

having the apertured lug 19, and the link 18, telescopically uniting the rod 17, and stud, substantially as described. 14th. The combination, with the apertured and pivoted shutter 4, having the detents 7 and 9, of a spring, an operating stud 20, having the shoulder 22, the shutter, spring and stud being connected with the spring pressed pawl 30, and arm 32, both detents being adapted to engage the pawl, the detent 9, holding the shutter in alignment with a lens opening, substantially as described. 15th. The combination, with the arched guide way 28, having the jaw 27, of a spring 26, held in the jaw, a cross head 38, embracing the guide and spring, a movable block 40, in the cross head abutting against the spring, and a thumb screw 41, in the cross head adapted to press the block against the spring, substantially as described. 16th. The shutter 4, having the peripheral detent 7, detachable therefrom, substantially as described.

**No. 40,496. Capsule. (Capsule.)**

McKesson & Robbins, New York, State of New York, U. S. A., assignee of William Oppenheimer, London, England, 1st October, 1892; 6 years.

*Claim.*—1st. A capsule, consisting of a soluble shell or casing formed integral with a soluble partition to provide separated chambers for different kinds of medicine, said shell or casing and partition dissolving when taken internally for the purpose of liberating the medicines, substantially as described. 2nd. A capsule, consisting of a soluble shell or casing formed with a soluble partition to provide separated chambers for different kinds of medicine, said shell or casing and partition dissolving when taken internally for the purpose of liberating the medicines, substantially as described.

**No. 40,497. Weighing Machine. (Balance à bascule.)**

John Jackson and Edwin Alfred Hoad, both of London, England, 1st October, 1892; 6 years.

*Claim.*—1st. A hydrostatic weighing machine, so constructed, that the load acts upon the liquid through the medium of one or more flexible or elastic diaphragms, instead of through a movable piston or plunger. 2nd. The combination, with the flexible or elastic diaphragm forming part of the closed vessel or box, of a rod or plunger bearing upon the said diaphragm and acted upon by a cross bar, from which the body or load to be weighed is suspended, substantially as described. 3rd. The combination, with the flexible or elastic diaphragm forming part of the closed vessel or box, of a device consisting of two or more parts or pieces working one within another, and arranged to act in succession upon the said diaphragm with or without means for varying the relative movement of the said parts or pieces, substantially as and for the purposes above specified. 4th. The herein described method of providing for the protection of a weighing machine against injury due to the too sudden application of a load, by the employment of one or more adjustable or interchangeable supports adapted to resist or sustain any excessive force exerted by the load whilst permitting the weight of the said load to act upon the weighing mechanism. 5th. A weighing machine provided with one or more adjustable screw threaded supports or nuts adapted to resist or sustain any excessive force due to the too sudden application of the load, substantially as and for the purpose above specified. 6th. A hydrostatic weighing machine provided with suitable means whereby when the gauge has been actuated to indicate the weight of the maximum or other predetermined load, such load will be supported independently of the weighing mechanism, substantially as hereinbefore described, and for the purpose specified. 7th. The combination, with a hydrostatic weighing machine, of an adjustable device whereby the cubic capacity of the space for the liquid may be varied at will, for the purpose above specified. 8th. The combination, with the closed vessel or box for containing the liquid of the cylinder provided with the adjustable piston, and communicating with the interior of the said vessel or box, by means of a pipe or passage governed by an adjustable valve, substantially as hereinbefore described, and for the purpose specified. 9th. The combination, with the diaphragm of the strengthening or supporting ring, substantially as and for the purpose above specified. 10th. The combination, with the index or pointer, of a gauge, of a spring or cushion for diminishing the shock or concussion imparted to the same on the sudden return thereof to zero, substantially as hereinbefore described.

**No. 40,498. Gas Heater or Radiator.**

(*Calorifère à gaz.*)

Arnovitz Wolff, New York, State of New York, U. S. A., 1st October, 1892; 6 years.

*Claim.*—1st. The combination in a gas heater or radiator, with a base and a gas pipe passing through the base and having burners, of vertical sheet metal tubes *c* rising from said base and having upper openings 13 for the escape of heated air, a movable plate to give access for lighting the burners, and a top or cover closing the upper ends of the tubes *c*, substantially as and for the purposes set forth. 2nd. The combination in a gas heater or radiator, with a base and a gas pipe passing through the base and having burners, of vertical sheet metal tubes *c* rising from said base and having openings 13 for the escape of heated air, a movable plate to give access for lighting the burners, frames connected upon the faces of said tubes and containing mica or jewel glasses, and a plate or cover closing the upper

ends of the tubes *c*, substantially as and for the purposes set forth. 3rd. The combination in a gas heater or radiator, with a base having legs or supports and collars 3, of the top plate *d* having collars 7, the vertical sheet metal tubes *c* between said base and top plate and fitting said collars, and having openings 13 near their upper ends, the top plate *e* covering the tops of said tubes, the open work top *f* resting upon the plate *e*, the tie rods connecting the base *a* and top *f*, and the plate *m* within the base, and means for securing said plate, substantially as set forth. 4th. The combination in a gas heater or radiator, with a base having legs, of vertical sheet metal tubes *c* rising from said base, a gas pipe passing through said base and having burners below the tubes *c*, and a bottom plate *m* fitting freely within and connected to the base and having turned up edges, around which air passes to the burners, whereby downward radiation is prevented, substantially as specified. 5th. The combination in a gas heater having a base with an opening along one side, sheet metal radiating tubes rising from said base, a gas pipe passing longitudinally within said base, and having gas burners upon the same and beneath the sheet metal tubes, of a hinged longitudinal plate fitting the opening in said base, whereby access is given for lighting the burners, substantially as specified. 6th. The combination in a gas heater having a base, with sheet metal radiating tubes rising from said base, a gas pipe passing longitudinally within said base and having gas burners upon the same and beneath the sheet metal tubes, of a bottom plate within and smaller than the base to leave air spaces between its edges and the inner surface of the base, and a sheet of wire gauze *n* between the gas pipe and bottom plate for breaking the force of air passing to the flames, substantially as specified. 7th. The combination in a gas heater or radiator, with the base *a*, and gas pipe *h*, having burners, of the bottom plate *m*, with turned up edges to leave air spaces, and with corners 12 and the straps *m*<sup>1</sup> surrounding the gas pipe and passing through the plate *m*, with the ends turned over to support the plate, substantially as set forth.

**No. 40,499. Stock Car. (Char à bestiaux.)**

William Gates Avery, Cleveland, Ohio, U. S. A., 1st October, 1892; 6 years.

*Claim.*—1st. The combination, in a car of the character described, of guide posts with a trough provided with projections upon its ends adapted to slide in the guide posts and allow the trough to tip to one side as it is raised, and to turn the trough face up as it is lowered, substantially as specified. 2nd. The combination, with a stock car, of guide posts having a groove *b*, a short bearing rail *b*<sup>1</sup>, and a long bearing rail *b*<sup>11</sup>, extending to the top of the post and secured thereto, a trough having tongues *a*, and studs *a*<sup>1</sup>, on its ends, and means for elevating said trough, substantially as shown. 3rd. The combination, in a stock car, of a trough having the tongues *a*, and studs *a*<sup>1</sup>, on its ends, with grooved guide posts provided with the bearing rails *b*<sup>1</sup> and *b*<sup>2</sup>, the pulleys *C*<sup>1</sup>, *C*<sup>2</sup> and *C*<sup>3</sup>, adjusted above the guide posts, the weights *D*, and cords *d*, all constructed and arranged, substantially as described. 4th. The combination, in a stock car, of the shaft *E*, the arms *e*, attached to said shaft, and means for securing said arms in a horizontal position, with a trough provided with the tongues *a*, and studs *a*<sup>1</sup>, on its ends, guide posts grooved and having the bearing rails *b*<sup>1</sup> and *b*<sup>2</sup>, and means for elevating and lowering said trough, substantially as described.

**No. 40,500. Wood Distilling Apparatus.**

(*Appareil pour la distillation du bois.*)

Charles J. T. Burecy, Syracuse, New York, U. S. A., 1st October, 1892; 6 years.

*Claim.*—1st. The combination, with the oven *B*, and the retort seated therein, of a heating furnace consisting of a central recess *c*, provided with radiating flues which communicate with the oven and a flue *j*, which extends laterally from the furnace and partly around the oven along the lining thereof, the main flue *F*, communicating with the said flue *j*, and a gas burner within the recess *c*, substantially as and for the purpose described. 2nd. The oven *B*, provided at its base with a central recess *c*, in combination, with the retort *A*, seated in said oven, the gas burner *d*, in said recess, a pipe *d*<sup>1</sup>, extending from said burner to the exterior of said oven, the enlarged vertical pipe *e*, provided with lateral air ducts *e*<sup>1</sup>, and gas pipe *g*, provided with a valve and extending lengthwise into the end of the pipe *e*, beyond the connection of pipes *e* and *e*<sup>1</sup>, substantially as and for the purpose described. 3rd. The combination, with a retort *A*, having a cover which is provided with a short pipe *n*<sup>1</sup>, of a pipe *n*<sup>2</sup>, movable pipe *n*, hinged to pipe *n*<sup>2</sup>, and provided with a short pipe which has a jet cock *s*, and a cap *r*, constructed to be removably attached to pipe *n*<sup>1</sup>, of the cover, substantially as and for the purpose described.

**No. 40,501. Magneto-Electric.**

(*Machine magnéto-électrique.*)

La Motte C. Atwood, St. Louis, Missouri, U. S. A., 1st October, 1892; 6 years.

*Claim.*—A magneto-electric machine, having bars applied to the pole pieces in the direction of the normal polar line, and suitably insulated therefrom, and coils in the circuit of the main line wound upon the ends of said bars to prevent the polar line from shifting under varying conditions, and to keep the brushes at a non sparking maximum point.