

MANUFACTURE OF STEEL AND IRON.—G. F. Ansell, London, England.—This invention relates to the conversion of iron into steel or wrought iron, for armor plates, railways, and for other purposes, by the use of bisulphate of potash, or the bisulphate of soda, or a mixture of the two, the same being applied in such a manner as to act throughout the mass of melted metal.

ANIMAL TRAP.—Elonzo Sprague and George C. Belt, Bridgeton, Ind.—This invention has for its object to construct a trap, by means of which animals can be readily caught, and which will always remain set without any liability of getting out of order. The invention consists in providing a double treadle in an open passage, each treadle operating a gate, whereby the escape of an animal, once within the passage is absolutely prevented.

MOLD FOR CASTING SPOONS.—Luther Boardman and N. S. Boardman, East Haddam, Conn.—This invention has for its object to reduce the expense of molds for casting spoons of britannia, or other metal.

MUFF.—R. M. Seldis, New York city.—This invention relates to a new manner of securing pocket flaps on muffs, with a view of economizing material and labor in their manufacture.

FLOCK GRINDER.—Robert Aldrich, Forestdale, R. I.—This invention relates to a new construction of flock grinder, and more particularly to a new method of securing the knives in the grinding surfaces, with a view of adjusting the same to different kinds of work, and to provide for wear by the operation of grinding.

SAPONIFIED MINERAL BATH.—Otto Gavron, New York city.—This invention has for its object to furnish a convenient surrogate for mineral baths, which can be brought into a condensed form to be conveniently transported and handy for use. The invention consists in combining the minerals and salts that are contained in the mineral waters with soap, so that the soap thus prepared can be used in baths with the same effect as the mineral waters alone.

HAT AND CAP SWEATS.—Phillip F. Lenhart, Brooklyn, N. Y.—This invention has for its object to improve the sweat bands of hats and caps in such a manner that the same will be more convenient and less injurious to health than those now in use. The invention consists in a novel treatment of the leather for the purpose of making the same water-proof, and still an absorbent of moisture.

CARPENTERS' PLANE.—Charles G. Miller, Brattleboro, Vt.—This invention has for its object to construct a plane which will be convertible into a grooving, rabbeting, or ordinary smoothing plane, and which therefore combines in one tool all the advantages heretofore included in three.

CHURNING APPARATUS.—James P. Curtis, Wytheville, Va.—This invention has for its object to furnish an improved churning apparatus which shall be so constructed and arranged that the operation of churning may be changed from a labor to a pleasure, enabling even a child to work the machine, and which shall, at the same time, bring the butter quickly and thoroughly.

LAMP-SHADE HOLDER.—Cornelius St. John, New York city.—The object of this invention is to furnish an improved lamp-shade holder, simple in construction, easily attached to and detached from the lamp, and which shall be so arranged as to allow the shade to be expanded or contracted at will.

CULTIVATOR PLOW.—James G. Miner, Nashville, Tenn.—This invention has for its object to furnish an improved plow which shall be so constructed as to cut up all the weeds and grass between two rows at a single passage, and turn up their roots so that they may be killed by the sun.

SEATS FOR VEHICLES.—P. F. Dean, Watsonville, Cal.—This invention has for its object to furnish an improved seat for buggies, carriages, cars, and other vehicles, so that when in use they may be easier to the rider.

INSIDE WINDOW BLIND.—Stephen Eich, East Toledo, Ohio.—This invention has for its object to furnish an improved inside blind for windows which shall be simple in construction and effective in operation, being so constructed that it may be closed so closely as not only to shut out the light, but also to prevent the entrance of flies and other insects, and which may at the same time be made light and ornamental.

WOOD BOX.—Frank Ficht, Dyckesville, Wis.—This invention has for its object to furnish an improved box for holding fire wood when prepared for the stove, which shall be neat in appearance, convenient in use, and easily kept clean.

SAFE LOCK.—Ludwig Beer, New York city.—This invention relates to improvements in that kind of locks in which a slotted key is applied to shift a series of slides or plates which serve as levers for turning a slotted locking cylinder, by which the bolt is moved. The invention consists chiefly in the application to the locking cylinder of a primary lock, which, engaging pins in a notch of said cylinder, prevents the same from being turned, even if the slides are properly set to unlock.

BOILER PLUG.—Robert L. Neill, Paterson, N. J.—This invention has for its object to economize boiler plugs which are, during the testing of the plates, used to close the holes that are provided for the reception of the tubes.

MEDICAL COMPOUND.—Wm. C. Tait, Alexandria, La.—This invention relates to a new and useful improvement in a compound to be used as a medicine for coughs and for all affections of the lungs or bronchial tubes, and other affections of the human system proceeding from colds, exposure, or other causes.

PROCESS OF CONCENTRATING TOMATOES.—Christopher T. Provost, New York city.—This invention has for its object to so prepare tomatoes for preservation, that only the nutritious and aromatic matter, but none of the useless bulk or body will be retained. The fruit can thereby be preserved in the most concentrated form, and will not occupy superfluous space.

DOOR AND SAFE LOCK.—Joseph Linder, Seneca Falls, N. Y.—This invention relates to a new construction of lock and key, with an object of preventing the opening of the lock by means of false keys. The invention consists chiefly in provision of complicate bolts and double key, all arranged so that a single key or bolt will not suffice to open the lock.

SIDE SADDLE TREE.—William Hill, New York city.—This invention relates to a new and useful improvement in trees for side saddles, whereby the strength, beauty, and utility of that article is increased while it is greatly simplified in its construction, and its cost diminished.

MOWING AND REAPING MACHINES.—Francis E. Rogers, Paw Paw, Ill.—This invention relates to new and useful improvements in mowing and reaping machines, having for its object to provide an arrangement of the cutting sections, whereby power may be economized, the cutters more easily detached for grinding, and the machines made to run with less noise than those now in use.

EXCAVATOR.—Benjamin Slusser, Sidney, Ohio.—This invention consists mainly in a scraper placed by the side of each of the rollers over which the endless apron runs, so as to clear the same of dirt, said scraper being attached at its ends to the boxes in which the rollers are mounted, so that whenever the boxes with the rollers are moved in one direction or the other in the frame, the scrapers are moved also to the same extent, and always preserve the same position relative to the rollers.

COMBINED CALL BELL AND SLOP BOWL.—Nathan Lawrence, Taunton Mass.—This invention consists of a metallic slop bowl provided with a threaded stem projecting downward from its under side, and with a horizontal arm connecting any two of its adjacent legs, on which arm is pivoted the thumb-piece and tongue of a call bell; and combined with the sounder of a call bell when the latter is either screwed upon the aforesaid projecting threaded stem, or slipped thereon and held by a nut.

FIRE AND DECK PUMP.—Peter M. and Oscar Snell, Williamsburgh, Ohio.—This invention consists in the application of a lever having a movable fulcrum placed in vertical slots, said fulcrum being directly connected with a slide valve to the operation of the piston of a force pump, for the purpose of giving the slide valve the movement requisite to opening and closing the cylinder ports.

WASHING MACHINE.—Gideon W. Cottingham, Marshall, Texas.—This invention consists of a globular case for containing clothes, provided with slots for admitting water, the globular case being intended to be suspended on trunnions in a vessel containing hot water, and to be revolved therein for the purpose of causing currents of water to flow through the case among the clothes.

INVALIDS' BEDSTEAD.—A. J. Russell, Baltimore, Md.—This invention relates to the simultaneous employment of two bedsteads, one above and outside the other, the inner one sustaining merely the mattress, and the upper one being provided with a contrivance for raising and lowering and supporting the other bedding, that part of which—that is, beneath the patient—being so contrived, that it may be removed and replaced without lifting the patient off the bed, and without in any way disturbing him.

STILL.—E. Melton, Flemmingsburg, Ky.—This invention relates to that class of stills in which the alcohol is carried off by steam ejected into the wash at the bottom of the chambers, and rising through the wash and passing off, charged with alcoholic vapor, to the refrigerator.

BUCK SAW.—William Hankin, Williamsburgh, N. Y.—This invention relates to a new brace for buck saws, and has for its object to simplify the construction of saw brace and still permit the adjustment of the saw frame. The invention consists in constructing the said brace with forked ends and double-arched edges, of one single piece of wood or other material, thereby producing an entirely reliable and inexpensive article.

STUMP EXTRACTOR.—C. Bilharz, Pittsylvania C. H., Va.—The object of this invention is to provide a stump extractor which will be yielding during operation, so that it will not require a change of position if by the weight of a stump one side should draw heavier than the other. The invention consists chiefly in suspending the entire operating apparatus from a semi-spherical yoke, which rests upon a perforated plate, so as to be swiveled thereon.

HAY AND COTTON PRESS.—Richard Ball, Petersburg, Va.—This invention has for its object to provide means whereby the parts of a press will be kept from injury, even if the follower should not be held entirely level during its vertical adjustment. The invention consists chiefly in the application to the followers of swinging nuts and in the combination with the swing of right and left screws.

RAILROAD CAR SPITTOONS.—M. J. Beach, Nashville, Tenn.—This invention has for its object to furnish a spittoon for cars, which may be placed on and extended through the floor and allow the contents to be easily emptied upon the ground under the cars.

Official List of Patents.

Issued by the United States Patent Office.

FOR THE WEEK ENDING June 28, 1870.

Reported Officially for the Scientific American

Table with 2 columns: Description of patent fee and Amount. Includes 'SCHEDULE OF PATENT OFFICE FEES' with items like 'On each caveat', 'On filing each application for a Patent', etc.

For copy of Claim of any Patent issued within 30 years... \$1. A sketch from the model, drawing, relating to such portion of a machine as the Claim covers, from... \$1 upward, but usually at the price above named.

- 104,688.—BELT BUCKLE.—Israel Alexander, San Francisco, Cal.
104,684.—ANIMAL TRAP.—Charles Angle, Hazel Green, Mich.
104,685.—QUILTING FRAME.—John Angus and John P. Angus, Mendonville, N. Y.
104,686.—MANUFACTURE OF IRON AND STEEL.—George F. Ansell, Bernard street, Russell Square, England.
104,687.—LAPPET LOOM.—William Aspinall, Philadelphia, Pa.
104,688.—PUMP.—Anson Balding, Wheeling, West Va.
104,689.—HAY AND COTTON PRESS.—Richard Ball, Petersburg, Va.
104,690.—SLEIGH BELL.—Wm. E. Barton, East Hampton, Conn.
104,691.—RAILROAD CAR SPITTOON.—William James Beach, Nashville, Tenn.
104,692.—STUMP EXTRACTOR.—Candidus Bilharz, Pittsylvania Court House, Va.
104,693.—CORN HUSKING MACHINE.—T. J. Burgess, Rondout, N. Y.
104,694.—LIME SPREADER.—W. C. Burnett, Burns' Mills, Pa.
104,695.—HARVESTER.—James Birch and Addison Crosby, Westfield, N. Y., and Thomas Birch, Meadville, Pa.
104,696.—STEAM HEATER.—George W. Blake, New York city.
104,697.—WATER WHEEL.—Oliver J. Bollinger, York, Pa.
104,698.—BAG HOLDER.—Edwin Boynton, Palmyra, Wis.
104,699.—BIRD CAGE.—Thomas H. Bradley, St. Louis, Mo.
104,700.—PREPARATION OF WHEAT FOR FOOD.—William S. Brewster, Chicago, Ill.
104,701.—STAMP CANCELER.—Franklin W. Brooks, New York city.
104,702.—SNAP HOOK.—George A. Brown, Kalamazoo, Mich.
104,703.—COMBINED HEARTH, GRATE, AND FENDER.—Geo. Buchanan, Washington, Pa.
104,704.—CAR COUPLING.—Samuel P. Carl and Amos Shute, Richmond, Ind.
104,705.—OFF-BEARING APPARATUS FOR BRICK MACHINES.—Cyrus Chambers, Jr., Philadelphia, Pa.
104,706.—DEVICE FOR TENDERING OR CHOPPING MEAT.—Fred. W. Coddling, West Rutland, Mass.
104,707.—STREET SWEEPING MACHINE.—Alexander A. Consalvi, New York city. Antedated June 13, 1870.
104,708.—WASHING MACHINE.—G. W. Cottingham, Marshall, Texas.
104,709.—LAMP BURNER.—Robert R. Crosby, Boston, Mass.
104,710.—CHURNING APPARATUS.—Jas. P. Curtis, Wytheville, Va.
104,711.—MUSTACHE SHIELD FOR CUPS.—George P. Cutler, Lawrence, Mass.
104,712.—KNOB LATCH.—John Davis, Terre Haute, Ind.
104,713.—METALLIC ROOFING.—John B. Davis, Cleveland, Ohio.
104,714.—SEAT FOR VEHICLES.—P. F. Dean, Watsonville, Cal.
104,715.—BALANCE SLIDE VALVE.—Wm. Dillon, Wheeling, West Va.
104,716.—APPARATUS FOR CARBURETING AIR.—Antoine E. Dupas, Paris, France, and Arthur Barbarin, New Orleans, La.
104,717.—WINDOW BLIND.—Stephen Eich, East Toledo, Ohio.
104,718.—END FASTENER FOR CAR SPRINGS.—Geo. Elliot, St. Louis, Mo.
104,719.—COMPOUND FOR STUFFING AND TANNING HIDES.—Elihu England, Mossy Creek, Tenn.
104,720.—CLOTHES PIN.—G. K. Farrington, Alcatraz Island, Cal.
104,721.—LINIMENT FOR TREATING NEURALGIA, ETC.—Geo. L. Fearis, Connorsville, Ind.
104,722.—WASH BOILER.—Benjamin G. Fitzhugh, Frederick, Md.

- 104,723.—GAS BURNER.—C. S. Ford (assignor to himself and Charles Young), Philadelphia, Pa.
104,724.—BOW FOR CARRIAGE TOPS.—J. F. Fowler, Alliance, Ohio.
104,725.—WASHING MACHINE.—Sam. C. Frink, Indianapolis, Ind.
104,726.—WATER WHEEL.—Oliver Fuller, Bennington, Vt.
104,727.—MEDICAL COMPOUND.—George C. Furber, Yreka, Cal.
104,728.—GRAIN CLEANER AND SEPARATOR.—Wm. Gardner, Cataip, Ky.
104,729.—CORN PLOW.—Marcellus R. Goff, Delavan, Wis.
104,730.—COFFIN FASTENING.—Wm. Hamilton, Allegheny City, Pa.
104,731.—ELEVATOR.—William Hamilton, Allegheny City, Pa.
104,732.—NEEDLE SHARPENER.—Edgar K. Haynes, Boston, Mass.
104,733.—SHANK LASTER AND PUNCH.—Frederick Henderson, Marietta, assignor to himself and G. H. Bell, Portsmouth, Ohio. Antedated June 23, 1870.
104,734.—DEPILATING AND TANNING HIDES AND SKINS.—John Henry, New York city.
104,735.—ASH SIFTER.—Lewis G. Hoffman, Albany, N. Y.
104,736.—DUMPING MACHINE.—Geo. W. Hough and Wm. S. Hough, Galva, Ill.
104,737.—BURIAL CASE.—Ralph Hunt, Milford, N. J., assignor to D. M. Spragle, Annapolis, Md.
104,738.—CAR BRAKE.—Reuben Hurd, Morrison, Ill.
104,739.—APPARATUS AND PROCESS FOR THE MANUFACTURE OF SOAPS.—Moses Hyde and Francis Hyde, Baltimore, Md.
104,740.—IRONING MACHINE.—William Jones, Oshkosh, Wis.
104,741.—TANNING.—James Kidder, Urbana, Ohio, assignor to himself and James F. Shumate.
104,742.—APPARATUS FOR ELEVATING BEER.—Albert H. Ludner and Thomas F. Fenlin, Philadelphia, Pa.
104,743.—TABLE CASTER.—C. H. Latham (assignor to Woods, Sherwood, & Co.), Lowell, Mass.
104,744.—ENGRAVING MACHINE.—John D. Lathrop (assignor, by mesne assignments, to Lippiatt, Maitby & Morse), New York city.
104,745.—LANTERN.—Lemuel W. Leary, Norfolk, Va.
104,746.—ROTARY STEAM VALVE.—Geo. Leckenby, Western, Mo.
104,747.—SHEET-METAL CAN.—Joseph Le Comte and Geo. H. Perkins, Brooklyn, N. Y.
104,748.—FLAT OR SADRON.—Luther Lincoln, No ton, Mass. Antedated June 9, 1870.
104,749.—DOOR LOCK.—Joseph Linder, Seneca Falls, N. Y.
104,750.—CAR COUPLING.—J. A. Mason, Keokuk, Iowa.
104,751.—LATHE.—F. B. Mattson, Rockford, Ill., assignor to himself and Wm. P. Dennis.
104,752.—STILL FOR SPIRITS.—Elijah Melton, Flemmingsburg, Ky.
104,753.—CARPENTERS' PLANE.—C. G. Miller, Brattleborough, Vt.
104,754.—CULTIVATOR PLOW.—James G. Miner, Nashville, Tenn.
104,755.—PUNCHING MACHINE.—Charles S. Moseley, Elgin, Ill.
104,756.—SAFETY PINION FOR WATCHES.—C. S. Moseley, Elgin, Ill.
104,757.—DREDGING MACHINE.—Ralph Robert Osgood, Troy, N. Y.
104,758.—MEDICAL COMPOUND.—Edward Myers, Davis, Ill.
104,759.—BOILER-TUBE PLUG.—Robert L. Neill, Paterson, N. J.
104,760.—CASE FOR SCISSORS.—David B. Page, Henry, Ill. Antedated June 16, 1869.
104,761.—CLOTHES DRYER.—Asahel H. Patch, Hamilton, Mass.
104,762.—STREET-RAILWAY CAR TRUCK.—J. R. Perry, D. W. Perry, and James Perry, Wilkesbarre, Pa.
104,763.—CULTIVATOR.—John Wesley Philip, Humboldt, Tenn.
104,764.—TEAPOT.—Nathaniel Plympton, Boston, Mass.
104,765.—REFRIGERATOR RAILROAD CAR.—Joseph D. Potts, Philadelphia, and Benjamin P. Lamason, Milton, Pa., assignors to Empire Transportation Company.
104,766.—BOTTLE STOPPER.—Henry C. Pratt, Boston, Mass.
104,767.—WINDOW-SHADE RACK.—Joshua Pusey, Philadelphia, Pa.
104,768.—AUTOMATIC FAN.—David Ramler, Union Deposit, Pa.
104,769.—PUNCH.—Isaac P. Richards, Whitinsville, Mass.
104,770.—BAND SAWING MACHINE.—John Richards and W. H. Thorne, Philadelphia, Pa.
104,771.—STOVE AND FURNITURE LEG.—H. R. Robbins, Baltimore, Md.
104,772.—STEAM HEATER.—John J. Rooper, Philadelphia, Pa.
104,773.—HARVESTER CUTTER.—Francis E. Rogers, Paw Paw, Ill.
104,774.—INVALID BEDSTEAD.—A. J. Russell (assignor to himself and W. W. Rowles), Baltimore, Md. Antedated June 16, 1870.
104,775.—BREECH-LOADING FIRE-ARM.—Sven Rydbeck, Red Wing, Minn.
104,776.—IRONING MACHINE.—Alvah C. Sawyer, Canton, N. Y.
104,777.—MOLD FOR CAR WHEELS.—John K. Sax, Pittston, Pa.
104,778.—WOOD PAVEMENT.—Joseph J. Schroyer, Springfield, Ill.
104,779.—KNIFE FOR CUTTING SHEAF BANDS.—Henry Sears, and E. B. Sears, Rockford, Ill.
104,780.—MUFF.—R. M. Seldis, New York city.
104,781.—APPARATUS FOR BLEACHING PAPER STOCK.—Francis Sheldon (assignor to the Union Machine Company), Fitchburg, Mass.
104,782.—EXCAVATOR.—Benjamin Slusser, Sidney, Ohio.
104,783.—MILL GEARING.—Harlow M. Smith, Peoria, Ill.
104,784.—GRAIN-FANNING AND SEPARATING MACHINE.—J. I. Smith and W. H. Nicodemus, Frederick, Md.
104,785.—MANUFACTURE OF STEEL-HEADED HORSESHOE NAILS.—J. H. Smith, Allegheny City, Pa.
104,786.—PUMP.—P. M. Snell and Oscar Snell, Williamsburgh, Ohio.
104,787.—BROOM HOLDER.—C. P. Snow (assignor to Sterne F. Aplinwall), Freeport, Ill.
104,788.—FRUIT DRYER.—George M. Sternberg, Fort Riley, Kansas.
104,789.—FEED-WATER HEATER AND FILTER.—E. R. Still, Mt. Dayton, Ohio.
104,790.—FLOOR CLAMP.—Oliver Taff, Whitestone, N. Y. Antedated June 16, 1870.
104,791.—MEDICAL COMPOUND.—Wm. C. Tait, Alexandria, La.
104,792.—STEEL CAR WHEEL.—J. B. Tarr, Fairhaven, Mass. Antedated June 18, 1870.
104,793.—BRIDLE BIT.—Henry C. Thompson, Mount Sterling, Ky.
104,794.—BOTTLE STOPPER.—Nathan Thompson, Brooklyn, N. Y.
104,795.—POTTERY MACHINE.—S. R. Thompson, Portsmouth, N. H.
104,796.—MANUFACTURE OF SOAP.—Joseph Treat, New York city.
104,797.—BORING MACHINE.—William Tucker, Fiskedale, Mass.
104,798.—INSTRUMENT FOR TESTING OILS.—Peter H. Vander Weyde, New York city. Antedated June 8, 1870.
104,799.—MACHINE FOR HULLING COTTON SEED, ETC.—A. J. Vandegrift, Coyington, Ky.
104,800.—CHURN.—Stroud Van Meter, Henderson, Ill.
104,801.—HEATING STOVE.—C. E. Warring, Poughkeepsie, N. Y.
104,802.—HOT-AIR REGISTER.—Alfred Watson, Jersey City, N. J.
104,803.—EXTENSION LADDER.—Thomas Watson and Chas. Perry, Brooklyn, N. Y. Antedated June 23, 1870.
104,804.—TWEED.—Peter L. Weimer, Lebanon, Pa.
104,805.—LUBRICATING JOURNAL BEARINGS.—I. P. Wendell (assignor to himself and S. P. M. Tasker), Philadelphia, Pa.
104,806.—HARNES.—Lewis Whitehead, Nunda, N. Y.