

48,766.—Sizing and finishing Covered Skirt Wire.—W. E. Frost (assignor to I. Washburne and L. P. Moen), Worcester, Mass.:

I claim causing the covered wire to pass from the supply reel, through the "sizing" medium, and back and forth over drums, and thence back through the "sizing" medium again, to the second coat, and so on, any number of times desired; for the purpose of applying successive coats of "size" one over the other, in the manner substantially set forth.

48,767.—Mast Coat.—Andrew J. Gove, San Francisco, Cal., assignor to himself and William Gerard, New York City:

I claim the metallic shield, F, and the flexible joint formed by the rings, G, G', or their equivalent, attached to the shield and the deck respectively by the metallic rings, S, S', or by any other suitable manner, substantially as described, and for the uses and purposes hereinbefore set forth.

48,768.—Beehive.—D. S. Gray (assignor to himself and M. H. Messer), Onarga, Ill.:

In combination with the inclined bottom, B, and sliding-door, F, constructed and arranged as described, I claim the slides, D, for facilitating the removal of filth, &c., from the hive, as explained.

48,769.—Machinery Clutch.—T. F. Hammer, Branford, Conn., (assignor to Gilbert J. Hine, New Haven), Conn.:

I claim, first, The combination of the clutch, E, and bar, G, when constructed and arranged with the tongue, c, or its equivalent, to operate in the manner and for the purpose specified. Second, The combination and arrangement described of the clutch, E, inclined groove, d, and tongue, c, substantially as and for the purpose specified.

48,770.—Rotary Air Pump.—George B. Hill (assignor to Ellis S. Archer), New York City:

I claim the combination in a rotary air pump of the buckets, M, curved, as described, so as to gather in the air or gas, with the space or chamber, O, substantially as described and to the effect set forth.

48,771.—Paddle Wheel.—G. Martin, (assignor to himself, and Watson Sanford, Thomas M. Davis, L. H. Walton), Philadelphia, Pa.:

I claim the smooth-faced friction slideroller, d', on each of the floats or paddles, D, D, and the smooth-faced, irregularly curved bearing E, on the vessel; the said parts being constructed and arranged to operate together substantially as and for the purpose described.

48,772.—Apparatus for Carbureting Air.—Patrick Mihan (assignor to Oliver P. Drake), Boston, Mass.:

I claim as my invention or improvements in the above described air-forcing apparatus the construction of each bucket educt with the pointed triangle or tapering form substantially as and so as to operate as described.

I also claim the arrangement of the back of each bucket, relatively to the shell of the drum and the educt of the said bucket, the said back in such case springing from the base of the educt and being arranged at an acute angle, or substantially so, with such educt, the whole being as and for the purpose specified.

I also claim the arrangement of the several bucket educts, viz., so that one may lap or extend by that or those next contiguous to it, substantially as and for the production of results as specified.

48,773.—Grates for Cooking Stove.—James B. Clarke (assignor to S. H. Burton & Co.), Cincinnati, Ohio.:

I claim, first, In the described combination, the stationary grated bottom, A B C, and the folding grate, E D D', or their equivalents, for a convertible wood and coal fire-place, as set forth.

Second, The stationary grates, B and E, and the hinged and folding grate, E, combined and operating as set forth.

Third, The parts A, B, C, D, D', E, F and G, or their equivalents, arranged and combined to form a convertible wood and coal fire-place, as herein described.

48,774.—Fence.—David L. Pettegrew, (assignor to Sylvester Davis and Jacob Smith), Claremont, N. H.:

I claim the double posts, B, with the key, K, and the adjustable brace, C, combined and arranged substantially as and for the purposes specified.

48,775.—Revolving Fire-arm.—Louis C. Rodier, (assignor to Samuel Norris), Springfield, Mass.:

I claim, first, The arrangement of the fire-arm, having a many-chambered cylinder being upon a central axis, in such manner that the said cylinder shall revolve or oscillate between two given points, i. e., between the first and last chamber, substantially as set forth.

Second, Combining with an open frame, provided with a projecting stud, a cylinder movable upon its axis and grooved between two points of its circumference, so as to allow of its revolution or oscillation, as herein set forth.

Third, Providing the skeleton frame plate or retractor on the end of the sliding pin, when located in the rear of the cylinder, with ratchet teeth, in combination with a pawl actuated by the lock to operate the sliding pin together with the cylinder, as herein described.

Fourth, Holding the cylinder and sliding pin within the open frame of the arm by means of a hollow axle upon one end of the cylinder, in combination with a central socket at the other end thereof, and wrought into the skeleton frame of the sliding pin, together with a short movable pin fitting into the said socket, substantially as herein set forth.

Fifth, The combination with a cylinder held in the frame, as set forth, of a spring lever bearing the movable cylinder holding pin, under such an arrangement that the same may be operated from without, for the purpose of releasing the cylinder and enabling it to be disconnected from the hit or stock of the arm.

Sixth, Combining with a cylinder held in its frame, as hereinbefore described, the method of mounting the frame, carrying the barrel and cylinder upon an axle, so as to allow of the disconnecting of the cylinder and barrel from the lock and stock by shifting the same sideways, as herein described.

48,776.—Lubricating Cups.—James Sangster, (assignor to Harvey Ball and Wm. H. Bonnell), Buffalo, N. Y.:

I claim the brace, B, when constructed to operate as herein substantially set forth and described.

48,777.—Steam Engines.—Wm. Mont. Storm, (assignor to himself and R. Charlton Mitchell), New York City:

First, I claim an engine constructed as follows, to wit: Of a cylinder containing two single acting pistons, rigidly connected by open "cross-heads," substantially as described, to the crank, both the latter (crank and crosshead) being located within the body of such cylinder and between its pistons, the whole being proportioned and arranged to this end, as set forth.

Second, I claim in combination with the above, the superposed cylinder or engine, B, to act upon a crank parallel to the first and on the same shaft, also, through the mediation of a "crosshead" located in the same chamber, between the pistons of the horizontal cylinder, substantially in the manner and for the purposes described.

Third, I claim the arrangement whereby the stroke of the piston of such superposed engine is made considerably less than those of the horizontal one, so that the length of its "cross-head" as will be understood, may not render necessary an undue separation of the horizontal pistons, thus occupying unnecessary space, while the combined action of the whole device obviates a dead point, &c.

Fourth, I claim making the pistons of the horizontal cylinder with an overhang, for the purpose described.

Fifth, I claim the pin, d, projecting longitudinally with, but eccentric to the shaft, and rotating with it, to operate the valve by tilting slots, X, X', in their tails, at right angles to the lines of their motion, all as explained.

Sixth, I claim the combination of the parts, e, f, h, p, j, l, constituting the reversing gear, as described.

48,778.—Measuring Faucet.—Shepherd H. Wheeler, (assignor to Richard Hadden, James T. Stillwell, C. T. Lee, Thomas J. Martin, A. G. Townsend, James Sullivan, Daniel Henderson and S. H. Wheeler), Dowagiac, Mich.:

I claim, first, The adjustable cap, g, and thimble, f, in combination with the valve, d, for tightly closing the discharge orifice, a, of the faucet tube, substantially as described.

Second, The valve chamber, b, provided with a valve, d, which is acted upon by a spring, e, in combination with a reciprocating valve-piston, D, and the tube, A, substantially as described.

Third, The combination of tube, A, piston, D, valve chamber, b, and nozzle, G, constructed and operating substantially as described.

48,779.—Machine for Skinning Vegetables.—Oscar Hase, Mecklenburg Schwerin, Germany:

I claim the combination in a vegetable or fruit skinner of a stationary

cylinder, having an internal roughened surface, with a rotating roughened disk, to impart centrifugal motion to the commodities to be skinned, substantially in the manner described.

48,780.—Transmitting Motion.—Edward Wadhams, (assignor to Edward Robert Kent), Hamilton, Canada West:

I claim the double segmental rack, A, on the rock shaft, C, in combination with pinions, b', ratchet wheels, d, d', and pawls, e, e', said ratchet wheels being keyed to the shaft, D, substantially as and for the purpose set forth.

[The object of this invention is to transmit motion from an oscillating or rock shaft to another revolving shaft, or, in other words, to convert the oscillating motion of one shaft in a continuous revolving motion of another shaft.]

REISSUES.

2,026.—Curtain Fixture.—Edward T. Briggs, Boston, Mass. Patented May 19, 1863:

I claim the combination composed of the tubular curtain roller, A, its stationary shaft, a, and helical spring, e, as set forth, and a friction apparatus (substantially as described, or its equivalent, for the purpose or to operate as set forth, the whole being for application to a shade and a weighted tassel, and co-operative, as explained.

I also claim the combination of the nut, E, and the screw, c, with the shaft, a, the roller, A', and its spring, e, they being arranged and applied as described, and the purpose of such screw and nut, irrespective of their use with the remainder of the friction apparatus, being to prevent the spring from unwinding further than is necessary to cause the roller to wind up the shade.

I also claim the friction apparatus constructed or composed of the screw, c, the disk, F, the nut, E, the spring, i, and the nut, H, and arranged with the roller, A', and its shaft, a, so as to operate therewith substantially as set forth.

2,027.—Truck for Street Railways.—Robert H. Lecky, Allegheny, Pa. Patented April 5, 1864:

First, I claim arranging the axles with relation to the wheels so that the inner end of the axles of the wheels which travel on the short or inner curve of the track will, in turning curves, move more than the inner end of the axles of the wheels which travel on the long or outer curve of the track, said axles and wheels being operated substantially in the manner and by the means herein described and for the purpose set forth.

Second, The combination of the swivel bearings, 6 and 20, with the disks, m (or their equivalents—levers), axes, l, wheels, i, and connecting rod, 19, operated by the means and in the manner substantially as described, for the purpose set forth.

Third, Securing the tongue, a', to the bottom, b, by means of the flanged tube, x', and support, x, as herein described and for the purpose set forth.

Fourth, The use of the catch, 17, and guide, g, when used in combination with the tongue, a', flanged tube, x', bottom, b, and lever, b', arranged and operating substantially as herein described and for the purpose set forth.

Fifth, The arrangement of the brakes, z, cups, w, plungers, v, and levers, 9 13 and 12, arranged and operating substantially as herein described for the purpose set forth.

EXTENSIONS.

Lanterns.—Hugh and James Sangster, Buffalo, N. Y. Patented June 10, 1851. Reissued Aug. 21, 1855. Extended June 8, 1865:

We claim constructing and arranging the spring catches, I, in the manner described or its equivalent, to cause the attachment of the lamp to the lantern by the operation of pressing the lantern down upon the spring catches.

Also arranging the thumb pieces, L, within the flange, G, at the base of the lamp by extending the springs, I, towards each other horizontally as described, and thus forming the elbow catch to rest against the shoulder of the flange, E, of the lantern in the manner and for the purposes specified.

Regulators for the Pen Beam in Ruling Machines.—W. O. Hickok, Harrisburg, Pa. Patented June 17, 1851. Extended June 14, 1865:

First, I claim the pieces, G H A B, in combination with the hinge-joints, 1 2 3, arranged and combined substantially and for the purpose as herein described.

Second, I claim the sliding piece, B, the bearings, C C C, and the finger wheel, F, in combination with the pieces, G H A, uniting by hinge joints, or in any other manner, substantially the same; using in the construction of the whole machine any material adapted to the purpose of forming, as herein described, a pen beam regulator, for ruling machines.

Printing names of Subscribers upon Newspapers, &c.—Henry Moerer, Pittsburgh, Pa. Patented June 24, 1851. Extended June 14, 1865:

I claim the arrangement and construction of a machine for printing names of persons or places on newspapers and other papers after the manner substantially as described, viz. of a form containing the column of names to be printed, set up in types, and being brought under the action of a stamp by means of a slide, moving by degrees; together with the application of a slitted plate, allowing the types to be pressed down on the line, right to contact the slit of the plate, and shielding the paper from the lines, adjoining that under action of the stamp, as herein before described.

Railroad Car.—Lawrence Myers, Philadelphia, Pa. Patented June 24, 1851. Reissued March 21, 1865. Extended June 16, 1865:

I claim, first, The combination substantially as described, of a hollow vessel with flanged wheels or tires adapted to the rails of a railroad for the purpose specified.

Second, One or more partitions combined with the said hollow vessel, substantially as and for the purpose described.

Machinery for Cutting Files.—John Crum, Ramapo, N. Y. Patented July 1, 1851. Extended June 24, 1865:

I claim connecting the file blank to be cut with a bed, which has a positive feed motion, substantially as described, in combination with the hand incident rolling motion depending upon the shape of the blank and the angle which the cutter forms therewith, substantially as described.

I also claim connecting the chisel with its stock by a joint, as described, in combination with a rolling bed, as described, by which they are rendered self-adapting, as described.

I also claim holding the file down on the bed during the operation of cutting by means of a roller, or its equivalent, combined with the rolling bed, substantially as herein described, but this I only claim when the end of the file is so connected with its bed that it shall be free to move up and down that the pressure of the roller may keep that part of the file that is being cut firmly down on the bed, as herein specified.

Portable Hydraulic Press.—Richard Dudgeon, New York City. Patented July 8, 1851. Extended June 23, 1865:

I claim a hydraulic press, quite portable, in which the ram is hollow, and serves as the reservoir to supply the cylinder with water or other liquid, while the force pump and its appendages are contained within the ram, so that by working this force pump the ram is forced up until the liquid in such ram is exhausted, and by moving the handle of the pump down it will come in contact with a rod attached to a valve in the pump piston, and the latter comes in contact with a valve in the end of the ram, opening them both, and allowing the water to return into the ram again through passages.

Harvester.—(A.)—Aaron Palmer, Brockport, N. Y., and Stephen G. Williams, Janesville, Wis. Patented July 1, 1851. Reissued April 10, 1855. Again reissued Jan. 1, 1861. Extended June 29, 1865:

We claim discharging the cut grain from a quadrant-shaped platform, on which it falls as it is cut, by means of an automatic sweep rake, sweeping over the same, substantially as described.

Harvester.—(B.)—Aaron Palmer, Brockport, N. Y., and Stephen G. Williams, Janesville, Wis. Patented July 1, 1851. Reissued April 10, 1855. Reissued Jan. 1, 1861. Again reissued May 31, 1864. Extended June 29, 1865:

We claim the combination of the cutting apparatus of a harvester, in which the cutting apparatus is arranged in the

thereof, and a sweep rake operated by mechanism, in such manner that its teeth are caused to sweep over the platform in curves when acting on the grain, these parts being and operating substantially as hereinbefore set forth.

We also claim the combination of a quadrant-shaped platform, a sweep rake operated by mechanism, which causes the rake to move in alternately opposite directions, an inclined rail to raise the rake, and a switch, these parts being and operating substantially as hereinbefore set forth.



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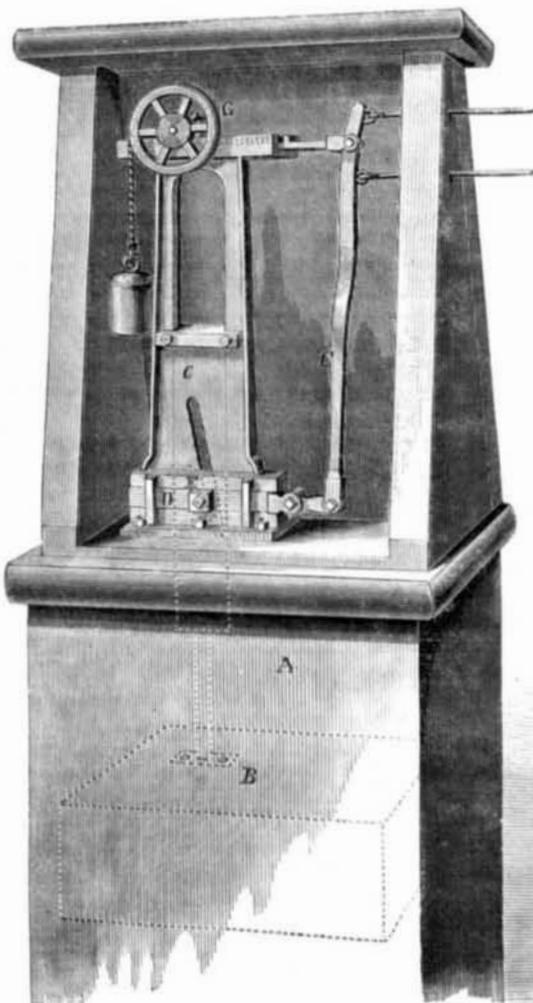
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**BRADLEY'S INDICATOR FOR STREAMS.**

placed therein. The bar is connected to a long lever, F, which, in common with a sliding rack and weighted wheel, G, causes the index hand on the dial, H, to move around, through the action of the levers aforesaid, and at the same time liberate an alarm bell to inform persons in the vicinity that a change is taking place.

This instrument can be used, we are informed, in shoal or deep water, and is valuable to pilots, millers and all other parties interested in the matters it professes to control.

It was patented through the Scientific American Patent Agency, Nov. 8, 1864, by R. D. Bradley, of Preston, Md.; address him as above for further information.

Singular Freak of a Lunatic.

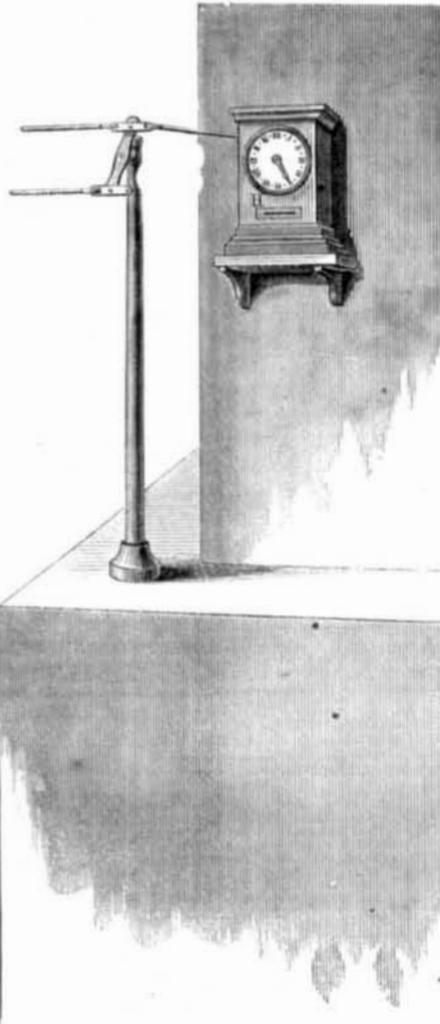
Has any one noticed the miniature fort at the top of Blackwell's Island to the north of the Lunatic Asylum? It is the work of an insane man, who has spent half his life upon it. He lost his mind in Mexico, or somewhere else where high privates were in demand, and just escaped being Mr. Armstrong, or Mr. Parrot, or Mr. Whitworth, by going crazy.

Gunnery was what ailed him—and fortification. As he was found to be quite hopeless, and obedient to his monomania, they gave him intrenching tools and told him to fortify the island. He took the geographical and geological bearings with the accuracy of a West Pointer and concluded that any attack upon it would come from the Sound. So he devised a sea-coast battery with bomb proof, approached by a dike

with sluices and gates, and mounting heavy ordnance.

There never was a more patient worker for humanity or patriotism than this poor addled head. Nobody else being insane upon the same point he could get no assistance. All the other monomaniacs had oil on the brain, or poetry, or capital punishment, or negro suffrage, and were quite as devoted and zealous as he upon their several claims.

So the old soldier, with a long sigh and a brave heart, took up his single shovel and commenced to build the whole fort by himself. He wheeled barrow after barrow of earth into the sea, tugging from morning till night, until at last he raised a narrow



causeway from the main land to a rock at the end of a long sand bar. With pebbles and shells and stones from the river, he walled this causeway until it became permanent. All this was not a month's or a year's work; year after year passed over his gray hairs, but he kept on wheeling, wheeling. The great city, on the greater island required protection, and he was making its ægis. So he went on like the men who threw up the Charleston redoubts, and for fear that he might be late to his task he left his bed in the asylum altogether and built himself a hut close to his place of labor. Here he slept and dwelt, in the company only of his assuring conscience; and when at last his path was done, he set to work at his fort.

The result of all these years is before us. His battery is sodded green, with parapet, berm, ditch, magazine, revetments, abattis, and it mounts mock or Quaker guns, upon carriages of capital construction, looking up from the sound towards Hell Gate, like real arbiters of dominion.

The old lunatic is worn and failing, but he is not satisfied. His fort is done, but not his whole duty. So he has projected a water battery and sea-wall around the entire island, and meant to bring to bear upon it all the knowledge of Vauban and Todleben. When the Island is impregnable he will wrap his mantle about him and die at his battery.

For the truth of all this story let anybody passing up the East river look upon the island tip, and see an old man ditching and building, and the little fort close by him bristling with pop-guns.

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