kenricken, Boston, Mass.  
 85,390.—GATE ATTACHMENT.—H. M. Long, Williamsville, N. Y.  
 85,391.—FOLDING LOUNGE.—William H. Lotz, Chicago, Ill.  
 85,392.—COLLAR FOR PIPES IN HOT BLAST FURNACES.—Henry McCullough, Marietta, Pa.  
 85,393.—ANTI-FRICTION BOX FOR SHAFTING.—Jeremiah McIvain, Churchville, Md.  
 85,394.—WINDOW FRAME.—Samuel Myers, Hogestown, Pa.  
 85,395.—HOSE.—Edward L. Perry, New York city.  
 85,396.—MACHINE FOR CUTTING VITREOUS SUBSTANCES.—Ozi M. Pike, Leverett, Mass.  
 85,397.—FABRIC FOR THE MANUFACTURE OF PAPER COLLARS, Cuffs, etc.—James Restein, Philadelphia, Pa.  
 85,398.—COVER FOR POTS, KETTLES, ETC.—George Reuben, San Francisco, Cal.  
 85,399.—MAKING SCREW NUTS.—Ferd. Rheydt, Chicago, Ill.  
 85,400.—FORK BLANK.—J. C. Richardson, Iilon, N. Y.  
 85,401.—BEE-HIVE.—S. L. Richardson, Webster City, Iowa.  
 85,402.—SHACKLE AND SUPPORTER.—William Riley (assignor to H. Carpenter), Salem, Oregon.  
 85,403.—PROPELLER.—Henry F. Roberts, Pittsburg, Pa.  
 85,404.—HOT AIR STOVE.—Mathias Schlegel, St. Jacob, Ill.  
 85,405.—POTATO WASHER.—L. B. Sherwin, Hyde Park, Vt.  
 85,406.—OPERATING BRIDLE BLIND.—A. Simis, Brooklyn, E. D. N. Y.  
 85,407.—CAR STARTER.—Joseph Steger, New York city.  
 85,408.—ATTACHING WHEELS TO SLEIGHS.—Joseph Stonebanks, College Point, N. Y.

85,409.—RAILROAD TICKETS AND PUNCH FOR CUTTING COUPONS THEREFROM.—Henry M. Stow, San Francisco, Cal.  
 85,410.—FURNACE FOR MELTING AND REFINING STEEL.—Alois Thoma, New York city.  
 85,411.—MACHINE FOR COATING THE SURFACE OF ELECTROTYPE MOLDS WITH FLUMRAGO.—Stephen D. Tucker, New York city.  
 85,412.—CULTIVATOR.—Flavius J. Underwood (assignor to B. D. Buford), Rock Island, Ill.  
 85,413.—DEVICE FOR CATCHING AND HOLDING DOMESTIC ANIMALS.—H. V. Van Etten, Auburn, N. Y.  
 85,414.—MACHINE FOR MAKING HORSE SHOES.—Edwin Wasell, Pittsburg, Pa.  
 85,415.—HOISTING MACHINE.—William C. Williamson, Philadelphia, Pa.  
 85,416.—HORSE HAY FORK.—John S. Yinger, Manchester township, Pa.  
 85,417.—SAW.—Emanuel Andrews, Williamsport, Pa.  
 85,418.—POTATO DIGGER.—Levi Annis, Quincy, Mich.  
 85,419.—HOISTING APPARATUS FOR BUILDERS.—Leonard Atwood, New York city.  
 85,420.—ICE CREAM FREEZER.—Allen S. Ballard, Mount Pleasant, Iowa.  
 85,421.—WATER WHEEL.—David L. Bartlett, Rockford, Ill.  
 85,422.—WEATHER STRIPS.—Charles Bean, Ionia, Mich.  
 85,423.—HOLLOW AUGER.—J. H. Beauregard, Sandy Hill, N. Y.  
 85,424.—ROAD SCRAPER.—Robert S. Boyd, Smithland, Ky.  
 85,425.—POKER.—James F. Brewer, Plantsville, Conn.  
 85,426.—MACHINE FOR COLORING PAPER.—Charles K. Brown (assignor to himself, Charles A. Brown, and F. Field), Troy, N. Y.  
 85,427.—SCISSORS.—James Bull, Galesburg, Ill. Antedated December 19, 1868.  
 85,428.—DRIVE WHEEL.—William Burditt and George H. Burditt, Boston, Mass.  
 85,429.—KETTLE FOR CULINARY PURPOSES.—Jabez Burns, New York city.  
 85,430.—COMBINED BEAM COMPASS AND CALIPERS.—William Burrows, New York city.  
 85,431.—AUTOMATICALLY OPERATED PAN FOR WATER CLOSERS.—William A. Butler, New York city.  
 85,432.—LOOM.—George Crompton, Worcester, Mass.  
 85,433.—CURTAIN FIXTURE.—Alfred S. Dickinson, Washington, D. C.  
 85,434.—COMPOUND FOR EXTINGUISHING FIRES.—Thomas Drew, Newton, assignor to himself and James P. Bridge, Boston, Mass.  
 85,435.—WATER INDICATOR FOR BOILERS.—William V. DuBois (assignor to himself, William A. Sangster, and I. G. Sangster), Covington, Ind.  
 85,436.—SEWING MACHINE.—Geo. H. Edelman, Atlanta, Ga.  
 85,437.—HORSE HAY FORK.—J. T. Elliott, Grand Rapids, Mich.  
 85,438.—FASTENING FOR SHEET METAL JOINTS.—Horace Everett, Philadelphia, Pa.  
 85,439.—DEVICE FOR CONTROLLING ENGINES.—Jean Joseph Leon Farcot, Saint Ouen (Seine), France.  
 85,440.—MOLDING PIPE.—George H. Garrett (assignor to Richard P. Garrett), St. Louis, Mo.  
 85,441.—COMBINED TANK AND CLOSET ATTACHMENT TO COOKING STOVES.—George W. Gillett, Chicago, Ill.  
 85,442.—BREACH LOADING FIRE ARMS.—Edwin F. Gunn, Charleston, S. C.  
 85,443.—COMBINED SEED SOWER AND HARROW.—Absalom Hallam, Monmouth, Ill.  
 85,444.—GRINDING MILL.—Edw. Harrison, New Haven, Conn.  
 85,445.—CHURN DASHER.—M. R. Heliker, Newark, Ohio.  
 85,446.—DEVICE FOR SUPPORTING WAGON TONGUES.—J. O. Houck, Iowa City, Iowa.  
 85,447.—WASHING MACHINE.—Eliza D. Hunt, New York city.  
 85,448.—MUSIC BOOK.—Isaiah Ickes, Massillon, Ohio.  
 85,449.—FILTER.—Charles H. Jackson, St. Louis, Mo. Antedated December 17, 1868.  
 85,450.—BINDING BOOKS.—A. H. Jocelyn, New York city.  
 85,451.—PLOW.—Moses Johnson, Three Rivers, Mich.  
 85,452.—CHURN.—William E. Kinert, Bluffton, Ind.  
 85,453.—METHOD OF LAYING AND SPREADING COMPOSITION ROOFING, PAVEMENTS, ETC.—J. Kivett and Geo. Kivett, Covington, Ky.  
 85,454.—PIANO STOOL SCREW.—Julius Krieg, New York city.  
 85,455.—SEED PLANTER.—Benjamin Kuhns, Dayton, Ohio.  
 85,456.—CALENDAR CLOCK.—Benjamin B. Lewis, Bristol, Conn.  
 85,457.—METAL SQUEEZER.—Lewis W. Lewis, Sharpsburg, Pa.  
 85,458.—MANUFACTURE OF ILLUMINATING GAS.—John S. Lippis, New York city.  
 85,459.—FRUIT DRYER.—Robert A. Lucas and Louis S. Lehman, Wooster, Ohio.  
 85,460.—EGG BEATER.—D. D. Mackay, Whitestone, N. Y.  
 85,461.—TEMPER SCREW FOR OIL WELLS.—Robert B. Magee, Venango City, Pa.  
 85,462.—WHIFFLE TREE ATTACHMENT.—Leonard Mancy, St. Morgan, Ill.  
 85,463.—COVER OR DOOR FOR GAS RETORTS, FURNACES, &C.—William Matthews and James Moore, Philadelphia, Pa.  
 85,464.—HAMES FASTENER.—J. H. McKinley, New York city.  
 85,465.—SHAFT COUPLING.—W. S. McKinley, Cincinnati, O.  
 85,466.—CORN AND SEED PLANTER.—Noah Mendenhall, Greensburg, Ind.  
 85,467.—CULTIVATOR.—Joseph Millard, Winslow, Ind.  
 85,468.—COOKING RANGE.—Eli Moneuse and Louis Duparcquet, New York city.  
 85,469.—ADJUSTABLE SHOVEL PLOW.—G. W. Morter and Edward Berry, Hartsville, Ohio.  
 85,470.—GRATE.—Peter Murray, Philadelphia, Pa.  
 85,471.—CULTIVATOR.—Ira A. Palmer, Monmouth, Ill.  
 85,472.—GRAIN DRILL.—C. E. Patric, Macedon, N. Y.  
 85,473.—POLE FOR HORSE CARS.—Timothy Pendergast, St. Louis, Mo.  
 85,474.—FARM GATE.—Albert J. Potter, Omaha, Nebraska.  
 85,475.—APPARATUS FOR FEEDING CLOTH TO PRINTING MACHINES.—Elisha O. Potter, Pawtucket, R. I.  
 85,476.—WATER ELEVATOR.—John T. Raferty, Eldara, Ill.  
 85,477.—BEER COOLER.—Thomas L. Rankin, New Richmond, Ohio, and Charles W. Grassmuck, Peru, Ill.  
 85,478.—NAIL-PLATE FEEDER.—Daniel Reed, Birmingham, Conn. Antedated December 24, 1868.  
 85,479.—GATE.—Nelson Rue, Harrodsburg, Ky.  
 85,480.—HOOP SKIRT CLASP.—M. Samuels, New York city.  
 85,481.—SPRING ROCKING CHAIR.—Charles C. Schmitt, Philadelphia, Pa.  
 85,482.—EXPLOSIVE CARTRIDGE.—Wilhelm Schmitz, Philadelphia, Pa.  
 85,483.—WASH BOILER.—I. D. Seely, Hudson, Wis.  
 85,484.—TUBE FOR OILERS.—Frederick J. Seymour (assignor to E. Miller and Company), Meriden, Conn.  
 85,485.—PROCESS FOR CURING AND PRESERVING MEAT.—Merrell B. Sherwood, Buffalo, N. Y.  
 85,486.—MACHINE FOR CHANNELING BOOT AND SHOE SOLES.—Michael Joseph Stein, New York city.  
 85,487.—DROPPER FOR HARVESTERS.—B. William Steschult, Glanville, Ohio.  
 85,488.—CULTIVATOR.—William L. Stewart, Rushville, Ind.  
 85,489.—CAR COUPLING.—S. S. St. John, Willoughby, Ohio.  
 85,490.—CLAY PIPE MACHINE.—Christian Stotz and George Smith, Perth Amboy, N. J.  
 85,491.—CANNON.—John A. Terrell, Bloomfield, Ky.  
 85,492.—APPARATUS FOR MANUFACTURING SHOES.—Jules Constant Touzet, Paris, France.  
 85,493.—PRINTING PRESS.—S. D. Tucker, New York city.  
 85,494.—MAGAZINE FIREARM.—Frederick Vetterlin, Neuhausen, Switzerland.  
 85,495.—MANUFACTURE OF SPECTACLE BOWS.—Henry Want and John Lundgren, New Haven, Conn.  
 85,496.—GANG PLOW.—Timothy U. Webb, Springfield, Ill. Antedated December 22, 1868.  
 85,497.—REVERSIBLE LATCH.—Eli Whitney, New Haven, Conn.  
 85,498.—MACHINE FOR MAKING WIRE HOOKS.—R. S. Willard, Franklin, Vt.  
 85,499.—CLOTHES DRYER.—Daniel Witt, Hubbardston, Mass.  
 85,500.—HAND SHEARS.—Charles Witte, Brooklyn, N. Y.  
 85,501.—VELOCIPEDE.—Sylvester A. Wood, Manitowoc, Wis.  
 85,502.—RUFFLED TRIMMING.—Emma C. Wooster, New York city.

REISSUES.  
 67,483.—GANG PLOW.—Dated August 6, 1867; reissue 3,244. Robert Baxter, French Camp, Cal.  
 73,494.—BREACH-LOADING FIREARM.—Dated January 21, 1868; reissue 3,245.—Francis E. Boyd and P. Shelton Tyler, Boston, Mass.  
 32,236.—LOOM.—Dated April 30, 1861; reissue 3,246.—George Crompton, Worcester, Mass., assignee, by mesne assignments, of John Shinn.  
 73,328.—MACHINE FOR SEWING CARPET LININGS.—Dated February 11, 1868; reissue 3,247. Joel F. Fales, Walpole, Mass.  
 37,778.—COOKING STOVE.—Dated February 24, 1863; reissue 3,248. Augusta P. Stiles, Rochester, N. Y., assignee, by mesne assignments, of David L. Stiles.  
 52,121.—PROCESS FOR REFINING IRON AND STEEL.—Dated January 23, 1866; reissue 3,249. First National Refined Iron and Steel Manufacturing Company (assignees of John Absterdam), New York city.

DESIGNS.  
 3,298.—BADGE.—N. P. Chipman and William T. Collins, Washington, D. C.  
 3,299.—SHOW CASE.—John H. Fraser, New York city.  
 3,300.—HANDLE FOR A FORK OR SPOON.—Henry H. Hayden, New York city, assignor to Holmes, Booth, and Haydens, Waterbury, Conn.  
 3,301.—MACHINE FRAME OR HOUSING.—Francis D. Pastorius, Philadelphia, Pa.  
 3,302.—SPOON OR FORK HANDLE.—Henry G. Reed (assignor to Reed and Barton), Taunton, Mass.  
 3,303.—KEY TAG.—Arthur Stafford, Brooklyn, N. Y.

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