

ANIMAL TRAP.—John O. Kopar and George W. Bauer, Washington, D. C.—This invention consists of four or more wooden or iron plates projecting from a common shaft hung in a box, each plate being provided with a bait-holder, so connected with a latch on the next plate in front that, when the animal stands on that one of the plates which is held by its latch in a horizontal position, and pulls at the bait suspended from the nearest vertical plate, such pulling loosens the latch of the horizontal plate and leaves it free to sink beneath the animal's weight, and precipitate the latter into the box, which operation also resets the trap and closes the orifice by which the animal entered.

HAY AND COTTON PRESS.—B. R. Brown and James Toone, Jr., Jackson, Tenn.—This invention consists of a device for holding the platen of a cotton or hay press down to its work when operating upon the loose material.

ROAD SCRAPER.—James C. Evans, Delaware, Ohio.—This invention relates to divers improvements in revolving or self-dumping scrapers, all tending to increase the efficiency of the machine.

CORN PLANTER.—James M. Kiracofe, Mount Solon, Va.—This invention has for its object to furnish an improved corn planter, which shall be so constructed and arranged as to drop the corn accurately and regularly, and cover it, and drop the fertilizer at the same time with the corn.

HANDLE SEAT FOR PLOWS.—Edward Wiard, Louisville, Ky.—This invention has for its object to furnish an improved seat for securing the handle to the mold board of plows, which shall be so constructed as to hold the handle firmly and securely.

COMBINED RULE AND CALCULATOR.—Nels Ockerlund, New York city.—This invention has for its object to furnish a simple and convenient instrument, which, while serving all the purposes of an ordinary rule, may be used for measuring angles, adding, subtracting, finding the fourth term of a proportion, etc., etc., while, at the same time, being compact and easily manipulated.

STUMP-SAWING MACHINE.—A. and H. Goodman, Williamsburgh, Mo.—This invention relates to improvements in machines for sawing stumps close to the ground, and consists in the application of a vibrating sawing frame upon a frame hinged to the side of a truck frame, and provided with small rollers for rolling together with the truck towards the stump, as motion is imparted to the saw frame by connecting rods working from a line shaft on the truck, and operated by a horse-power apparatus also mounted on the truck, to be worked by a sweep attached to the driving wheel on the top of the truck, and arranged to work over the saw frame and stump, or in case of sawing high stumps or trees, the drive wheel may be provided with short levers and handed around. This said power is also provided with a set of feeding gears for working the driving wheels of the truck, and arranged for being geared or ungeared with the power as required.

COOKING UTENSIL.—J. A. Morrison, Brady's Bend, Pa.—The object of this invention is to furnish cheap, ready, and convenient means for toasting bread, broiling or frying meat, or warming vegetables, and it consists in combining with a metallic frame or stand two curved reflectors, one above the other, with their convex sides near and facing each other, and with a toasting or broiling grate between them, supported by the frame, the concave side of the upper reflector being uppermost and forming a pan for frying.

MEASURING BOARDS.—I. J. W. Adams, Salisbury, Md.—This invention relates to a new and useful improvement in the mode of measuring boards and planks, and is especially adapted to measuring flooring as it is delivered from the planing machine, whereby accuracy of measurement is secured and time saved.

LOOMS FOR FANCY WEAVING.—Albert R. Field, Centra Falls, R. I.—This invention relates to new and important improvements in looms for weaving fancy goods, and it consists mainly in the mechanism for raising and lowering the harness of the loom, but embraces in combination with such mechanism other and improved mechanical appliances for producing the necessary motions for properly operating the harness, changing their positions, and thereby changing the figure or face of the goods woven.

PUMP SPOUT.—J. H. Gleim, Tipton, Mo.—The object of this invention is to provide convenient means for returning water to a well or cistern as it is pumped up, and in so doing the inventor has three objects in view: first to save water, which in some sections of the country at certain seasons of the year is a matter of great importance; secondly to obtain cool water, after thus pumping and returning the water, without waste; and thirdly, pumping and returning the water for the purpose of agitating and thereby aerating the water in the well.

EXPANSION JOINT FOR PIPES.—J. E. Jones, Tidoute, Pa.—The object of this invention is to produce a suitable joint for connecting the ends of pipes, the said joint allowing free expansion and contraction of the pipes, during the changes of temperature.

HOSE COUPLING.—Charles Powell, Birmingham, England.—This invention relates to improvements in coupling joints for hose or other pipe, and consists in providing longitudinal brackets or projections, on the end of one section with notches fronting the center, and a rotating collar on the other section behind the flange, with spiral flanges for wedging in the said notches, when the joints are placed together and the said collar is turned on its section, clamping the flange between it and the flange or end of the other section firmly together. The flange of the section on which the collar turns has radial notches engaging the projections of the other section to prevent it from being turned with the revolving wedging collar, by the frictional contact. The revolving wedging collar may have lugs for the attachment of a spanner for turning it, or a lever may be permanently attached to it.

GUN WIPER.—Herman Greve, Sparta, Wis.—This invention relates to a new gun wiper for small arms, and consists in an expanding and contracting cylindrical piece of vulcanized india-rubber, or other suitable substance, made hollow for the most part of its length, having a screw plug arranged in the hollow and permanently connected at the bottom, and provided with spiral grooves on the exterior, which is dropped into the barrel, and expanded by a rod with a tubular end, having screw threads fitted for the screw plug, and screwed down therein to expand the wiper against the wall of the barrel, and to turn it to scrape the foul matter adhering to the inner wall of the barrel into the grooves of the wiper so that it may be drawn out when the wiper is withdrawn.

GATE.—S. Henry, Chenoa, Ill.—This invention relates to improvements in gates for fences, and consists in a combination with gates composed of longitudinal bars pivoted to the posts and to the vertical end bars, so that a slight downward movement of the end vertical bars next the posts and attached to the horizontal bars near the pivots and the posts, will open the gates by swinging them upon the said pivots of hinged platforms on each side of the gate connected at their ends with these vertical bars, so that the weight of the person or animal advancing will open the gate.

DOVETAILING MACHINE.—James R. Van Epps, Albany, N. Y.—This invention relates to new and useful improvements in machines for cutting dovetail for putting together boxes, drawers, flasks for founderies, and for all similar work.

WINDOW-BLIND HINGES.—A. C. Cornell, St. Louis, Mo.—This invention relates to improvements in hinges, to be used for opening, closing, and locking the blinds by turning a shaft projecting through the window frame to the interior of the building.

DRILL.—Alexander Thompson, Burlington, Vt.—This invention has for its object to so improve the device for holding rotary drills that the feed of the drill can be varied at will, and that, also, the drill and holder may be used in narrow places, where they otherwise could not be inserted.

SHIFTING RAIL FOR CARRIAGE SEATS.—Caspar Disser, West Union, O.—This invention relates to a new device for securing the rail to a carriage or buggy seat, and for facilitating the removal of the same; and it consists in the application of swiveled fastening buttons and hook-shaped back fastenings, by which the rail is securely locked, and which facilitates the ready removal of the same.

BELT REPLACER.—William C. Bridges, Michigan City, Ind.—This invention relates to a new apparatus for adjusting belts on their pulleys, facilitating their removal from and application to, such pulleys, and it consists in the application of a curved semi-annular belt-receiver to a suspended lever, in such manner as to conveniently receive the belt from the pulley and re-apply it to the same.

EGG-PACKING CASE.—George Ruston, Freeport, Ill.—This invention relates to improvements in egg-packing cases, and consists in providing small cells within a box by means of narrow strips of strong paper extending across the box one way, and perforated at suitable distances for the reception of short tenoned pieces, dividing the spaces between the long strips, into compartments, one for each egg.

CARTRIDGE CASES.—O. Schevenell, Marion, Ala.—This invention relates to a new and useful improvement in cartridges for shot guns, more especially, but which may be used in rifles and guns of larger caliber, and it consists in making the cartridge case of staves of wood, or other suitable material, with common gun wads at the ends of the staves the whole being cemented or stuck together so that the shot will be retained therein and kept in place, while the case, or joints of the case will be broken in ramming down the cartridge.

BARK MILL.—J. G. Curtis, Emporium, Pa.—This invention relates to improvements in bark mills, and consists in an arrangement with a pair of metal cylinders, with notched teeth formed on them, in circular rows, with plain grooves between them, one having coarse and the other finer teeth, and the one with the coarser teeth being arranged in a suitable case above the other, of strong iron plates, with projections corresponding to the grooves in the rollers, and notches corresponding to the teeth, fitted in the sides of the case, for adjustment, to or from the rollers, and for action in connection with the toothed rollers for grinding the bark fed into the case at the top, to be first acted on by the coarse or breaking roller, in connection with which, at the point of receiving the bark, there is a strong iron block, permanently attached to the case, and having projections and grooves acting in conjunction with the roller, for breaking the bark into coarse pieces before passing to the lower breaking plates.

Official List of Patents.

Issued by the United States Patent Office

FOR THE WEEK ENDING APRIL 19, 1870.

Reported Officially for the Scientific American.

SCHEDULE OF PATENT OFFICE FEES:

Table with 2 columns: Description of fee and Amount. Includes fees for filing applications, issuing patents, appeals, extensions, and design applications.

For copy of claim of any patent issued within 30 years... \$1. A sketch from the modeler drawing, relating to such portion of a machine as the claim covers, from... \$1. The full specification of any patent issued since Nov. 20, 1866, at which time the Patent Office commenced printing them... \$1.25.

- 101,967.—APPARATUS FOR MEASURING BOARDS.—I. J. W. Adams, Salisbury, Md.
101,968.—SPIDER FURNACE FOR BURNING BAGASSE.—John Amick, Assumption parish, La.
101,969.—MANUFACTURE OF STEEL FROM CAST OR PIG IRON.—H. M. Baker, Washington, D. C.
101,970.—ROOFING MATERIAL.—M. G. Balfour (assignor to himself and B. Boorman), Mauston, Wis.
101,971.—HAY DERIVICK.—Alden Barnes, Bloomington, Ill.
101,972.—VENTILATOR.—Orlando Barr, Beloit, Wis.
101,973.—STEAM GENERATOR.—J. F. Belleville, Paris, France.
101,974.—WATER-PROOF COMPOUND FOR BOOTS AND SHOES.—M. H. Boettger, Sacramento City, Cal.
101,975.—LATHE SPINDLE.—James E. Boutelle, Fishersville, N. H.
101,976.—CULTIVATOR.—Jacob Bower, Dayton, Ohio.
101,977.—STOP-COCK FOR STEAM AND LIQUIDS.—Joseph Breeden, Birmingham, England.
101,978.—BELT REPLACER.—William C. Bridges, Michigan City, Ind.
101,979.—CLOTH-MEASURING APPARATUS.—T. M. Brintnall, Medina, Ohio.
101,980.—SHIFTING RAIL FOR BUGGIES.—Ira Bronson, Lockport, N. Y.
101,981.—TURNING CHISEL.—R. P. Buttles and Salmon Sweet, Mansfield, Pa.
101,982.—SAWSET.—E. Y. Clark, New York city.
101,983.—SHUTTER WORKER.—A. C. Cornell, St. Louis, Mo.
101,984.—BARK MILL.—J. G. Curtis, Emporium, Pa.
101,985.—CAMERA STAND.—William W. Dames, San Jose, Cal.
101,986.—SHIFTING RAIL FOR CARRIAGE SEATS.—Caspar Disser, West Union, Ohio.
101,987.—SLATE WASHER.—Samuel G. Dugdale, Richmond, Ind.
101,988.—HEMMER FOR SEWING MACHINES.—John V. D. Elledge, Detroit, Mich.
101,989.—LOOM.—A. R. Field, Centra Falls, R. I.
101,990.—WHEAT DRILL.—John F. Fisher, Greencastle, Pa.
101,991.—AXLE FOR WHEAT DRILLS.—John F. Fisher, Greencastle, Pa.
101,992.—BOILER FEEDER.—Lucas Foote, Fairfield, Ohio.
101,993.—VELOCIPED.—Frederick J. Forsyth, Bay City, Mich.
101,994.—MANUFACTURE OF ELASTIC ROLLS.—J. B. Forsyth, Boston, Mass.
101,995.—PUMP SPOUT.—J. H. Gleim, Tipton, Mo.
101,996.—TURBINE WATER WHEEL.—D. W. Glendinning, Detroit, Mich.
101,997.—GUN WIPER.—Herman Greve, Sparta, Wis.
101,998.—FARM GATE.—Michael Gunshenan, New York city.
101,999.—CLOTHES DRYER.—Joseph C. Haines, West Philadelphia, Pa.
102,000.—SINGLETREE.—Andrew J. Hanna, New Garden township, Pa.
102,001.—SHEET-METAL BENDING MACHINE.—C. C. Hare, Kansas City, Mo.
102,002.—SINK AND WASHSTAND.—Christer L. Hedell, Galesburg, Ill.
102,003.—GATE.—Samuel Henry, Chenoa, Ill.
102,004.—CORN PLANTER.—Christopher Hippensteel, Lee's Cross Roads, Pa.
102,005.—STEAM CONDENSER.—John Houpt, Springtown, Pa.
102,006.—BOLT CUTTER.—H. L. Howard, Mendon, Mich.
102,007.—WHIP.—Liverus Hull, Charlestown, assignor to American Whip Co., Westfield, Mass.
102,008.—WAGON TIRE TIGHTENER.—A. B. Hurd, Watkins, N. Y.
102,009.—WAGON BRAKE.—Reuben Hurd, Morrison, Ill.
102,010.—EXPANSION JOINT FOR PIPES.—J. Evans Jones, Tidoute, Pa.

- 102,011.—DOVETAILING MACHINE.—Dedrick Jordan, Charles town, Mass., and Joseph Hill, Grand Rapids, Mich.
102,012.—CLOSET AND BED.—Wm. Kelly, Bath, Me.
102,013.—PRINTERS' FURNITURE.—A. N. Kellogg and J. J. Schock, Chicago, Ill.
102,014.—BOOTJACK AND BRUSH.—Samuel Kennedy, Rochester, Pa.
102,015.—SWEEP HORSE-POWER.—Richard J. M. King, Ypsilanti, Mich.
102,016.—BELL.—Joseph Kintz (assignor to himself and P. Clark), West Meriden, Conn.
102,017.—CORN PLANTER.—James M. Kiracofe, Mount Solon, Va.
102,018.—APPARATUS FOR REMOVING OILS, GREASE, GUMS, AND THE LIKE, FROM COTTON AND WOOLEN WASTE, AND RECOVERING THE SAME.—J. W. Kredps, Chicago, Ill.
102,019.—DENTAL APPARATUS FOR CASTING PLATES FOR ARTIFICIAL TEETH.—J. A. Loomis, Cathage, Ill., and C. F. Moll, San Francisco, Cal.
102,020.—SMOKE STACK.—Hector Mackinnon, Cleveland, Ohio.
102,021.—CHERRY STONER.—Jonah Merchant, Farmington, Ill.
102,022.—FOLDING CHAIR.—George McAleer, Worcester, Mass.
102,023.—COMBINED HAY RACK AND WAGON BOX.—F. G. McClellan, Attica, Ohio.
102,024.—FRUIT JAR.—Robert McCully, Philadelphia, Pa.
102,025.—AXLES AND THEIR BOXING.—Rob Roy McGregor, Covington, Tenn.
102,026.—BOLT CUTTER.—Wm. Mendham, Philadelphia, Pa.
102,027.—SHEET-METAL GROOVING MACHINE.—D. H. Metcalf and Daniel Squier, Battle Creek, assignors to themselves and Martin Metcalf, Grand Rapids, Mich.
102,028.—AGRICULTURAL STEAMER.—Henry W. Millar, Utica, N. Y.
102,029.—DOOR SPRING.—Abel Mishler, New York city.
102,030.—METHOD OF TREATING TRACING PAPER.—Julius Moog, Karlsruhe, Germany, assignor to Emil Heusner, Newark, N. J.
102,031.—COOKING UTENSIL.—J. A. Morrison (assignor to himself and A. J. Elliott), Brady's Bend, Pa.
102,032.—WINDMILL.—W. D. Nichols, Chicago, Ill.
102,033.—APPARATUS FOR REDISPILLING AND RECTIFYING SPIRITS.—Alonzo Noteman, Toledo, Ohio.
102,034.—RULE AND CALCULATOR.—Nels Ockerlund, New York city.
102,035.—ALARM AND OTHER BELL.—Thomas Pemberton and Geo. A. Pemberton, Birmingham, Eng.
102,036.—ATTACHMENT FOR HEATING STOVES.—J. L. Pfau, Jr., Quincy, Ill.
102,037.—STEAM TRAP.—L. H. Plum, Cincinnati, Ohio.
102,038.—HOSE COUPLING.—Charles Powell, Birmingham, England.
102,039.—LOOM.—Pierre F. Ramel and Jean Drogat, Lyons, France.
102,040.—HARNES BUCKLE.—George Reyer, Indianapolis, Ind.
102,041.—COOLING ALE AND BEER.—Michael Reynolds, New York city.
102,042.—CHIMNEY.—Francis Richardson, Hebron, Ill.
102,043.—RAILWAY RAIL SPLICE.—George P. Rose, Elmira, N. Y.
102,044.—STOVEPIPE THIMBLE.—P. H. Rose and M. B. Hudson, Canadaigua, N. Y.
102,045.—CULTIVATOR.—H. S. Ross, Millville, Ohio.
102,046.—WASHING MACHINE AND BOILER.—John Russell and T. T. McGrath, Fentonville, Mich.
102,047.—EGG PACKING.—George Ruston, Freeport, Ill.
102,048.—SHOEMAKERS' EDGE PLANE.—J. H. Sanford (assignor to Chandler Sprague), North Bridgewater, Mass.
102,049.—DREDGING APPARATUS.—C. A. Scanlan, Charleston, S. C.
102,050.—FUNNEL CAN FILLER.—Thos. Scantlin, Evansville, Ind.
102,051.—CARTRIDGE CASE.—Oswald Schevenell, Marion, Ala.
102,052.—HORSE-COLLAR CAP.—John Sellors, Bellevue, Mich.
102,053.—HEATING DRUM.—Charles W. Servoss, Chicago, Ill.
102,054.—EYELETING MACHINE.—Elijah Shaw, Milwaukee, Wis.
102,055.—BUTTER WORKER.—W. S. Shoemaker, Towsontown, Md., and E. H. Shoemaker, Columbus, Ohio.
102,056.—WATER WHEEL REGULATOR.—J. P. Sibley and A. Walsh, Bennington, Vt.
102,057.—ROTARY PUMP.—Anthony Slouthour, Cleveland, Ohio.
102,058.—WRENCH.—O. J. Smith, Wauwatosa, Wis.
102,059.—CLOTHES DRYER.—Lewis A. Stave, Oconomowoc, Wis.
102,060.—TURBINE WATER WHEEL.—Gilbert Stover, Crystal, Mich.
102,061.—ROOFING COMPOUND.—Wm. M. Stuart, St. Clair, Mich., assignor to himself, A. O. Whitcomb, W. S. Holmes, and R. H. Holmes.
102,062.—BLOWER.—Benjamin F. Sturtevant, West Roxbury, Mass.
102,063.—FAN BLOWER.—Benj. F. Sturtevant, West Roxbury, Mass.
102,064.—REFRIGERATOR.—A. B. Sweetland (assignor to himself and James Daley), Fitchburg, Mass.
102,065.—SAW MILL.—Charles Taylor, McKeesport, Pa.
102,066.—DRILL.—Alexander Thompson, Burlington, Vt.
102,067.—DETACHING HOOK.—J. W. Tuttle and Julius Peterson, Rochester, N. Y.
102,068.—MACHINE FOR MAKING WROUGHT-IRON CHAIRS FOR RAILROADS.—Wm. Van Anden, Poughkeepsie, N. Y.
102,069.—DOVETAILING MACHINE.—J. K. Van Epps, Albany, N. Y.
102,070.—MACHINE FOR MOLDING GLASS BUTTONS.—Charles Vigneron, Providence, R. I.
102,071.—HANDLE SEAT FOR PLOWS.—Edward Wiard, Louisville, Ky., assignor to B. F. Avery.
102,072.—LOCOMOTIVE AND CAR BRAKE.—J. C. Wilson, Winneconne, Wis.
102,073.—FEEDING APPARATUS FOR NAIL MACHINE.—U. S. Wolf, Burel township, Pa.
102,074.—BELT TIGHTENER.—Alvin N. Woodard, Fenton, Mich.
102,075.—TOOL HANDLE.—Edwin L. Abercrombie, Florence, Mass.
102,076.—BUCKLE.—J. J. Adair (assignor to W. J. Huey), Portland, Ind.
102,077.—ELECTROTYPING.—Joseph A. Adams, Brooklyn, N. Y.
102,078.—PROCESS FOR FACING VALVE AND VALVE SEAT FOR STEAM ENGINES.—Q. S. Backus, Winchendon, Mass.
102,079.—WHEEL GEAR FOR CARRIAGES.—Albert Baxter, Howard, N. Y.
102,080.—STOVE FOR RAILROAD CARS.—G. Beeman, Ironton, Ohio.
102,081.—GRAIN DRILL TEETH.—Lyman Bickford, Macedon, N. Y.
102,082.—HEMMER FOR SEWING MACHINE.—A. W. Boomer and J. P. Haskins, Poulitney, Vt.
102,083.—WASHING MACHINE.—Samuel Brackett, Wenona, Mich.
102,084.—CHURN DASHER.—Isaac Brewbaker, Fincastle, Va., assignor to W. A. McCue.
102,085.—GLOBE VALVE.—Isaac W. Brown, Jefferson City, Mo.
102,086.—HOT AIR FURNACE.—Lorenzo W. Brown, Cleveland, Ohio.
102,087.—BOX HOOK.—Charles Brusio, Worcester, Mass.
102,088.—CAPSTAN.—E. Buel, Silver Creek, N. Y.
102,089.—SPRING BED BOTTOM.—J. N. Bull, Springfield, Mass.
102,090.—ADJUSTABLE HOLLOW DRILL.—C. E. Butler, Hudson, N. Y.
102,091.—HEAD-BLOCK OF SAW MILL.—J. A. Clark, Leavenworth, Ind.

- 102,092.—COMBINED MANURE FORK AND SCRAPER.—J. W. Clarke, Kingston, Wis.
- 102,093.—EXTRACT FOR THE CURE OF CANCER AND OTHER DISEASES.—P. A. Cobb, Lynchburg, Va.
- 102,094.—PATTERN CHAIN FOR LOOM.—H. D. Davis, North Andover, Mass.
- 102,095.—HORSESHOE BLANK.—John Day, Buffalo, N. Y.
- 102,096.—OPERATING FAN TREMOLOS.—J. H. Dow (assignor to himself and Darius Wilcox), Birmingham, Conn.
- 102,097.—CONCRETE PAVEMENT.—N. H. Downs, Birmingham, Conn.
- 102,098.—FRENCH BEDSTEAD.—R. C. Du Bois, Washington, D. C.
- 102,099.—THRILL COUPLING.—George W. Dubuisson, Norwich, Conn.
- 102,100.—HAME ATTACHMENT.—Charles H. Easte, South Boston, Mass.
- 102,101.—LAWN MOWER.—Norman Eaton, Woburn, Mass.
- 102,102.—ROAD SCRAPER.—James C. Evans, Delaware, Ohio.
- 102,103.—LUNCH VALISE.—Sigmund Feust, New York city.
- 102,104.—ELASTIC ROLL.—Jas. B. Forsyth and John J. Haley, Boston, Mass.
- 102,105.—COMBINATION TOOL.—Calvin A. Foster, Fitchburg, Mass.
- 102,106.—SCISSORS SHARPENER.—Calvin A. Foster, Fitchburg, Mass.
- 102,107.—WHEEL FOR LOCOMOTIVE LAND CONVEYANCE, AND COAL-HOISTING APPARATUS.—James S. French, Alexandria, Va.
- 102,108.—SHUTTER FASTENER.—Frederick W. Frost, Somerville, Mass.
- 102,109.—METALLIC CARTRIDGE.—Adonis N. C. Gavard, Paris, France.
- 102,110.—WIRE COVERING MACHINE.—Ambrose Giraudat, New York city.
- 102,111.—SCREW PROPULSION FOR TUG BOATS.—Edward D. Gird, Syracuse, N. Y.
- 102,112.—SAWING MACHINE.—Allen Goodman and Hardin Goodman, Williamsburg, Mo.
- 102,113.—FLY NET FOR HORSES.—John Graham, New York city.
- 102,114.—STOVE PIPE SHELF, HEATER, AND DAMPER.—Edward Hall, Beloit, Wis., and F. D. Searl, Rockton, Ill.
- 102,115.—BRICK MACHINE.—George W. Harlan, Cincinnati, Ohio.
- 102,116.—NON-CONDUCTING COVERING FOR STEAM BOILERS.—Washington Harris and Wm. Howell, Philadelphia, Pa.
- 102,117.—PIE STAMPER AND CUTTER.—Allen Hawkes (assignor for one half to O. E. Bielcow), Providence, R. I.
- 102,118.—MINERAL PAINT.—Edward B. Heckel, Vincent, Pa.
- 102,119.—STOVE PIPE DRUM.—Jacob Heger, Jefferson, Wis.
- 102,120.—FAUCET.—Joseph Heine and John Vonficht, Toledo, Ohio.
- 102,121.—HORSESHOE.—John Henderson, Albion, N. Y.
- 102,122.—MECHANISM FOR MAKING WIRE HEDDLES.—E. T. Hortle and Richard Thompson, New York city.
- 102,123.—COVER FOR TABLES, FLOORS, ETC.—August Herzog, New York city.
- 102,124.—SIRUP PITCHER.—John H. Hobbs, Wheeling, West Va.
- 102,125.—HINGE FOR SHUTTERS.—Johann Hof and Philipp Brencis, Baltimore, Md.
- 102,126.—HYDRANT.—James P. Hyde, New York city.
- 102,127.—AXLE BOX FOR CARRIAGES.—David Jewett, Lynn, Mass.
- 102,128.—EARTH CLOSET.—George Baker Jewett, Salem, Mass.
- 102,129.—STOPPER FOR JARS AND BOTTLES.—H. W. Ketcham, New York city.
- 102,130.—MACHINE FOR ROLLING CONICAL AND OTHER TUBES.—Charles Kewin, San Francisco, Cal.
- 102,131.—HARVESTER.—William A. Kirby, Auburn, N. Y.
- 102,132.—KNOB FOR SAFE DOORS.—Joseph G. Kittredge, San Francisco, Cal.
- 102,133.—ANIMAL TRAP.—John O. Kopas and Geo. W. Bauer, Washington, D. C.
- 102,134.—ANIMAL TRAP.—John O. Kopas, Washington, D. C., assignor for one half his right, to S. I. Wallis, Salisbury, Md.
- 102,135.—TREATING PARAFFINE AND OBTAINING IT IN CRYSTALS.—Frederick Lamb, London, England. Antedated Dec. 4, 1865.
- 102,136.—ROTARY PUMP.—Erwin Lavens and James C. Lamb, Middletown, Conn.
- 102,137.—PISTON ROD PACKING.—Harvey T. Lee, Marysville, Cal.
- 102,138.—HAME FOR HARNESS.—Josiah Letchworth, Buffalo, N. Y.
- 102,139.—COFFEE URN.—Eugene Martin, Waterbury, assignor to himself and Blaise Soules, Bridgeport, Conn.
- 102,140.—ROTARY PUMP.—Henry W. Mather, New York city.
- 102,141.—BRICK KILN.—William T. Mathews, Negaunee, Mich.
- 102,142.—SELF-WINDING AND BALANCING CURTAIN FIXTURES.—F. C. D. McKay, Elmira, N. Y.
- 102,143.—STOVE GRATE.—Henry Miner (assignor for one half his right, to Louis Harter), Green Island, N. Y.
- 102,144.—PAVING BRICK.—David Moffatt and John Thomson, Philadelphia, Pa.
- 102,145.—PICKER CHECK FOR LOOM.—William Montgomery, Northampton, Mass.
- 102,146.—MANUFACTURE OF STEEL.—Charles Motier Nes, York, Pa.
- 102,147.—SAFETY VALVE.—H. J. Paine (assignor to himself and Joseph Kelly), Providence, R. I.
- 102,148.—TREATING TIN SCRAP TO OBTAIN USEFUL PRODUCTS.—D. D. Parmelee, New York city, assignor to W. K. Marvin.
- 102,149.—CAR COUPLING.—William B. Parsons, Short Tract, N. Y.
- 102,150.—DOUBLE SHOVEL PLOW.—George Perry, Granville, Ill.
- 102,151.—JOINT FOR PITMAN HEADS, SICKLES OF HARVESTERS, ETC.—Iva Poffenberger, Champaign county, Ohio.
- 102,152.—HULLING MACHINE.—William Porter, Brooklyn, N. Y.
- 102,153.—PAPER FILE.—John P. Quarles, Richmond, Va.
- 102,154.—SCREEN ATTACHMENT FOR WINDOWS.—Geo. Reed, W. C. Hoagland, and J. J. Newson, Brooklyn, Cal.
- 102,155.—MACHINE FOR UNITING BOOT AND SHOE SOLES TO THE UPPERS.—T. K. Reed, East Bridgewater, assignor, by mesne assignment, to Gordon McKay, trustee of the McKay Sewing Machine Association, Boston, Mass.
- 102,156.—APPARATUS FOR PITCHING BEER AND OTHER BARRELS.—Hermann Reutti and Philipp Winkelhaus, Hamilton, Ohio.
- 102,157.—INKING APPARATUS FOR COLOR PRINTING.—Israel L. G. Rice, Cambridge, Mass.
- 102,158.—APPARATUS FOR REEFING SAILS.—N. W. Rich, Swampscott, Mass.
- 102,159.—MACHINE FOR TRIMMING THE HEELS OF BOOTS AND SHOES.—E. P. Richardson, Lawrence, assignor to himself and F. W. Caruth, Boston, Mass. Antedated April 9, 1870.
- 102,160.—MACHINE FOR JOINING THE CLEANING TEETH OF CROSSCUT SAWS.—John H. Kolson, Ovid, Mich.
- 102,161.—COMPOUND TO BE USED IN TREATING RHEUMATISM AND OTHER DISEASES.—John B. Rodgers, St. Louis, Mo. Antedated April 12, 1870.
- 102,162.—PLOW.—Samuel D. Sayre, Rockford, Ill.
- 102,163.—LAMP.—Bennett B. Schneider, New York city.
- 102,164.—BOBBIN-WINDER FOR SEWING MACHINES.—Thos. Shanks, Baltimore, Md.
- 102,165.—WATCHMAN'S TIME CHECK.—David Shive, Philadelphia, Pa.
- 102,166.—CLEANING WOOL AND HAIR.—Chas. F. A. Simonin, Philadelphia, Pa., and Edward W. Coffin, Glendale, N. J.
- 102,167.—DEVICE FOR HANGING PICTURES, ETC.—Corelli W. Simpson, Bangor, Me.
- 102,168.—LAMP.—Francis Vanvost Sleeth, Keokuk, Iowa.
- 102,169.—VAPOR BURNER.—Chas. E. Smith and H. J. Rice, Columbus, Ohio.
- 102,170.—SEWING MACHINE.—Geo. A. Smith and Edward L. Miller, Philadelphia, Pa.
- 102,171.—CHURN POWER.—Ruth N. Smith, New York city.
- 102,172.—HORSE HAY RAKE.—Solomon P. Smith, Waterford, N. Y.
- 102,173.—HAY TEDDER.—Walter Smith, Weston, Mass.
- 102,174.—GOVERNOR VALVE.—William Smith, Philadelphia, Pa.

- 102,175.—APPARATUS FOR COOLING GRAIN.—S. A. Stebbins, Toledo, Ohio.
- 102,176.—SELF-ACTING EQUALIZING VALVE.—J. J. Steiger, Peoria, Ill.
- 102,177.—AMALGAMATOR.—Charles C. Stevenson, Gold Hill, Nevada.
- 102,178.—FOLDING CHAIR.—Alexander W. Stewart, Boston, Mass.
- 102,179.—FOLDING CHAIR.—Alexander W. Stewart, Boston, Mass.
- 102,180.—FOLDING CHAIR.—Alexander W. Stewart, Boston, Mass.
- 102,181.—METAL-CAPPED CORE.—Edwin Street, East Haven, Conn.
- 102,182.—SPRING BED BOTTOM.—Richard Tattershall, Beloit, Wis.
- 102,183.—TYPE DISTRIBUTING MACHINE.—D. B. Thompson, Brooklyn, N. Y.
- 102,184.—MACHINE FOR GRINDING AND POLISHING MARBLES.—J. H. Volk, Chicago, Ill.
- 102,185.—CARPET FASTENER.—R. W. Walker, Washington, D. C.
- 102,186.—STILL FOR PETROLEUM.—John Warren, Flushing, N. Y.
- 102,187.—STOP VALVE FOR PETROLEUM PACKAGES.—Albin Warth, Stapleton, N. Y.
- 102,188.—TAP FOR LIQUID PACKAGES.—Albin Warth, New York city.
- 102,189.—COPY BOOK.—John D. Williams, New York city.
- 102,190.—BUTTON FASTENING.—Morris Wise, New York city.
- 102,191.—SHUTTER WORKER.—Hermann Wolff, Milwaukee, Wis.
- 102,192.—SHUTTER WORKER.—Hermann Wolff, Milwaukee, Wis.
- 102,193.—ARTIFICIAL TEETH.—John H. Wood, Lebanon, Ohio.
- 102,194.—MEDICINE FOR COUGHS AND COLDS.—Allen Young, Pittsborough, N. C.
- 102,195.—MACHINE FOR FORMING AND CUTTING EYELETS AND FOR THE PREPARATION OF STOCK FOR THE SAME.—S. W. Young (assignor to himself, Russell A. Dennison, and Elisha Dyer), Providence, R. I.
- 102,196.—ADVERTISING DESK.—H. W. Crotzer, Philadelphia, Pa.
- 102,197.—DOOR SPRING.—A. T. Ballantine (assignor to himself, W. W. Kingsland, N. R. Bates, and L. D. Phelps), Titusville, Pa.
- 102,198.—BRONZING AND GILDING.—J. L. Duffe, Washington, D. C.
- 102,199.—PUMP.—B. F. Gustin, Middletown, Ind.

REISSUES.

- 3,921.—TREATING ORGANIC MATERIALS WITH AIR.—Rudolph D'Heureuse, New York city.—Patent No. 93,183, dated August 3, 1869.
- 3,922.—HOISTING MACHINE.—Wm. Miller, Cincinnati, Ohio.—Patent No. 48,579, dated July 4, 1865; reissue 2,066, dated September 5, 1865.
- 3,923.—GRAIN SEPARATOR.—G. B. Turner, Cuyahoga Falls, Ohio, assignee of G. B. Turner and James A. Vaughn.—Patent No. 1,013, dated April 9, 1861.
- 3,924.—GAS GENERATOR.—Benjamin Best, Dayton, Ohio, assignee of Patrick Kelly.—Patent No. 92,317, dated July 6, 1869.
- 3,925.—MILL.—J. B. Brown, Peekskill, N. Y., assignee of C. B. Hutchinson.—Patent No. 29,490, dated August 7, 1860.
- 3,926.—MILL.—J. B. Brown, Peekskill, N. Y., assignee of C. B. Hutchinson.—Patent No. 29,490, dated August 7, 1860.
- 3,727.—HAND STAMP.—B. B. Hill, Chicopee, Mass.—Patent No. 59,305, dated November 6, 1866; reissue 2,536, dated January 14, 1868; reissue 3,261, dated January 12, 1869.
- 3,928.—OILER FOR LOOSE PULLEYS.—C. A. King and D. B. Wesson, Springfield, Mass., assignees of C. A. King.—Patent No. 1,591, dated October 19, 1860.
- 3,929.—BAKER'S OVEN.—M. A. E. McKenzie, Brooklyn, N. Y., assignee to Duncan McKenzie.—Patent No. 25,130, dated May 1, 1860.
- 3,930.—ROLLER FOR CLOTHES WRINGER.—Woonsocket Rubber Company, Woonsocket, R. I., assignees of J. F. Holt.—Patent No. 49,030, dated July 25, 1865.
- 3,931.—MACHINE FOR SAWING MARBLE.—P. J. Torney, for himself, and Charles W. Hayden, and J. L. Kidwell, assignees of P. J. Torney, Washington, D. C.—Patent No. 54,515, dated December 1, 1865.

DESIGNS.

- 3,973.—MASONIC CHART.—James Ames, Indianapolis, Ind.
- 3,974.—BUGGY BODY.—William M. Armstrong, Middletown, Ohio.
- 3,975.—WATCH CHAIN.—Montraville Buffum, Leominster, Mass.
- 3,976.—CARPET PATTERN.—R. R. Campbell (assignor to Lowell Manufacturing Company), Lowell, Mass.
- 3,977 to 3,983.—CARPET PATTERN.—E. J. Ney, Dracut, assignor to Lowell Manufacturing Company, Lowell, Mass. Seven patents.
- 3,984.—TRADE MARK.—D. A. Page, Dover, N. H.
- 3,985.—HANDLE FOR SPOONS, FORKS, LADLES, ETC.—J. R. Wendt, New York city.

EXTENSIONS.

- MACHINE FOR SOWING FERTILIZERS.—W. S. Bartle, Newark, N. Y.—Letters patent No. 14,708, dated April 22, 1856; reissue 558, dated May 15, 1858.
- PULVERULENT ACID FOR USE IN THE PREPARATION OF SODA POWDERS, FARINACEOUS FOOD, AND OTHER PURPOSES.—E. N. Horsford, Cambridge, Mass.—Letters Patent No. 14,722, dated April 22, 1856; reissue 2,567, dated May 7, 1867; reissue 2,979, dated June 9, 1868.

DISCLAIMERS.

- HORSE HAY RAKE.—Mary G. Pratt of Marple township, Pa., administratrix of Randall Pratt, deceased.—Letters patent No. 40,067, dated January 5, 1856; reissue 1,893, dated February 28, 1865.—Filed Jan. 7, 1870.
- COMPOSITION FOR INKING ROLLERS, PADS, ETC.—Lewis Francis and C. H. Loutrel, New York city, assignees of Lewis Francis and P. W. Letmate.—Letters patent No. 43,192, dated June 21, 1864; reissue 2,805, dated November 26, 1867.—Filed March 25, 1870.

NEW BOOKS AND PUBLICATIONS.

- ELECTRO-METALLURGY PRACTICALLY TREATED. By Alexander Watt, F.R.S.A., Lecturer on Electro-Metallurgy, etc., formerly one of the Editors of "The Chemist." New Edition. Strahan & Co., Publishers, 56 Ludgate Hill, London.
- MODERN WORKSHOP PRACTICE. As Applied to Marine, Land, and Locomotive Engines, Floating Docks, Dredging Machinery, Bridges, Shipbuilding, Cranes, etc., etc. By John G. Winton, Engineer. Strahan & Co., Publishers, 56 Ludgate Hill, London.
- The above valuable works, noticed in No. 17, can be had on application to Messrs. Virtue & Yorston, No. 12 Dey street, this city.
- LAW OF PATENTS, with Explanatory Notes of the Law as to the Protection of Designs and Trade-Marks. By F. W. Campin, Engineer. London: Virtue & Co.
- This volume of over two hundred pages is devoted to a discussion of the English Patent Law and practice, and contains much useful information to patent attorneys and others interested. Sold by Virtue & Yorston, No. 12 Dey street, New York city.
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