

RECENT AMERICAN PATENTS.

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:—

Device for molding Pottery-ware.—This invention relates to a new and improved machine for molding elliptical dishes of pottery-ware, and consists in the employment of an upright eccentric lathe in connection with a yielding "former" and also with a cam to operate said former when required. The object of the invention is to attain a device which will supersede the ordinary exclusive manual process of forming pottery-ware vessels of this kind, by admitting of the desired work being performed more expeditiously and in a more perfect manner. R. J. Marcher, of New York city, is the inventor of this device.

Sewing Machine.—This invention relates to sewing machines for making a running stitch with a needle of the kind used for hand-sewing, such needle being placed between feed rollers which gather up the cloth and feed it along in such a manner that the said needle passes through and through it, first from one side and then from the other. Its object is to avoid the necessity of stopping the machine and taking out the work when a certain length has been performed, which is so great an objection to other machines of this class, and to render continuous the stitching of a piece of cloth of any length. It consists, principally, in the arrangement of the rollers which hold the needle and feed the cloth, in a vibrating frame, and in the employment, in combination with such frame, of a stationary throat by which the cloth is conducted to the feed rollers and needle in such manner that the point of the needle will be caused by the vibrating movement of the frame to enter the cloth from opposite sides alternately; also in the employment of a reciprocating thimble which serves as a bearing for the head of the needle at the time of the operation of the feed rolls, but which, by its reciprocating movement, allows the cloth to pass over and off the head of the needle; also in the employment, in combination with such reciprocating thimble, of a tooth or catch, which takes hold of the cloth and pulls it over the head of the needle as the said thimble moves back therefrom. This invention has been assigned to Madame Demorest, of 473 Broadway, New York, by the patentee, William G. Cook, also of this city.

Safety Valve for Steam Boilers.—This invention, which is applicable to steam boilers, digesters, rubber vulcanizing vessels, and all other vessels in which steam may be generated, partakes partly of the characters of what is known as a safety valve and of what is known as a fusible safety-plug, and is intended to combine the advantages of both these devices, and to insure the letting-off the steam when it arrives at a higher pressure or temperature than is safe or desirable. Hitherto fusible plugs have generally been secured by riveting or by screwing the alloy into a hole in the boiler or by fusing the alloy into the hole, letting a portion flow through and form a head on the inside. In all of these modes, steam begins to escape the moment the most fusible portion of the mold begins to liquify and long before the plug has so far lost its tenacity as to be dislodged; the time of dislodgment varying just in proportion to the mechanical force exerted by that portion which forms the head inside or the screw-thread within the hole; the same composition in the same size hole blowing out at temperatures varying from 340° to 400° Fah., and in some instances not till the vessel explodes. A fusible plug has also been inserted or formed within a conical seat provided in the top of an inverted cup arranged in the part of the boiler above the fire-box, but this position of the plug, for some reasons, is objectionable. The object of this invention is to obviate these difficulties, and to this end it consists in drilling a taper hole from the outside of the boiler or other vessel into the steam space, leaving the hole very small on the inside of the vessel, and fitting to this hole a valve or valve-like plug of brass or other metal or alloy, which is infusible at any temperature to which it can possibly be subjected by the steam, and soldering this plug into the hole or seat with a fusible alloy. G. E. Hayes, of Buffalo, N. Y., is the inventor of this improvement.



ISSUED FROM THE UNITED STATES PATENT OFFICE

FOR THE WEEK ENDING JUNE 16, 1863.

Reported Officially for the Scientific American.

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

38,875.—School Globe.—J. R. Agnew, Mercersburgh, Pa.: I claim the arrangement of the case, B, in combination with a celestial or with a terrestrial globe, constructed and arranged substantially as and for the purpose herein shown and described. And I also claim the arrangement of the folds or ribs, d, in the flexible case, B, in combination with the horizon, C, and globe, A, constructed and operating substantially as and for the purpose specified.

[An engraving and full description of this invention, together with other valuable improvements in school globes, patented by the same inventor, will be published shortly in the SCIENTIFIC AMERICAN.]

38,876.—Hinge for Blinds.—Wm. L. Barnes, Kingston, N. Y.:

I claim the swinging blocking pieces, g, hinged to the leaf, a, of the hinge, in combination with the projection, f, on the leaf, d, for the purposes and as specified.

38,877.—Machine for Round Tenons.—Ira L. Beckwith, Providence, R. I.:

I claim the improved spoke-tenoning tool or machine, as provided, not only with the separate guide tube, B, and its socket, g, but also having one or more adjustable cutter carriers, k, k', made and applied to its stock, A, substantially as hereinbefore specified.

I also claim the guide tube, B, as made with a recess, i, for the reception of the cutter and its carrier, such recess being arranged in the said guide tube, as and for the purpose specified.

I also claim the arrangement of the cutter rest, l, the adjustable cutter carrier, k, and the clamping and adjustable screws or devices, n, n', of the latter.

38,878.—Apparatus for dipping Lucifer Matches.—S. A. Bell, Epping Villas, Stratford, England, and Thomas Higgins, Carrico Terrace, Middlesex County, England. Patented in England Aug. 16, 1862:

We claim submitting sticks or matches to the dipping operation by presenting their ends to a continuous supply of the phosphorus or other like ignitable compound, in the manner above described.

[This invention relates to means for effecting the coating of the ends of splints or matches with the compound that ignites by applying friction thereto; its chief object is to present the splints, while contained in a traversing clamp or frame, en masse, to a continuous supply of phosphorus or other like ignitable compound evenly covering a containing surface, and thereby enable the matches to take up a suitable supply of the compound on their ends as they pass through the machine; this arrangement not only facilitates the dipping operation but also removes the liability of the workman contracting the disease now common among those who have to handle the phosphorus compounds.]

38,879.—Coal-oil Lamp.—W. B. Billings, New York City. Ante-dated June 10, 1863:

I claim, first, The impelled current of air when carried into the self-generating burner for the purpose and in the manner substantially as set forth.

Second, The mixing or mingling of the self-generated vapor with the impelled current of air in the burner, near the point of combustion.

38,880.—Bellows.—R. Boeklen, Brooklyn, N. Y., and L. Planer, New York City. Ante-dated Sept. 1, 1862:

We claim the employment or use of the ball valves, F, placed in a box, C, provided with a central partition, g, and applied to the double acting bellows, as and for the purpose herein set forth.

38,881.—Lamp Chimney.—Henry Booth, Jr., New York City:

I claim the combination of the lower glass portion, D, of the chimney, with the metal tube portion, E, when the latter has pendant rods, c, c', attached to it, which are fitted in tubes, C, C', connected to a ring or band, A, placed on the burner, B, and all arranged substantially as and for the purpose herein set forth.

[This invention relates to an improvement in that class of lamp chimneys which are composed of metal and glass, that is to say, of a glass bulb, cone or cylinder, and a metal tube, the former being at the upper end of the latter.]

38,882.—Harvester.—John Butter, Buffalo, N. Y. Ante-dated May 5, 1863:

I claim, first, changing the gearing in a combined reaping and mowing machine, in the manner and for the purposes set forth.

Second, I also claim the combination of the shoe which supports the heel of the finger beam when the machine is used for a mower with the yielding supports of the finger beam with the main frame, in such a manner as that, by simply turning said shoe, one quarter over, the finger beam can be attached to the same-hoe piece for reaping, and the same connecting rod used, while the finger beam is left free to rise and fall, substantially as described.

Third, I also claim the tubular part, H, in combination with the finger beam supports, J and K, arranged in relation to each other for the purposes stated.

Fourth, I also claim the combination of the finger beam, I, and brace, M, with the tubular part, H, and its lugs, o and p, substantially as and for the purposes set forth.

Fifth, I also claim the frame, G, as a support for shafts, f and e, substantially as set forth.

Sixth, I also claim the frame, G, in combination with the supporting plates, F, F', substantially as set forth.

Seventh, I also claim the combination of the yielding slotted brace, N, with frame, G, substantially as set forth.

38,883.—Tobacco Pipe.—Charles Chinnock, Brooklyn, N. Y.:

I claim the pointed and punctured tube, a, the movable cap, cigar and pipe-holder, b, for the purposes set forth.

38,884.—Cultivator.—Phillip Conrad, Keithesburgh, Ill. Ante-dated June 2, 1863:

I claim the combination of the stationary frame, D, and the rising and falling frame, E, when the latter is provided with the laterally adjustable plows, F, and guards, M, arranged with the bars or levers, J, J', operated through the medium of the foot lever, J, or hand lever, J', as herein set forth. I further claim the lever, u, connected with the frame, E, through the medium of the shaft, L, crank, s, and link, s, but this I only claim

when used in connection with the laterally-adjustable plows, F, and the means employed for operating as herein described.

[This invention relates to an improved cultivator of that class designed for plowing corn and other crops which are grown in hills or drills; its object is to obtain a simple machine for the purpose specified and one which will, by an extremely simple arrangement of parts, admit of the plows, which adjoin the rows of plants, being adjusted laterally so as to conform to the sinuosities of the latter.]

38,885.—Furnace.—N. F. B. de Chodzko, Paris, France. Patented in England June 27, 1862:

I claim, first, The improvement in dividing the furnace into upper and lower fire grates or compartments. Second, The lugs, projections or hooks at one end of the fire-bars to keep them in their proper position.

Third, The deflector over the lower fire grate to deflect the gases or smoke on to the surface of the heated coke. The combination of a furnace divided into upper and lower fire grates with the deflector over the lower fire grate, substantially as above set forth.

38,886.—Hulling and dressing Rice.—Silas Dodson, of Bloomsburg, Pa.:

I claim the combination of the bevel-faced stones, C, C', and the straight faced stone, C, with the central shaft, D, screen, B, stone, E, straight-faced upon one side and beveled upon the other, and the double-beveled stone, E', as herein shown and described.

Having the stone, E, made adjustable upon the shaft, D, independently of the stone, E', in the manner and for the purpose herein shown and described.

The arrangement of the screw, H, with the shaft, D, in the manner herein shown and described, whereby the speed and direction of motion of said screw may be changed and governed without altering the velocity of the shaft, D, or that of the stones, all as set forth.

[This invention relates to a new and improved machine for hulling and dressing rice, that is to say, for removing the hulls from the rice and investing it of the inner coating or pellicle of the grain, the whole work being done simultaneously and in a perfect manner.]

38,887.—Water Wheel.—Daniel Doncaster, Punxutawney, Pa.:

I claim, first, The combination of a turbine, A, with a guide wheel, C, and an adjustable suspension frame, E, when arranged and operating substantially in the manner described, for the purposes set forth.

Second, the combination of the turbine, A, and adjustable gate, G, when constructed, arranged, and operated, substantially in the manner and for the purposes set forth.

Third, the combination of an adjustable guide frame, a guide wheel, turbine, and a gate arranged below the same; the whole operating substantially in the manner described and for the purposes specified.

38,888.—Machine for cleaning Animals' Intestines.—C. F. Dortenbach, Cleveland, Ohio:

I claim, in combination with the rotary scrapers, K, the inclined adjustable table, C, for cleaning the intestines of animals, substantially in the manner herein described. I also claim in combination with the adjustable table, C, the springs, P, for the purpose of causing the table to yield to the pressure of the scrapers to protect the intestines from being injured by the scrapers, substantially in the manner herein described.

I also claim, in combination with the rotary scraping cylinder and adjustable table, the rod, P, and the convex scrapers, P, for the purpose of turning the intestines inside out, substantially in the manner herein set forth.

38,889.—Horse Collar.—Cubitt Durrant, Lyndonville, N. Y.:

I claim, as a new article of manufacture, the improved horse collar herein described, the skeleton or foundation being composed of braids of flax or rushes, and the stuffing composed of rushes or other stalks retained in place by the transverse fringe or covering, g, to give additional strength and covered by the cloth lining, k, the whole constructed and arranged substantially as herein set forth.

38,890.—Piston for Steam Engines.—H. D. Dunbar, Hartland, Vt.:

I claim, first, Covering the cuts of packing rings by flat plates fastened at one side of the said fitting rings into recesses in the uncutter ring for the purpose of preventing the passage of steam through the joints, substantially as described.

And I claim, in combination with plates for covering the cuts packing rings, the pivoting of said plates to one side of the cut, and so that when in their recesses they will allow the rings to move upon them as they expand or contract, substantially as described.

38,891.—Churn.—S. F. Emerson, Seville, Ohio:

I claim the combination of the tubes, E, E, with the dasher, D, in the manner and for the purpose herein shown and described.

[This invention relates to an improvement in that class of churns in which rotary dashers are used, and consists in using with a dasher of peculiar construction two or more tubes connected with the dasher shaft and arranged in such a manner as to conduct, by their rotation, air down into the cream, and also to serve as beaters, whereby butter of a superior quality is obtained in a short time.]

38,892.—Pencil-eraser and Stamp.—Eberhard Faber, New York City:

I claim as an improved article of manufacture a lead pencil provided with an angulated rubber-seal head, as herein shown and described, which serves as a seal, a preventer against rolling and as an eraser, all as set forth.

[This invention consists in placing and securing on one end of an ordinary wooden-cased lead pencil a knob or piece of india-rubber, the latter being of such dimensions that it will serve as an eraser of the pencil marks and of such a form that it will also serve as a seal or stamp, and at the same time prevent the pencil from rolling off a table or desk.]

38,893.—Apparatus for the Manufacture of Salt.—C. S. Farrar, Romeo, Mich. Ante-dated Feb. 27, 1863:

I claim, first, the improved arrangement of the vats, A, B and C, constructed and operated substantially in the manner and for the purpose set forth and described.

Second, I claim the grates, D, D, in connection with the steam pipes, m, m, as set forth and described.

38,894.—Liquid for Galvanic Batteries.—D. H. Fitch, Jr., Litchfield, Ill.:

I claim the use of chlorate of potassa in combination with sulphuric acid and water for the purpose specified.

I also claim the use of the salts of chloric acid in combination with sulphuric acid and water, for the purpose specified, their action being substantially the same as chlorate of potassa.

38,895.—Hat.—P. P. Planagan, Newark, N. J.:

I claim, first, The employment, in combination with a coating of hatter's varnish to secure a covering of felt, cloth, plush or other woven fabric, to a hat body made of palm leaf or other material of similar character, of a coating of india-rubber solution applied to the body preparatory to the application of the hatter's varnish, substantially as and for the purpose herein specified.

Second, The binding strip, a, fastened over the edge of the brim preparatory to the application of and in combination with the covering, b, substantially as and for the purpose herein specified.

38,896.—Sheep Rack.—J. B. Freeman, Lebanon, N. Y.:

I claim the combination of the hay rack, C, and troughs, B, B, placed within a frame, A, provided with the bars, DD, and all arranged as and for the purpose herein set forth.

[This invention consists in combining a hay rack and feed troughs in such a manner that a very convenient and economical feeding device is obtained and one which will prevent the waste of food by the sheep.]

38,897.—India-rubber Whip Socket.—Chas. Goodyear, Jr., New York City:

I claim the manufacture of soft vulcanized india-rubber whip sockets, substantially as hereinbefore described.

38,898.—Power Mortising Machine.—G. W. Gould, Norwich, Conn.:

I claim, first, The iron frame, C, cast whole—top, bottom and sides