

RECENT AMERICAN INVENTIONS.

The following are some of the most important improvements for which Letters Patent were issued from the United States Patent Office last week. The claims may be found in the official list.

Revolving Fire-arms.—This invention relates to that class of revolving fire-arms in which the bores of the chambers are continued right through the cylinder for loading them at the breech with metallic cartridges. It consists in so constructing a slide for closing the opening provided in the recoil shield for the insertion of the cartridges into the chambers, and so applying the same in combination with the pawl by which the rotary motion of the cylinder is produced, that the said slide prevents the acts of cocking the hammer or rotating the cylinder, while it is open, and that the hammer, when cocked, prevents the said slide from being opened. James Jenkinson, of Brooklyn, N. Y., is the inventor of this improvement.

Device for Indicating the Elevation of Ordnance.—This invention consists in combining a sighting bar with a device for indicating the elevation of the piece, on the same side of the gun as the latter device, so that the sighting of the gun and the adjustment of the elevation may be directed by the same man and at the same time. Charles B. Long, of Worcester, Mass., is the inventor of this device.

Officers' Shoulder Straps.—The object of this invention is to obtain a shoulder strap which is less costly and more durable than those which are made of bullion embroidery, and which has a better appearance than those in which the border and bars are composed of metal plate, and, at the same time, it has a desirable degree of flexibility; to this end it consists in the construction of the border of the shoulder strap of wire by coiling the wire upon a mandrel of half-round or nearly half-round shape to form the sides and ends of the border, and combining the sides and ends by means of internal corner pieces stamped or otherwise formed of plate metal. It also consists in the use of a lining of wire cloth applied in combination with the coiled wire of the border for the purpose of better preserving the form of the border and keeping the coiled wires from separating perceptibly in case of the bending of the strap. Gideon Robinson, of New York city, is the patentee of this invention.

Drip Pots for Refining Sugar.—The drip pots commonly employed for the draining of the molds in the manufacture of sugar are made with cast-iron bottoms of uniform thickness, and in placing away the pots one above another in the sugar-house the bottoms are often cracked or broken by being brought down violently upon the edges of the necks of those upon which they are placed. The object of this invention is to prevent such fracture, and to this end it consists in strengthening the bottoms by casting them with ribs projecting in such a manner that, in setting down the pots on the tops of others, the ribs, where the greatest strength is, will always strike the necks of the pots below them. Alexander Mackey and John W. Jarboe, of New York city, are the inventors of this improvement.

Machine for Dressing Fibers.—This invention relates to the employment, in combination with each other and with suitable feeding rollers, of a series of combs or combs and scrapers attached to the periphery of a cylinder and a similar series attached to an endless belt, for the removal of the woody or pulpy portions of the leaves from the fiber. It consists in so arranging the bearings of the shaft of the drums which carry the endless band, and those of the feed rollers as to leave the machine open on one side to facilitate the removal of the fibers; and it further consists in so applying the upper feed roller as to allow the end next the open side of the machine to be raised for the purpose of permitting the uncombed ends of the leaves to be taken out of the machine. J. A. de Brame, of New York city, is the inventor of this improvement.

Improved Harrow.—This invention consists in the arrangement of two or more rows of flanged teeth rounded at their front edges and secured to the frame in oblique positions, one row being inclined to the right and the other to the left, and so disposed that they cover the whole line, in combination with longitudinal triangular ribs attached to the same frame

with the teeth in such a manner that by the action of the teeth, when the harrow is drawn over the field, every particle of ground is disturbed and pushed off first in one direction and then in the other; and by the action of the triangular ribs the ground is fully smoothed, pulverized and leveled. C. E. Steller, of Genesee, Wis., is the inventor of this improvement.



ISSUED FROM THE UNITED STATES PATENT OFFICE

FOR THE WEEK ENDING DECEMBER 2, 1862.

Reported Officially for the Scientific American.

* * Pamphlets giving full particulars of the mode of applying for patents, under the new law which went into force March 2, 1861, specifying size of model required, and much other information useful to inventors, may be had gratis by addressing MUNN & CO., Publisher of the SCIENTIFIC AMERICAN, New York.

37,030.—W. D. Andrews, of New York City, for an Improvement in Steam Engines:

I claim the construction of the valve with flanches, l l, attached respectively to the partitions, k k, and arranged to operate in conjunction with the ports, all in the manner herein shown and described.

[This invention relates to valves of that class which effect the reversal of the engine by reversing the relation of the steam and exhaust pipes with two chambers or passages, or sets of passages in the steam chest of the engine. It consists in a certain construction of such valve of ring form, and a certain arrangement of the ports and passages or pipe connections in its casing, whereby the said valve and casing are enabled to be fitted up entirely in a turning lathe, and the valve when in use is perfectly balanced.]

37,031.—G. B. Bailey, of Greenfield, Ind., for an Improvement in Grain-cleaners:

I claim the curved guard plate arranged over the space, a, in cylinder, A, as herein set forth for the purpose specified.

[This invention consists in constructing a cylindrical screen with a longitudinal opening in it, which is protected by a curved plate, arranged in such a manner over said opening that grain may be readily put into the cylinder, and the cylinder rotated in one direction without the grain escaping, and by rotating the cylinder in an opposite direction the grain will all escape through the guard opening.]

37,032.—R. Chester, of Chicago, Ill., for an Improvement in Signal Lanterns:

I claim the combination and arrangement of the glasses, c d e, (whether set in frames or not) the grooves, C D E, and the cords, r r', g', and second, the arrangement of the wings, a, with the glass, c, all constructed and operating substantially as and for the purposes delineated and set forth.

37,033.—C. O. Crosby and Henry Kellogg, of Hartford, Conn., for an Improvement in Machines for Frilling and Crimping:

We claim, first, A crimper, acting substantially as described, to crimp goods, and to space the crimps, in combination with a table or platform and a holding mechanism or holder, substantially such as described, the combination acting substantially as specified, and we claim these also in combination with either one or two mechanisms for making stitches, substantially as specified.

Second, We claim in combination, a crimper and a smoother, substantially such as described, and acting substantially as specified to fold the crimps to an edge.

Third, We claim a crimper, whose acting edge is provided with slots, substantially as described, to admit the passage of a needle to secure the crimps as formed while said crimps are being held by the crimper.

Fourth, We claim in combination with a crimper, substantially such as specified, a spring acting to force said crimper upon the goods while crimping them, and relaxing its pressure while the crimper is retracting, substantially in the manner and for the purpose specified, and, lastly, we claim an auxiliary smoother, having a mode of operation substantially such as specified in combination with a crimper and a holder or holding mechanism, substantially such as described.

37,034.—D. M. Cummings, of Enfield, N. H., for an Improvement in Water Wheels:

I claim the long and short sided buckets, A A A, of my improved water wheel, made substantially as herein described.

I also claim the use of a combined series of long and short sided acute-angled buckets, A A, when arranged within a water way, E, which is furnished with a series of stationary tangential shuttes, K K, and with a connected series of movable connecting gates, M M, substantially in the manner and for the purpose herein set forth. I also claim the arc-shaped open spaces, t t t, which immediately surround my improved water wheel, the said spaces being outwardly bounded by the tangential shuttes, K K, and the inner side of the water-way, E, substantially in the manner and for the purpose herein set forth.

37,035.—H. H. Day, of New York City, for an Improvement in Elastic Breeches for Ordnance:

I claim an elastic breech-piece, composed of rubber or its equivalent, acting in combination with confined air, the whole being placed in rear of the charge, constructed substantially as above set forth, for the purpose of lessening the pressure upon that part of the gun against which the gases press with greatest force in the act of explosion.

[An engraving of this invention will soon be published in our columns.]

37,036.—O. H. Dunham, of Washington, D. C., for an Improved Lubricator for Steam Engines:

I claim the combination of the simultaneously-operating disk valves, B F, with the tubes, a2 e2 and f2, arranged to provide independent and unobstructed passages for the oil and steam, in manner substantially as and for the purposes explained.

[This invention consists in a certain novel arrangement of two connected disk valves operating simultaneously with separate ports, whereby the steam or air from the part of the engine to be lubricated is conducted through the oil without interfering with its descent.]

37,037.—John Firth and John Ingham, of Phillipsburg, N. J., for an Improved Flask for Cast-iron Pipes:

I claim, first, The combination substantially as set forth of the two halves, A and A', of the flask hinged together, the staples, I, or their equivalents, the flanges, a a, and clamps, B B, or their equivalents, for the purpose specified.

Second, The covers, H, of the holes, G, when the said covers are hung to the side of the flask and adapted to projections on the same, in the manner described.

37,038.—F. W. Hudson, of Leominster, Mass., for an Improvement in Apple-parers:

I claim the arrangement of the gearing, E g h, disk, E, and shaft, C, substantially as shown, for giving the fork, I, and apple thereon the two movements specified; in combination with the knife arm, J, arranged to operate conjointly with the aforesaid parts through the medium of the pinion, G, lever, M, and flange, l, on disk, F, or their equivalents, substantially as herein described.

[This invention consists in arranging the fork on which the apple is placed with gearing, in such a manner that it will by the turning of a crank rotate on its axis, and also rotate in a circle in such relation with a knife or cutter that the apple will be properly pared; the knife being so arranged as to operate conjointly with the fork to effect that result.]

37,039.—D. M. Gunn and C. L. Cain, of Oskaloosa, Iowa, for an Improvement in Beehives:

I claim, first, The springs or elastic projections, C, attached to the comb frames, B, as and for the purpose herein shown and described. Second, The false or sliding bottom, F, provided with a cleat, j, all around its edge, and an alighting board, n, and also provided with recesses, l, in its under surface in connection with the notches, m, in the under side of the bottom, and in the lower edges of the sides of the bottom of the hive, substantially as and for the purpose herein set forth.

[This invention relates, first, to an improvement in the construction of the comb-frames of the hive, whereby the bees are allowed a free passage from one comb-frame to the other, and the former rendered less liable than hitherto to join the combs of contiguous frames, and the guard wires between the upper parts of the frames allowed to be placed lower in position than formerly, so as to prevent them being waxed or glued to the cover of the hive. The invention also relates to an improved means for keeping the comb-frames at a proper distance apart, and also to a novel and improved arrangement of a false bottom applied to the hive in such a manner that the advantage of a proper ventilation is obtained, as well as facilities for cleaning the hive, and the guarding of the same against the ravages of the bee moth.]

37,040.—Suspended.

37,041.—Joseph Goodrich, of Muscoda, Wis., for an Improvement in Sorghum Strippers:

I claim the cutter, A, when constructed, arranged and operated substantially as and for the purposes delineated and set forth.

37,042.—Richards Kingsland, of New York City, for an Improvement in Heaters and Ventilators for Tents:

I claim the combination of the stoves, A B, drum, F, ventilating pipe, H, and discharge pipe, G, constructed and arranged to operate in manner substantially as and for the purpose set forth.

[This invention is formed of two of Kingsland's army stoves, together with a long drum and ventilating pipe. The entire apparatus is nested together within a single stove. It has been fully tested, and has received high commendation from the principal authorities in the army.]

37,043.—Richards Kingsland, of New York City, for an Improvement in Army Stoves:

I claim, first, A course of two or more stoves, A B, each having the form of an elliptical cylinder with a flat upper surface, and provided with movable legs, b, a movable head, d, g, and tapering pipe, i, all as herein described, so as to adapt them to fit compactly one within another, in the manner and for the purposes explained.

Second, Securing the pipe, i, and movable head in position by means of the prong, h, and loop, j, in manner substantially as and for the purposes explained.

[The object of this invention is to produce a portable and effective stove particularly for army purposes, capable of being transported with ease and facility, and of being readily put up and used with a comparatively small quantity of fuel.]

37,044.—Henry Kurth, of New Lots, N. Y., for an Improvement in Tobacco Pipes:

I claim the arrangement of the central opening, c, and weighted valve, d, in combination with the perforated plate, C, inserted into the bowl, A, of a smoking pipe, substantially in the manner and for the purpose shown and described.

[The invention consists in the arrangement of a weighted valve being retained by a perforated plate which is inserted in the bowl above its junction with the stem, in such a manner that the inner end of the smoke channel is never closed by the tobacco in the bowl, and consequently a good draught of the pipe is insured, and that by means of the central valve the spittle and other impurities accumulating in the lower portion of the bowl can easily be removed without taking out the perforated plate.]

37,045.—J. H. Mabbett, of Mechanicsville, N. Y., for an Improvement in Railroad Chairs:

First, I claim a railroad chair having a recess or opening, E, through the bottom plate or bed thereof, with lip, D, upon the inside, and the lip, B, on the opposite side thereof, and each next adjoining the said recess or opening, E, on opposite sides of the same, in combination with the block, F, substantially as herein described and set forth.

Second, I also claim supporting the head or table of railroad rails at their respective joints on the outside thereof, and immediately under and adjoining the same, by means of the brace, B, in combination with the bottom plate or bed of the chair, and with the head or table of such rails, whereby great strength is given thereto, and undue wear and fracture thereof prevented, substantially as herein described and set forth.

37,046.—Alexander Mackey and J. W. Jarboe, of New York City, for an Improvement in Drip Pots for Refining Sugar:

We claim the construction of a drip pot with a ribbed bottom, substantially as and for the purpose herein specified.

37,047.—J. J. Marcy, of Meriden, Conn., for an Improvement in Lamp Burners:

I claim the burner, B, having its tube, c, perforated at its lower end and encompassed by the guard flange, f, in combination with the perforated annular flange or chimney supporter, C, applied to the tube, c, below the deflector or cone, d, all arranged as and for the purpose herein set forth.

[The object of this invention is to obtain a lamp for burning coal oil with or without a glass chimney, and it consists in a peculiar arrangement of two perforated rims, a draught chamber and a cone or deflector, whereby the flame of the lamp will be supplied with a requisite quantity of air to support proper combustion, and the draught of air rendered uniform, so that the flame will not flicker, but give a steady light.]

36,048.—I. M. Milbank, of Greenfield Hill, Conn., for an Improvement in Breech-loading Fire-arms:

I claim the employment of a detached or loose breech-piece, C, and a self-locking independent breech-wedge, D, arranged to operate together in the manner herein shown and described.

[This invention relates to the use of a chambered breech, which fits to the rear of the barrel with a valve-like joint, and which has a movement toward and from the barrel, in a direction parallel therewith, and a tilting movement to bring its muzzle above the barrel for loading. It consists in a certain improved arrangement of such a breech in the frame of the gun and means of locking the same in connection with the barrel for firing, and unlocking the same preparatory to loading, whereby a breech-loading firearm of exceedingly simple construction, and which is very durable and effective, is obtained.]