

**35,542.—Paul Prybil, of New York City, for Improved Tension Regulator for Sewing Machines :**

I claim, first, The arrangement of the friction pulley, D, with the conical hub, E, in combination with the screw spindle, G, and spring pad, F, constructed and operating substantially as and for the purpose specified.

Second, The arrangement of the elliptical nut, d, on the spring, H, in combination with the screw spindle, G, and pulley, D, substantially as and for the purpose described.

Third, The recess, e, and shoulder, on the screw spindle, G, in combination with the lower part, g, of the nut, d, as and for the purpose set forth.

**35,543.—M. A. Richardson, of Sherman, N. Y., for Improvement in Machine for Working Butter :**

I claim the employment of the tub, G, works, H, and shaft, D, with the arm, C, and hinged extension, C', the several parts being constructed and arranged to operate in the manner and for the purpose specified.

Second, The use of the lever, a, upon which the bottom of the shaft, D, is situated, or in which it has its bearings for the purpose of throwing out or gear the lever end of said shaft, as is fully set forth.

Third, The use of the bar, L, lever, M, and scale, N, when used with the standard, B, as and for the purpose specified.

**35,544.—Michael Ritner, of Vincennes, Ind., for Improvement in Sabot for Projectiles of Rifled Ordnance :**

I claim a hollow sabot of vulcanized india rubber, constructed substantially as described, and applied in the rear of a cannon ball or other projectile without enveloping the same or being attached thereto; constituting a cushion to receive the percussive force of the explosion, and adapted to expand by the pressure of the gases so as to effectually prevent their escape.

[The object of this invention is to permit the use of leaden projectiles in guns of large caliber. The sabot is made to act both as a cushion and a packing, and prevents the slugging of the ball either by the heat, friction or percussive force of the gases.]

**35,545.—Henry Ruth, of Summerfield, Ill., for Improvement in Corn Planters :**

I claim, first, In combination with the rollers, L, the toothed curved plates, M, arranged in a hinged frame as described.

Second, The cam, F, in combination with the valve, E, constructed and arranged as described.

**35,546.—J. L. Sater, of Cincinnati, Ohio, for Improvement in Planting Machines :**

I claim the combination of the hollow perforated open cylinders, B B, with the grain boxes, A A, when the said hollow cylinders are combined with the obliquely-perforated segmental blocks, D D, and the conducting tubes, E E, in the manner and for the purpose substantially as set forth.

**35,547.—W. C. Shipherd, of Saratoga Springs, N. Y., for Improved Boot-Crimping Device :**

I claim the notches, i, o, made respectively in the tree, E, and plates, k, k, of the clamp, G, as shown, in combination with the clamp formed of the nuts, p, screw rods, p', and clasps, q, all arranged as shown for the purpose of securing the crimped leather to the tree.

[This invention consists in the employment of a boot-tree attached to a sliding frame, in such a manner that it may be readily removed therefrom when necessary, in connection with a crimping clamp and a series of tree clasps, all being so constructed and arranged that the uppers and legs of boots may be neatly crimped at a single operation, and then secured to the tree with great facility.]

**35,548.—J. N. Smith, of Jersey City, N. J., for Improvement in Repeating Firearms :**

I claim, first, Ejecting the charge case laterally from the bore of a gun, through an opening made in the side of the bore, in the manner substantially as described.

Second, The employment of the carrier, F, or its equivalent for opening the gun to introduce the charge, substantially as set forth.

Third, I claim the arrangement of the feed wheels, M, and N, the same being connected by the spring, j, and forming a compound wheel for bringing forward the charges automatically and with precision, as specified.

**35,549.—J. N. Smith, of New York City, for Improvement in Coal-Oil Lamps :**

I claim the flexible lifting cup, L, constructed and operating substantially as and for the purpose specified.

I also claim the combination of the flexible lifting cup, L, and disk, J, united and arranged with their apertures, l, and j, substantially as and for the purpose set forth.

I also claim the evaporating tank, P, with its open aperture, p, or its equivalent, substantially as described and applied to the lamp for the purposes specified; and this I claim whether arranged and applied as described, or in any other way combined with a lamp to produce the effects, and for the purposes set forth.

I also claim the safety valves, F, G, and K, applied to the oil passages, and operating substantially in the manner and for the purposes described.

I also claim the employment of a retort, for vaporizing the oil at the burner of a lamp, substantially as and for the purpose specified.

I also claim the separate oil chamber, r, in the retort, so arranged as to cut off let on the supply of oil thereto from the oil reservoir at pleasure, substantially as specified.

I also claim the separate vaporizing chamber, X, in the retort, arranged so as to be cut off from, or connected with the oil chamber, r, substantially as set forth.

I also claim the retort cap, T, arranged so as to regulate or close the flame orifice of the burner, substantially as specified.

I also claim the rarifying chamber, V, substantially as and for the purposes set forth.

I also claim the chamber, W, arranged and operating substantially as and for the purpose specified.

I also claim the radiating cone, U, constructed, arranged and operating substantially as and for the purposes set forth.

I also claim the small auxiliary burner, situated within the rarifying chamber, V, substantially as and for the purposes specified.

I also claim the double cone, Y, arranged and operating in combination with the small burner, substantially in the manner and for the purposes described.

I also claim the register plate, Z, for controlling the introduction of the draft air and vapors into the rarifying and blaze chambers, V W, in combination therewith, substantially as and for the purposes specified.

**35,550.—E. F. Southgate, of Bridgewater, Vt., for Improved Sawing Machine :**

I claim the levers, N N, provided with the pawls, O, and operated from the saw gate or sash as shown, in combination with the ratchets, M M, shafts, L, and the cords or chains, K, or their equivalents, all arranged substantially as shown for giving the feed movement to the carriages, I, as set forth.

[This invention relates to a new and improved sawing machine of that class designed more especially for sawing small stuff, as for instance felloes for wheels, scroll work and the like. The object of the invention is to obtain a machine which may be used with either one or two saws in the same gate or sash, and be provided with a simple automatic feed mechanism, all being so arranged that both saws may be used simultaneously on different work, or either used separately, as may be desired.]

**35,551.—James Spear, of Philadelphia, Pa., or Improvement in Stove Doors :**

I claim the combination of the openings, b b', at the bottom of the door and the opening, a a', at the top of the frame when in connection with the mica and metal plate or wire gauze, constructed substantially as described.

**35,552.—Albert Taplin, of Providence, R. I., for Improved Burner for Coal Oil Lamps :**

I claim turning the rim of the cone upward at A A, and outward at B B.

**35,553.—James Thierry, of Aurora, Ill., for Improvement in Machines for Turning of Grindstones :**

I claim the combination of a circular cutting tool, C, a spindle, D, and a frame, F, together with the wedges, K K' K'' K''', or their equivalents, with a grindstone-turning machine so constructed that it will operate by the joint effects of its contact with a grindstone in motion, and the inclination of said spindle in relation to said grindstone, as described above substantially.

**35,554.—G. M. Thomas, of New York City, for Improved Lemon Squeezer :**

I claim a cast metal lemon squeezer, composed of two handles, A A', connected at their front ends by a fulcrum pin, a, and provided respectively with beaks, B C, one fitting within the other and below the handles, substantially as described.

[This invention consists in constructing the squeezer of cast metal and of such form or in such a manner that a very durable, economical and light implement for the purpose is obtained, and one that may be manipulated or operated with greater facility than the ordinary kinds in general use.]

**35,555.—C. A. Wheelock, of Uxbridge, Mass., for Improved Steam Trap :**

I claim my improved steam trap, as made substantially as before described; that is to say, not only with an abutment, E, and with the valve and stem separate from such abutment, and movable with the pipe as explained, but with the valve so arranged as to be closed by pressure of the steam, and opened by contraction of the pipe under circumstances, substantially as above set forth. And, furthermore, in connection therewith, I claim my improved arrangement of the valve seat or the same, and its exhaust passage relatively to the valve stem and its stuffing box, whereby the latter is separated or insulated from the pressure of the steam of the expansion pipe, as specified.

**35,556.—E. A. Wible, of Georgetown, Cal., for Improvement in Preserving Grapes and other Fruit :**

I claim the packing of fruit sprinkled with powdered alum in layers, between layers of dry sand, in air-tight boxes, substantially as specified.

[This invention is stated by the inventor to be capable of preserving grapes in their natural state for a year. The claim describes its nature.]

**35,557.—G. G. Wolfe, of Troy, N. Y., for Improvement in Stoves :**

I claim the combination of the partition, F, with the fire cylinder, B, substantially as described and set forth.

**35,558.—W. A. Wood, of Hoosick Falls, N. Y., for Improvement in Harvesters :**

I claim, first, uniting the platform to the main frame by the bent rod, a, and hinged rod, e, and their appliances, so that the platform may be raised or lowered on the main frame, substantially as described.

I also claim the plate, d, as forming a hinged support to the rod, e, and a means of uniting the platform and finger bar, substantially as described.

I also claim the device for raising and lowering the outer side of the platform, namely, the sleeve and its adjusting holes on the arm or outside wheel supporter, E, and similar adjusting holes in the rod, c, and a pin or key passing through them, substantially as set forth.

**35,559.—A. J. Bowen (assignor to himself, and L. K. Bowen), of Baltimore, Md., for Improvement in Tobacco Pipes :**

I claim the two tubes or channels, a, and b, in the stem, in combination with the bowl, c, and cup or receptacle, d, as set forth.

**45,560.—J. E. Everett (assignor to W. Everett and Co.) of Dedham, Mass., for Improved Wringing Machine :**

I claim the above described water-conducting attachment for clothes wringers, consisting of the conducting box with its longitudinal partition, c, and trough, D, which may be moved to either side of the partition, substantially as specified.

**35,561.—J. H. Fairchild (assignor to himself, and C. P. Stimets), of Highgate, Vt., for Improved Sap Bucket for the Manufacture of Maple Sugar :**

I claim the combination of the cement and box for the specific purpose of catching sap or a sap bucket to be used in the manufacture of maple sugar.

**35,562.—Hezekiah Conant (assignor to the Willimantic Linen Co.), of Willimantic, Conn., for Improvement in Machines to Label Thread Spools :**

I claim, first, The combination of feeding, holding, punching, pasting, applying and ticket-presenting apparatus, all substantially such as described.

Second, I claim the combination, substantially as described, of feeding, withholding mechanism or apparatus, and I claim these in combination with the holding mechanism, substantially such as specified.

Third, I claim punching out and applying mechanism, substantially such as described in combination with pasting mechanism, substantially as specified.

Fourth, I claim a ticket-presenting apparatus, substantially such as described, in combination with punching and applying mechanism, substantially such as specified.

Fifth, I claim the combination of punching with applying mechanism, each having a mode of operation, substantially as set forth.

Sixth, I claim in combination with ticket-presenting mechanism, substantially such as described a holding mechanism, substantially such as specified.

Seventh, I claim in combination a rack, a bolt and a frame provided with projections, all substantially such as specified and operating as described.

Eighth, I claim in combination a carriage, a rack, and a bolt, substantially such as described, in combination with a frame having projections, all substantially such as specified.

Ninth, I claim in combination a rack, a carriage, and a bolt, and two pawls provided with proper mechanism, substantially such as described for causing them to act alternately, as specified.

Tenth, I claim a feeding trough adjustable toward and from a gate, substantially as described, in combination with a forked gate, whose range of motion is adjustable, whereby the same holding mechanism may be adapted to be used with center articles of different size.

Eleventh, in combination with a trough or lower support for a spool or similar article, I claim two forked gates, each having an independent downward motion substantially as specified, whereby articles of different diameter at opposite ends may be more accurately held, when acting in combination with proper mechanism for applying labels or tickets thereon.

Twelfth, I claim in combination ticket presenting, punching, applying and pasting mechanism, all substantially such as described.

**35,563.—George Cook, of Bristol Station, Ill., assignor to himself and William Scarlett, of Aurora, Ill., for Improvement in Harrows :**

I claim, first, Inclining the teeth of a harrow at the will of the operator, so as to discharge the obstructions accumulated therein, and restoring the same to their positions for working, without lifting the harrow, all substantially in the manner set forth.

Second, The arrangement of the teeth A, beams 1 2 3 &c., eyes C C' and D D', and any suitable force or extending and contracting the same, so as to operate as set forth.

Third, The employment of the lever, F, and links, H, as arranged relatively to the beam, 1 2 3 &c., and to the eyes, C C' and D D', and links, c and d, as to operate as set forth.

Fourth, The uniting or connecting of the rods, H, to an eye, G, which is higher than the eye or steeple, E, to which F is connected so that the extending and contracting force applied to the harrow by the elevation and depression of F, shall act diagonally in the vertical plane as set forth.

Fifth, I claim connecting the lever, F, and the drag link, B, to a point, E, forward of and lower than the center of the front beam 1, substantially as and for the purpose set forth when the parts are arranged relatively to the several other cross beams, 2 3, &c., and their connections, and to the links or bars, H, as shown.

Sixth, I claim securing the lever, F, in different positions by means of the notches, i i', in the posts 1, in combination with the other parts, substantially as represented, for the purpose of holding the teeth firmly in the several positions desired for working in various soils.

**35,564.—J. R. Hyde (assignor to Charles Eddy & Co.), of Troy, N. Y., for Improvement in Stoves :**

I claim the suspending of the said boiler, D, at the upper corners thereof next adjoining the stove, by means of the brackets, b b, in combination with the brackets, c c, projecting from the said boiler, D, into the recess, a, of brackets, b b; so that, by the weight of the water in the said boiler, it will be brought into close connection to and with the stove, thus connected with said boiler, substantially as described and set forth.

**35,565.—Luke Kavanagh (assignor to himself, and Gage, Campbell & Gage), of Waterford, N. Y., for Improvement in Burrs for Knitting :**

I claim a rotary knitting burr, having removable wings, A, held sta-

tionary within oblique radial slots, b, in a hub, c, by means of detachable rings or disks, D, engaged with and clamped against the ends of the wings, substantially as set forth.

**35,566.—James McNamee (assignor to himself and H. F. Steckel), of Easton, Pa., for Improvement in Registers for Bar Rooms :**

I claim the box, A, provided with the numbered compartments, B, having a tilting or movable bottom, D', in connection with the drawer, E, also placed in the box, A, and arranged with the compartments, B, substantially as and for the purpose specified.

I further claim the passages, D, numbered as shown at the front of the box, A, and provided with the inclined bottoms, b, when said passages are used in connection with the numbered compartments, B, tilting or moving bottom, D', and drawer, E, for the purpose set forth.

**35,567.—Stuart Perry, of Newport, N. Y., assignor to C. H. A. Carter, of New York City, for Improvement in Horse Powers :**

I claim, first, supporting the end of the shaft, B, in or near the center of the main drive wheel, E, for the purpose substantially as described.

I also claim, in combination with a main drive shaft that has upon its outer end a wheel that may run over an uneven track, the hanging of the opposite end in a rocking or pivoted box, to yield thereto, substantially as described.

I also claim, in combination with a main drive wheel, E, and the bevel pinion, g, the compound pinion, F, composed partially of square and partially of beveled teeth, substantially as and for the purpose set forth.

**35,568.—George Potts (assignor to himself, Joseph and William and A. and J. R. Potts), of Yocumtown, Pa., for Improved Washing Machine :**

I claim, the combination and arrangement of the vat, A, links, G G, rock shaft, I, and levers, E E, firmly or rigidly fastened to the rubber, D, substantially as described, for the purposes set forth.

**35,569.—J. M. Sanborn, of Hardwick, Vt., assignor to himself and E. M. Gifford, of Wolcott, Vt., for Improved Portable Milk Cooler :**

I claim the new article of manufacture described, adapted to the filtering of milk or other liquid through water so as to change its temperature, and to be readily applied to and removed from an ordinary vessel, substantially as and for the purpose set forth.

**35,570.—Rufus Sibley (assignor to Samuel Mowry), of Greenville, Conn., for Press for Photographs :**

I claim, in combination with the bed and rails, the traveling truck or carriage, and the polishing roll, operating in connection therewith, substantially in the manner and for the purpose described.

**35,571.—J. E. Smith (assignor to himself and C. T. and J. N. Chester), of New York City, for Improvement in Electro-Magnetic Telegraphs :**

I claim, the combination of electro-magnets in a main telegraph circuit substantially as described, whereby the vibrating armature lever of the first or receiving magnet is made to discharge or neutralize the escape or abnormal currents flowing through the second or working magnets when the main circuit is opened in the operation of telegraphing, substantially as set forth.

**35,572.—R. M. Treat (assignor to himself and G. H. Daley), of Morris, Conn., for Improvement in Horse Rakes :**

I claim, first, The rigid bars, d, d, or their equivalent, extending out from the back of the turning axle, A a, beyond the rear of the circumference of the wheels, for supporting a long rake with short teeth, in the manner and for the purpose as described.

Second, The swinging, adjustable clearer or discharger, G, arranged and operating substantially in the manner and for the purpose described.

Third, The rake, F, in combination with the curved eccentric rods, g, g, and discharger or clearer, G, constructed and operating substantially in the manner and for the purpose described.

Fourth, The arrangement of the wheels, C C, axle, A a, shafts, B B, seat D, bars, d, d, and rake, F, with hand lever, H, in the manner and for the purpose described.

**35,573.—W. H. Willard (assignor to Sarah E. Willard), of Cleveland, Ohio, for Improved Apparatus for Adjusting Propellers relatively to the Draft of Water.**

I claim, the combination of the oscillating bed plate, A, rotating packer, B, and guard or fender, V, constructed substantially as described, and for the purposes set forth.

**35,574.—Smith Groom, of Troy, N. Y., for Improvement in Stoves :**

I claim the introduction of highly-heated steam into the fire chamber, by means of annular chambers or pipes surrounding the said fire chamber on the inside thereof, and having therein apertures through which such steam or hydrogen is admitted into the fire around the outside thereof, whereby combustion is greatly aided and the fuel economized, substantially as described and set forth.

**35,575.—James McCholland, of Reading, Pa., for Improvement in Giffard's Injector :**

I claim the chamber, A, with the branch, c, communicating with the boiler and branch, b, for the water, in combination with the nozzle, B, for the steam; the whole being formed and arranged substantially as and for the purpose set forth.

**DESIGN.**

**1,604.—G. L. Kelly, of New York City, Design for Tassel Tops.**

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