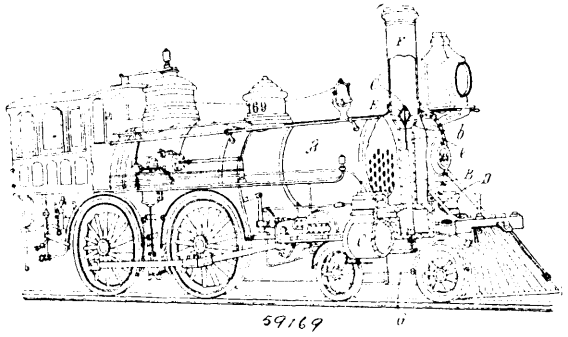
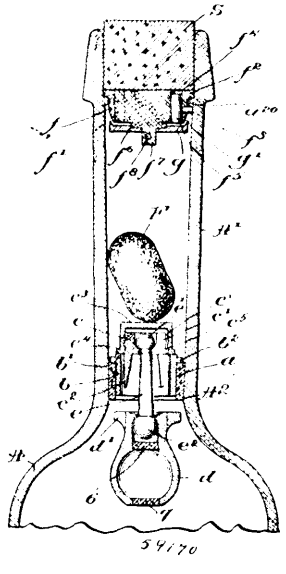
greater at the top than the greatest diameter of the conical plug, a valve-stem carrying said valve-plug and extending therefrom through



the stand-pipe into the stacker-box, a guide for such valve-stem, a lever connected with the valve-stem to reciprocate the same vertically, and means for operating the lever.

No. 59,170. Non-Refillable Bottle.

(*Bouteille non réemplissable.*)

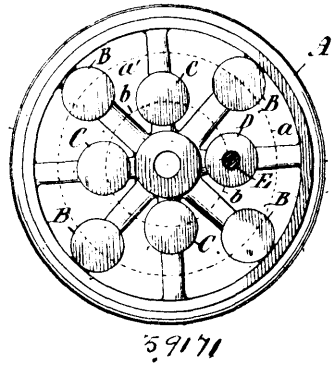


Patrick Henry McGrath, Randolph, Massachusetts, U.S.A., 1st March, 1898; 6 years. (Filed 18th February, 1898.)

Claim.—1st. In a non-refillable bottle, a valve in the neck thereof, a valve seat for said valve, a valve controller connected with the valve and arranged below it and its seat within the body of the bottle, said controller acting by gravity to retain the valve closed when the bottle is upright or canted, and a removable stopper and fixed guard in the bottle neck below the stopper and the float intermediate the valve and the underside of the guard, said controller being laterally extended at its upper end, whereby when the bottle is canted the body of the controller will be retained out of contact with the bottle seat and operative to retain the bottle seated. 2nd. In a non-refillable bottle, a valve seat in the neck, a two-part valve to operate therewith, comprising a separated member and a detachable valve member, a valve controller, consisting of a hollow body within the bottle and having radial extensions at its upper end and a link controlled by a ball and socket joint with said valve and the upper end of the body of the controller, the extensions retaining the said body out of contact with the bottle side and operative to maintain the valve seated when the body is canted. 3rd. In a non-refillable bottle, an annular valve in the neck thereof, a valve seat and valve controller connected by a ball and socket joint with the valve and arranged below it and its seat within the body and the bottle, said controller closing the valve when the bottle is upright or canted, said controller having an air chamber therein to act as a float and to permit the outflowing liquid to readily open the valve when the bottle is only slightly canted, substantially as described. 4th. In a non-refillable bottle, a valve in the neck thereof, a valve seat and valve controller connected with the valve and acting to normally retain the valve closed, a guard in the neck above the valve having a liquid passage and a separated deflector below said guard, means to retain said guard and deflector in place, and the float between the valve and guard, to positively close the valve from entering liquid, substantially as described. 5th. In a non-refillable bottle, a valve in the neck thereof, a valve seat for said valve, and a valve controller flexibly connected with the valve and arranged below the seat and valve and within the body of the bottle, and acting to retain the valve closed when the bottle is upright or canted, said controller having at its top an annular enlargement which affords a fulcrum against the valve seat support when the bottle is tilted sidewise, to insure closing of the valve by the weight of the controller, the enlargement being provided with fluid passages, substantially as described. 6th. In a non-refillable bottle, a guard in the neck thereof, a valve-seat and support therefor also arranged in said neck and distant from the guard, a valve applied to said seat, a float interposed between the guard and valve, and a valve controller flexibly connected with the valve and arranged below the seat and valve and within the body of the bottle, acting by gravity to retain the valve closed when the bottle is upright or canted and having at its top an annular enlargement projecting therefrom, said enlargement being provided with fluid passages and serving as a fulcrum against the valve-seat support when the bottle is tilted sidewise, to insure closure of the valve by the weight of the controller, introduction of liquid while the bottle is upside down, causing the float to press the valve upon its seat, substantially as described. 7th. In a non-refillable bottle, a shoulder upon the interior of the neck, a guard resting upon said shoulder and having an exit passage for the fluid, means to lock the guard in place, and a deflector plate attached to the lower end of and slightly separated from said guard, said plate having an upturned bevelled annular flange, substantially as and for the purpose set forth.

No. 59,171. Locomotive Drive Wheels.

(*Roue de commandes de locomotives.*)



Philip Z. Davis, Lometa, Texas U.S.A., 1st March, 1898; 6y ears. (Filed 19th February, 1898.)

Claim. 1st. A wheel having a series of weights arranged at equal distances apart in a circle adjacent to and coinciding with the axis of the wheel, and a series of weights arranged at equal distances apart on a circle adjacent the periphery of and coinciding with the axis of the wheel, the weights of both circles being at equal angular distances apart relative to the circumference of the wheel, substantially as described. 2nd. A wheel having a series of weights arranged in a circle and a weight arranged on the line of a circle within the series of weights, all of said weights being an equal angular distance apart relative to the centre of the wheel, substantially as described. 3rd. A wheel for a locomotive having a series of weights arranged in a circle thereon and a series of weights arranged on the line of a circle within the outer series of weights, the weights of each circle being an equal angular distance apart relative to the centre of the wheel, substantially as described. 4th. A driving wheel for locomotives having a balancing weight of annular form between its circumference and centre and concentric therewith, substantially as described. 5th. A driving wheel for locomotives, having a balancing weight of annular form within its circumference and adjacent thereto and concentric therewith, and a similar weight within the circle of the first named weight and adjacent to the axis of and contentric with said wheel, substantially as described. 6th. A driving wheel for locomotives having a balancing weight within its circumference and concentric therewith, said weight consisting of a series of segments arranged end to end to form a ring, substantially as described. 7th. A locomotive drive wheel having a series, of weights arranged on the line of a circle within the circumference of the wheel at equal angular distances apart relative to the centre of the wheel, whereby the vertical and horizontal forces generated during the revolution of the wheel are balanced, substantially as described. 8th. A locomotive drive wheel, having three equal weights arranged on the line of a circle midway the center and circumference of the wheel and at equal angular distances apart relative to the centre of the wheel, whereby the vertical and horizontal forces generated during the revolution of the wheel are balanced, substantially as described.