

OFFICIAL REPORT OF PATENTS AND CLAIMS

Issued by the United States Patent Office,

FOR THE WEEK ENDING NOVEMBER 5, 1867.

Reported Officially for the Scientific American

PATENTS ARE GRANTED FOR SEVENTEEN YEARS the following and a schedule of fees—

Table with 2 columns: Fee description and Amount. Includes 'On filing each caveat', 'On filing each application for a Patent', etc.

Pamphlets containing the Patent Laws and full particulars of the mode of applying for Letters Patent, specifying the model required, and much other information useful to Inventors, may be had gratis by addressing MUNN & CO., Publishers of the Scientific American, New York.

70,384.—RAILROAD FREIGHT CAR.—J. H. Aldrich, Nashua, New Hampshire.

70,385.—TOBACCO-SMOKING TUBE.—James M. Alexander, Delhi, Ohio.

70,386.—MODE OF TREATING TOBACCO.—Gustavus Arnd, New York City.

70,387.—ELEVATOR.—Edw'd H. Ashcroft, Lynn, Mass.

70,388.—METHOD OF COVERING STEAM GENERATORS.—E. H. Ashcroft, Lynn, Mass.

70,389.—CONDENSER.—E. H. Ashcroft, Lynn, Mass.

70,390.—FIRE-PROOF SAFE.—E. H. Ashcroft, Lynn, Mass.

70,391.—STEREOSCOPIC APPARATUS.—George Beigel, New York City.

70,392.—LAMP EXTINGUISHER.—Wm. P. Bennett (assignor to himself and Henry Blake), East Pepperell, Mass.

70,393.—EMERY WHEELS FOR GRINDING AND POLISHING SAWS, &c.—George L. Benton (assignor to himself and John Greenwood), Rochester, N. Y.

70,394.—DEVICE FOR HOLDING SAW-BUCKETS.—Julius Bevins, Unadilla Forks, N. Y.

70,395.—GAS STOVES.—John K. Birkey, Philadelphia, Pa.

70,396.—CORN-SHELLER.—Thomas W. Bishop, Austin, Ind.

70,397.—SKELPING-DIES.—Mildred Blakey, Pittsburg, Pa.

70,398.—GAS-CHANDLIER ATTACHMENT.—Alfred Bliss, New York City.

70,399.—RAIL FOR RAILWAYS.—Jonathan L. Booth, Rochester, N. Y.

70,400.—RAILS FOR RAILWAYS.—Jonathan L. Booth, Rochester, N. Y.

70,401.—STOCK AND POULTRY FEEDER.—George Bowdman, Napoleon, Ohio.

70,402.—SPINNING JACKS.—Henry P. Briggs, Clarksburg, Mass.

a jack for the purpose of bringing the fast pulley, C, into partial engagement with the race-shaft belt, substantially as and for the purpose above set forth.

70,403.—CLEANER FOR LAMP-CHIMNEYS.—Obidah B. Brown, Middlebury, Mass.

70,404.—STRAW-CUTTER.—Addison Buch, West Earl Township, Pa.

70,405.—ILLUMINATING OILS.—Asa W. Burrows, Cleveland, Ohio.

70,406.—CHURNS.—Philander Byrns and George Stannard, Andover, Wis.

70,407.—STEAM ENGINE.—Charles W. Cahoon, Portland, Me.

70,408.—BENT KNEE AND FRAME FOR SLEIGHS.—Daniel O. Card, Rawsonville, Ohio.

70,409.—REGISTER PABLOCK.—J. L. Chambers, Brooklyn, N. Y.

70,410.—TELEGRAPH CLOCK.—Js. Chandler, Syracuse, N. Y.

70,411.—ELASTIC SASH ELEVATOR.—S. A. Chase, Boston, Mass.

70,412.—HOISTING APPARATUS.—Henry Chatfield, Wolcottville, Conn.

70,413.—TONGS.—Samuel Collinson, Buffalo, N. Y.

70,414.—LINING BARRELS WITH SHEET METAL.—Theodore R. Cook, Saratoga Springs, N. Y., assignor to Henry Lawrence, Norristown, Pa.

70,415.—FIRE-PROOF SAFE.—Thomas Cook, London, Eng., assignor to Chas. P. Burton, New York City.

70,416.—DIFFERENTIAL WHEEL GEARING.—Chas. F. Cooke, York, and John Stanfield, Lambeth, Great Britain.

70,417.—MANUFACTURE OF BUTTER.—Joseph Sigler, Anderson, Ind., administrator of the estate of Jesse P. Crampton, deceased.

70,418.—VEREFRIGERARY NARCOTIC INJECTOR.—Moritz Krohn (assignor to himself, H. W. Volkner, and Guido D'Onofri), St. Louis, Mo.

70,419.—FLOATING WATER POWER.—Commodore Daniels, Cleveland, Ohio.

70,420.—CURING TOBACCO.—Benj. A. Davis Petersburg, Va.

70,421.—COMPOSITION FOR PACKING JOURNAL BOXES, JOINTS, &c.—John F. Davis, Jersey City, N. J., and Wm. C. Selden, Brooklyn, N. Y.

70,422.—FASTENING FOR COACH LAMPS.—Marcus De Voursney, Newark, N. J.

70,423.—DEVICE FOR SETTING SAW TEETH.—Henry Disston, Philadelphia, Pa.

70,424.—DEVICE FOR SHARPENING SAW TEETH.—Henry Disston, Philadelphia, Pa.

70,425.—SADDLE TREE.—D. A. Dixon, St. Louis, Mo.

70,426.—OZONE GENERATOR.—Wm. Eimer and H. G. Hubert, New York City.

70,427.—CONSTRUCTION OF SHEET METAL BUCKETS.—James Fallows (assignor to Porter & Booth), Philadelphia, Pa.

70,428.—SHUTTER-BOWING BOLT.—Walter H. Fitzgerald (assignor to himself and W. H. Sexton), Philadelphia, Pa.

70,429.—CATTLE-GUARD GATE.—Armstrong Freeman, Lowell, Mich.

70,430.—CULTIVATOR.—Hugh J. Graham, Monmouth, Ill.

upright bars, P, P, substantially as described and for the purpose set forth.

70,431.—CHURN.—Jas. J. Gruver and Ambrose D. Wiggins, New Market, Ohio.

70,432.—GAS COOKING RANGE.—David G. Haskins, Cambridge, Mass.

70,433.—LIGHTING ROOMS.—David G. Haskins and Joseph Winlock, Cambridge, Mass.

70,434.—PREVENTING TIN WARE FROM RUSTING.—Portus M. Haman, Rochester, N. Y.

70,435.—PREPARING FISH FOR FOOD.—George H. Heron (assignor to himself and Samuel E. Day), Washington, D. C.

70,436.—BEEHIVE.—Jesse Hiestand, Palestine, Ill.

70,437.—SECURING THE ENDS OF ROPES.—Hiram Inman and Horace Inman, Amsterdam, N. Y.

70,438.—APPARATUS FOR MAKING ENTRIES FROM BARK AND OTHER MATERIALS.—James W. Jones, Cambridge, Md.

70,439.—TABLE URN.—Ernest Kaufmann, Philadelphia, Pa.

70,440.—PICTURE ENVELOPE.—C. A. Kihlgren, Boston, Mass.

70,441.—PUMP.—John T. Kimbel, Vernon, Ind.

70,442.—WINDOW FASTENING.—Geo. B. Kirkham, N. Y. City.

70,443.—HOT AIR FURNACE.—James A. Lawson, Troy, N. Y.

70,444.—ELASTIC SPRINGS FOR CARRIAGES.—Thomas Long, Vanalala, Ill.

70,445.—BLAST FURNACE.—F. W. Lurmann, Osnabruck, Prussia.

70,446.—FASTENING FOR COACH LAMPS.—Marcus De Voursney, Newark, N. J.

70,447.—DEVICE FOR SETTING SAW TEETH.—Henry Disston, Philadelphia, Pa.

70,448.—BED BOTTOM.—J. I. Mabbett, Titusville, Pa.

70,449.—MACHINE FOR CUTTING STONE.—James W. Maloy, Boston, Mass.

70,450.—MILK CAN.—Hugh L. McAvoy and Ezekiel Mills (assignors to E. Mills), Baltimore, Md.

70,451.—EVAPORATOR FOR SORGHUM AND OTHER GRASSES.—Solomon McWorter, Barry, Ill.

70,452.—COTTON BALE TIE.—Henry B. Merritt, St. Louis, Missouri, assignor to J. H. Merritt, Memphis, Tenn.

70,453.—FOUNTAIN PEN.—George Rudolph Metten, St. Louis, Mo., assignor to Horace Baldwin, Painesville, Ohio.

70,454.—LUBRICATING OIL.—Cyrus Moore, East Saginaw, Mich., assignor to himself and Abel Blakeslee, Detroit, Mich.

2d. The use of the ingredients, and in the proportions substantially as described, for the purpose designed.

70,455.—COMPENSATING FORCE CRANE.—Thomas Morris, Claboston, England, assignor to himself, John Morris, and Thomas C. Knowles. I claim the lever, P, adjusting weight, R, and chain, Q, in combination with the weight, L, sheaves, J, chain, K, and carriage, F, arranged and operating substantially as and for the purpose set forth.

70,456.—HOSE COUPLING.—Andrew J. Morse, Boston, Mass. I claim, in combination with the tail piece of the coupling, having a screw thread upon its outer surface, the encompassing ring having two screw threads, one for fitting upon the outer surface of the hose, and the other for connecting the ring to the tail piece, substantially as set forth.

70,457.—IMPLEMENT FOR TRANSPLANTING FLOWERS, ETC.—Edgar G. Nichols, Beaufort, S. C. I claim, 1st, the making of a transplant in two separate and similar parts which, when united, enclose the roots of the plant and the soil next to them, preventing the soil from falling away from the roots in removing.

70,458.—MACHINE FOR CUTTING TEETH OF FILE BLANKS.—Hiram Bassett Nickerson, Boston, Mass., assignor to Stillman B. Allen, Frank A. Allen, J. H. Winsor, and George B. Almy. I claim the combination as well as the arrangement of the two cutters, A and B, provided with mechanisms for raising and depressing them, as specified, with the file-supporting carriage, C, having mechanism for imparting to it an intermittent motion in one direction, substantially as and for the purpose herein before explained.

70,459.—EYES FOR PICKAXES.—George Nimmo, Jersey City, N. J. I claim the eye for pickaxes and other tools, formed in the manner and for the purposes specified.

70,460.—PROPELLER FOR VESSELS.—Charles M. O'Hara, London, England. I claim, 1st, A propeller, for vessels of navigation, made of sector form, and hung or suspended, so as to operate or oscillate in a vertical plane, substantially as shown and described.

70,461.—COVER FOR TEA-KETTLES, ETC.—William W. Page (assignor to Arnold H. Holdridge and Daniel E. Paris), Troy, N. Y. I claim a cover and cover combined to vessels or kettles constructed with a cam or bulge at one end of the cover, so that it will operate on an arm, or one end of the cover, to raise it up and let it down as the ball is shifted from side to side, when constructed substantially as herein described and set forth.

70,462.—GRATE.—Peter A. Palmer, Troy, N. Y. I claim the alternate stationary bars, B, in combination with the shaft, C, bars, E, and frame, A, or their equivalents, as and for the purposes herein set forth.

70,463.—BRECH-LOADING FIRE-ARMS.—William R. Pape, Newcastle-on-Tyne, Great Britain. I claim the vertical rotating spindle, carrying beveled catches, 1 and 2, and spring, G, operating in combination with the lumps, D, and horizontal slots, B and C, in the rear of the breech, substantially as and for the purposes specified.

70,464.—TAP.—Robert Parks, Philadelphia, Pa. I claim the tap, A, constructed with cuts or incisions, a, a, and parts, b, c, d, or b, c, d, e, f, g, h, i, j, k, l, m, n, o, p, q, r, s, t, u, v, w, x, y, z, arranged, constructed, and applied together so as to operate as specified.

70,465.—WATCH-KEY.—Eugene Paulus, Philadelphia, Pa. I claim a combined watch-key and push-piece, which is made a steady part of the case, the head or winding crown being directly screwed in the pendant, leaving the pipe free and movable, so as to act on the case spring to open the watch, and also to wind it up by taking it out, the whole constructed and operating substantially as described.

70,466.—ROPE-MAKING MACHINE.—Howard Perkins, Mansfield, Mass. I claim the self-adjusting regulators, K, constructed as described, in combination with their elastic cords, N, as and for the purposes set forth.

70,467.—FRAME FOR SUSPENDING MAPS.—Wm. F. Phelps, Winona, Minn. I claim, 1st, A horizontal bar, having longitudinally sliding arms, provided with hooks, substantially as described and for the purpose set forth.

70,468.—WINE PRESS.—A. L. Rand, Peoria, Ill. I claim, 1st, The box, A, provided with the perforated plates, G, having plate, E, and spring, F, and an inclined chute, I, when combined and operating substantially as described and for the purpose set forth.

70,469.—GAME TABLE.—Louis Raymond, Rockland, Del. I claim the combination of the circular recessed and figured platform, the horizontal, circular, covered or enclosed way, and the abutment or deflecting surface, D, all arranged as and for the purpose herein described and represented.

70,470.—CHURNS.—Thomas Rettew, West Vincent Township, Pa. I claim, 1st, The churn, A, as a whole, when constructed, arranged, and operating as shown and described.

70,471.—TEMPERING SEEL.—Asa R. Reynolds and Napoleon B. Reynolds, Auburn, N. Y. We claim tempering articles made in whole or in part of steel, by means of a head of flowing water, and a guiding and holding harrow, or tempering head, substantially as described.

70,472.—HORSE-HOE.—T. Rice and Luke R. Hitchcock, Canandaigua, N. Y. We claim the combination of the curved perforated braces and hoe, as shown by figs. 1 and 2, for the purpose of cultivating garden and field crops in the best and most desirable manner.

70,473.—HITCHING-STRAP.—A. J. Ross, Rochester, N. Y., assignor to O. C. Ross, Penfield, N. Y. I claim the strap or cord, B, provided with the length, I, for passing over and around the horse's head and through rings of the bit, and the buckle, K, or equivalent, for fastening tightly under the chin, the whole arranged and operating in the manner and for the purpose herein set forth.

70,474.—PREPARATION OF PAPER-PULP FROM REEDS, &c.—Robert W. Russell, Brooklyn, and Thomas Howland, Stockport, N. Y. We claim, 1st, The above mentioned process of making paper-pulp, paper-maché, and other articles from vegetable fibrous substances, by means of the apparatus described by the said steam-blowing process, without maceration, boiling or chemicals.

70,475.—CARRIAGE-SEAT SPRINGS.—Wm. Scott, Plymouth, Mich. I claim the arrangement and combination of the spiral spring, A, the socket, B, and the plate, C, provided with the circular flange, D, substantially as described for the purpose designed.

70,476.—MANUFACTURE OF REFINED INGOTS OF IRON AND STEEL.—Christian Shunk, Armstrong County, Pa. I claim the employment and the application of certain metals, herein set forth (or an equivalent, or either of the same separate from the other), in the refining and converting molten crude iron into refined ingots of iron and steel, or semi-steel, by the pneumatic process, and of bar or wrought iron converted into refined steel ingots by the "pot" or crucible mode for melting.

70,477.—PORTABLE GAS-GENERATING FURNACE.—Wm. M. Sloane, Buffalo, N. Y. I claim, 1st, the combination and arrangement of the vaporizing chamber, B, with a common heating furnace, or stove, A at 2, for the purpose and substantially as described.

70,478.—ROOFING COMPOUND.—George O. Smith and J. H. Smith, Chicago, Ill. We claim a roofing compound of the ingredients herein named, substantially as set forth.

70,479.—METAL PLANER.—Jas. Hervey Sternbergh, Reading, Pa. I claim the combination as well as the arrangement of the sperry-wheel, E, W (or other grinding or polishing wheel or stone), adjustable at various heights to suit the work by means of the screw, C, in connection with movable table, T, T', carrying the slide rest, S, R, and vise, V, V', or other suitable arrangement for holding the article to be planed or ground off, for the purpose mentioned, substantially as set forth and described.

70,480.—MAIL BAGS.—Edward Sevens and John A. Knight, St. Louis, Mo. We claim the bag, B, the loop, B', and the partition, B'', combined and operated as herein shown and described.

70,481.—MACHINE FOR CUTTING SOLES OF BOOTS AND SHOES.—Edgar M. Stevens, Boston, Mass. I claim, 1st, The spindle, C, constructed with the spiral and straight grooves in combination with the adjustable spring rod, P, when operating in the manner and for the purpose set forth.

70,482.—MOLD FOR CASTING CAR-WHEELS.—John Blake Farr, Chicago, Ill. I claim a lining of the form of a car-wheel, made of soapstone or other analogous soft material, in combination with a strong sectional metal casing, such lining being in sections and applied within the sectional metal casing, so as to be adapted for giving form to a cast-steel car wheel, and the casting and lining of such strength combined so as to be capable of sustaining the pressure which is requisite to insure a condensation of the steel of which the wheels are cast, all substantially as herein set forth.

70,483.—LATHE-WAY SMOOTHERS.—Alfred Thomas, Worcester, Mass. I claim, 1st, the combination with the frame, C, cross-bar, L, piece, K, and slide, P, for the purposes set forth, H, and smoothing-wheel, J, substantially as and for the purposes set forth.

70,484.—WIRE-BELLS FOR CLOCKS.—Hiram C. Thompson, Bristol, Conn. I claim, 1st, The coil or ring, A, when formed on a wire bell, substantially as and for the purpose set forth.

70,485.—MODE OF TREATING VEGETABLE SUBSTANCES FOR MAKING PAPER PULP, &c.—T. Highman, Philadelphia, Pa. I claim the process of treating vegetable substances which contain fibres with a solution of sulphurous acid in water, either with or without the addition of sulphites, or other salts of equivalent chemical properties, as above explained, heated in a close vessel under pressure, to a temperature sufficient to cause it to dissolve the intercellular incrusting or cementing constituents of said vegetable substances, so as to leave the undissolved product in a fibrous state, suitable for the manufacture of paper, paper pulp, cellulose, or fibres, or for other purposes, according to the nature of the material employed.

70,486.—APPARATUS FOR CASTING CAR WHEELS.—Samuel H. Whitaker, Covington, Ky. I claim, 1st, A flask for casting together two or more metals, consisting of the outer shell, J, suspended head, K, an heater, N, and O, the whole being combined and adapted to operate as set forth.

70,487.—WINDOW SASH FASTENER.—Chester F. Wickwire, Cortland, N. Y. I claim, 1st, The slotted bent lever, B, operating upon the pin, A, for the purpose of holding the sash in position when raised.

70,488.—FASTENING EYELETS.—Wm. W. Wilcox, Middletown, Conn. I claim, 1st, The arrangement of a rough surface ring, b, between the flange of an eyelet and the material to which the same is to be fastened, substantially as and for the purpose described.

70,489.—BED BOTTOM.—H. W. Williams, Stowe, Vt. I claim the flat steel springs, A, their sliding boards, B, with connecting rods, C, and horizontal levers, D, when arranged and combined as herein described, and for the purposes set forth.

70,490.—TIP FOR THE FEET OF CHAIR LEGS.—Edward S. Winchester, Boston, Mass. I claim the India rubber tip constructed as described, that is, formed as a ferrule to be placed upon the foot of the chair, the ferrule increasing in thickness from its center, B, to its open end, A; or apparatus therefor, from its center, B, to the closed end, or base thereof, on which the foot of the chair rests.

70,491.—SLEDS.—A. T. Woolsey and A. F. Hubbell, Sandusky, Ohio. We claim the construction of a runner, A, and side rail, A', of one entire piece, in the manner and for the purpose set forth.

70,492.—CAR TRUCKS.—Walter Youmans, Lansburg, N. Y. I claim connecting the body or platform of the car with the truck frame or frames, substantially as described, so that the former shall be free to move up and down on the latter with springs interposed, and so that the body, or platform shall not move longitudinally or laterally independently of the truck frame, or frames, when this is intended, with the connection of the axes with the truck frame, so that the said axes shall be free to move under it, substantially as described, and by the means described, or the equivalents thereof.

70,493.—HATS.—Daniel K. Albright, Philadelphia, Pa., and Leo H. De Lange, Bordentown, N. J. We claim, 1st, The band, D, connected to the body and brim of a hat, and arranged in respect to the same substantially as and for the purpose herein set forth.

70,494.—GAS STOVES.—Chas. E. Alden, Philadelphia, Pa. I claim, 1st, The casing, B, wire gauze or perforated plate, E, and holes, I, in combination with the adjustable casing, F, the whole being constructed and arranged substantially as and for the purpose herein set forth.

70,495.—HEATING AND VENTILATING APPARATUS FOR RAILWAY CARS.—C. F. Allen and L. W. Campbell (assignors to themselves, A. T. Hall and A. J. Ambler), Aurora, Ill. We claim, 1st, The combination of the grating, G, and sieve, D, with the bonnet, A, partitioned pipe, C, Q, G, pipe, L, water chamber, E, or M, and register pipe, R, X, substantially in the manner and for the purpose described.

70,496.—NAIL MACHINE.—John M. Allen, Cambridge, Mass. I claim a machine for cutting nails, without waste, from plate or sheet metal, in which the dies are formed longitudinally on the surfaces of the rollers, in the manner and for the purpose described.

70,497.—RAILWAY CHAIR.—Peter Allen (assignor to himself, L. Valliquette and Cleophas Brodeur), Rutland, Vt. I claim the plate, B, in combination with the plate, W, with the tongue, b, fitted in a groove in the bed, a, constructed and secured with screw bolts and spikes, as herein described.

70,498.—ANCHORS.—W. J. Armstrong and Charles Browne, Brooklyn, N. Y. We claim, 1st, Attaching the crown, B, to the shank, A, by passing a tenon formed upon the lower end of said shank, through a mortise formed in the said crown, and securing them in place by blocks, D, firmly attached to the side of the projecting end of said tenon, substantially as herein shown and described, and for the purpose set forth.

70,499.—SNAP HOOK.—C. H. Atwood, New Britain, Conn. I claim, 1st, The snap hook constructed as described, consisting of the circular solid plate, A, having loop, B, and lugs, a, cast upon it, between the lugs, a, the straight bar, D, pivoted and held in place against the turn up end, C, by means of the spring, e, as herein set forth for the purpose specified.

70,500.—CARD RACKS.—E. D. Averell, New York city. I claim the arrangement on a curved or circular surface of a stand or frame of a coiled wire or spring and forming in combination with said stand or support a card or paper holder, essentially as herein set forth.

70,501.—WHIP ROLLING MACHINE.—Henry Axtell, Huntington, Mass. I claim, 1st, A device for rolling whips consisting of a frame, A, having a reciprocating bar, B, an adjuster, C, between which the whips are rolled, B, being operated by power on the bar, G, by the levers, E, and F, with their treadle attachment, the whole being arranged substantially as and for the purpose described.

70,502.—HORSE YOKE.—Thomas J. Barnes, Cambridge, Ill. I claim, 1st, An improved horse yoke made in two parts, A and B, and substantially as described for the purpose set forth.

70,503.—COTTON-BALE TIE.—J. W. Barnum, New Orleans, La. I claim the device herein described and as shown upon the drawings when provided with the two overlapping semi-annular grooves or curved supporting points, A, A', as described when constructed as described and used for fastening the ends of wire rope or of common untwisted wire that is employed for baling cotton bales, as set forth.

70,504.—PNEUMATIC RAILWAY.—A. Ely Beach, Stratford, Ct. I claim, 1st, The enlargement of the tube at or near the stopping station, substantially as and for the purpose set forth.

70,505.—CAR COUPLING.—G. M. Beardsley, Fenton, Mich. I claim the double hooks, D, D', with operating arms and levers in combination with the arrow-headed coupling bar, B, and frame, A, and parts, all constructed and arranged as described and for the purpose as set forth.

70,506.—CANE AND UMBRELLA COMBINED.—Henry Beebe, Hudson city, N. J. I claim, 1st, The two tubes, B, F, in combination with the handle, A, and body, E, of the cane or umbrella stick and locked together by the T shaped slots and the shaft, K, of the lamp burner, substantially as shown and described.

70,507.—ADJUSTABLE CALKS FOR HORSESHOE.—William Jones Berne, Cincinnati, Ohio. I claim, 1st, The mode of securing the sockets, A, by means of the set screws, A', arranged to operate in combination therewith, substantially as set forth.

70,508.—WASHING MACHINE.—Joseph Bevis, Putnam, Ohio. I claim, 1st, The combination of the stationary washboard, B, movable washboard, C, or presser, C, and cam, D, with each other and with the tub, A, substantially as herein shown and described and for the purpose set forth.

70,509.—SOLAR CAMERA.—Lyman G. Bigelow, Albion, Mich. I claim, 1st, The universal jointed connection, K, constructed and arranged substantially as described for the purposes set forth.

70,510.—PREPARING CEMENTS FROM SLAES.—John James Bommer, Newport, Great Britain. I claim the use of slag or scoria produced by blast or other furnaces (or when produced by other means, in combination with lime or with lime and alumina in the formation of cement, substantially as described).

70,511.—DEVICE FOR OPERATING FOLDING VALVES.—Eugene Bourden, Paris, France. I claim the combination with the valve, and suitable orifice or orifices for the herein of the membrane or flexible valve, and lever for operating the same, substantially as and for the purposes herein set forth.

70,512.—CARBURETING GASES AND AIR.—John F. Boynton, Syracuse, N. Y. I claim, 1st, An apparatus for carbureting gas for illuminating purposes, the use of double perforated walls, B, B', having a suitable capillary substance confined between them, said walls being so arranged as to form a porous division through which the gas is forced, substantially as described.

70,513.—ALLOY FOR THE MANUFACTURE OF METAL SHEETS, FOIL, &c.—Leopold Brandeis, Brooklyn, N. Y. I claim to produce metal sheets of any thickness, perfectly pliable, not easily acted upon by weather and temperature, of great strength and durability, for roofing, plumbers', tinners', and chemical use, for grocers, tobaccoists, perfumers, and confectioners, by making an alloy of lead and other metals in suitable proportions and shape by producing this alloy with a coat of tin surrounding it, and to produce from this alloy, so produced, sheets or leaves of any size and weight, and for the device or application of hot water or steam between the rollings.

70,514.—WOOD PAVEMENT.—J. L. Brown, New York city. I claim the employment of arched formation timbers, laid crosswise of the street, in combination with any suitable earthy foundation, and sections of wooden pavement resting upon such foundation, and overlapping the arched timbers, substantially as described.

70,515.—BLACKING BRUSH.—G. H. Burdon, Waltham, Mass. I claim the combination and arrangement of the brush, E, with the grooved head, G, ring, I, spring, M, joint, J, holder, A, and blacking box, L, substantially as described for the purpose set forth.

70,516.—MILK CAN.—N. C. Burnap, Argusville, N. Y. I claim a milk can when provided with a rounded connection between sides and bottom, and when combined with a suitable round protecting bottom, B, having a flange, a, and with a ring, C, all made substantially as and for the purpose herein shown and described.

70,517.—CARRIAGE SEAT BACKS.—John Burt, Sturgis, Mich. I claim the within-described vehicle seat, in which the back and ends, with round corners, are formed from a single piece of wood of proper length and thickness, shaped and bent to the desired shape, as set forth and described.

70,518.—MASH COOLER.—Franklin P. Bush (assignor to himself and Jephtha Garrard), Cincinnati, Ohio. I claim, 1st, The arrangement of tun, A, central annular waste way, D,

rotary centrally discharging coils, J, central supply pipes, G, I, stuffing box, H, and rake, L, for the purpose set forth.

2d, In the described combination the rotary coils, J, discharging into a common waste way, D, in the manner set forth.

70,519.—MACHINE FOR SHARPENING CALKS OF HORSESHOES.—William M. Butler, Waukegan, Ill.

I claim the machine for sharpening horseshoes, made and operating substantially as herein shown and described.

2d, The device for moving the cutter, C, forward or backward consisting of the spring, g, nut, f, and shaft, B, all made and operating substantially as herein shown and described.

3d, The device for moving the cutter laterally consisting of the slotted frame, A, screw, k, sleeve, l, and shaft, B, all made and operating substantially as herein shown and described.

4th, The frame, A, when provided at the corners with projections, a, and set screws, b, so as to be easily fastened on any sized shoe and when provided with slotted flanges, h, h, and bolts and nuts, i, for the same purpose, substantially as set forth.

70,520.—SHIPS' COMPASS.—James, Earl of Caithness, Middlesex county, England.

I claim the combination of a mariner's compass and a weighted pendulum secured to the compass box and having near the upper end a ball which fits in a stationary socket, all substantially as and for the purpose described.

70,521.—PISTON PACKING.—Luther W. Campbell, Aurora, Ill., assignor to himself, A. T. Hall, C. F. Allen and A. J. Ambler.

I claim, 1st, So arranging a series of concentric elastic rings, K, G and E, having alternately inclined faces that acting in combination with the conical hub, A, and packing rings, H, H, they shall maintain a uniform outward pressure upon the latter by the action of the steam alternately entering each end of the cylinder, B, in combination with the devices for giving the rings, K, G and E, the desired motion.

2d, The combination of the perforated heads, B, B', conical hub, A, and rings, E, F, G, K, and H, arranged to operate substantially as set forth.

70,522.—PISTON PACKING.—Luther W. Campbell, Aurora, Ill., assignor to himself, A. T. Hall, C. F. Allen and A. J. Ambler.

I claim, 1st, So arranging a double series of concentric elastic rings, F, G and H, that acting in combination with the central ring, E, having double inclined faces, E2, they may be by the pressure of the steam, alternately admitted to the opposite ends of the cylinder, be alternately expanded, substantially in the manner and for the purpose set forth.

2d, The combination of the hub, A, perforated plates, B, B', ring, E, having a central flange, E1, and double inclined faces, E2, and the concentric rings, F, G and H, constructed and arranged to operate substantially as set forth.

70,523.—APPARATUS FOR RAISING AND SECURING THE LEGS OF HORSES TO SHOE THEM.—J. P. Champion, Phelps, New York city.

I claim the apparatus for raising and securing the legs of horses to shoe them safely, arranged and applied as herein shown and described.

70,524.—CYLINDER PRINTING PRESS.—Henry C. Chandler, Indianapolis, Ind.

I claim moving the bed, B, under the impression cylinder, C, at the time of making the impression by means of the pins, S, and standards, R, segmental cog bars, G, and cog bars, F, in combination with the devices for giving the return movement to the bed by means independent of that which carries it under the cylinder, in the manner substantially as set forth.

70,525.—TABLE CUTLERY.—Matthew Chapman, Greenfield, Mass.

I claim as a new article of manufacture table cutlery having the blade, bolster, and handle forged or swaged from one solid piece of steel, substantially as herein described.

70,526.—SLEIGH BELLS.—Cyrus R. Clark, Cobalt, Conn.

I claim attaching sleigh bells to their straps by means of two or more sheet metal plates, b, b, which are secured to a shank, a, that is cast with the bell, A, and made substantially as and for the purpose herein shown and described.

70,527.—HORSE HAY FORK.—Mark Coffin, Milton, Ky.

I claim the arrangement of the rope, C, having the ring, F, knot, c', and trigger, B, with the handle, D, pulley block, R, and rope, G, as herein described for the purpose specified.

70,528.—METHOD OF STOPPING AND STARTING CARS.—Elisha T. Colburn, Boston, Mass.

I claim the combination of the slide bar, D, and its locking pawls with the brake mechanism consisting of the levers, F, the blocks, G, the rope, I, and the wheel or wheels, H, the whole being substantially as specified.

I also claim, as an accelerating mechanism for a car, the combination of the slide bar, D, the rope, I, and the wheel or wheels, H, arranged and applied to the axle of the car, the slide bar, D, being connected to the draw bar or tongue of the car, as explained.

70,529.—COMBINED TOOL.—B. W. Collier, Oxford Miss.

I claim the instrument above described having the parts combined and arranged substantially as and for the purposes specified.

70,530.—CORPSE PRESERVER.—C. W. Compton, Newark, N. J.

I claim, 1, Forming the bottom or cooling board, A, in two parts hinged to each other, substantially as herein shown and described and for the purpose set forth.

2d, Forming an air chamber or chambers, a', in the bottom or cooling board, A, substantially as herein shown and described and for the purpose set forth.

3d, The ice chamber, D, extending down upon the sides of the trunk or tray nearly to the bottom board, A, and extending around the head of the corpse, substantially as herein shown and described and for the purpose set forth.

4th, Forming the corpse preserver in three parts, A, B, C, substantially as herein shown and described and for the purpose set forth.

5th, Forming the adjuster of the parts, B and C, inclined or wedge shaped, substantially as herein shown and described and for the purpose set forth.

6th, The combination and arrangement of the body chamber, G, ice chamber, D, and air chambers, a', E and F, substantially as herein shown and described and for the purpose set forth.

70,531.—WEIGHTS FOR SCALES.—H. W. Comstock, Lafayette, Ind.

I claim the substitution of glass in place of other substances as weights for weighing scales, thereby producing an anti-corrosive and cheaper weight, as specified.

I also claim a filled glass weight when so constructed that the material used as filling shall be entirely surrounded by the glass, as specified and described.

70,532.—ATTACHING WHEELS TO VEHICLES.—L. Crouch, Baraboo, Wis.

I claim the nut, E, provided with the screw thread upon its outer circumference and secured to the hub, A, by means of screws, in combination with the axle box, C, nut, E, and cap, E, substantially as described for the purpose specified.

70,533.—WAGON BRAKE.—Ezra N. Curtice, Spring Water, N. Y.

I claim, 1st, The brakeshaft, F, supported in the boxes, a, on the wagon reach and hounds and the straps, c, c, on the braces, b, b attached to the axle, A', arranged and operating as and for the purpose described.

2d, The eccentric arms, e, e, on the ends of the brake shaft, F, in combination with the rubbers, d, d, arranged and operating as described.

3d, The combination of the brake shaft, F, the rod, g, and the draft pole, E, arranged and operating as and for the purposes described.

70,534.—MANUFACTURE OF SUCTION BOXES FOR PAPER MAKING.—Francis Curtis, Newton, Mass.

I claim the improved method of suction box as composed wholly or in part of hard rubber, substantially in the manner and for the purpose as before described.

70,535.—SLEIGH KNEE.—Isaac Dan, Sanford, N. Y.

I claim the blocks, B and C, as constructed and used in combination with the knee and the bar, E, as and for the purpose set forth.

70,536.—SLEIGH KNEE.—Isaac Dan, Deposit, N. Y.

I claim the knee constructed of wood and metal in the manner herein set forth and used with the runner, for the purpose specified.

70,537.—GATE LATCH.—Alfred K. Davis, Carey, Ohio.

I claim the pivoted latch bars, D, D', and connecting bar, E, and their respective equivalents, all as set forth in combination with the lever, F, operating and arranged in manner substantially as and for the purposes herein shown and described.

70,538.—FEED-WATER HEATER FOR STEAM GENERATORS.—John W. Doughty and Horatio B. Beckman, Newburg, N. Y.

We claim the chamber, F, with pipe, P, in connection with the feed pump, or any other instrument of supply, well, W, blow off pipe, P2, steam-connecting pipe, Q, water-communication pipe, E, G, Q2, with the cap, F, and boiler, B, as shown in the drawing, and for the purpose as set forth.

70,539.—STRAW CUTTER.—Stephen Elliott, Richmond, Ind.

I claim constructing a straw cutter, as above described, when the same is composed of the spiral spring, K, lever, B, cross piece, H, uprights, F and G, cross piece, D, lever, E, rod, I, and frame, A, arranged and operated substantially as above described.

70,540.—SYRINGE.—Jas. J. Essex, Newport, R. I.

I claim, 1st, The employment or use, in connection with a syringe, of a receiver or reservoir, A, provided with a glass or other transparent plate, Ax, and with a screw cap, b, and tube, B, substantially as and for the purpose set forth.

2d, The combination of a metallic and an elastic bulb, when the former are attached to opposite ends of the latter, and used either in connection with or without an air chamber, for the purpose specified.

3d, The rose nozzle, or douche, composed of the cup, l, and perforated plate, j, when used in connection or combined with a syringe provided with an elastic bulb, in the manner and for the purpose specified.

4th, Providing the male screw of the connections or joints with a socket, g, to receive the packing and prevent its lateral expansion under pressure, where the two parts of the connection or joint are screwed together.

5th, The arrangement of the rigid discharging pipe and the flexible suction tube and their valves at one end of the bulb, substantially as herein shown and described.

70,541.—SEED PLANTER.—H. C. Fairchild, Brooklyn, Pa.

I claim, 1st, The slide, D, operated from the outside by the screw, a, and the arm, c, substantially as described.

2d, The hole, d, through the cylinder, substantially as and for the purposes herein set forth.

70,542.—PAINT BRUSH.—Wm. H. Forker, Meadville, Pa.

I claim the cap, E, and the ferrule, F, forming the cup, E, F, in combination with the cylinder, D, with the staves, J, J, J, the conical nut, C, and the screw, H, when the same are constructed as described in the aforesaid combination, for the purposes set forth.

70,543.—CONDENSER FOR CARDING ENGINES.—Geo. R. Gardner (assignor to himself and Benjamin W. Bentley), Westery, R. I.

I claim, 1st, The roller, C, on a set screw, made either of hollow or solid, and charged with a condensing liquid, as herein described, or its equivalent, and placed on a condenser, in relative position with the cylinders, B, thereof, substantially in the manner as and for the purpose set forth.

2d, The guards, G, attached to the guide bars, F, on frame, D, and arranged in relation with the ropings, a, substantially as and for the purpose specified.

70,544.—SCISSORS SHARPENER AND CLOTH RIPPER COMBINED.—A. W. Gifford (assignor to William A. Richardson and Henry D. Ward, Worcester, Mass.

I claim a combined scissors sharpener and ripper, constructed for operation substantially as described.

70,545.—MACHINE FOR SPLITTING WHALEBONE.—Nathan Goddard, Boston, Mass.

I claim the arrangement and combination of the series of knives, A, B, C, D, and adjustable rollers, F, on the same and the adjustable throat piece, G, the whole being applied to a frame, E, substantially as and for the purpose set forth.

70,546.—WEIGHING AND MEASURING CUP.—E. A. Goodes, (assignor to himself, E. L. Miller, and W. H. Morford), Philadelphia, Pa.

I claim a cup provided with scales, a, b and c, d, whereby it may be used for weighing and measuring purposes, in the manner substantially as herein set forth, as a new article of manufacture.

70,547.—LEVEL AND TRY-SQUARE.—J'n Graham, Ludlow, Vt.

I claim, 1st, The indicator, composed of a T-shaped bar, F, connected by a toothed segment, d, and pinion, e, or their equivalents, with an index, f, which traverses over a graduated ring, g, all being arranged and applied to a square, to operate in the manner substantially as and for the purpose set forth.

2d, The combination of one or more supplemental movable or adjustable squares, G, J, with a T or try-square, substantially as shown and described.

3d, The slide, I, provided with a bevelled or V-shaped notch, o, at one end, and a series of slots, p, at the opposite end, when said slide is applied to or used in connection with a T or try-square, substantially as and for the purpose set forth.

4th, The plate, H, provided with the ribs, l, m, and slot, n, when said plate is used in combination with a supplemental square applied to a T or try-square, substantially as and for the purpose set forth.

70,548.—FARM GATE.—Orson Graham, Lima, N. Y.

I claim, 1st, The collar, C, and collar, D, in combination with the gate, E, and folding part, F, when made and used substantially as specified.

2d, The folding part, F, when made as specified, and used in combination with the gate, E, substantially as specified.

70,549.—FENCE.—Isaiah M. Green, Sen., Clinton, Ill.

I claim the groove, C, in the post, A, and rod, D, passing through eyes in the ends of the wires, e, c, in combination with the key, b, and their seats in the posts, B, all arranged and operating substantially as and for the purpose set forth.

70,550.—HAY RAKE.—Albert J. Greene, Sterling, Mass.

I claim, 1st, In a hand hay rake, the arrangement of the axle, B, teeth, C, blocks or hinges, l, rod, F, and shaft, E, with each other, substantially as herein shown and described.

2d, The combination of the spring or springs, G, with the rod, F, axle, B, and shafts, E, substantially as herein shown and described, and for the purpose set forth.

3d, Adjusting the tension of the spring, G, by means of a thumb screw, H, substantially as herein shown and described.

4th, In a hand hay rake, the arrangement of the arm, K, and rod, L, with the axle, B, and shafts, E, substantially as herein shown and described, and for the purpose set forth.

70,551.—PHOTOGRAPHIC PROCESS.—Manfred M. Griswold, Columbus, O.

I claim, 1st, The black baked photographic plate, prepared substantially as hereinabove set forth, as a new article of manufacture.

2d, The composition of the enamel or collodion for producing the original white surface, substantially as described.

3d, Baking the plate subsequent to the application of the white collodion film, substantially as set forth.

4th, Restoring the white color to the surface of the plate, subsequent to its being baked, as set forth, or in any manner, substantially the same.

70,552.—ANNUNCIATOR.—Henry Gross and George S. Yingling, Triffin, O.

I claim the self-controlling figure drops, B, constructed substantially as described, in combination with the upright guides, C, upon which they slide, as and for the purpose set forth.

2d, The double springs, D, constructed substantially as herein shown and described, in combination with the drops, B, and with the upright guides, C, as and for the purpose set forth.

3d, The levers, E, constructed substantially in the form and manner herein shown and described, in combination with the connecting rods, E, and double springs, D, for the purpose of releasing the drops, B, and with the tumbler, H, by means of which the bell hammer is operated, as and for the purposes set forth.

70,553.—ENGRAVING MACHINE.—J. C. Guerrant and B. J. Field, Leaksville, N. C.

We claim, 1st, The holder, A, adjustable in a horizontal plane upon a center coincident with the axis of rotation of the post which carries the graver shaft, substantially as described.

2d, The arrangement of the extensible rod, G, G', connecting the tracing arm, H, with the graver arm, D, substantially as described.

3d, The adjustment of the connecting rod, G, G', at the point of attachment to the tracing arm, so as to vary the degree of penetration of the graver, substantially as described.

4th, The vibrating graver, D, in combination with the vibrating and counterpoised graver arm, D'.

5th, The vibrating slotted guide plate, K, constructed and operating substantially as described and represented.

6th, The guide rod, L, planted in the adjustable slide rest, M, and affording a guide for operating the cutter on a given vertical line.

70,554.—MODE OF ORNAMENTS GLASS SHADES AND GLOBES.—R. Guthrie and J. Shearer, New York city.

We claim the removable sectional glass ornaments or hangings for lamp shades and globes, arranged substantially as and for the purpose herein shown and described.

70,555.—HEAD REST.—Robert Hale, Chicago, Ill.

I claim the head rest, constructed as described, consisting of the cap, A, having the neck strap, C, the adjustable strap, D, secured at one end to the visor, B, and at the other by a hook, E, to the roof of a car, or an equivalent support within the car, as herein described for the purpose specified.

70,556.—REVERSIBLE CHAIR SEAT.—Mathias Hamburger, New York city.

I claim the reversible seat, B, when hinged, by means of pins, a, a, in the chair frame, A, and when combined with the stop, b, and pin, c, all made and operating substantially as herein shown and described.

70,557.—FURNACE.—David Harger, Des Moines, Iowa.

I claim the combination of the pipe, A, having the apertures, a, and provided with the sliding cover, d, with the turbine, C, D, F, the several parts being constructed, arranged, and operating together, substantially in the manner and for the purpose specified.

70,558.—MACHINE FOR STAMPING AND SHAPING LEATHER.—Benjamin B. Harris (assignor to himself, F. G. Harris, and Seneca Sly), Lockport, Ill.

I claim, 1st, The combination of the toggle joint and levers, all as set forth, with the follower, C, hung from the frame, A, having the stage post, B, hung from, and playing through a loose mortise, in manner substantially as herein shown and described.

2d, The die or knife plate, I, carrying the knife, k, sliding in the dovetailed groove, g, on stage, G, which is furnished with the hole, m, and bolted by the dovetailed pin, L, to the stage, G, all as set forth, in combination with the toggle joint, levers, and followers, substantially as herein shown and described.

70,559.—COMPOSITION FOR TEMPERING STEEL.—F. G. Harris, Willsborough, N. Y.

I claim the composition formed of the ingredients combined with each other in the proportions herein described and for the purpose set forth.

70,560.—CAR WHEEL.—John Harris (assignor to John S. Vine) Marquette, Wis.

I claim the flanges, c, c', upon the hub, B, and plate, d, forming the chambers for the lubricating material upon the sides of the rim, D, as herein shown and described for the purpose specified.

70,561.—CURB FOR WATER WHEELS.—John H. Hartsuff, New Castle, Pa., assignor to himself, R. W. Cunningham, and R. C. Dunlap.

I claim the tongues, D, D, provided with the hinged flaps, E, E, and used in combination with the wheels, A and B, constructed and operating as and for the purpose set forth.

70,562.—BARN DOOR OR GATE FASTENING.—L. B. Hayes and William Morris, of Greene, N. Y.

We claim, 1st, The combination of the vertical bar, C, spring catch, E, and catch, I, with each other, and with the door or gate, A, substantially as herein shown and described and for the purpose set forth.

2d, The combination of the band or collar, L, and block, K, having a pin, k', attached to its edge, with the bar, C, substantially as herein shown and described and for the purpose set forth.

70,563.—TOOL FOR CUTTING BOLTS.—J. E. Heath, Niles, Mich.

I claim, 1st, The combination of the plate, A, cutters, C, C, levers, D, D, and springs, a, a, arranged as described.

2d, The slotted guide plate, B, projecting between the cam lever, D, D, from the plate, A, as shown, in combination with the jointed arms, E, E, cam levers, D, D, and cutters, C, C, substantially as and for the purpose set forth.

70,564.—PHOTOGRAPHIC PRINTING FRAME.—John Heddon, Elkhart, Ind.

I claim the hinged back, of five pieces, more or less, so constructed that any or more may be fastened together, or an opening be effected at either of the joints, thus admitting the examination of the printing from either end of the frame.

I also claim the broad flanges, in connection with the adjustable grouping board, which may be perforated board, or any other material answering the same purpose, I also claim, this being equivalent to the movable or sliding frame for carrying the back up or down.

I claim the adjustable and sliding back, also, the vignetting arrangement for cutting the light from the sensitive paper, by the use of two pieces of board, or other material, with a tube for conducting the rays of light to the negative.

I claim this invention, separately and as a whole, in combination one with the other, substantially as set forth above.

70,565.—HOISTING APPARATUS.—Philip Higdon, Lewisport, Ky.

I claim the combination of the frame, A A1 A2, shaft, B, pulleys, D F J K pinion, G, cords or ropes, E I, rack, a, either jointed or inflexible, and movable sheave, L, all arranged and operating substantially as described.

70,566.—CHILDREN'S CARRIAGE AND CRADLE.—C. W. Higinz, Waukesha, Wis.

I claim a children's carriage, when constructed substantially in the manner and for the purposes described.

70,567.—LAMP EXTINGUISHER.—F. B. Hill, Cleveland, O., and W. H. McCoy, Des Moines, Iowa.

We claim the combination of the cap, C, pendent bars, e, rod, B, crank, d, and spring, f, arranged to operate in the manner and for the purpose herein specified.

70,568.—REGISTER POINT FOR PRINTING PRESSES.—Nicholas Hopkins, N. Y.

I claim, 1, The hinged plate, B, having a metallic point, C, attached to its movable part, to be used in connection with a piece of furniture in making

up the form, substantially as herein shown and described, and for the purpose set forth.

2d, The combination of one or more rubber or other elastic bearers, D, with the movable part, B, of the hinged plate, B, substantially as herein shown and described for the purpose set forth.

70,569.—TOY.—Kellis Horde, Washington, D. C.

I claim the plunger, B, combined with tube, A, and lever, a, for operating toys, substantially as described.

70,570.—BEVEL.—Leonard D. Howard, St. Johnsbury, Vt.

I claim the applying of a blade screw and nut to a bevel, in the manner shown, or in an equivalent way, so that the head of the screw and the nut will be flush with the sides of the handle or stock, as set forth.

I also claim the cap, C, applied to the end of the handle or stock, and provided with the concave or countersink, d, at one side, and the socket, E, at the opposite side, to receive, respectively, the screw head and the screw nut, substantially as shown and described.

70,571.—BOOT BLACKING AND POLISHING MACHINE.—S. W. Huntington, Augusta, Me.

I claim the combination in a machine, such as described, with one or more rotating brushes, of an adjustable trough or backing receptacle, substantially in the manner and for the purposes herein shown and set forth.

70,572.—SADIRON HEATER.—George Hurman (assignor to Chas. F. Clark), Wolverhampton, England.

I claim, as my invention, the improvements in charcoal-box sad irons, hereinafter described, that is to say, the combination of the rod, pin, or guide, g, and eyes or brackets, f, f, with the body and lid or cover of charcoal-box iron for the purpose of permitting the sliding of the lid or cover upon the body, substantially as described and illustrated.

I also claim the combination with the said parts, f, g, of the turn or button, h, for fastening the lid or cover, and the knob or handle, i, for holding the iron during the sliding of the lid or cover, substantially as described and illustrated.

70,573.—VAPOR-LAMP BURNER.—W. W. Jacobs, Hagers-town, Md.

I claim the combination of tube, A, pan, D, screw cap, B, and wick, C, constructed and arranged substantially as shown and for the purpose set forth.

70,574.—KNIFE CLEANER AND SHARPENER.—L. J. Johnson, Montville, Conn., assignor to himself and Erskine A. Cole.

I claim, 1st, The composition of the box, A, with the corks, c, c, and the handle, F, containing the knife sharpener, L, the cylindrical covered box, G, with the cylindrical cup, H, and polishing apparatus, I, substantially as shown and described and for the purpose specified.

2d, The combination of the cylindrical polishing band, I, and cork, J, with the box, A, B, as shown and described and for the purpose specified.

70,575.—DRESS ELEVATOR.—George William Keller, Philadelphia, Pa.

I claim the spiral spring girle or belt, A, provided with openings, B, in combination with spring, C, cord, D, and strings, E, substantially as herein set forth.

70,576.—DOOR LOCK.—Michael Knapp and John Knapp, Hudson City, N. J.

We claim, 1st, Guiding the secondary tumbler, D, through the slotted guides, d, and through the grooved tumblers, b, b, said secondary tumbler provided with the projections, g, as described, and connected with the spring, h, operating as and for the purpose specified.

2d, The combination and arrangement of the bolt, B, tumblers, b, b, secondary tumblers, D, g guides, d, and springs, a, c, h, all operating as described, for the purpose specified.

3d, So constructing a lock that the same can only be locked and unlocked by turning the key in one direction only, as set forth.

70,577.—PEGGING JACK.—John L. Krieg, New York city.

I claim the construction of the hollow last holder, in combination with the pin rod inserted therein and adjustable, for the purposes and as specified.

70,578.—CULTIVATOR.—S. A. Kroner, New Britain, Pa.

I claim, 1st, The trestle, H, in combination with the handles, B, and beam, A, for the purpose of shifting the handles, in the manner and for the purpose specified.

2d, I claim the movable sides, C and C', in combination with the plates, D and F, the slide, E, and pin, G, in the manner and for the purpose set forth.

3d, I claim the arrangement of the shares, K, in combination with the movable sides, C and C', plates, F and D, slide, E, trestle, H, and clevis, I, in the manner and for the purpose set forth.

70,579.—UMBRELLA RUNNER.—Henry Kurth, Brooklyn, N. Y.

I claim an umbrella runner provided with the locking device consisting of the supporting piece, f, locking ring, e, in combination with pins, C and d, in the handle, substantially as described.

70,580.—CLEAT CHOCK.—Amariah Lake, Smith's Landing, N. J.

I claim a cleat chock made and employed substantially as herein shown and described.

70,581.—MACHING FOR PEGGING BOOTS AND SHOES.—Wm. R. Landfear, Hartford, Conn., assignor by mesne assignments of David R. Bittermore.

I claim, 1st, Passing the pegs severed from the peg wood from the severing knife to the driving bar, through a slot in the axle of the feeding sleeve, substantially in the manner and for the purpose described.

2d, The combination of the bar, A, bolt, B', and set screw, C', arranged substantially as specified, for securely holding down the peg wood during its passage through the machine, as set forth.

3d, The application of an adjustable brake to control the movement of the feeding sleeve, in the manner described.

4th, The plates, F' and C', arranged as described, and forming grooves for the passage of theawl and driver in front of the feeding sleeve, as specified.

70,582.—CONSTRUCTION OF ICE PITCHERS.—Nathan Lawrence (assignor to Reed & Barton), Taunton, Mass.

I claim, 1st, An ice or double-walled pitcher having its inner wall or lining spun or swaged out of one piece of metal, or swaged out of a single piece, so that the bottom will be seamless or without a joint, substantially as described.

2d, The securing of the ribs, b, to the bottom of the inner wall or lining, substantially as and for the purpose specified.

70,583.—BED BOTTOM.—Frederick Leadbetter, Plymouth, Mich.

I claim connecting the slats, B, to the ends of the bedstead by means of the wires, C, connected to the ends of the slats, as shown, and attached at their outer ends to bars, D, which are fitted loosely on V-shaped wires, E, driven in the ends of the bedstead, and having spiralsprings, f, upon them, as herein set forth.

70,584.—PROPAGATING TANK AND BED.—N. H. Lindley, Bangport, Conn.

I claim the valve, E, E', as described, and their adjustability in combination with the hot water channels, C, D, propagating bed, a, hot air space, x, and deflector, c, substantially as described for the purposes specified.

70,585.—BRICK MACHINE.—Stephen W. Long, Louisville, Ky.

I claim, 1st, The arrangement in a brick machine of two plungers, I, K, so as to form a measure, and to exert upon the clay compressive forces in directions perpendicular to each other, substantially as described.

2d, The combination of the plungers, I, K, sliding molds, J, J', chambers, G', and pug mill, G, all arranged and operating substantially as and for the purpose herein specified.

70,586.—ICE TONGS.—R. M. Mansur, Augusta, Me.

I claim the ice tongs or hook provided with the elastic arms, A, and the angular, sharpened, or pointed prongs or teeth, C, constructed and operating in the manner and for the purpose set forth.

70,587.—HANDLE FOR SHIPS' PUMPS.—Knud Markuson (assignor to himself and Leonard A. Burnham), Gloucester, Mass.

I claim the improved pump handle, as made in two parts, A, B, connected together by two hinges, or by a hinge and latching or locking device, applied to their opposite sides, the whole being substantially as specified.

I also claim the arrangement and combination of the rotary rod, made as described, and the socket for the head of such rod, with the two handle parts, A, B, connected substantially as explained.

70,588.—MANUFACTURE AND APPLICATION OF BISULPHITE OF LIME.—Wm. Marr, New York City.

I claim, 1st, The new article of manufacture, liquid bisulphite of lime, prepared substantially as herein described.

2d, The improved mode of arresting fermentation in beer, ale, and other fermented liquors, by the application of liquid bisulphite of lime, substantially as herein described.

3d, The application of liquid bisulphite of lime for preventing fermentation in saccharine and other fermentable liquids.

4th, The application of liquid bisulphite of lime for preserving meat and fish, substantially as described.

70,589.—HARNES SADDLES.—Godfrey Marshall, Indiana, Pa.

I claim a harness saddle constructed with its cushion or pad substantially as and for the purpose specified.

70,590.—STEAM ENGINE.—Emory McClintock, New Brunswick, N. J.

I claim the combination of the valve ports, S S' E' E' U' U' L' L', in the cylinders, C, C', and the passages, a, b, c, d and a' b' c' d', in the double-acting pistons, P, P', and the socket for the head of valves, all substantially as herein described, for the purposes specified.

70,591.—LIFTING JACK.—Wm. McMillen, Milan, assignor to himself and Z. King, Cleveland, Ohio.

I claim the arrangement of the legs, A, A', in combination with the lever, C, and link, B, when pivoted or jointed in the manner substantially as described.

70,592.—PLANING MACHINE.—Rufus N. Meriam, Worcester, Mass.

I claim the slides, F, F', carrying the shafts, C, C', and constructed with racks, d, d', in combination with the blocks, B, B', formed with standards, E, E', and the pinions, e, e', whereby the said shafts may be raised or lowered with reference to the bed, a, constructed and operating substantially as herein set forth.

70,593.—SASH SUPPORT AND FASTENER.—Fenwick R. Miller and Edwin Prescott, Pittsburg, Pa.

We claim the upper cam, d, in combination with the lower cam, d, so constructed, arranged, and connected, substantially as described, as to press against the rail or frame of the window in opposite directions by means of the weight of the upper cam and the lock and support the sash in any position in which it may be placed, while the depressing of the lower cam shall also raise the upper cam, and thus leave the sash free to be raised or lowered.

70,594.—MODE OF SECURING WHEELS ON AXLES.—J. Miller, Jr., Baltimore, Md.

I claim the combination of the box, A, spring, B, plate, C, and the linchpin, D, or their equivalents, operating in the manner described and for the purposes substantially as set forth.

70,595.—CYLINDER OF STEAM HAMMERS.—Robert Mitchell, Wolverhampton, Great Britain.

I claim the peculiar arrangement of steam ports and ways in the cylinders of double acting steam hammers and forging machines, substantially as and for the purpose hereinbefore described, and illustrated by Fig. 5 of my drawing.

70,506.—APPARATUS FOR MOVING BUILDINGS.—John H. Moore, Binghamton, N. Y.
I claim the hinged latch, G, and the catch, H, in combination with the reach or sand board, C, and bolster, F, all constructed and arranged substantially as and for the purposes set forth.

70,507.—HINGE.—Antonio L. Mora, New York City.
I claim, 1st, the pawl, D, and the spring, E, constructed, and operating substantially as and for the purposes described, in combination with a ratchet hinge.
2d, The pin, f, by which the pawl is tripped, substantially as described, in combination with the pawl, D.
3d, In combination with the pawl, D, I claim the ratchet, C, and the stop plate, F, substantially as described.
4th, In combination with a hinge, I claim the plates, A and B, substantially as and for the purposes described.

70,508.—LUNCH BOX.—John F. Morgan, Boston, assignor to Cornelius S. Huribut, Springfield, Mass.
I claim a lunch or dinner box as an article of manufacture, the end plates and side plates, of which are joined to each other and to the bottom plate of the box by hinges, and the end plates of which are made of two parts or pieces connected by hinges, which traverse the end plates diagonally, and one side plate of which is made of three parts or pieces connected together by hinges, so that the box can be folded flat without detaching any part of it, beside the top or cover, from the other parts, substantially as herein set forth.

70,509.—PERMUTATION LOCK FOR DOORS, ETC.—John H. Morse, Peoria, Ill.
I claim, 1st, The push pin, S, with its spiral spring, s, acting on click, K, in combination with hub plate, D, with its notches, d.
2d, I also claim the rubber pad, o, or its equivalent, on lug, J.
3d, Also the bolt, K, with its slot, h, and lug, G, on lug bar, E, all working in the manner and for the purpose specified.

70,600.—INSTRUMENT FOR ADMINISTERING BALLS TO HORSES.—Chas. P. Moyer, Womelsdorf, Pa.
I claim, 1st, The india-rubber or pliable cup, E, the cup, A, and the plunger D, used substantially as and for the purpose set forth.
2d, The shield, C, in combination with the tube, B, and plunger, D, when used as and for the purpose specified.

70,601.—MACHINE FOR MAKING PAPER BAGS.—E. B. Olmsted, Washington, D. C.
I claim, 1st, The combination of the feed and printing roller, F, with the inking roller, I, the cutting roller, F', and the gumming roller, G, substantially as and for the purpose described.
2d, The combination of the cutting edge, h, and knife, k, when used in an apparatus for making paper bags or envelopes, and when the parts are constructed, combined, and operating in the manner and for the purpose herein specified.
3d, The combination of the two folding devices, M and K, substantially as and for the purpose shown.
4th, The combination of the roller, N', and leaves, n n', when constructed and operating in the manner and for the purpose set forth.

70,602.—MEDICAL COMPOUND.—Bird Paine, McMinnville, Tenn.
I claim the combination of pulverized ipecacuanha with the other remedies as described, above, where the well known deleterious effects of quinine in large doses are prevented, and the aggregate healing properties of the combination greatly enhanced.

70,603.—ORE SEPARATOR AND CONCENTRATOR.—Thomas N. Paine and Samuel Stephens, Grass Valley, Cal.
We claim, 1st, The pan constructed with the copper-lined recess, h, at its top to save the gold or amalgam, substantially as herein described.
2d, The adjustable distributing spouts, constructed with the parts, d e and f, and having the adjusting screw, g, the whole operating substantially as and for the purpose described.
3d, The round arms, E, with the separated brushes, r r r, for agitating the surface of the pulp, operating substantially as herein described.
4th, The ring raising automatically, and the rod, b, together with the endless screw, L, and the cone pulleys, K and K', when used for raising the ring, H, substantially as herein described.
5th, The movable ferrule, G, and the reservoir, M, supported by the rollers, k k, and the plate, l, operating substantially as and for the purpose described.
6th, The revolving belt, n, with its brushes and the perforated plate, p, when used in the feed trough, G, substantially as herein described.
7th, The two-part shaft, constructed with a hollow stationary slotted shaft, C, and the hollow movable slotted shaft, D, when constructed with the balls and the grooves in their ends to prevent friction, operating substantially as and for the purpose herein described.

70,604.—WINDOW-SASH SUPPORTER.—Joseph R. Payson, Chicago, Ill.
I claim the friction plate, A, with its projection, B, in combination with the inclined surface, a, and the spring, E, all arranged as shown, or in an equivalent way, for the purpose specified.

70,605.—WRENCHES.—Edward Perry, Hopkinton, Mass.
I claim the combination with the frame or stock, A, of the movable jaws, E, E, screws, D, and rosette, C, substantially as and for the purposes set forth.

70,606.—RAIL-CLAMP JOINT.—Francis Pidgeon, Saugerties, N. Y.
I claim, 1st, The combination of the dove-tailed rails, E, and dove-tailed clamps, G, H, substantially as described, for the purpose specified.
2d, In combination with the above, the outer section of the clamp flush with the head of the rail, substantially as described, for the purpose specified.

70,607.—WAGON REACHES.—Zenas Plumb, assignor to himself and John C. Polley, De Witt, Iowa.
I claim constructing a wagon-reach in two parts, connected by a swivel joint, substantially as and for the purpose described.

70,608.—FERTILIZER.—Henry E. Pond, Franklin, Mass.
I claim the new fertilizer, substantially as before described.

70,609.—COMBINED DOOR FASTENER AND POCKET KNIFE.—Benjamin F. Porter, assignor to himself and Timothy S. Mitchell, Manchester, N. H.
I claim the door fastener, B, constructed and arranged to operate as described, in combination with a pocket knife.

70,610.—TOY HUMMING WHEEL.—W. D. Porter (assignor to himself and James H. Platt, Jr.), Petersburg, Va.
I claim the toy wheel, E, formed by the union of two concave disks, united at their peripheries, and provided with one or more openings, D, and the loops, A, when said parts are constructed and arranged as herein shown and described.

70,611.—SACK FASTENER.—Theodore Purse and Henry C. Draper, Ashley, Mo.
We claim the sack fastener, consisting of the two pieces of wire, A, B, joined at or pivoted at C, when bent and arranged to operate substantially as described.

70,612.—PRIMING METALLIC CARTRIDGES.—Joseph Rider, Newark, Ohio, assignor to himself and E. Remington and Sons, Ilion, N. Y.
I claim, 1st, A shell without an end piece, and a flange turned and projecting forward on its inside, substantially as and for the purpose described.
2d, I also claim, in combination with a shell having an inward flange, a case, B, having a recess for a cap, and holes extending from said recess to the charge in the cartridge, and removable and replaceable, substantially as and for the purpose described.

70,613.—DREDGING, SPICE, AND PEPPER BOX.—George W. Putnam, Peterboro, N. Y.
I claim a dredging or spice box, perforated upon its sides, substantially as herein shown and described.

70,614.—HARVESTER.—Amos Rank, Salem, Ohio.
I claim, 1st, The side-delivery scraper, hinged to the outer divider, or its equivalent, so as to allow it to conform to the undulations of the ground, in combination with a grain platform or receiver, which is arranged behind the cutting apparatus of a harvester, and applied so as not to revolve, substantially as described.
2d, The hinged or hinged platform, D, arranged behind the finger beam of a harvester, in combination with a scraper, G, which operates as shown, for the purpose set forth.

70,615.—SULKY PLOUGH.—John H. Rankin, Versailles, Mo.
I claim, 1st, The cultivators, C, constructed as above described and for the purpose set forth.
2d, The cultivators, C, screw, l, nut, l', cords, e, drums, f, an axle, g, and handle, h, in combination with the frame, A, all arranged as above described and for the purpose set forth.
3d, The ploughs, D, constructed as above described and for the purpose specified.
4th, The cultivators, C, ploughs, D, adjusting bars, b, rail, d, screws, l, nuts, l', cords, e, drums, f, on axle, g, and handle, h, in combination with the frame, A, as above described and for the purpose set forth.

70,616.—PESSARY.—M. J. Rhees, M. D., Mount Holly, N. J.
I claim a pessary, made substantially as described.

70,617.—WELL TUBES.—John W. Ricker, Chelsea, Mass.
I claim a series of perforated conical shaped thimbles, a, applied to a well tube, constructed and operated substantially as and for the purpose described.
I also claim a well tube provided with a series of perforated conical shaped thimbles, a, from which the sand is ejected by the employment of tubes, C, D, substantially in the manner set forth.

70,618.—SPRING BEDSTEADES.—Robert Roberts, St. Paul, Ind.
I claim, 1st, In combination with the bedstead, A, support, B, and cleats, F, the frame, C, springs, D, slats, E, and webbing, I, arranged substantially as and for the purpose set forth.
2d, The head piece, G, when attached by hinges to the inner and detached frame, C, substantially in the manner set forth.
3d, The combination of the slats, E, springs, D, webbing, I, and hinged head piece, G, arranged substantially as set forth.

70,619.—WAGON SEAT.—R. N. Rockwell, Glenwood, Iowa.
I claim the board or plank, A, with the springs, B, B', attached, in combination with the pendent pins, E, attached to the bottom of the seat, C, all arranged substantially in the manner as and for the purpose set forth.

70,620.—BAG FASTENER.—Ephraim Romans, La Porte, Ind.
I claim the combination of the frame, a, plate, b, and cord, f, substantially as and for the purpose described.

70,621.—CONFORMATORS.—E. Roseen, New York City.
I claim, 1st, The bar, n, constructed with joints, s, and hinges, 6, so that its curvature can be preserved when the apparatus is flattened out, substantially as described.
2d, The adjustable bars, v, v, in combination with the curved bars, m and w, substantially as described.
3d, The combination and arrangement of the bar, j, provided with a hook at its end, d, e bars, s and 6, and the set screw, 3, connecting the bars, s and t, substantially as described.

70,622.—SPINNING WHEEL.—Jonas H. Rowe, Hudson, N. Y.

I claim, 1st, The arrangement of the vibrating arm, F, carrying the adjustable spindle head, G, said arm supported from the adjustable bar, E, and resting upon the spring, e, with the adjustable bar, D, and connecting rod, L, pivoted in said arm, F, as herein described, for the purpose specified.
2d, The combination of the bearing spring, e, with the vibrating arm, F, adjustable bar, D, and connecting rod, L, as herein described, for the purpose specified.

70,623.—ROTARY CAM FOR LOOMS.—Ransom Sargent, Norwich, Vt.
I claim the rotary loom cam formed of a centre shaft, a, provided with heads, b', on the periphery of which are hung the truck shafts, c, in the adjustable boxes, d, for carrying the adjustable circular cams or trucks, E, to operate on the cam blocks, D, placed on the treadles, C, constructed, arranged and operating substantially as and for the purposes herein described.

70,624.—ANIMAL TRAP.—Jeremiah Schroy, Fort Ville, Ind.
I claim the drop, o, in the removable chamber, C, when such drop is provided with the shoe protrusion, r, arranged as described, whereby the weight of the animal upon said shoe prevents its being raised, as herein set forth.

70,625.—CAR COUPLING.—Lewis O. Schultz, Mattoon, Ill.
I claim the catch, F, the coupling pin, C, the guides, D and E, and the lifting rod, d, constructed and arranged substantially as described, in combination with the draw head of a railroad car, for the purpose set forth.

70,626.—GATES.—L. M. Scothorn, Findley, Ohio.
I claim, 1st, The double post, B, constructed as and for the purposes substantially as above set forth and described.
2d, The upright movable post, C, working in a groove in the post, B, and provided with the roller, c, substantially as above set forth and described.
3d, The main and extension gates, consisting of vertical and horizontal bars, D, D', F, G, H and H', or their respective equivalents, and provided with rollers, D', D', g, g', in manner and for the purposes substantially as above set forth and described.

70,627.—WHIP SOCKETS.—E. W. Scott, Wauregan, Conn.
I claim a whip socket provided with a tassel composed of a lever arranged or applied substantially as shown and described, to hold the whip steady or firm in its socket, as set forth.

70,628.—ADJUSTABLE PROP-JOINTS FOR CARRIAGES.—Anson Sears, San Francisco, Cal.
I claim, 1st, An adjustable or extension prop joint.
2d, A socket, pivot, or center joint, all substantially as described, and for the purposes set forth.

70,629.—TRUSS.—Isaac B. Seeley, Philadelphia, Pa.
I claim a supporter made of hard, vulcanized India rubber, substantially as and for the purpose described.

70,630.—WASHING MACHINE.—G. C. Selfridge, Saratoga Springs, N. Y.
I claim the combination of the slotted cover, C, hinged lids, D, D', sectional wash board, E, double oscillating plungers, I, arms, H, rock shaft, G, removable connecting rods, K, working above the lid of the tubs, box, pins, b, crank shaft, J, as herein described for the purpose specified.

70,631.—FOLDING UMBRELLAS.—A. B. Shaw, Holderness, N. H.
I claim the combination of the auxiliary runner, F, and its series of spreaders, G, with the staff, the main runner, D, and its series of spreaders, E, and each of the ribs, formed in two parts, c, d, and applied together, substantially as described.
Also, the connection of the ferrule to the staff by means of the spring, arranged within and applied to such ferrule and staff, substantially as set forth.
Also, the connection of the ferrule to the staff by means of the screws and the spring applied to them, substantially as specified.

70,632.—FOLDING UMBRELLAS.—A. B. Smith, Holderness, N. H.
I claim the combination of the rib-locking mechanism, with the braces and with the ribs, each made in two parts, e, f, and applied together, so as to enable the mechanism to be moved with respect to the upper ones, f, substantially in manner as specified.
Also, the rib locking mechanism, composed of the slide rod, o, the collar, n, the series of locking rods, l, the staples, k, and the arms, i, the whole being constructed and arranged together as explained and represented.
Also, the combination of the spring, r, with the stick, z, and the locking apparatus, applied to the ribs, and arranged to operate substantially as described.

70,633.—HARNES PAD TREE.—Palmer Shaw and Edward S. Dawson, Syracuse, N. Y.
We claim the elastic plate, e, covering the joint between the cut-off end, a, and the pad, A, and connecting the two parts, substantially as described for the purpose specified.

70,634.—PUMP.—George Shield, Cincinnati, Ohio.
I claim, 1st, The combination and arrangement of the hollow plunger, C, valve rod, D, valve, d, solid or closed plunger, E, plate, e, and stuffing-boxes, a, as herein described, for the purpose specified.
2d, The solid or closed plunger, E, in combination with the hollow plunger, C, valve, d, and discharge passage, A, as herein described, for the purpose specified.
3d, The double-plunger pump, constructed as described, consisting of the barrel, A, B, with branches, A', B', stuffing-boxes, a, a, hollow plunger, C, solid or closed plunger, E, valve, d, plate, e, chamber, F, and pipes, G, g, as herein described, for the purpose specified.

70,635.—LAMP.—John B. Slawson, New Orleans, La.
I claim, 1st, Arranging the burner, B, at or near the end of the reservoir, A, substantially as and for the purpose herein shown and described.
2d, Arranging a reflector, C, at or near the corner of the reservoir, the said reflector being made substantially as herein shown and described.
3d, A lamp, A, when provided with a burner, B, which is arranged at or near to its end, so that it will be at or near one corner of the fare box, in combination with the reflector, C, which is made and arranged substantially as and for the purpose herein shown and described.

70,636.—APPARATUS FOR CLEANING STOVE-PIPES.—A. W. Smith, Pierpont, N. Y.
I claim the scraper, formed by the combination of the semi-circular plate, D, handle, E, brace and guard wires, F', and spring, H, with each other, substantially as herein shown and described, and for the purpose set forth.

70,637.—PADDLE-WHEEL.—E. C. Smith (assignor to himself and A. G. Sommerfeldt), Old Ripley, Ill.
I claim the fixed eccentric, a, in combination with the collars, c, c, the disks, C, C, or their equivalents, provided with the circular holes or rings, I, 2, 3, 4, the pins, e, e, on the collars, c, c, the jointed arms, b, b, the paddles, D, D, and the shaft, A, the whole constructed, arranged, and operating, substantially as and for the purpose herein described.

70,638.—GRATE BAR.—J. R. Smith, Salem, Mass.
I claim, 1st, The double-curved ribs, A, in combination with the flanges, B, B, and connections, a, substantially as and for the purposes set forth.
2d, The combination with the double-curved ribs, A, of one or more projections, b, flanges, B, B, and connections, a, as and for the purposes set forth.
3d, The combination with the side of the bar, of the peculiarly constructed filling piece, composed of the parts lettered B', B', C, D, and E, for the purposes stated.

70,639.—WAGON BRAKE.—Thomas Smith, California, Mo.
I claim, 1st, The band, C, and bolt, D, constructed and secured to the brake-bar, A, substantially in the manner herein shown and described, and for the purpose set forth.
2d, The clamps, G, constructed as described, in combination with the rod or bolt, D, and band, C, substantially as and for the purpose herein set forth.

70,640.—COVERING FOR WALLS OF PARLORS AND SALOONS.—J. M. Soutrenon, New York City.
I claim as an improved article of manufacture, a covering for parlor walls, composed of ornamental silk gauze combined with a backing of paper or other suitable material, as and for the purpose described.

70,641.—GASOLINE COOK-STOVE.—J. D. Spang, Dayton, O.
I claim, 1st, The disk, c', with perforated rim, c'', substantially as described.
2d, The disk, c', perforated rim, c'', in combination with the ring, b', and burner, C, substantially as described.

70,642.—FINISHING BRAD.—Henry Stanton, Syracuse, N. Y.
I claim as an improved article of manufacture, the finishing brad, made as herein shown and described, as and for the purpose set forth.

70,643.—HORSE-RAKE.—Henry K. Stoner, Lancaster, Pa.
I claim the arrangement and construction of a cylinder, A, with an arm, B, extending from it at right angles, when the rake tooth, F, passes through a lug, G, perforated for its reception, and held by a headed bolt or its equivalent, through its eye, f, in a lug, D, said lugs, arm, and cylinder, all of one part, substantially in the manner shown for the purposes specified.

70,644.—LIFTING JACK.—Jacob Stoodly, Ripley, Ohio.
I claim the stand, A, the bar, B, the eccentric, D, with lever, E, and rack, F, constructed, arranged, and combined substantially as shown for the purposes set forth.

70,645.—FASTENER FOR PANTALOONS.—Isaac Stratton, Keene, New Hampshire.
I claim, in combination with the fly front of the pantaloons, the elastic cord c, arranged in the eyelet holes, a and b, substantially as and for the purpose specified.

70,646.—AMALGAMATOR.—Arthur Swazey, Chicago, Ill.
I claim, 1st, Providing the long arm, A, with the buoyant valve, F, and stop-cock, G, arranged to operate as described, and for the purpose set forth.
2d, The movable plates, d, when arranged to operate substantially as described and for the purposes set forth.
3d, The spiral, c, when arranged to operate automatically by the movement of the liquid, substantially as described and for the purpose set forth.
4th, The construction of the tube in sections, so that portions of the same may be removed as described and for the purposes set forth.
5th, An inverted siphon-shaped tubular amalgamator of movable sections with a buoyant valve, F, stop-cock, G, movable plates, d, and self-acting spiral, c, arranged to operate with the tubes as described and with its bent portion surrounded with a steam jacket, I, for the purposes set forth.

70,647.—REFRIGERATOR FOR BREWERS.—Augustus H. Tait and Joseph W. Avis, New York City.
We claim, in combination with the fermenting vat, D, the arrangement of cooling apparatus substantially as described for the injection into the wort of jets of cooled air, for the purpose described.

70,648.—LAST.—Ambrose Taylor, Osawatimie, Kansas.
I claim the spring hook, E, secured by its straight snank, F, in the block, B, and engaging with the hook, C, in the recess, D, of the last, A, all constructed and arranged to operate as herein set forth for the purpose specified.

70,649.—BALING PRESS.—Joseph P. Taylor, Hudson City, N. J., and Jackson R. Baker, Jersey City, N. J.
We claim, 1st, The combination of the levers, F, yoke, C, levers, E, lifting pawls, H, and toothed racks, L, with each other and with the follower or platform, N, and bed plate or frame, B, substantially as herein shown and described, and for the purpose set forth.
2d, The spring pawls, L, constructed as described having the lever, J, projecting through the side of the frame to be operated upon by the foot and the lower end projecting downward through the bottom of the press to act as a brake against the smooth surface of the vertical bars, I, in their descent when the upper part of said pawl is released from the rack, K, as herein shown and described.

3d, The arrangement of the cover, T, constructed as described, ropes, W, keys, V, posts, U, catch bars, S, and box, O, as herein described for the purposes specified.

70,650.—LUBRICATING CARRIAGE AXLES.—Edrick Thomas, Kickapoo, Ill.
I claim the Babbit-metal tube, F, with the bolt or screw plug, E, and the hole, a, in the metallic box, C, all arranged in the manner substantially as and for the purpose set forth.

70,651.—RETAINING LINK FOR SHUTTLES.—Martha Thomas, Lower Merion, Pa.
I claim the within-described retaining link composed of a strip, e, of metal with books, a and b, arranged at each end, as and for the purpose herein set forth.

70,652.—MACHINE FOR CUTTING TUBES.—Nicholas Thomas, Chicago, Ill.
I claim the construction and arrangement of the stock, A and A', socket screw, W, screw, D, having its lower end inclined below its square shank, b, inclined horizontal cutter, E, spring, F, blocks, G, H, and horizontal spring knobs, d, i, as herein set forth for the purpose specified.

70,653.—MEANS OF SUSPENDING GASOLIERS AND DROP LIGHTS.—Samuel B. H. Vance (assignor to Mitchell, Vance & Co.), New York City.
I claim, 1st, The apparatus composed of a system of lazy tongs the arms and pivots of which are constructed with an internal gas passage communicating with a suitable burner, substantially as and for the purpose specified.
2d, The parallel guides, r, attached to the stem, f, and arranged and operating in relation with the system of lazy tongs, substantially as and for the purpose specified.

70,654.—BOTTLE STOPPER.—William Von Hote, N. Y. city.
I claim the nut, b, and headed screw, d, entering each other and with the intervening follower, c, clamping the elastic plug, a, whereby the parts operate uniformly on each other, and form a stopper of nearly uniform diameter throughout, substantially as described.

70,655.—PROCESS OF PRESERVING EGGS.—Arthur Waagymar, St. Louis, Mo., assignor to himself, Byron Sloper and W. C. Gould.
I claim, 1st, The process of killing the animal life of the egg by the use of the substances above described, or their equivalents.
2d, The process of toughening the membrane next the shell of the egg by the use of the substances above specified, or their equivalents.
3d, The process of closing the pores of the egg shell by the use of the substances above specified, or their equivalents.
4th, The process of preserving eggs by the combination of the above-named substances, or their equivalents, when used substantially in the manner set forth.

70,656.—DEVICE FOR SCOURING MARBLE.—William Weaver, Nashua, N. H.
I claim, 1st, The box, A, provided with a movable bottom constructed substantially as and for the purpose set forth and of any suitable material.
2d, The use of a water tank, E, in combination with the sand box, A, substantially as and for the purpose set forth.
3d, Confining the bottom, B, to the box by means of bolts, and nuts, said nuts being constructed so as to answer as handles for the scourer, substantially as represented.

70,657.—COMBINATION BENCH.—William Weaver, Nashua, N. H.
I claim, 1st, The fixed and movable portions, A and C, of the top when arranged for adjustment substantially in the manner and for the purposes set forth.
2d, The movable sliding upper portion of the bench composed of the fixed and movable top and transverse sliding pieces, B, B, when arranged substantially as and for the purpose specified.
3d, The movable and adjustable rising skids, F, arranged in the manner and for the purpose specified.
4th, The sliding mechanism constructed as shown and described combined with a bench, substantially in the manner and for the purpose set forth.
5th, The movable and reversible block, D, constructed in the manner and for the purposes specified.
6th, The movable and adjustable step, E, arranged for operation substantially in the manner and for the purpose set forth.
7th, The employment of the adjusting screws, a and g, or the equivalent thereof, substantially in the manner and for separate purposes as set forth.
8th, The edging notch, e, in the end of the portion G, of the bench, for the purpose specified.
9th, The combination of the movable sliding upper portion, as described in the preceding claims, F, block, D, step, E, screws, a and g, or the equivalent, with or without the sliding mechanism, the whole constructed, and arranged for adjustment and operation substantially as and for the purposes set forth.

70,658.—STEAM-CYLINDER FOR FINISHING CLOTH.—Alexander Webster, Seneca Falls, N. Y.
I claim the combination and arrangement of the perforated cylinder, A, perforated steam pipe, B, water pipe, E, and plate, D, substantially as described for the purpose specified.

70,659.—STOVE-PIPE DRUM.—Eben Webster, Holland, Mich.
I claim, 1st, The construction of the inverted, conical, slotted cone, B, secured at its base to the inner circumference of the drum, A, and containing the inverted, conical slotted cone, C, whose apex extends slightly through the opening of the outer cone, B, and whose base the short cylinder is secured having an outer ring resting and supported upon the flattened base of the cone, B, sliding freely thereon, all arranged and operating as described for the purpose specified.
2d, The inverted slotted cone, B, whose base supports the inner slotted cone, C, by the ring around its base turning freely thereon, the inner cone thereof, substantially in the manner and for separate purposes as set forth.

70,660.—HORSESHOE.—Jacob Wheeler, Huntington, Ind.
I claim the combination of the hinged tie or brace, D, with the hinged quarter, B.

70,661.—PITMAN-HEAD AND CRANK-WRIST CONNECTION.—Wm. N. Whiteley, Springfield, Ohio.
I claim, 1st, The pitman-head box, F, constructed with two bearings, whose axes are at right angles to and cross each other, substantially as and for the purpose set forth.
2d, In combination with the pitman-head box, F, the hollow wrist-pin, g, 6, provided with the escape hole, D, so as to form a reservoir for a liquid lubricant, within the journal, substantially as set forth and described.

70,662.—MACHINE FOR PEGGING BOOTS AND SHOES.—David Whittemore, North Bridgewater, Mass.
I claim, 1st, The lever, V, with its bent slot, U, and pawl, a, in combination with the bar, T, and the ratchet, on the surface of the feed-sleeve, all constructed and operating substantially as described.
2d, The slide, S', operating as described, and worked by lever, L', substantially in the manner and for the purpose specified.
3d, The supplemental pawl, i, engaging the ratchet wheel, m, when the pawl, e, is disengaged from it, for the purpose of preventing the peg-wood from slipping backward while the feed roll is freed from the action of pawl, c, and the knife is severing the peg, thus aiding in imparting steadiness and precision to the movements of the peg-wood, as set forth.
4th, The knife, g, constructed arranged and operating in the manner described.

70,663.—BED-BOTTOM.—J. W. Wilder, (assignor to himself and E. Butterick), New York City.
I claim the spring-bed bottom, constructed as described, consisting of the rectangular frame, A, the slats, a, b, packed with metallic tubes containing springs, d, which support the slats, e, having rounded heads upon which the flexible slats of the rectangular frame, D, rest, substantially as described for the purpose specified.

70,664.—SHRINKING TIRE.—Levi Wilkinson, New Haven, Ct.
I claim the combination of the block, A, and brackets, B and C, with the screws, c and d and g and h, when the whole are constructed and fitted to produce the result, substantially as herein described and set forth.

70,665.—CLOTHES-LINE HOLDER.—J. L. Wilcox, Preble, N. Y.
I claim the endless clothes-line, M, in combination with the pulleys, d, lever, i, and ratchet, e, and pawl, g, as described, and for the purpose set forth.

70,666.—ELEVATED RAILROAD.—Wm. H. Williams, Little Falls, N. Y.
I claim, 1st, The elevated railroad consisting of a track or tracks suspended over a street by means of towers, A, and cables, H, substantially as described.
2d, The supporting towers, A, constructed as above described, namely, by combining and arranging together substantially as shown, the transverse arches, E, and the compound diagonal arches, F, said arches all springing from the columns, B.
3d, The hollow connecting beams, G, which tie the arches to each other in combination with the supporting cables, H, which pass through said beams, so that they are protected and also held in place by the beams, substantially as shown.

70,667.—WASHING MACHINE.—Geo. L. Witsil, (assignor to Thomas E. Hauberger), Philadelphia, Pa.
I claim the stelliform case, with radiate sides, C, and door, D, turning upon a tubular journal, G, and having diagonal internal ribs, I, the several parts being constructed and arranged in relation to one another substantially as set forth.

70,668.—EXTENSION TABLE.—F. R. Wolfinger, Chicago, Ill.
I claim, 1st, The end rails, C, formed in three or four parts, c1 c2 c3 c4, in combination with the central folds, D, substantially as herein shown and described.
2d, The combination of the narrow strips or leaves, I, with the central parts, c2 c3, of the end rails, C, substantially as herein shown and described.
3d, The central strips, J, having the legs, K, in combination with the central parts, c2 and c3, end folds, E, and central folds D, substantially as described for the purpose specified.
4th, The narrow leaves, I, resting upon the parts, c2 c3, in combination with the leaves, G1 G2 G3 G4, as herein set forth for the purpose specified.
5th, The arrangement of leaves, G1 G2 G3 G4, and narrow strips, I, whereby the leaves, G2 G3, are folded upon the end rails, G, having the leaves, G2 and strip, I, in the same horizontal plane to form the top of the table, and the leaf, G1, folding down over the ends of the said leaves, G3 G4, as herein shown and described.
6th, The leaf, G2, hinged in an elevated position upon the side rail, B, and supporting the leaves, G1 and G3, the outer end of the leaf, G1, adjusted by the spring catch, H, as and for the purposes specified.

70,669.—MACHINE FOR MAKING BRICK.—Daniel Woodbury, Minneapolis, Minnesota.
I claim a machine for making brick, constructed and operating substantially as herein shown and described.

70,670.—WHEEL HUB-BOX.—Elbridge G. Woodside, San Francisco, Cal.
I claim, 1st, Surrounding the box, A, with an elastic packing, B, substantially as described, for the purpose set forth.
2d, Also, in combination with the box, B, the end packings, c and d', substantially as described, for the purposes set forth.

70,671.—PREPARATION OF FERTILIZERS.—William S. De Zanz, Geneva, N. Y.
I claim the application of slags, of reducing and smelting furnaces, as a fertilizer, using the slags and adapting them for this purpose, substantially as described in the above specification, viz., in a finely pulverized condition also in combination with acids and alkalis, and also in intimate admixture with certain ammoniacal compounds, above specified.

70,672.—FIRE-ALARM TELEGRAPH.—J. M. Fairchild (assignor to himself, J. K. Bunney, and J. M. Townsend), New Haven, Conn. I claim, 1st, the arrangement of the sliding partition, F, the piston, G, and partition, D, with the box, A, and combined with a signalling apparatus, substantially in the manner herein set forth.

2d, Operating the key of telegraphic instruments by means of a mechanism connected therewith, but perfectly insulated therefrom, substantially in the manner herein set forth.

3d, The arrangement described of the pins or projections, a, b, c, etc., upon the wheel, H, when constructed so as to be adjustable to different signals, substantially as set forth.

4th, The arrangement of the lever, W, so as to arrest the movement of the wheel, R, at each revolution, as an auxiliary purpose described.

70,673.—MECHANISM FOR OPENING AND CLOSING TELEGRAPHIC CIRCUITS.—J. M. Fairchild (assignor to himself, J. K. Bunney and J. M. Townsend), New Haven, Conn. I claim, 1st, the arrangement of the two spindles, J, K, in connection with their respective wires, upon the non-conducting plate, G, so as to open and close the circuit, substantially as set forth.

2d, The arrangement of the groove cam wheel, C, and the lever, F, combined with the spindles, J, K, so as to open and close the circuit by the turning of the wheel, C, substantially as set forth.

70,674.—PIGEON-HOLES FOR POST-OFFICES, ETC.—Henry G. Pearson, New York city. I claim the employment of a perforated or open work shelf for the reception of letters, packages, etc., as and for the purposes designe.

I also claim the same when applied as to be readily removable, as and for the purpose described.

REISSUES.

2,794.—FIRE-PROOF CEILING AND ROOFS.—Joseph Gilbert, Philadelphia, Pa. I claim, 1st, a ceiling composed of girders, corrugated plates and socket bearings adapted to the said plates, and supported by the girders, all substantially as described.

2d, In combination with the above I claim the brackets or blocks, X, X, applied substantially in the manner and for the purpose described.

2,795.—DITCHING MACHINE.—Henry C. Ingraham, Tecumseh, Mich. I claim, 1st, The combination of the double flanged wheel, A, and belt, Q, which, revolving in the same direction, will carry the earth loosened by the plow over the wheel, substantially as set forth.

2d, Attaching the right and also the plow frame to the axis of the wheel, A, substantially as and for the purpose set forth.

3d, The combination of the double mold board plow, H, and single mold board, J, J, with the belt, Q, and double flanged wheel, B, substantially as set forth.

4th, Hinging the main frame, C, to the tongue irons, substantially in the manner and for the purpose set forth.

5th, The arrangement of the double flanged wheel, A, and clute, F, when the latter is so constructed as to serve also as a scraper for clearing the earth from the wheel, substantially as set forth.

6th, The arrangement of the segments, M and N, frame, V, and lever and catch, H, substantially as set forth.

7th, The combination of the lever, R, rod, T, bent arm, K, and wheel, L, for the purpose of adjusting the depth of the plow, H, substantially as set forth.

8th, The combination of the lever, O, and pawl attached to the frame, C, and segment, U, for raising the wheel, A, and the other mechanism, substantially as set forth.

9th, The combination of the double flanged wheel, A, endless belt, Q, tightening pulley, X, and pulley, I, arranged to operate substantially as set forth.

2,796.—METHOD OF OBSTRUCTING ICE IN RIVERS AND HARBOURS.—Peter Van der Meer, New York city. I claim the employment of removable ice obstructors, arranged to operate substantially as described.

DESIGNS.

2,818.—BURIAL CASKET.—Benj. R. Bacon, Philadelphia, Pa. I claim the design of a casket, substantially as shown and described.

2,819.—TRADE MARK.—John T. Bailey (assignor to himself and James Cascarden), Philadelphia, Pa. I claim the design of a trade mark, substantially as shown and described.

2,820.—CANS.—Christian Barry, Philadelphia, Pa. I claim the design of a can, substantially as shown and described.

2,821.—REFLECTOR.—Elizabeth Himes, New Albany, Ind. I claim the design of a reflector, substantially as shown and described.

2,822.—MELODEON-CASE.—John R. Lewis, New Haven, Ct. I claim the design of a melodeon case, substantially as shown and described.

2,823.—MOULDINGS.—Edward Martin, Burlington, Vt. I claim the design of a moulding, substantially as shown and described.

2,824.—SMOKING PIPE.—Wm. Masters, New York city. I claim the design of a smoking pipe, substantially as shown and described.

2,825.—ORNAMENTAL TABLE GLASSWARE.—H. Sellers McKee, Pittsburg, Pa. I claim the design of ornamental table glassware, substantially as shown and described.

2,826.—COFFIN HANDLE.—James S. Ray, East Haddam, Ct. I claim the design of a coffin handle, substantially as shown and described.

2,827.—TRADE MARK.—Jas. N. Schoonmaker, Pittsburg, Pa. I claim the design of a trade mark, substantially as shown and described.

2,828.—BAND SLIDE.—Edward Sealy, Newark, N. J. I claim the design of a band slide, substantially as shown and described.

2,829.—PENDANT FOR HAT BAND.—Edward Sealy, Newark, N. J. I claim the design of a pendant for hat band, substantially as shown and described.

2,830.—OIL CLOTHS.—Wisner H. Townsend, New York city. NOTE.—Nothing is more indicative of the progress of inventions than the long list of patents reported in these columns from week to week. The increase in the number of applications for patents this year, over any previous one, is very great. Through the agency of this office alone, SEVENTY-FIVE PATENTS were issued last week, and are reported above. During the month of October, we had the pleasure of forwarding official circulars of allowance of their patents to 351 inventors, whose cases were conducted through the Home Department of the Scientific American Patent Agency, beside a large number through our Washington Branch Office. With more than twenty years experience, and a large business, which enables us to bring to our assistance a large number of first-class mechanics, some of which have been with us for more than a score of years, we are enabled to do the work of preparing applications for patents cheaper and more expeditiously than can be done elsewhere.—Eds.

PENDING APPLICATIONS FOR REISSUES.

Application has been made to the Commissioner of Patents for the Reissue of the following Patents, with new claims as subjoined. Parties who desire to oppose the grant of any of these reissues should immediately address MUNN & Co., 37 Park Row, N. Y.

23,703.—MACHINE FOR MAKING DRAIN PIPE.—Bradford S. Pierce, New Bedford, Mass., and Mason K. Pierce, Woodstock, N. Y. Dated April 19, 1859. Reissue No. 1,877. Dated Feb. 28, 1865. Application for Reissue received and filed Oct. 24, 1867.

1st, We claim a mold consisting of a case capable of being properly secured around the material to be set, and also a mold, and being freed from the pipe when the molding is completed, in combination with a core and also with a core socket, having a provision for freeing the socket or pipe, or both, from the core, the whole operating substantially as set forth.

2d, A mold in which the core socket is made separate and distinct from the other parts, and so formed and so combined with such other parts that it is capable of being connected with the mold is ready for use, and of being continuously kept connected with them during the entire process of molding and finishing the pipe, substantially as and for the purposes described.

3d, The arrangement of the mixing apparatus and of the core-relieving devices above the platform which conveys the molds in the manner and for the purpose substantially as specified.

4th, The combination of the core socket with the revolving disk, which receives the core and the mold, when the disk contains a provision for enabling the socket or pipe, or both to be freed from the core, the whole operating substantially as described.

9,531.—SCYTHE FASTENING.—Pinckney Frost, Springfield, Vt. Dated Jan. 11, 1853. Reissue No. 524. Dated Feb. 9, 1858. Application for Reissue received and filed Oct. 26, 1867.

I claim the loop bolt provided with the groove, b, and the hook or loop, e, in combination with the set ring, and also provided with a groove, a, all constructed and arranged substantially as and for the purpose set forth.

40,695.—THRASHER.—David Lippy and Jas. Bradley, Mansfield, Ohio. Dated Nov. 24, 1863. Application for Reissue received and filed Sept. 19, 1867.

We claim the cranks, c, c, c, of shafts, F, and bars, b, b, b, all arranged and operating substantially in the manner and for the purpose set forth.

63,755.—COMB.—Jas. H. Briggs, Brooklyn, N. Y. Dated Oct. 25, 1867. Application for Reissue received and filed Oct. 23, 1867.

I claim the longitudinal flanges, b, on the metallic part, B, constructed as described, and fitting over longitudinal shoulders, a, in the part or parts, A, as herein set forth for the purpose specified.

57,132.—WASHER FOR BOLTS.—Gibbons G. Hickman, Frank Hickman, and R. L. Baldwin, Coatsville, Pa. O. P. Baldwin, Brooklyn, N. Y. C. J. Baldwin, and J. C. Baldwin, Philadelphia, Pa. assignors to G. G. Hickman, aforesaid, and said F. Hickman, R. C. and O. P. Baldwin, and said J. C. Baldwin, assign their right to Hamilton Graham. Application for Reissue received and filed Oct. 16, 1867.

1st, I claim a bolt having a groove, furrow, depression, or other equivalent provision, to receive or hold a projection or lip on the washer, so as to prevent the latter from turning on the bolt, substantially as and for the purpose set forth.

2d, Providing the washer with a lip or lips to be bent into a groove in the bolt, either with or without the lip, to be bent against the side of the nut according to the circumstances of the case, substantially as and for the purpose described.

64,028.—COOLING MILK.—Watson Peck, Babcock's Grove, Ill. Dated April 23, 1867. Application for Reissue received and filed July 16, 1867.

I claim the combination of a pipe, B, provided with a receiver, C, or its equivalent, with a cooling vat, A, arranged to operate substantially in the manner and for the purposes herein set forth.

69,746.—WINDOW-SASH FASTENER.—Robert G. Arnold, Rochester, N. Y. Dated Oct. 15, 1867. Application for Reissue received and filed Oct. 1, 1867.

I claim a sash lock composed of bolt, H, tumbler, G, and notched plate, the whole combined and arranged substantially as and for the purposes set forth.

1,770.—METHOD OF SETTING THE LOGS IN SAW MILLS.—Denison Lane, Montpelier, Vt. Dated July 9, 1861. Application for Reissue received and filed Oct. 21, 1867.

1st, I claim the employment or use of the ratchets, H, I, J, K, having teeth at different distances apart, in connection with the adjustable dog, P, placed on the rod, O, which is provided with retaining pins, h, the ratchet being placed on the shaft, F, having pinions, G, G, at its ends, which gear into racks, D, D, attached to bar, C, all being arranged as and for the purpose set forth.

2d, The bar, C, when provided with projecting uprights or side supports or rests, h, h, for the log, substantially as described and for the purposes set forth.

3d, The logs, l, arranged in imposts, K, K, of the bar, C, substantially as described and for the purpose set forth.

4th, The side supporters or rests for the log on the setting-up bar or side, when such rests, either one or more, are provided with a means of setting off the log, either more or less therefrom, substantially as described for the purpose set forth.

5th, The pendant, A, attached to setting up lever, N, in combination with an incline plane, substantially as and for the purpose described.

22,310.—NUT MACHINE.—The Union Nut Machine Company, Unionville, Conn., assignees of Julius B. Savage. Dated Dec. 14, 1853. Application for Reissue received and filed Oct. 18, 1867.

1st, We claim the combination of a shears with a table transferer and edge swages, substantially as described.

2d, The combination of a shears with both face and edge swages, by means of a supporting table and transferer, substantially as specified.

3d, The combination of edge swages with face swages by means of a table and transferer, substantially as described.

4th, The combination of face swages with a transferer supporting table, and a punch, substantially as described, and these in combination with edge swages, substantially as set forth.

5th, The combination of a shears, a punch supporting table, edge swages, face swages, and transferers, the combination being substantially such as described.

6th, The arrangement, in succession, of first, a shears, second, swages, and third, a punch, substantially as herein described, so that a blank is first cut off, then swaged, and finally punched, as set forth.

7th, In combination with a punch, I claim edge swages acting to center the blank to be punched while resting upon a table, the combination being as described.

8th, In combination with edge swages, substantially such as specified, I claim a supporting table upon which the nut rests, while subjected to the action of such swages, the combination being substantially such as described.

9th, I claim, in combination with a supporting table, a transferer with a notched or angular acting face, operating both to turn and move a blank, as described.

19,408.—WHEEL AND AXLE ATTACHMENT OF HORSE-POWER, ETC.—Abram Wright and George F. Wright, Clinton, Mass., assignees by mesne assignments of George E. Burt and George F. Wright. Application for Reissue received and filed Aug. 23, 1867.

We claim the attachment of a shaft, or iron axle, to be applied to the revolving platform of treadmill or endless chain horse-power, and secured to the shaft or axle by a bolt and nut to the link or cast solid upon it, constituting a member of the same.

59,538.—COFFER HULLERS.—Albert Angell, Newburgh, N. Y. Dated Nov. 13, 1866. Application for Reissue received and filed Oct. 19, 1867.

1st, I claim the application to use without strippers or rubbers for hulling or cleaning coffee or other articles, or their equivalents, for pressing the strippers or rubbers against the coffee or other articles, substantially as described.

2d, The combination with the roughened or serrated cylinder, B, of independent spring strippers, D, arranged within a hollow segment or case that partly incloses the cylinder, substantially as specified.

3d, The divided spring strippers, D, constructed with roughened or serrated ends, and used by side, and also in a series, one in advance of the other, within a case, C, for operation in combination with a serrated or roughened cylinder, B, substantially as described.

65,018.—STEAM-GENERATOR GAGE COCK.—Thomas Shaw, Philadelphia, Pa. Dated May 21, 1867. Application for Reissue received and filed Oct. 11, 1867.

I claim the construction and arrangement of the valve whereby to control the pressure, substantially as set forth.

NOTE.—The above claims for Reissue are now pending before the Patent Office and will not be officially passed upon until the expiration of 30 days from the date of filing the application. All persons who desire to oppose the grant of any of these claims should make immediate application to MUNN & Co., Solicitors of Patents, 37 Park Row, N. Y.

PATENT CLAIMS.—Persons desiring the claim of any invention, patented within thirty years, can obtain a copy by addressing a note to this office, giving name of patentee and date of patent, when known, and enclosing \$1 as a fee for copying. We can also furnish a sketch of any patented machine to accompany the claim, at a reasonable additional cost. Address MUNN & CO., Patent Solicitors, No. 37 Park Row, New York

RECEIPTS.—When money is paid at the office for subscriptions, a receipt for it will be given; but when subscribers remit their money by mail, they may consider the arrival of the first paper a bona-fide acknowledgment of their funds.

CITY SUBSCRIBERS.—The SCIENTIFIC AMERICAN will be delivered in every part of the city at \$1 a year. Single copies for sale at all the News Stands in this city, Brooklyn, Jersey City, and Williamsburg, and by most of the News Dealers in the United States

Advertisements.

The value of the SCIENTIFIC AMERICAN as an advertising medium cannot be over-estimated. Its circulation is ten times greater than that of any similar journal now published. It goes into all the principal libraries and reading rooms of the world. We invite the attention of those who wish to make their business known to the annexed rates. A business man wants something more than to see his advertisement in a printed newspaper. He wants circulation. If it is worth 25 cents per line to advertise in a paper of three thousand circulation, it is worth \$2.50 per line to advertise in one of thirty thousand.

RATES OF ADVERTISING.

Back Page, 75 cents a line.

Back Page, for engravings, \$1.00 a line.

Inside Page, 40 cents a line.

Inside Page, for engravings, 60 cents a line.

BOILER FELTING SAVES TWENTY-FIVE PER CENT OF FUEL. JOHN ASHCROFT, 21 1/2 JOHN ST., NEW YORK.

PAINTER, GILDER, and VARNISHER'S COMPANION.—Tenth Edition, with important additions, just ready, price \$1.50 by mail, free of postage. HENRY CAREY BAIRD, Industrial Publisher, 406 Walnut st., Philadelphia, Pa.

FABRICATION OF VINEGAR. Prof. H. DUSSAUCE, Chemist, is ready to furnish the most recent methods of manufacturing vinegar by the slow and quick processes, with and without alcohol, directly from corn. Also, process to manufacture vinegar and acetic acid by distillation of wood. Methods of assaying vinegars. Address New Lebanon, N. Y.

SCALE IN STEAM BOILERS.—The Iron-ton Rolling Mills, Ohio, say:—“We are well pleased with your Powder, and think it fully answers the purpose intended.”—Oct. 28, 1867.

H. N. WINANS' Anti-Incrustation Powder, 11 Wall street, New York.

ASHCROFT'S LOW WATER DETECTOR or will insure your Boiler against explosion. JOHN ASHCROFT, 20 John St., New York.

HOUSEKEEPERS DO YOUR OWN PAINTING. Full directions for mixing and applying Paints and Varnishes will be found in Painter, Gilder, and Varnisher's Companion, price \$1.50 by mail, free of postage. HENRY CAREY BAIRD, Industrial Publisher, 406 Walnut st., Philadelphia.

THE SUBSCRIBER WISHES TO CORRESPOND with some manufacturers who can make the wood and iron work for his Patent Dish Washer and Dryer—iron work mostly light gearing. Size and description furnished on application to J. LOMAS, Fishkill Landing, N. Y.

DEATH ON BURGLARS. E. F. Mallory's Improved Burglar Alarm patented Sept. 3, 1867. Something everybody needs, a safe, reliable, and simple, ornamental, durable and effective. Sent postpaid on receipt of 75 cents. State and County Rights for sale. can be obtained almost for a song! a good chance for a live man who wishes to make money. Full particulars free. Address E. F. Mallory, Springfield, Pa., sole proprietor and manufacturer.

VALUABLE PATENT RIGHT FOR SALE.—The weighing and measuring cup, patented Nov. 1867. An article long needed by every family in the land. Thoroughly practical, extremely simple, yet very accurate, and so cheap as to be within the reach of all; by means of which house-keepers can prepare the ingredients for pastry, preserves, etc., and that too by a utensil useful for many other purposes, simply a tapper. Rights for the Eastern, Southern, and Western States, for sale at reasonable rates. Reliable agents wanted to introduce the “Cup” everywhere. Jobbers supplied to any extent required. Samples furnished for 50 cents. For further particulars address GOODER, MILLER & MORFORD, Patentees and Manufacturers, No. 658 Franklin street, Philadelphia.

COACH PAINTERS will find Practical Directions for Coach Painting and Varnishing in tenth edition of Painter, Gilder, and Varnisher's Companion, now ready, price \$1.50 by mail, free of postage. HENRY CAREY BAIRD, Industrial Publisher, 406 Walnut street, Philadelphia.

WILL SELL ENTIRE OR STATE RIGHTS for my Hay Gatherer, illustrated in No. 19, Scientific American. Every farmer needs one. Address 19 1/4 JAS. SWINERTON, Marion, O.

DUNHAM'S Improved Nut-Forging Machine is unequalled in simplicity and durability, and the most perfect working machine in use. Rights for sale. Address [15 8 1/2] GEO. DUNHAM, Unionville, Conn.

PUBLIC SALE OF VALUABLE FOUNDRY, Machine, and Stove Works, Nov. 21, 1867, with water power, situated in Frederick, Md. For plat description and list of patterns, apply to M. C. YOUNG, Frederick, Md.

A PORTABLE RAILROAD.—The advantages of the patented Portable Railroad are manifold. It saves both time and money; it is particularly adapted for excavating and filling, constructing railroads, bridges, mills, levees, etc., for working in mines, quarries, brick yards, and great bogs. Sold of sections, 20-foot sections, from one to a thousand. Also, Cars suitable for the work to be done. Contracts for excavations, etc., promptly attended to. For particulars or pamphlet, address box 222, Mechanics Exchange, or A. P. ELLER & CO., New Brighton, Richmond county, N. Y.

THE REPEATING VEST-POCKET Light or Match, without any brimstone, in elegant silvered cases, about the size of a Lady's watch. The last article of the kind, are selling, giving instantly a clear, beautiful flame; will light fifty times in succession without replenishing. The material is cheap and perfectly safe. Sample case, filled with lights, sent by mail to any address on receipt of 65 cents. Liberal inducements to agents. Address L. F. STANDISH, Springfield, Mass.

PAINTER, GILDER, AND VARNISHER'S COMPANION, Tenth Edition, contains the best practical directions for Glass Staining, Sign Painting, Imitation of Woods, Marbles, Tortoise Shell, etc., price \$1.50 by mail, free of postage. HENRY CAREY BAIRD, Industrial Publisher, 406 Walnut st., Philadelphia.

The very highest prize, THE CROSS OF THE LEGION OF HONOR, was conferred on the representative of the Grover & Baker Sewing Machines, at the Exposition Universelle, Paris, 1867, thus attesting their great superiority over all other Sewing Machines. Sales-rooms 495 Broadway, New York.

TO OWNERS OF STEAM BOILERS.—SMITH'S PATENT FUSIBLE SAFETY VALVE or Plug is a protective against the explosion of Steam Boilers, by either low water or high steam, and has been extensively introduced in England, with the most satisfactory results. For further information apply to C. W. COPELAND, No. 171 Broadway, New York.

PATENT IMPROVED ENDLESS OR BAND SAW MACHINES, where saw breaking is entirely prevented; they run one-third faster than any other band saw. Also, a narrower saw, than usual, can be used and produce from three to five times more work than any of the best up-and-down saws in use; save much power and stock. Refer nees can be given from almost any part of the country. Machines for cutting boards are in process of building. We also manufacture well designed oval and other wood turning lathes, double adjustable spindle boring machines, circular saws, hand drills, snatching pulleys, flanges, etc. FIRST & PRYBELL, 175 and 177 Rector st., New York city.

A LOT OF MACHINERY FOR SALE VERY CHEAP.—has been used about one year, as good as new—price.....\$900 One 30 horse Engine, new, price.....1,200 One 40 horse Engine, new, price.....1,400 One 12 horse Engine, new, price.....400 One 10 horse Engine, new, price.....350 One 8 ft. Planer—planes 32 inches square—new, price 650 One 7 feet Planer—planes 28 inches square—second hand, price.....450 One 4 feet Planer, second hand, price.....310 One 1 1/2 ft. Engine Lathe, 24 inches swing, second hand 500 One 6 ft. Engine Lathe, second hand, price.....450 One 8 ft. Engine Lathe, second hand, price.....700 One 11 ft. Engine Lathe, new, swngs 48 inches, price 700 One Large Lathe, 25 feet bed, swngs 6 feet, Wood & Light makers, nearly new, price.....2,700 Two No. 2 Peck's Patent Drop and Lifter. One small Swing Table Drill. Several Steam Boilers, both new and second hand, which we will sell very cheap.

One No. 2 Mackenzie Patent Cupola—has not been used over three months.

One No. 4 Mackenzie Patent Cupola—has not been used six times—which we will sell for half price.

We wish to clear out the above lot of machinery, and have cut our prices very low, by person wishing to buy will do well to call and examine. BIGELOW MANUFACTURING CO., New Haven, Conn.

PROPOSALS FOR THE SALE OR LEASE OF THE PROPERTY OF THE BALTIMORE WROUGHT IRON PIPE AND TUBE COMPANY, are invited until November 20th, 1867.

The works are large and fitted up with the most approved machinery for the manufacture of Gas Pipe and Boiler Flues, Flues with Foundry, Machine Shop, and Galvanizing Shop attached.

Its reputation is established, and the demand larger than the supply. Plans of the premises, and full particulars, may be had on application to the Secretary, at No. 51 Holliday st., Baltimore, Md., or to H. W. J. DAVIDSON, 20 1/2 No. 200 Water st., New York.

ROLLING MILL MACHINERY AND CASTINGS. Address [19 1/2] GREENLEAF & CO., Indianapolis, Ind.

500 Agents Wanted Immediately to sell Richmond & Hoster's celebrated Silver Plating Fluid. Our Agents are making \$5 to \$10 dollars per day. Address RICHMOND & HOSTER, Seneca Falls, N. Y.

PAINTER, GILDER, AND VARNISHER'S COMPANION.—Tenth Edition, with important additions, just ready, price \$1.50 by mail, free of postage. HENRY CAREY BAIRD, Industrial Publisher, 406 Walnut st., Philadelphia.

FOR SALE.—Mineral Land.—Missouri Pine and Mineral Land. For sale, my one-third interest in a tract of 4,000 acres, with two Steam Saw Mills and Lead Mines now in course of development. Send for description and map. THOS. ALLEN, 722 South Fourth street, St. Louis, Missouri.

LABORATORY OF INDUSTRIAL CHEMISTRY, directed by Prof. H. Dussauce, Chemist. Addresses and consultations on chemistry applied to arts and manufactures, metallurgy, agriculture, etc. Plans of factories, drawings of apparatus, informations on chemical fabrications, Analyses of every kind; New Lebanon, N. Y.

WANTED.—PERSONS OUT OF EMPLOY, Male or Female, to sell an article that is wanted in houses, stores, offices, factories vessels, steamboats, etc. In fact, wherever there is Paint to clean or Grease and oil to be extracted, there

THE MAGIC CLEANSING CREAM is wanted. It does the work so quickly and nicely that it looks to a stranger like a sleight-of-hand operation. Send a red stamp and receive “THE Echo” free for one year. Address J. J. PIKE & CO., Chelsea, Mass.

FACTORY AND MACHINERY FOR SALE.—A three-story Factory, built in 1866, on the Niagara Falls Railroad 5 miles from New York, suited for any kind of business and fifty yards from the depot, one of the best water powers in the State. Also, one Pratt & Whitney Engine Lathes, 12-inch swing, taper attachment. One 3-foot Planer, same make. One Stiles, No. 3 Power Machine Press. One Index Machine, Chicago pattern. MILLING MACHINES, Drill Lathes, Four-Square Drill Chucks, Cutters, Small Tools, Portable Forges, Blacksmith Tools, Fishling Vices, etc., etc., have been used but a few months, and must be sold. J. M. HOPKINS, Burrville, Conn.

FOR SALE CHEAP.—A Fifty-six inch inserted tooth Circular Saw, made by Woodruff & McFarlin, Cincinnati, Ohio. Address H. A. & S. G. WRIGHT, Detroit, Mich.

ENGINE LATHES, Hand Lathes, Foot Lathes, and Tapping Machines, of the best design and first-class workmanship. Also, special machinery, small tools, etc. Patent articles made to order. 18 5 1/2 FLATHER & CO., No. 11 River st., Nashua, N. H.

WANTED.—A few experienced salesmen on commission, or to take an interest in four new inventions, and sell the rights or find manufacturers on royalty for the same. For particulars address JOHN H. BARRINGER, JR., Hillsboro, Montgomery county, Ill.

PLANER AND MATCHER for \$350, a good, new machine. S. C. HILLS, 12 Platt st. N. Y.

JUST PUBLISHED.—THE INVENTOR'S and MECHANIC'S GUIDE.—A new book upon Mechanics, Patents, and New Inventions. Containing the U. S. Patent Laws, Rules and Directions for doing business at the Patent Office; 112 diagrams of the most mechanical movements, with descriptions; the Condensing Steam Engine, with engraving and description; How to Invent; How to Obtain Patents; Hints upon the Value of Patents; How to sell Patents; Forms for assignments; Informations upon the Rights of Inventors, Assignees and Joint Owners; Instructions as to Interferences, Reissues, Extensions, Caveats, together with a great variety of useful information in regard to patents, new inventions and scientific subjects, with scientific tables, and many illustrations. 108 pages. This is a most valuable work. Price only 25 cents. Address MUNN & Co., 37 Park Row, N. Y.

MESSEURS LES INVENTEURS.—Avis important. Les inventeurs non familiarisés avec la langue Anglaise, et qui préféreraient nous communiquer leurs inventions en Français peuvent nous adresser dans leur langue natale. Envoyez nous un dessin et une description concise pour notre examen. Toutes communications seront reçues en confidence. MUNN & CO., Scientific American Office, No. 37 Park Row, New York