

tially of the rolls, B D, the standards, A A', with their movable jaws, F, the spring, H, and regulating screw, G, arranged and operating substantially as described.

[This stove is applicable to all varieties of heating purposes. Its advantages are economy of fuel, large area of heating surface, and protection of the parts from too severe action of the fire.]

35,632.—S. B. Sexton, of Baltimore, Md., for Improvement in Heaters :

I claim, first, The air heating chamber, F, located above the fire pot, between the chambers, G G', communicating in front with the interior of the room and at the back with a chamber, I, from which heated air is conducted to apartments above the said parts being arranged to operate in the manner and for the purposes specified.

Second, The employment of the air-heating chamber, F, located as set forth and open both at front and back, as a means of producing a free circulation of air in contact with the top of a covered fuel supply chamber, E, of any suitable construction.

Third, The combination of the chamber, F, stoppered aperture, N, flue, D, and covered opening, e, of the fuel supply chamber, all arranged in the manner and for the purposes specified.

35,633.—Pierpont Seymour, of East Bloomfield, N. Y., for Improvement in Seeding Machines :

I claim the arrangement and combination of the fixed, attaching jaw, B, movable, adjusting jaw, C, and adjustable supporting guide bars, D D D, substantially in the manner and for the purpose specified.

35,634.—Jonathan Smith, of Tiffin, Ohio, for Improvement in Grain Drills :

I claim, first, In combination with the spring, f, and curved neck, S, of the toothed and combined blades, H, placed between the bars, forming drag bar, a, and provided with two or more holes, for the purpose of adjusting the position of drill tooth or boot, b, as and for the purpose set forth.

Second, I claim, in combination with a seed drill boot, held in position or operated by a spring, providing said boot with suitable projections, and such projections with suitable holes and pins to retain the boot in position when in use, in case said spring should by any means be rendered inoperative, as and for the purposes set forth.

37,635.—William Southworth, of Newcastle, Maine, for Multiplying Camera :

I claim, first, The device for moving the lenses, as described, namely, the raising or lowering the lenses by means of the holder, B, and catches, F.

Second, Moving the lenses from one side for the camera, C, to the other, to stops, s s, by means of the slide, A.

Third, The manner of excluding the light from the sensitive plate by the use of the partitioned box or diaphragm, D.

Fourth, The manner of constructing the same, so that it can be partially drawn out or slid back at pleasure.

35,636.—J. H. Thomas and P. P. Mast, of Springfield, Ohio, for Improvement in Seed Drills :

I claim the plate, B, provided with the projections, c, and loops, g, the whole being cast in one piece, in the manner and for the purpose set forth.

35,637.—W. B. Treadwell, of Albany, N. Y., for Improvement in Breech-Loading Ordnance :

I claim the employment of the gun with concave breech in connection with the convex breech piece, the ball, D, and the projecting pieces, C C, the several parts being constructed and operating in the manner and for the purpose set forth.

35,638.—C. D. Van Allen, of Syracuse, N. Y., for Improvement in Churns :

I claim the combination and arrangement of the floats, B B, the partitions, F F, the regulating slide, C, and the butter tray, H, when used for the purposes specified.

35,639.—G. Frink, of New York City, and L. Heitkamp, of Brooklyn, N. Y., for Machine for Cutting Books in the Round :

We claim a machine for cutting the fronts of books in the round, consisting of a rocking knife suitable for cutting the round or concave of the front edge of the book in combination with a press suitable for holding the book and presenting it to the action of the knife, substantially as described.

Second, We claim, in combination with a press suitable for holding the book, a convex polishing device, substantially as described for the purpose of polishing the fronts of books in the round, as set forth.

Third, We claim, in combination with a press suitable for holding a book, and presenting the front edge to be cut a knife edge moving in the desired curve of the round, having combined with it a polishing surface, substantially as described.

Fourth, We claim, in combination with a press suitable for holding and presenting the front edge of the book to be cut, the endwise motion of the knife and polishing device, whether combined together, or separate from each other, as described, when constructed and arranged to move in the curve necessary to cut and finish the front of the book in the round, substantially as described.

Fifth, We claim, in combination with a press suitable for holding the book, a knife, the cutting edge of which travels in the desired curve of the round, substantially as described.

Sixth, We claim, in combination with a press suitable for holding a book and presenting it to be cut, and a knife having a cutting edge moving in the desired curve of the round, a cutting board, or other suitable surface, for the knife to cut against, substantially as described.

35,640.—W. W. Virdin, of Baltimore, Md., for Improved Rotary Engine :

I claim the chambers, D, when formed partly in the cylindrical case and partly in the drum, and when operating in the manner, substantially as described.

I also claim the peculiar arrangement of the steam passages, a, with respect to the annular or ring steam chest, C, and pistons or pistons, l and m, substantially as specified.

I also claim the grooved annular packing ring, f, as and for the purpose set forth.

I also claim the wheel, J, when constructed and operating, substantially as specified.

35,641.—William Vogt, of Louisville, Ky., for Mode of fastening Shirt Studs :

I claim the application of the spring and lever to shirt buttons, composed of two parts, thereby preventing them from getting lost, and facilitating the fixing of them.

35,642.—W. B. Wadman, of Boston, Mass., for Improvement in Coal Sifters :

I claim the arrangement of the square projection, b, on one, and the pivot, a, on the other side of the handle, E, in combination with the square socket, c, in the center of the sieve, F, and with the bridge, D, in the bottom of the barrel, A, as and for the purpose specified.

I also claim the conical cap, d, over the socket in the center of the sieve, E, as and for the purpose described.

35,643.—Sylvanus Walker, of Boston, Mass., for Improved Clothes Wringer :

I claim the frame, A, constructed of two forked side pieces, and provided with curved flanges or guards, d, d, and ears or lugs, g, g, in combination with the screws, E E, passing through the ears or lugs, f, f, of the sockets or bearings, D D, of the upper roller, C, through the ears or lugs, g, g, of the frame, A, and through the springs, F F, underneath the ears or lugs, g, g, all arranged as and for the purpose specified.

35,644.—Job T. Williams, of Philadelphia, Pa., for Improvement in Lamp Reflectors :

I claim, the reflector, composed of the outer concave rim, a, and central convex projection, b, and having radial ribs or corrugations, the whole being constructed and arranged, as and for the purpose set forth.

35,645.—John E. Wilson, of Baltimore, Md., for Improvement in Apparatus for Defecating Liquids :

I claim, the combination of the reservoir, A, receiver, B, and filter, C, with the suction and discharge pipes, g, h, force pump and conducting faucet, j, all arranged and operating in the manner explained, to defecate or cleanse hot or cold liquids, by forcing them in a continuous circuit without contact with the external air.

[This invention consists in a certain construction of apparatus, in which is combined a pump, whereby the liquid may be impelled or forced through any suitable filtering medium in a continuous circuit, without coming in contact with the external air, thus greatly facilitating the operation of defecating or cleansing.]

35,646.—John Zimmerman, of Bloomfield, Pa., for Improvement in Lifting Jacks :

I claim, the two racks, b and c, in combination with the two dogs, g and n, when arranged one on each side of the standard, A, and operating, substantially as described.

I also claim the combination of the two racks, b and c, the two dogs, g and n, the connecting rod, F, and the operating rod, D, as and for the purpose set forth.

35,647.—A. I. Ambler, (assignor to himself, R. N. Ambler and W. Martin), of Milwaukee, Wis., for Improvement in Railroad Car Brakes :

I claim, first, The employment or use of a steam cylinder, applied to a locomotive, and connected with a revolving shaft, M, substantially as shown, when said steam cylinder is used in combination with revolving brake rods, Q, attached to the cars on the trucks thereof, for the purpose set forth.

Second, The employment of bent or angle levers, with friction rollers, to obtain perfect uniformity of pressure, in combination with rods and chains, to connect the braking bars and each other when operated by a tumbling or revolving rod, substantially as shown, and for the purpose set forth.

Third, Actuating the brakes from the rotating rod, Q, through the medium of a crank, V, and spring, m, arranged with a lever, Z, or applied directly to the brakes, so as to operate, substantially as and for the purpose set forth.

Fourth, The jointed shaft, H', provided with the screw, J', sliding spring rod, I', lever, K', or its equivalent, and the worm wheel, P', on the chain shaft, P', all arranged as shown, for the purpose specified.

35,648.—E. G. Dyer (assignor to Owens, Lane, Dyer & Co.), of Hamilton, Ohio, for Improvement in Thrashing Machines :

I claim the application to the grain delivery of a thrashing machine, of the winnowing suction spout, E, in combination with the shoe fan; the whole being constructed, adapted and regulated, substantially as set forth.

35,649.—Merwin Fowler (assignor to Edward Miller), of Meriden, Conn., for Improved Spring Catch for Lamp Chimneys :

I claim, the combination of the hook, C, and spring, d, applied to the lamp top, or burner, substantially as and for the purpose set forth.

[This invention consists in securing the chimney to the lamp top by means of a hook, which is attached to the lamp top, and has a spring connected to it and all arranged in such a manner that the hook will, under the action of the spring, press down upon the flanch of the chimney, and firmly secure the latter to the cone of the burner.]

35,650.—Charles Heath, of Malden, and Joseph Wilson, of Boston, Administrators of J. B. Wilson, deceased, late of Malden, Mass., for Improvement in Machinery for Pressing Brick :

We claim the combination of the cranked lever or shaft, K, and the two connecting rods, I I, with the two sectoral toggles, L M, and the crossbar, G, the whole being applied so as to operate with the follower and the discharger of a brick press, substantially as specified.

We also claim, the combination of the spring, H, with the bar, G, the rods, I I, the cranked shaft, K, and the sectoral toggles, L M, when employed for operating the follower or platen of a brick press, as specified.

35,651.—E. C. Hussey (assignor to himself and John Devlin), of Brooklyn, N. Y., for Improvement in Machines for Making Elongated Bullets :

I claim, first, The combination of a straight groove, e, in a stationary flat table or bed, and a corresponding groove in a straight reciprocating bar or slide, such groove having a suitable form, and operating to roll the blanks of lead into shape, by a movement about their own axes, substantially as specified.

Second, The combination with the grooved reciprocating bar or slide, C, and the grooved stationary table or bed, A, of a cutter, c, applied and operating in connection with the grooves of the bar and slide, and table or bed, substantially as set forth.

Third, The combination with a bar or slide, C, a table or bed, A, and cutter, c, operating as described, of a feed bar, E, and an elastic feed lever, D, applied and operating, substantially as and for the purpose specified.

Fourth, The combination with the grooved table or bed, A, and the grooved bar or slide, C, of one or more pairs of holding dies, and a corresponding number of drills, applied to receive the rolled bullets from the said grooves, and drill the cavities in their bases, substantially as specified.

Fifth, The dies, F G, constructed, combined, applied and operated, substantially as and for the purpose specified.

Sixth, Combining the die carriages, H H, with the reciprocating feed bar, E, by means of grooves, q, q, and switches, J J, substantially as and for the purpose set forth.

[This invention consists in a machine of novel character, in which cylindrical blanks are cut from rods of lead, then brought to the desired external form for the bullets by a rolling process, and afterward drilled to produce the cavities in their bases.]

35,652.—I. S. and J. W. Hyatt, Jr., of Chicago, Ill., assignors to said I. S. Hyatt and Oliver Bascom, of Whitehall, N. Y., for Improvement in Knife and Scissors Sharpeners :

We claim, first, The combination and arrangement of the double rest, d', and grinding wheel, C, substantially as and for the purpose specified.

Second, We claim the combination of the scissors rest, D, either double or single, with the twin grinding wheels, C C', kept in contact by a spring or its equivalent, the whole forming a machine for sharpening both scissors and knives, substantially as described.

35,653.—J. H. Mears (assignor to himself and Alfred Ward), of Oshkosh, Wis., for Improvement in Rakes for Harvesters :

I claim, first, The wheel, H, constructed with an upright rim, having slots, substantially as and for the purposes set forth, in combination with wheels, C, c, sleeve, D, spindles, V, caps B and R, posts or springs, U and W, and rake N, all constructed and arranged, substantially as set forth.

Second, I claim the caps, B and R, or their mechanical equivalent, attached to the sleeve, D, and wheel, H, and operating in a contrary direction from wheel, H, constructed and operating in combination with rake, N, substantially as and for the purposes set forth.

Third, I claim the mechanical arrangement of rake N, with its ring or short sleeve, L, with gear wheels, H and C, and their attachments, whereby one wheel causes the rake to move toward the reel in an elevated state, and the other in a contrary direction, causing it to sweep in close contact with the platform, substantially as set forth.

35,654.—J. E. Seavey (assignor to himself and Matthew E. Bochner), of Kennebunkport, Me., for Improved Sail Link to Mast Hoop :

I claim the mast hoop and sail connection, consisting of the shackle, the bolt, and the clamp, constructed, arranged and combined together, substantially in manner, and so as to operate as specified.

35,655.—Charles C. Stansell, of Middleboro', Mass., assignor to himself and A. W. Rockwood, of Newton, Mass., for Improvement in Lamps :

I claim combining and arranging with the wick tube, B, and the flame adjuster, H, of a lamp, in manner substantially as described, a vapor interceptor, F, and conduit or passage, G, the same being substantially as and for the purpose above explained.

I also claim combining and arranging with the flame adjuster and the vapor interceptor and conduit, as described, a heat insulator or insulating vapor reservoir, I, made of a material and so as to operate in manner, and for the purpose, substantially as specified.

35,656.—J. C. Tobias, of Middleport, Ill., assignor to himself and Henry C. Kirk, of White County, Ind., for Improvement in Harness Saddles :

I claim, as an improved article of manufacture, a harness saddle or pad-tree, composed of plates, A B, pad C, and cover, f, made and united in the manner shown and described.

[The object of this invention is to obtain a saddle or padtree for harnesses that will be extremely simple in construction, and still be capable of yielding or giving to the movement of the animal, as well as adjusting itself to the shape or form of the same.]

35,657.—John H. Vickers (assignor to Lucius W. Pond), of Worcester, Mass., for Improvement in Revolving Fire Arms :

I claim the continuous cylinder frame, A, rigidly attached to the barrel, and combined with the breech piece, D, to fold into a groove, provided therein for its reception, substantially as and for the purpose specified.

I also claim bringing the lower front angle of said continuous frame, A, to a portion, C, of the stock frame which projects forward from the bottom of the breech piece, D, substantially as specified.

And I further claim the insertion of the cylinder axis pin, in a forward direction, through the cylinder frame and cylinder, and into a hole in the center of the breech piece, substantially as and for the purpose specified.

35,658.—S. R. Going (assignor to D. S. Quimby and D. S. Quimby, Jr.), of Brooklyn, N. Y., for Improvement in Stoves :

I claim, first, The manner of equalizing the heat of the fire in and around the oven, by means of a damper, as set forth.

Second, Placing the damper, B, in the flue in the position shown.

35,659.—Alfred Berney, of Jersey City, N. J., for Improved Composition for filling Shrapnel and othersimilar projectiles :

I claim asphaltum for the purpose of filling shells, substantially as set forth and described.

RE-ISSUES.

1,317.—G. G. Lobdell, of Wilmington, Del., for Improvement in Cast Metal Car Wheels. Patented April 15, 1862 :

I claim, first, A hollow cast metal tire, or hollow rim, B, provided internally with radial braces, f, connected at their ends respectively with the inner and outer peripheries of the tire, and without being in contact with its sides, substantially as and for the purpose set forth.

Second, Securing the tire or rim, B, to the rim, c, of the wheel, A, by means of the bolts, g, passing through the rim, c, and the inner periphery of the tire or rim, B, and having holes, j, made in the sides of the tire or rim, B, to turn the nuts, i, as set forth.

Third, Counterbalancing the wheel by pouring melted lead or other suitable metal into the chamber, e, when said metal counterbalance is used or employed with the braces, f, arranged as set forth.

Fourth, The combination of the hollow wheel, A, and the hollow tire, B, when both are constructed, arranged and secured together, as and for the purpose set forth.

[A notice of this invention appeared in Volume VI. No. 18, of the SCIENTIFIC AMERICAN, New Series.]

1,318.—Henry A. Burr, of New York City, assignee through Mesne Assignments of H. A. Wells, deceased, for Improvement in Manufacturing Hat Bodies. Patented April 25, 1846. Re-issued October 7, 1856. Extended, and again Re-issued April 25, 1860 :

I claim, first, In depositing fur in a conical hat of the described varying thickness.

Second, In holding the hat by pressure, so as to preserve the disposition of the fur and permit the percolation of water, and

Third, In saturating the hat with water while the disposition of the fibers is preserved. These three steps being performed in the order, and substantially in the manner specified.

DESIGNS.

1,605.—W. L. McDowell, of Philadelphia, Pa., for Design for a Stove.

1,606.—W. L. McDowell, of Philadelphia, Pa., for Design for a Stove.

1,607.—John Martino and James Horton, of Philadelphia, Pa., assignors to Stuart and Peterson, for Design for a Cook's Stove.

1,608.—G. B. Owen, of New York City, for Design for a Clock Case.

1,609.—J. F. Rathbone, of Albany, N. Y., for Design for a Cook's Stove.

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