

anti-friction bearings for the transmitting axle, as well as in the general arrangement and combination of parts.

TELEGRAPH APPARATUS.—David Flanery, New Orleans, La.—The object of this invention is to provide a portable telegraph apparatus comprising a "relay magnet," "key," "sounder," "local galvanic battery," and writing desk, all contained in a portable box...

GALVANIZED IRON.—J. D. Grey, Pittsburgh, Pa.—This invention consists in preparing the iron, previous to galvanizing it, in a way calculated to provide a better article in point of toughness and appearance when finished...

SIDE-SADDLE TREES.—Louis Triplett, Columbia, Ky.—This invention relates to improvements in the construction of side-saddle trees, and consists in forming the cantel belly, right horn, and spring, of one piece of sheet metal...

BIT HOLDER.—Jacob Winkelhouse, New York city.—The present invention relates to a new and useful device for securing bits in their places by means of a slotted bolt and spring.

BROWNING AND MAKING COFFEE.—James Galloway, Chetoph, Kansas.—This invention relates to a new and useful improvement in the method of preparing coffee, whereby much time is saved, and the entire aroma is preserved.

TRACTION ENGINES.—C. C. Merriman, Brighton, N. Y.—This invention relates to an improvement in traction engines, and it consists in producing the traction by feet secured to revolving wheels.

THRASHING MACHINE.—Joshua Slep and Henry J. Schmeier, Macungie, Pa.—This invention relates to new and useful improvements in machines for thrashing and cleaning grain, whereby many of the objections to the old style of thrashing machine are obviated.

RAILROAD.—George V. Sheffield, and Jas. F. Coburn, Hopkinton, Mass.—This invention relates to new and useful improvements in railroads, having reference both to the rail and track, and the flange and tread of the wheel to run thereon.

WATER-CLOSET VALVE.—W. Smith, San Francisco, Cal.—This invention relates to new and useful improvements in valves for water closets, whereby they are rendered more useful and durable than they have hitherto been.

SELF-CLOSING TELEGRAPH KEY.—Joseph J. B. Frey, New York city.—This invention relates to a new and improved key for telegraphic instruments, whereby the circuit is always kept closed when the instrument is not at work, the key automatically closing when released from the pressure of the finger or hand.

MACHINE FOR PICKING WOOL.—James Cate, Rumsey, Ky.—This invention relates to a new and useful improvement in machines for picking and cleaning wool.

HAME-BENDING MACHINE.—J. H. Preston, Jefferson City, Mo.—This invention relates to a new and improved machine for bending wooden hames whereby that operation is greatly facilitated.

EXTENSION TABLE.—Joseph P. Curry, Vincennes, Ind.—This invention relates to a new and useful improvement in extension tables, whereby they are made more convenient and useful than they have heretofore been, and consists in extending and contracting the table by means of a shaft, crank, and cords.

VAPORIZING FURNACE AND PANS.—L. Scott, Sinking Spring, Ohio.—This invention relates to a furnace and an arrangement of pans for boiling and vaporizing juice or sirup, in the process of working sorghum sugar or molasses, and for other purposes of a similar nature.

THRASHING MACHINE.—F. A. Geisler, Bristol, R. I.—This invention relates to new and useful improvements in machines for thrashing grain, and winnowing or cleaning it at the same time.

HAY FORK.—E. J. Fenn, Medina, Ohio.—This invention relates to new and useful improvements in forks for handling hay, and consists in operating two tines by means of a bar and lever.

COMPOUND FOR RESTORING DAMAGED TOBACCO.—Wesley A. Wright, Liberty, Va.—The object of this invention is to produce a substance for restoring the good qualities of moldy or decaying tobacco so that it will again receive as nearly as possible the qualities and appearance of fresh and good tobacco, for the purpose of preventing its loss.

STUMP EXTRACTOR.—T. W. Fay, Camden, N. J.—This invention relates to a new stump extractor, or stone and log lifter of that class in which the power is applied to a screw shaft by means of a nut. The invention consists in a new manner of supporting the nut to avoid friction, and in a novel manner of fastening the supports to the main plate and the shoes to the supports.

RAILROAD CAR HEATER.—Josiah E. Kline, Wheeling, West Va.—This invention relates to a new apparatus for heating railroad cars and for properly ventilating the same, and consists in the general construction and arrangement of parts for producing a fireproof and convenient heating attachment.

UNIVERSAL GUIDE FOR STAMP MILLS.—C. A. H. Rice and A. J. Van Doren, Central City, Colorado.—This invention relates to a new device for guiding the shafts of stamp mills, and consists in the general construction of parts, whereby the guide pieces are securely held and readily adjusted.

WIND WHEEL.—Charles C. Harris, Lafayette, Ill.—The object of this invention is to provide a simple and cheap wind wheel with self-adjusting wings, or brackets, capable of opening to the wind on one side and closing on the other. The invention also comprises an improved arrangement for transmitting motion from the said wheel, especially adapted for operating pumps.

LAMP.—H. Long, Kittanning, Pa.—This invention consists in an improved arrangement of means for conducting the wick through a reservoir of water after having taken up the oil, the said water reservoir being interposed between the oil and the flame so as to prevent generation of gas; also to prevent the contact of the flame with the oil in the reservoir.

CULTIVATING HOE.—John J. Ray and James R. Young, New Orleans, La.—This invention consists in the arrangement of a pair of scraping blades, of wood or metal, to work on the ground in an edgewise position in the form of two sides of a triangle, cut off at some distance from the apex, and connected by framing so that it will allow the said blades to work on each side of the row without disturbing the standing plants, the ends most widely separated being drawn foremost, together the earth and turn it up in a double ridge against the rows of plants. Near the bottom inside, the blades are provided with laterally projecting cutters to sever the weeds, and wheels are placed at the front end on which the frame may be tilted to be moved from one row to the other.

FLY BRUSHES.—Henry R. Robbins, Baltimore, Md.—This invention relates to a portable apparatus in which a brush or fan is made to oscillate by means of machinery for the purpose of driving flies from a table or bed, and creating, at the same time, a breeze.

HORSESHOE.—Capt. Charles Peillard, of the Empire of France.—This invention consists in dividing a horseshoe in two parts, of equal length, the division taking place at the middle, and the line of section being partly straight and partly circular, so as to form, at the extremity of one branch, a curved projection, and, at the adjacent extremity of the other branch, a depression of corresponding shape, by which the two branches are connected when nailed upon the hoof, without a hinge.

RESERVOIR BACK FOR COOKING STOVES.—Henry R. Robbins, Baltimore Md.—The object of this invention is to provide an attachment for cooking stoves, which will enable the cook always to have a supply of hot water on hand, the quantity and boiling temperature of which can be seen at a glance, without removing the cover of the boiler. At the same time, the construc-

tion and arrangement of the apparatus are such as to protect the back of the fire-pot from burning away, thereby rendering the stove more durable and less expensive, in the matter of repairs, than those heretofore introduced into general use.

LAMP SHADE.—R. W. Churchill, Bridgeport, Conn.—This invention relates to improvements in lampshades for application to the chimneys of kerosene and other similar lamps, having for its object to provide an improved construction and arrangement for shades made in sections for expanding and contracting, to vary the size of the shade.

HORSE HAY RAKE.—W. P. Ewing, Fancy Hill, Va.—This improvement in horse hay rakes is designed to provide a simple and efficient machine for attachment to a sulky, whereon the operator may ride while driving and attending to the rake, and it consists in a rake having one set of teeth, detachably connected to the sulky, and provided with suitable operating and governing apparatus.

HOISTING APPARATUS.—G. H. Kamnacher, Columbus, Ohio.—The object of this invention is to provide a cheap and simple portable hoisting apparatus for bricklayers and builders, for hoisting the building material, and it consists of a peculiar arrangement on a bench or "horse," of a large grooved hoisting wheel, a pair of balancing platforms, vertical guides for the same, and hoisting ropes.

COMBINATION LOCK.—J. P. White, Savannah, Ga.—This invention relates to improvements in combination locks, consisting of a series of vibrating tumblers, notched at the ends for the reception of a lug on the bolt, when sliding back for unlocking, which are provided with auxiliary tumblers, to be acted on by a series of rotating cam disks worked by the key, to move the said tumblers for bringing the notches therein to the position coinciding with the lug on the bolt, to allow it to be retracted. These auxiliary tumblers are engaged with the others by spring dogs, when the bolt is at the locked condition, and the whole are suspended on the cam wheels, so that the notches do not coincide with the lug on the bolt, thereby preventing its withdrawal.

Official List of Patents.

Issued by the United States Patent Office.

FOR THE WEEK ENDING SEPT. 21, 1869.

Reported Officially for the Scientific American.

SCHEDULE OF PATENT OFFICE FEES: On each caveat \$10; On filing each application for a Patent (seventeen years) \$20; On issuing patent certificate \$10; On appeal to Commissioner of Patents \$20; On application for Reissue \$20; On application for Extension of Patent \$20; On granting the Extension \$20; On filing a Disclaimer \$10; On an application for Design (three and a half years) \$10; On an application for Design (seven years) \$15; On an application for Design (fourteen years) \$20; In addition to which there are some small revenue-stamp taxes, Residents of Canada and Nova Scotia pay \$500 on application.

For copy of Claim of any Patent issued within 30 years \$1; A sketch from the model or drawing, relating to each portion of a machine as the Claim covers, from \$1 upwards, but usually at the price above named. The full Specification of any patent issued since Nov. 20, 1866, at which time the Patent Office commenced printing them, \$1.25; Official Copies of Drawings of any patent issued since 1836, are consigned to the printer at the price depending upon the amount of labor involved and the number of views. Full information, as to price of drawings, in each case, may be had by address in MUNN & CO., Patent Solicitors, No. 37 Park Row, New York.

- 94,934.—REVENUE STAMPS FOR CIGARS.—Anson Atwood, New York city. Antedated September 13, 1869.
94,935.—ALLOY FOR TUBING.—John S. Barden, Providence, R. I.
94,936.—ALLOY FOR MAKING WATER METERS.—John S. Barden, Providence, R. I.
94,937.—BOILER FEED WATER REGULATOR.—John S. Barden, Providence, R. I.
94,938.—WASHING MACHINE.—George W. Benton, East Pike, N. Y.
94,939.—FELTING MACHINE.—Job W. Blackham (assignor to himself and James H. Prentice), Brooklyn, N. Y.
94,940.—BRUSH.—Charles Boeckh, Buffalo, N. Y.
94,941.—BRUSH.—Samuel Brillinger, Clarence Center, N. Y.
94,942.—APPARATUS FOR EVAPORATING CANE JUICE.—M. S. Bringer, Ascension Parish, La.
94,943.—AXLE BOX LID.—John Bristow, Detroit, Mich. Antedated September 6, 1869.
94,944.—SIGNS FOR STREET LAMPS.—Erastus Caswell and Herman Lachmann, Chicago, Ill.
94,945.—SASH PULLEY.—Charles B. Clark, Buffalo, N. Y.
94,946.—SCRUBBER.—Charles E. Clum (assignor to himself and Moses C. Haskell), Troy, N. Y.
94,947.—MACHINE FOR CLOSING THE SEAMS OF METALLIC VESSELS.—E. T. Covell, Brooklyn, N. Y. Antedated September 13, 1869.
94,948.—PROTECTOR FOR STEMS OF BOATS.—Wm. P. Davis and Samuel Elwell, Jr., Gloucester, Mass.
94,949.—DOOR SPRING.—Frederick Dodge, Syracuse, N. Y.
94,950.—SURGE RELIEVER FOR CABLES.—John J. Emery, Owl's Head, Me.
94,951.—NECKTIE.—Franklin Field, Troy, N. Y.
94,952.—GRINDING MILL.—Morrison Foster, Cleveland, Ohio.
94,953.—PORTABLE FENCE.—Newton J. Glover, Waveland, Ind. Antedated August 31, 1869.
94,954.—WASHING MACHINE.—J. T. Greenwood, Beloit, Wis.
94,955.—COMPOUND FOR EMERY WHEELS AND OIL STONES.—N. B. Hadley and R. J. Costain, Northampton, Mass.
94,956.—MACHINE FOR DRESSING MILLSTONES.—J. B. Harris, Ottawa, Ill.
94,957.—MOUNTING LEASE RODS FOR LOOMS, ETC.—Wm. A. Hastings, Thornabyke, Mass.
94,958.—TILE MACHINE.—Simeon Hawkins, Carmel, Ind.
94,959.—APPARATUS FOR EVAPORATING CANE JUICE.—L. S. Hereford, West Baton Rouge parish, La.
94,960.—BRAKE SHOE.—Amos A. Hotchkiss (assignor to himself and Wm. J. Qualey), Hannibal, Mo.
94,961.—ARGAND LAMP.—Andrew B. Howland, Titusville, Pa.
94,962.—HOLDBACK FOR CARRIAGES.—Thomas F. Kiff, Havana, N. Y., assignor to Elijah A. Simmons, Chatsworth, Ill.
94,963.—FIELD FENCE.—Edwin King, Dunkirk, N. Y.
94,964.—ADJUSTABLE HARROW.—John Kinhart, Athens, Ill.
94,965.—METALLIC BUTTON-HOLE OR CLASP.—Jeremiah R. Little, Jamaica Plains, Mass.
94,966.—HARVESTER.—Charles E. Mason, Elgin, Ill.
94,967.—DRYER.—Oscar F. Mayhew, Indianapolis, Ind.
94,968.—GAGE FOR TURNING BEVELS.—George W. Moore, Worcester, Mass.
94,969.—METHOD OF PURIFYING NITRIC ACID.—George M. Mowbray, Titusville, Pa.
94,970.—RAILWAY FROG.—James Patterson, Hornellsville, N. Y.
94,971.—ARCHIMEDEAN SCREW WATER ELEVATOR.—Wm. H. Plumb, New York city. Antedated September 8, 1869.
94,972.—CHIMNEY.—Peter Portois, San Francisco, Cal.
94,973.—STEAM ENGINE VALVE.—Elting Post, Boston, Mass.
94,974.—WEIGHING SCOOP.—David H. Priest, Watertown, and John R. Howard, Charlestown, Mass.
94,975.—ANIMAL TRAP.—Wm. D. N. Reed, Washington, D. C.
94,976.—SEWING MACHINE.—T. S. Reeve, C. D. Smith and H. L. Swartwout, Chicago, Ill.; said Smith and Reeve assign their right to said Swartwout.
94,977.—BASKET FOR GRINDING TILE.—Peter C. Reniers, Pittsburgh, Pa.
94,978.—STEAM GENERATOR.—S. T. Russell, Springfield, Ohio.
94,979.—SPRING SEAT FOR VEHICLES.—Samuel S. Simmons, Watonsville, Cal.

- 94,980.—NEEDLE THREADER.—Corelli W. Simpson, Bangor, Me.
94,981.—CARRIAGE SPRING.—Alfred E. Smith, Bronxville, N. Y. Antedated September 15, 1869.
94,982.—GAS MACHINE.—Andrew R. Spang and Daniel F. Sheaf, Dayton, Ohio.
94,983.—CLOTHES POUNDER.—Orrin J. Stickles, Canton, N. Y.
94,984.—FIREPLACE.—James C. Strong and Luther C. McNeal, Buffalo, N. Y.; said Luther C. McNeal assigns his right to said James C. Strong.
94,985.—MACHINE FOR PAINTING FLOOR OILCLOTHS.—C. W. Strout and Amos Wilder, Hallowell, Me.
94,986.—STOVEPIPE DAMPER.—Isaac Van Hagen, Chicago, Ill.
94,987.—BAG AND SHOE-STRING FASTENER.—John H. Weed (assignor for one half to George C. Thomas), Waterbury, Conn.
94,988.—DUMPING CART.—F. Haddock Williams, Washington, D. C.
94,989.—WAGON-TONGUE SUPPORT.—George Alexander, Romney, Ind.
94,990.—ROCKING CARRIAGE.—A. Armando, New York city.
94,991.—CURRY COMB.—J. M. Baker, Marshfield, Ohio.
94,992.—VELOCIPEDE.—Robert J. Barr, Philadelphia, Pa.
94,993.—COTTON PRESS.—Charles J. Beasley (assignor to him self and Tappay, Lumsden & Co.), Petersburg, Va.
94,994.—MANUFACTURE OF IRON AND STEEL.—Henry Bessemer, London, England. Patented in England, December 31, 1857.
94,995.—MANUFACTURE OF IRON AND STEEL.—Henry Bessemer, London, England. Patented in England, March 21, 1868.
94,996.—MANUFACTURE OF IRON AND STEEL.—Henry Bessemer, London, England. Patented in England, March 21, 1868.
94,997.—MANUFACTURE OF IRON AND STEEL.—Henry Bessemer, London, England. Patented in England, March 31, 1868.
94,998.—SELF-CLOSING FAUCET.—A. Brinckmann, New York city.
94,999.—WOOL-PICKING MACHINE.—James Cate, Rumsey, Ky.
95,000.—LAMP SHADE.—R. W. Churchill, Bridgeport, Conn.
95,001.—WATER CLOSET.—Geo. Conroy, New York city. Antedated Sept. 8, 1869.
95,002.—SELF-WINDING LINE MACHINE.—Wm. A. Coventry, Paterson, N. J.
95,003.—EXTENSION TABLE.—J. P. Curry (assignor to S. S. Burnet), Vincennes, Ind.
95,004.—BOX LOOP FOR CARRIAGE TOPS.—C. H. Davis, Syracuse, N. Y.
95,005.—REVOLVING PLOW.—William J. Dawson, Brookfield, Mo.
95,006.—HAY AND GRAIN ELEVATOR.—John Dennis, Oswego, N. Y.
95,007.—HAMES FASTENER.—M. L. Drake, Rockford, Ill.
95,008.—HORSE-POWER.—C. L. Drury, Rockingham, Vt.
95,009.—METHOD OF HEATING TAN-BARK LEACHES BY STEAM.—L. C. England, Philadelphia, Pa.
95,010.—HORSE HAY RAKE.—Wm. P. Ewing, Fancy Hill, Va.
95,011.—STUMP EXTRACTOR.—T. W. Fay, Camden, N. J.
95,012.—HORSE HAY FORK.—E. J. Fenn, Medina, Ohio.
95,013.—TELEGRAPH APPARATUS.—David Flanery, New Orleans, La.
95,014.—SELF-CLOSING TELEGRAPH KEY.—J. J. B. Frey, New York city.
95,015.—COFFEE ROASTER.—James Galloway, Chetoph, Kansas.
95,016.—THRASHING MACHINE.—F. A. Geisler, Bristol, R. I.
95,017.—MANUFACTURE OF GALVANIZED IRON.—J. D. Grey (assignor to himself and John Lippincott), Pittsburgh, Pa.
95,018.—WIND MILL.—C. C. Harris, LaFayette, Ill.
95,019.—SEWING MACHINE.—M. C. Hawkins, Eainborough, Pa.
95,020.—WATER WHEEL.—Wm. E. Hill, Renovo, Pa.
95,021.—REVOLVING DOUGH MIXER.—Thomas Holmes, Williamsburgh, N. Y.
95,022.—HOISTING APPARATUS.—G. H. Kamnacher, Columbus, Ohio.
95,023.—OPERATING CHURN DASHER.—William Kegg, Lassellville, N. Y.
95,024.—DOOR KNOB.—J. J. King, New York city.
95,025.—FRUIT JAR.—J. M. W. Kitchen, Brooklyn, N. Y.
95,026.—RAILROAD CAR HEATER.—J. E. Kline, Wheeling, West Va.
95,027.—LAMP.—Henry Long, Kittanning, Pa.
95,028.—PROCESS FOR PRESERVING EGGS.—John Longmaid, New York city.
95,029.—CHURN.—S. D. Lucas, Winterpock, Va.
95,030.—FIREPLACE.—R. D. McDonald, Jersey City, N. J.
95,031.—CORN HARVESTER.—John McLeish, Chicago, Ill.
95,032.—TRACTION ENGINE.—C. C. Merriman, Brighton, N. Y.
95,033.—MACHINE FOR GRINDING MOWER & REAPER KNIVES.—Henry Millard, New York city.
95,034.—MACHINE FOR WINDING BOBBINS.—F. H. Morrill, Philadelphia, Pa.
95,035.—CULTIVATOR.—Isaac J. Morrow, Everton, Ind.
95,036.—COMPOSITION FOR USE IN FIRE EXTINGUISHERS.—J. M. Mutterse and H. G. De Valory, Guerande, France.
95,037.—MACHINE FOR BENDING WOOD.—H. H. Nichols (assignor to P. S. Whitcomb), Keeseville, N. Y.
95,038.—MEAT-CUTTING MACHINE.—August Nittinger, Jr., Philadelphia, Pa.
95,039.—EXTRACT OF Madder FOR DYEING AND PRINTING.—Alfred Paraf, New York city, assignor to Edward Sabine Renwick, trustee.
95,040.—PROCESS FOR PRINTING COLORS ON TEXTILE MATERIALS.—Alfred Paraf, New York city, assignor to Edward Sabine Renwick, trustee.
95,041.—RAILWAY RAIL CHAIR.—D. C. Pierce, Washington, D. C. Antedated Sept. 8, 1869.
95,042.—MACHINE FOR BENDING WOOD.—J. H. Preston, Jefferson City, Mo.
95,043.—RAILWAY CAR TRUCK.—Perry Prettyman, Paradise Spring Farm, Oregon.
95,044.—CULTIVATING HOE.—J. J. Ray and J. R. Young, New Orleans, La.
95,045.—GUIDE FOR STAMP MILLS.—C. A. H. Rice and A. J. Van Doren, Central City, Colorado Territory.
95,046.—RAILROAD STATION INDICATOR.—A. C. Rodgers (assignor to himself and Lewis Shaffer), Fort Washington, Pa.
95,047.—STRAW CUTTER.—J. H. Ryland, Baltimore, Md.
95,048.—SOFA AND BEDSTEAD.—William H. Schwalbe, New York city.
95,049.—PAN AND FURNACE FOR EVAPORATING.—Lewis Scott, Sinking Spring, Ohio. Antedated Sept. 10, 1869.
95,050.—COMBINED THRASHING MACHINE AND SEPARATOR.—Joshua Slep and H. J. Schmeier, Macungie, Pa.
95,051.—RAILWAY.—G. V. Sheffield and J. F. Coburn, Hopkinton, Mass.
95,052.—SAW.—Joseph H. Smith, and Elijah G. Peckham, Toledo, Ohio.
95,053.—NICKEL-FACED TYPE.—Luther L. Smith, Brooklyn, N. Y.
95,054.—SLOW-CLOSING VALVE FOR WATER CLOSETS.—W. Smith, San Francisco, Cal.
95,055.—SIDE-SADDLE TREE.—Louis Triplett, Columbia, Ky.
95,056.—COFFEEPOT.—H. Von Hoften, Hoboken, N. J.
95,057.—ROTARY MECHANICAL POWER.—A. G. Waterhouse, San Francisco, Cal.
95,058.—COMBINATION LOCK.—J. P. White, Savannah, Ga.
95,059.—SAFE.—J. P. White, Savannah, Ga.
95,060.—BIT HOLDER.—Jacob Winkelhouse, New York city.
95,061.—MINING PUMP.—Hiram Wolf (assignor to himself and A. D. Wolf), St. Louis, Mo.
95,062.—COMBINED CORN AND COTTON PLANTER.—A. H. Wootton, Bartow, Ga.
95,063.—COMPOUND FOR RESTORING DAMAGED TOBACCO.—Wesley A. Wright (assignor to himself and William C. Trowbridge), Liberty, Va.
95,064.—COATING IRON FOR THE FRONTS OF BUILDINGS, AND FOR OTHER PURPOSES.—John Alexander, Greenpoint, N. Y.
95,065.—EXPANDING MANDREL.—D. L. Allen, Williamsport, Pa.
95,066.—HEARSE.—Edwin Allen, Norwich, Conn.
95,067.—MARKER FOR SEEDING MACHINES.—George Armstrong, Elmira, Ill.

95,068.—CORN PLANTER.—James Armstrong, Jr., Elmira, Ill.
 95,069.—MOTIVE POWER FOR SEWING AND OTHER MACHINES.—J. B. Ayer, Elizabeth, N. J. Antedated Sept. 10, 1869.
 95,070.—HORSE RAKE TEETH.—J. L. Bartlett and J. B. L. Bartlett, North Jay, Me.
 95,071.—COMPOSITION FOR ROOFING AND PAVING.—Giacinto Bartolomei, Chicago, Ill.
 95,072.—DEVICE FOR PREVENTING CATTLE FROM JUMPING.—Charles Bettinger, South Dansville, N. Y.
 95,073.—WHEAT DRILL.—Hiram Blunt and R. C. Blunt, Bath, Ill., by Hiram Blunt for himself, and Hiram Blunt and Mary Jane Blunt, executors of R. C. Blunt, deceased.
 95,074.—HAT VENTILATOR.—Thomas W. Bracher, New York city.
 95,075.—MANUFACTURE OF WHITE LEAD.—S. R. Bradley, New York city.
 95,076.—TABLE AND BEDSTEAD.—James L. Brander, Boston, Mass.
 95,077.—FAUCET.—John Broughton, New York city.
 95,078.—SAUSAGE STUFFER.—A. L. Brouse and Urias Weidman, Lake, Ohio.
 95,079.—SHIELD FOR CORN PLOWS.—D. F. Brown, Champaign, Ill., and E. C. Brown, Crawfordsvle, Ind.
 95,080.—FOLDING UMBRELLA.—S. B. Bushfield, Jr., Parkersburg, West Va.
 95,081.—CANE AND WHIP COMBINED.—C. L. Bushnell, Jefferson, Ohio.
 95,082.—CANG PLOW.—Robert Carson, Meredosia, Ill.
 95,083.—GATE.—I. A. Clark, Marion, N. Y.
 95,084.—BILLIARD AND BAGATTELLE TABLE.—W. A. Clark, Boston, Mass.
 95,085.—CORN PLANTER.—J. S. Coen, Attica, Ind.
 94,086.—SIGNAL HOLDER FOR RAILWAY CARS.—W. W. Coley and W. H. Deltrick, Philadelphia, Pa.
 95,087.—HEEL FOR BOOTS AND SHOES.—Henry Cordtz, Chicago, Ill.
 95,088.—PUMP.—C. A. Crowell, Newark, N. J. Antedated September 13, 1869.
 95,089.—DEVICE FOR COLLECTING PETROLEUM FROM THE SURFACE OF WATER COURSES.—L. H. Cowley, Silver Creek, N. Y.
 95,090.—LEVEE.—W. P. Craig, Milton, Ky.
 95,091.—TICKET CUTTER.—L. O. Crocker, Braintree, Mass.
 95,092.—LOOM.—George Crompton, Worcester, Mass.
 95,093.—THRILL COUPLING.—P. D. Crosby, Danbury, Conn. Antedated Sept. 11, 1869.
 95,094.—FULLING MILL.—Ernest Dams, Newark, N. J. Antedated Sept. 17, 1869.
 95,095.—ARTIFICIAL SLIDING HILL.—C. De Bodisco, St. Petersburg, Russia, and P. D. De Rivera, Madrid, Spain.
 95,096.—APPARATUS FOR MAKING BUTTER.—Avery Denison (assignor to himself and Wm. Kelly), Woodville, Ohio.
 95,097.—MANUFACTURE OF WHITE LEAD.—C. W. Dwell, St. Louis, Mo.
 95,098.—CARRIAGE WHEEL.—W. P. Elam, Petersburg, Ill.
 95,099.—PILE FOR RAILROAD CHAIRS.—David Eynon, Richmond, Va.
 95,100.—BEEHIVE.—H. H. Flich, Lavansville, Pa. Antedated Sept. 8, 1869.
 95,101.—HINGE FOR BLINDS.—W. T. Freigh, Jersey City, N. J.
 95,102.—INSTRUMENT FOR TIGHTENING AND LOOSENING SCREW CAPS OF FRUIT JARS.—Alonzo French, Philadelphia, Pa.
 95,103.—HINGE FOR BOXES.—Russel Frisbie (assignor to J. and E. Stephens & Co.), Cromwell, Conn.
 95,104.—URN STAND.—C. E. Goodhue, Malden, Mass.
 95,105.—SPRING-BED BOTTOM.—George C. Grut, Milwaukee, Wis.
 95,106.—BAKE OVEN.—I. A. Hammer, Newton, Iowa.
 95,107.—ELASTIC CUSHION FOR HORSES' FEET.—John Hazeltine, Melrose, and C. L. Wheeler, Cambridge, Mass.; said Hazeltine assigns his half to said Wheeler.
 95,108.—BRICK MACHINE.—C. V. Hemenway (assignor to himself and A. A. Powers), New London, Ohio.
 95,109.—COFFIN.—A. W. Hendrick, Batavia, Ill.
 95,110.—SASH HOLDER.—Coleman Hicks, Lancaster, Ky.
 95,111.—TRUNK HASP.—Louis Hillebrand, Philadelphia, Pa.
 95,112.—LET-OFF AND TENSION DEVICE FOR SPOOLS OF BRAIDING MACHINES.—W. J. Horstmann, Philadelphia, Pa.
 95,113.—MACHINE FOR FORMING SCREW THREADS ON SHEET METAL CAPS.—Thomas Houghton, Philadelphia, Pa.
 95,114.—DREDGING APPARATUS.—Bernard Hughes and Daniel Hughes, Rochester, N. Y.
 95,115.—ATTACHMENT FOR LAMP BURNERS.—Robert Hutton (assignor to himself and J. T. G. Middleton), Williamsburgh, N. Y.
 95,116.—BIRD CAGE.—J. C. Jewett and John Vogt, Buffalo, N. Y.; said Vogt assigns his right to said Jewett.
 95,117.—MACHINE FOR TURNING TAPERS.—Clark Jillson, Worcester, Mass.
 95,118.—TWINE HOLDER.—E. M. Judd, Wolcottville, Conn.
 95,119.—WASHING MACHINE.—Henry Lighty, Attica, Ind.
 95,120.—CLOTHES-LINE FASTENER.—M. H. Lineback, Greensfield, Ind.
 95,121.—SEED PLANTER.—H. C. Locke, Somerville, Tenn.
 95,122.—RAILWAY CAR AND DRIVING WHEEL.—N. C. Lombard, Cambridge, assignor to J. A. Woodbury, Winchester, Mass.
 95,123.—FENCE POST.—Clark Losee, Perrysburgh, N. Y.
 95,124.—CHURN.—P. J. Manning, Troy, Ill.
 95,125.—SLED.—James Martin, Chesterfield, Ohio.
 95,126.—DENTIST'S IMPRESSION CUP.—G. McDonald, Athens, Ga.
 95,127.—SHINGLE BINDER.—G. E. More, Royalton, Wis.
 95,128.—WATCH.—C. S. Moseley, Elgin, Ill.
 95,129.—MORTISING MACHINE.—Arthur O. Neal, Hyde Park, Mass.

95,130.—CHILD'S ROUND COMB.—C. H. Noyes, Brooklyn, N. Y.
 95,131.—CRACKER AND GRINDING MILL.—Charles Parker, Meriden, Conn.
 95,132.—CORN DRILL.—R. F. Patton, Quincy, Ohio.
 95,133.—HORSESHOE.—Charles Peillard, France.
 95,134.—CAR WINDOW.—G. W. Perry, Wilmington, Del.
 95,135.—COFFEE AND SPICE MILL.—Henry Petrie, Chicago, Ill.
 95,136.—GRAIN SEPARATOR.—J. F. Plum, near Greencastle, Pa.
 95,137.—PROJECTILE.—A. F. Potter, San Francisco, Cal.
 95,138.—SASH-ROPE PULLEY.—J. C. Price, New Philadelphia, Ohio.
 95,139.—CORN PLANTER.—W. S. Purdey, Butler, Ind.
 95,140.—MACHINE FOR SAWING FELLS.—Ezra Rhodes, Erie, Pa.
 95,141.—FLY BRUSH.—H. R. Robbins, Baltimore, Md.
 95,142.—CORN AND COTTON CULTIVATOR.—J. H. Robinson, Selma, Ala.
 95,143.—UPSET, PUNCH, AND SHEARS.—J. B. Rose and J. B. Brown, New London, Wis.
 95,144.—UPSET, PUNCH, AND SHEARS.—J. B. Rose and J. B. Brown, New London, Wis.
 95,145.—LOOM FOR MAKING FRINGE.—George Roth (assignor to Heilmann and Silbermann), New York city.
 95,146.—SHUTTER HOOK.—D. C. Sage, Middletown, Conn.
 95,147.—HORSE RAKE.—C. W. Sanborn, Morrill, Me.
 95,148.—SAWING MACHINE.—J. G. Schiller, New Middletown, Ohio.
 95,149.—SEED FEEDING DEVICE FOR GRAIN DRILLS, ETC.—Andreas Schopp, Belleville, Ill.
 95,150.—PROPELLER.—Christian Sharps, Philadelphia, Pa.
 95,151.—BEE HIVE.—E. N. Shedd, Three Oaks, Mich.
 95,152.—ATOMIZER FOR ADMINISTERING MEDICINES.—James Sheedy, New York city.
 95,153.—CYLINDER PAPER MACHINE.—J. P. Sherwood, Fort Edward, N. Y. Antedated Sept. 10, 1869.
 95,154.—SCREW-CUTTING DIE PLATE.—Tom Shrewsbury, New York city.
 95,155.—VALVE FOR STEAM AND OTHER ENGINERY.—Gerard Sickles, Boston, Mass.
 95,156.—BUTTER JAR.—John Smith, East Liverpool, Ohio. Antedated May 26, 1869.
 95,157.—LIFTING JACK.—L. P. Smith, Middletown, Pa.
 95,158.—BUTTER WORKER.—Otis Snow, Burlington, Vt.
 95,159.—PINCH BAR.—Palmer Spalding, Chicago, Ill., assignor to himself, William Spalding, and T. D. Spalding.
 95,160.—PLAYING CARDS.—John Stevens, Mount Vernon, N. Y.
 95,161.—COMBINED OVEN AND DRUM.—J. J. Stout, S. J. Russell, and Noah Mendenhall, Greensburg, Ind.
 95,162.—RUBBER COMPOUND.—M. A. Sutherland, New York city.
 95,163.—PLOW.—Abel Teague, Madisonville, Ky. Antedated September 10, 1869.
 95,164.—HORSE RAKE.—P. A. Thayer, Theresa, N. Y.
 95,165.—MECHANICAL MOVEMENT.—Hugh Thomas and Robert Wallace, New York city.
 95,166.—GAGE FOR SAWS.—C. W. Tschumy, Fremont, Ohio.
 95,167.—CHURN.—S. S. Ulrey, North Manchester, Ind.
 95,168.—HORSE POWER.—J. S. Upton, Battle Creek, Mich.
 95,169.—FRUIT CRATE.—Frank R. Van Dake, Jackson, Miss.
 95,170.—COOKING STOVE.—N. S. Vedder, Troy, N. Y.
 95,171.—RUFFLING ATTACHMENT FOR SEWING MACHINES.—C. A. Vosburgh (assignor to himself and Merriam, Boyd, and Co.), Memphis, Tenn.
 95,172.—SHOEMAKERS' TOOL.—Michael Walpole, Milford, Mass.
 95,173.—MEDICAL COMPOUND.—John Ward, Evansville, Ind. Antedated Sept. 13, 1869.
 95,174.—ECCENTRIC.—J. C. Wells, Warren, Pa.
 95,175.—POTATO DIGGER.—James Wheeler, Dowagiac, Mich.
 95,176.—DUMPING CART.—M. F. Wickersham, Springfield, Ill., assignor to himself, Thomas Eckhardt, H. F. Eldred, J. G. Law, T. Hutchinson, C. B. Hurd, C. Dresser, and D. Sherman.
 95,177.—STREET-SWEEPING MACHINE.—M. F. Wickersham, Springfield, Ill., assignor to himself, Thomas Eckhardt, H. F. Eldred, J. G. Law, T. Hutchinson, C. B. Hurd, C. Dresser, and D. Sherman.
 95,178.—FENCE POST.—C. K. Butterfield, Eddyville, N. Y.

REISSUES.
 85,578.—COOKING STOVE.—Dated Feb. 2, 1869; reissue 3,642.—Clement Olhaber, Cincinnati, Ohio.
 92,357.—STEAM WATER ELEVATOR.—Dated July 6, 1869; reissue 3,643.—W. E. Prall, Washington, D. C., and A. C. Rand, New York city; assignors to E. Prall.
 42,118.—GRATE.—Dated March 29, 1864; reissue 3,644.—G. L. Smith, Brooklyn, N. Y.
 70,947.—STEAM ENGINE.—Dated November 19, 1867; reissue 3,645.—Jules Strehler, New York city; assignee of Eugene Bourson.
 92,840.—ROTARY OVEN.—Dated July 20, 1869; reissue 3,646.—D. A. Kennedy, William Wadsworth, and E. D. Murray, Darien, Wis.; assignees of D. A. Kennedy.

DESIGNS.
 3,664 to 3,666.—HINGE.—Milton Bradley, Springfield, Mass., assignor to the Union Manufacturing Company, New Britain, Conn. Three patents.

EXTENSIONS.
 KNITTING MACHINE.—Clark Tompkins, of Troy, N. Y. and John Johnson, of Boston, Mass.—Letters Patent No. 13,586, dated Sept. 18, 1855; reissue No. 963, dated May 15, 1860.

MACHINERY FOR FOLDING AND MEASURING CLOTH.—J. D. Elliot of Leicester, Mass.—Letters Patent No. 13,543, dated September 11, 1855.
 STEAM GAGE COCKS.—Albert Bisbee, of Chelsea, Mass.—Letters Patent No. 13,563, dated September 18, 1855.
 DOOR LOCKS.—J. H. Butterworth, of Dover, N. J.—Letters Patent No. 4,452, dated April 11, 1846; reissue No. 38, dated June 4, 1861.

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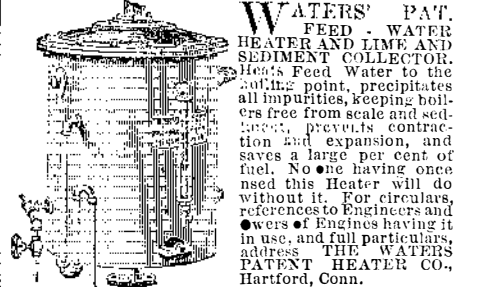
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