

other ends, and means for simultaneously moving said latter-named spring ends in opposite directions, substantially as described. 2nd. The combination, with a fly-wheel A, a laterally-movable eccentric C having an arm D pivotally secured to said wheel, an arm E projecting at an angle greater than a right angle, with said pivoted arm from said eccentric and weight-levers, G, G', pivoted to the wheel at points on the same side of the eccentric, of springs I adjustably attached at one end to the wheel on the same side thereof, and having their other ends connected with the free ends of the levers, and means for simultaneously adjusting the ends of the springs that are connected to the wheel an equal distance apart, substantially as described. 3rd. The combination, with a fly-wheel A, a laterally-movable eccentric C, and pivoted weight-levers G, G', one of which is connected with said eccentric, of springs I adjustably connected with said wheel at one end, and means for connecting the other ends of said springs to the free ends of the levers, and adapted to adjust the tension of the springs without change of point of connection to lever, substantially as described. 4th. The combination, with a fly-wheel A, a laterally-movable eccentric C, pivoted weight-levers G, G', one of which is provided with a short arm h at an angle thereto, a link F connected with said arm and the eccentric, and a link H connecting said levers, of springs I connected at one end to the free ends of the levers and at their opposite ends to the wheel, and means for simultaneously adjusting said last-named ends of the springs an equal distance apart, substantially as described. 5th. The combination, with a fly-wheel A, a laterally-movable eccentric C, pivoted weight-levers G, G', one of which is provided with a short arm h projecting at an angle therefrom, and the other with a short arm p projecting in a curved line corresponding with the curve of the lever, a link H connecting said short arms, and a link F connecting said eccentric and one of said arms, of springs I attached at one end to the free ends of the weight-levers, and at their other ends to said wheel, substantially as described. 6th. The combination, with a fly-wheel A, a laterally-movable eccentric C, pivoted weight-levers G, G', having short arms a, p, a link H connecting said arms, and a link F connecting one of said arms and the eccentric, of springs I adjustably attached at one end to the wheel at the same side of its center, and at their other ends to the free ends of the weight-levers, and means for increasing or decreasing the tension of said springs without changing their points of attachment to the levers or to the wheel, substantially as described. 7th. The combination, with a fly-wheel A, a laterally-movable eccentric C, and pivoted weight-levers G, G', of springs I connected at one end to the wheel, nuts I' secured to the other ends of said springs, screw-rods m having hexagons n formed thereon entering said nuts, and yokes J pivotally secured to the free ends of the levers, and adapted to receive one end of said screw-rods, substantially as described. 8th. The combination, with a fly-wheel A, a laterally-movable eccentric C, and pivoted weight-levers G, G', of springs I pivotally connected at one end to the free ends of the levers, pins M adjustably secured to said wheel, and means for moving said pins simultaneously in opposite directions, substantially as described. 9th. The combination, with a fly-wheel A, a laterally-movable eccentric C, and pivoted weight-levers G, G', of pins M adjustably secured to said wheel, and having lugs N formed with screw-threaded perforations, a rod P having right and left screw-threads cut thereon, and a hexagon Q at its center of length, and springs I having one end connected to the free ends of the levers, and the other ends to said pins, substantially as described. 10th. The combination, with a fly-wheel A, having a recess w and slotted lugs R formed on one of the spokes, a laterally-movable eccentric C, and pivoted weight-levers G, G', of pins M having a reduced portion a' adapted to fit in said slots, and lugs N having screw-threaded perforations, a rod P having right and left screw-threads cut thereon and provided with a hexagon Q, whereby said rod may be revolved, and springs connected with the free ends of said levers and with said pins, substantially as described. 11th. The combination, with the curved weight-lever of gradually-increasing width, of a weight W having a slot W' formed therein extending from the periphery beyond the center of said weight, and formed with a curved bottom portion W² and a screw B' adapted to secure said weight to said lever, substantially as described.

No. 37,716. Metallic Sole and Heel Plate for Boots and Shoes. (*Semelle et plaque de laton métalliques pour chaussures.*)

Herbert Samuel Lithgow and Henry H. Roedel, both of Lebanon, Pennsylvania, U.S.A., 3rd November, 1891; 5 years.

Claim.—1st. A metallic protector for boots or shoes, comprising a series of plates having rows of elongated projections and intervening grooves on the outer surface, and having the inner surface hollow or concave, and provided with cells to receive a suitable filling. 2nd. A metallic protector for boots and shoes, comprising a series of plates having rows of diagonally arranged and laterally elongated projections of different heights and overlapping each other lengthwise of the shoe, and intervening grooves on the outer surface. 3rd. A stamped sheet metal protector for boots and shoes made in sections constructed to be secured at their ends separately, and provided with diagonally arranged elongated projections overlapping each other lengthwise of the shoe.

No. 37,717. Hot Air Register.

(*Régistre d'air chaud.*)

John H. Reese, Austin, and Warren Wilkie, Oak Park, both in Illinois, U.S.A., 3rd November, 1891; 5 years.

Claim.—1st. In a device of the character described, the combination, with the enclosing wall, of a register having a box-part projecting at right angles therefrom and in close proximity to the floor, and regulating-valves or dampers located in said box-part away from the wall, and adapted to deflect the hot-air currents and deliver the same along a horizontal line, substantially as set forth.

2nd. A register consisting of the rectangular projecting box-part, the attaching-flange, the extension back of said flange, and valves or dampers pivotally mounted on the inside of said box, substantially as described.

No. 37,718. Baling Press. (*Presse d'emballage.*)

The Collins Plow Company, (assignees of Albert Adolph Gehert), all of Quincy, Illinois, U.S.A., 3rd November, 1891; 5 years.

Claim.—1st. The combination of a shaft, a cross head loosely united to said shaft, a sweep head loosely mounted on said shaft and united to the cross head, a traverser, a pitman, and a connection loosely mounted on said shaft and located between the cross head and pitman, whereby the former is allowed to revolve continuously with the sweep head, while the pitman swings forward and back on one side only of the press, substantially as described. 2nd. The combination of a traverser, a shaft, a cross head loosely mounted on the shaft, a sweep head loosely mounted on said shaft and united to the cross head, a pitman, and a loose connection between the pitman and the cross head loosely mounted on the shaft, substantially as described. 3rd. The combination of a shaft, a cross head loosely mounted on said shaft, a sweep head loosely mounted on said shaft and united to the cross head, a traverser, a pitman, an arm loosely mounted on the shaft and having a curved slot, a pin by which the pitman is connected to the arm working in the slot, a movable projection on the arm by which the cross head is connected with the arm to advance the latter, and means for periodically moving the projection out of the path of the cross head, the arm reciprocating with the pitman, while the sweep and cross head revolve continuously, substantially as described. 4th. In a baling press, the combination of a traverser, a shaft, cross head on the shaft, an arm loosely mounted on the shaft, a pitman having slot-and-pin connection with the arm, a block pivoted to the arm, and a cam against which said block impinges, substantially as and for the purpose set forth. 5th. In a baling press, the combination of a traverser, a shaft, a cross head on the shaft and having notched ends, an arm loosely mounted on the shaft and to which the traverser is connected by a pitman, a block provided with a friction roller and pivoted to the said arm, and a cam against which said block impinges, substantially as and for the purpose set forth. 6th. In a baling press, the combination of a traverser, a shaft, a cross head on the shaft, an arm loosely mounted on the shaft, a pitman connecting the traverser to the arm, a block pivoted to the arm and adapted to be engaged by the cross head, a cam against which the block impinges, and a spring 20, substantially as and for the purpose set forth. 7th. In a baling press, the combination of a traverser, means for operating the traverser, a baling chamber having a flexible wall, pivoted cams bearing against the wall of the baling chamber, levers on the cams, a link connecting the levers, and a screw provided with a handle for moving the cams, substantially as and for the purpose set forth.

No. 37,719. Disinfecting Apparatus.

(*Appareil à désinfecter.*)

Frederick James Mitchell, New York, State of New York, U.S.A., 3rd November, 1891; 5 years.

Claim.—1st. A vessel adapted to contain liquid and provided with a spout composed of fibres of vitreous or mineral substance so arranged that the liquid in the vessel will flow out through said fibres in the direction of their length, substantially as shown and described. 2nd. A vessel adapted to contain liquid and provided with a spout composed of fibres of a vitreous or mineral substance in combination with mechanism for controlling the circumferential pressure on said fibres, substantially as shown and described. 3rd. The combination with a vessel adapted to contain liquid, of a fibrous spout, a washer surrounding said fibres and an adjustable follower arranged to bear against said washer, substantially as set forth. 4th. The combination of a vessel adapted to contain liquid and provided with a fibrous spout in combination with an auxiliary feeding reservoir, substantially as set forth. 5th. In a valve, the combination of the valve stem d', the spring d', surrounding said stem and adapted to normally hold the valve towards its seat, the collar d', loosely mounted on said stem and furnishing a bearing for the upper end of said spring, the packing d², held between the collar d' and the bonnet of the valve, the arm d², rigidly secured to the valve stem and provided with a projection d³, and the step d⁴, on the bonnet of the valve, substantially as set forth. 6th. In a valve, the combination of the valve stem d', the spring d', surrounding said stem and adapted to normally hold the valve towards its seat, the collar d', loosely mounted on said stem and furnishing a bearing for the upper end of said spring, the packing d², held between the collar d' and the bonnet of the valve, the arm d², rigidly secured to the valve stem and provided with a projection d³, the step d⁴, on the bonnet of the valve, and mechanism substantially as shown for vibrating said arm, substantially as set forth. 7th. In an apparatus of the character described, the combination of the reservoir B, provided with a fibrous spout, the receptacle C, provided with a suitable outlet, and the valve D, arranged to deliver water to said receptacle substantially as and for the purposes set forth. 8th. In an apparatus of the character described, the combination of the reservoir B, provided with a fibrous spout b, the packing b², the follower b², the receptacle C, provided with a suitable outlet, and the valve D, arranged to deliver water to the receptacle C, substantially as and for the purposes set forth. 9th. In an apparatus of the character described, the combination of the reservoir A, the reservoir B, having a fibrous spout, the receptacle C, provided with a suitable outlet and the valve D, adapted to deliver water into said receptacle, substantially as and for the purposes set forth. 10th. In an apparatus of the character described, the combination of the reservoir A, the reservoir B, having a fibrous spout, the receptacle C, provided with a suitable outlet, the valve D, provided with valve stem d', arm d², projection d³, step d⁴, and spring d⁵, with an atomizer, an air forcing apparatus adapted to operate the same, and connections between the air forcing apparatus and the arm d², substantially as and for