

The plow beam is placed between the beams, and through the rear end of all three the axle passes. To a U shaped bracket, the ends of the arms of which are attached to the beams so that the plow beam may move up and down within said bracket. It is pivoted a lever, the rear end of which extends back into such a position that it may be conveniently reached and operated by the driver from his seat, and which may have a foot rest or stirrup attached to it to enable the driver to operate it conveniently with his foot. The forward end of this lever is slotted longitudinally to receive the bolt by which it is pivoted to an eye bolt or other support attached to the forward end of the plow beam, so that the plow may be raised from the ground or adjusted to work at any desired depth in the ground by simply operating the said lever. A standard passes down through the rear part of the tongue, and to its lower end is pivoted a caster wheel, which supports the forward part of the machine. The lever is operated to raise and lower the plow beam and plow, while another lever is also operated to move the forward end of the frame in the same direction, thus increasing the effect.

WASH BOILER.—Jacob Davis, Florida, Mass.—This invention has for its object to furnish an improved washer for washing cloth, clothes, bedding, etc., quickly and thoroughly, without wearing the cloth, straining the seams, or injuring them in any way. As the heat is applied, the boiling suds and steam pass up through the flues and are discharged through holes upon the clothes in the interior of the boiler, through which they pass to a slot, and back into the flues, thus keeping up a continuous circulation, cleaning the clothes thoroughly in a very short time.

DIAMOND SETTING.—Ferdinand J. Heipers, Newark, N. J.—This invention relates to a new setting for diamonds or other precious stones or imitations thereof, though more particularly intended for pure diamonds, with the object of obtaining a better display of the beauties of the stone. The invention consists in constructing the setting of a series of arms or prongs that radiate from a common center, thus exhibiting the jewel in all its beauty.

CULTIVATOR.—Calvin D. Perkins, Princeville, Ill.—This invention has for its object to furnish an improved cultivator designed especially for garden use as a hand machine, which may be adjusted to work at any desired depth in the ground, and also to throw the soil more or less toward the plants, as may be desired. The cutters are bent at right angles so that the blades may work in a horizontal position a little below the surface of the ground to cut off the roots of grass, weeds, runners, or other vegetation that may be growing between the rows of plants. The cutting blades may be adjusted to work at right angles, or at any other angle, with the line of draft, as may be desired. Upon the rims of the drive wheels are formed, or to them are attached, ring flanges or cutters to cut off runners that may be thrown out from the rows or hills of plants, such as strawberries, and thus prevent the said plants from spreading. The machine is light and graceful in appearance, and such a digression from the ordinary cultivator that it will likely come into general use.

BALING PRESS.—Joseph P. Taylor, Hudson city, N. J.—This invention has for its object to improve the construction of the baling press described in letters patent No. 70,649, granted to Joseph P. Taylor and Jackson R. Baker, November 5, 1867. To the side parts of the foundation frame of the press, upon the outer sides of the baling box, are attached two side frames. Yokes are pivoted to the outer sides of the baling box or to supports connected with the side frames. Upon the opposite or diagonal corners of the under side of the yokes are formed projections or cams, having smooth inclined faces against which the ends of the levers rest. So the outer sides of the yokes are attached other levers, the outer ends of which, at each end of the press, are connected by a cross bar, and serve as handles in operating the press. The levers first mentioned are bent into U shape to pass around the ends of the baling box, and their ends or long arms project along the sides of said baling box, overlapping each other. The ends of the levers project upward so that they may pass beneath the yokes and operate upon the cams or projections furthest from the pivoting points of said levers. The levers are pivoted to the sides of the baling box near its ends. To the center of the middle parts of the levers that cross the ends of the baling box are pivoted the lifting pawls, which are so formed and pivoted that their own weight will hold them forward against the teeth of the rack bars upon which they operate. The holding pawls are pivoted to the end posts of the press or to the baling box frame, and are so formed and pivoted that their own weight may hold them forward against the teeth of the rack bars to hold the said rack bars in place while the lifting pawls are moved down to take another hold. The lower ends of the rack bars are pivoted to the ends of the follower, so that the said rack bars may retain their vertical position however much the follower may incline, as its ends are alternately raised by the action of the levers and pawls. The follower is grooved for convenience in passing the bands around the bales and moves up and down through the vertical baling box. Doors, which form the sides of the upper part of the baling box, are hinged at their lower edges to the frame. The lower edges of the doors project a little below the bars to which the hinges are attached, said projecting edges entering recesses formed for their reception at the inner edges of the frame to relieve the hinges from strain. The upper parts of the doors are secured in place by the bars which extend entirely across the ends of the baling box, and which have hooks or catches formed upon their ends to hook or catch upon the ends of other bars which extend longitudinally across the upper parts of the said doors. By this construction the hook or catch bars and the bars form a band or frame surrounding the baling box. The cover of the baling box is made heavy so that, as it is allowed to drop, it may force the material placed in the box downward, packing it more closely into said box; said cover is held down and secured in place by lock bars, which are pivoted at one end to the side part of the ends of the cover, so that they may be swung into grooves in the inner sides of the end posts. Cords, the ends of which are attached to the end parts of the cover, pass over pulleys pivoted to the upper ends of the end posts. To the cords are attached hooks which, when the cover is raised, may be hooked into hooks or eyes formed upon the upper ends of the rack bars to hold the said cover securely while the baling box is being filled. The operating parts of the press are all located upon the outside of the baling box, so as to allow the baling box to be close down to the foundation frame, enabling the press to be made much lower and making it much more convenient than the old press.

[OFFICIAL.]

Index of Inventions

For which Letters Patent of the United States were granted

FOR THE WEEK ENDING SEPTEMBER 24, 1872, AND EACH

REARING THAT DATE.

SCHEDULE OF PATENT FEES: On each caveat \$10, On each Trade-Mark \$2, On filing each application for a Patent, (seventeen years) \$15, On issuing each original Patent \$20, On appeal to Examiners-in-Chief \$10, On appeal to Commissioner of Patents \$20, On application for Reissue \$50, On application for Extension of Patent \$50, On granting the extension \$50, On filing a Disclaimer \$10, On application for Design (three and a half years) \$10, On application for Design (seven years) \$15, On application for Design (fourteen years) \$20.

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APPLICATIONS FOR EXTENSIONS.

Applications have been duly filed, and are now pending, for the extension of the following Letters Patent. Hearings upon the respective applications are appointed for the days hereinafter mentioned: 22,460.—MANUFACTURE OF STARCH.—S. T. Stratton. Dec. 11, 1872. 2,500.—BEE HIVE.—J. S. Harbison. Dec. 18, 1872. 22,503.—OPERATING VALVES OF PUMPS.—L. J. Knowles. Dec. 18, 1872. 22,514.—SIFTING SHOVEL.—P. A. Sabbaton. Dec. 18, 1872.

EXTENSIONS GRANTED.

21,659.—FOLDING GUIDE.—A. Douglas. 21,698.—HORSE RAKE.—M. Raeyer. 21,712.—HORSE RAKE.—G. Whitcomb. 21,712.—HORSE RAKE.—G. Whitcomb.

DESIGNS PATENTED.

6,149.—TOY STEAM ENGINE.—G. A. Brown, Farmington, Mich. 6,150.—STOVE.—E. S. Heath, Baltimore, Md. 6,151.—COCKEY.—J. Letchworth, Buffalo, N. Y. 6,152.—COCKEY.—J. Letchworth, Buffalo, N. Y. 6,153.—LAST.—G. D. Melotte, Utica, N. Y. 6,154.—HAIR NET.—G. Osborne, Brooklyn, N. Y. 6,155.—COOKING RANGE.—W. A. Spicer, Providence, R. I. 6,156.—TOY BANK.—D. A. Stiles, Durham, Conn. 6,157.—SHAWL.—F. Wink, Philadelphia, Pa.

TRADE MARKS REGISTERED.

1,000.—SEWING SILK, ETC.—Brainerd, Armstrong & Co., New York city. 1,001.—LAMP BURNERS.—Bristol Brass and Clock Company, Bristol, Conn. 1,002.—WHISKY.—J. E. Cassidy, Boston, Mass. 1,003.—FRICTION MATCHES.—J. L. Clark, Oshkosh, Wis. 1,004.—CUTLERY, ETC.—W. Clauberg, Solingen, Prussia. 1,005.—LEAD PENCILS.—Cutter, Tower & Co., Boston, Mass. 1,006.—FLOUR.—Empire Mill Company, St. Louis, Mo. 1,007.—PAINTS.—Maxwell & Clarke, Brooklyn, N. Y. 1,008.—CORSETS.—Ottenheimer, Rothschild & Co., New York city. 1,009.—FLOW.—Springfield Iron Works, Springfield, Mo.

COPIES OF PATENTS.

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