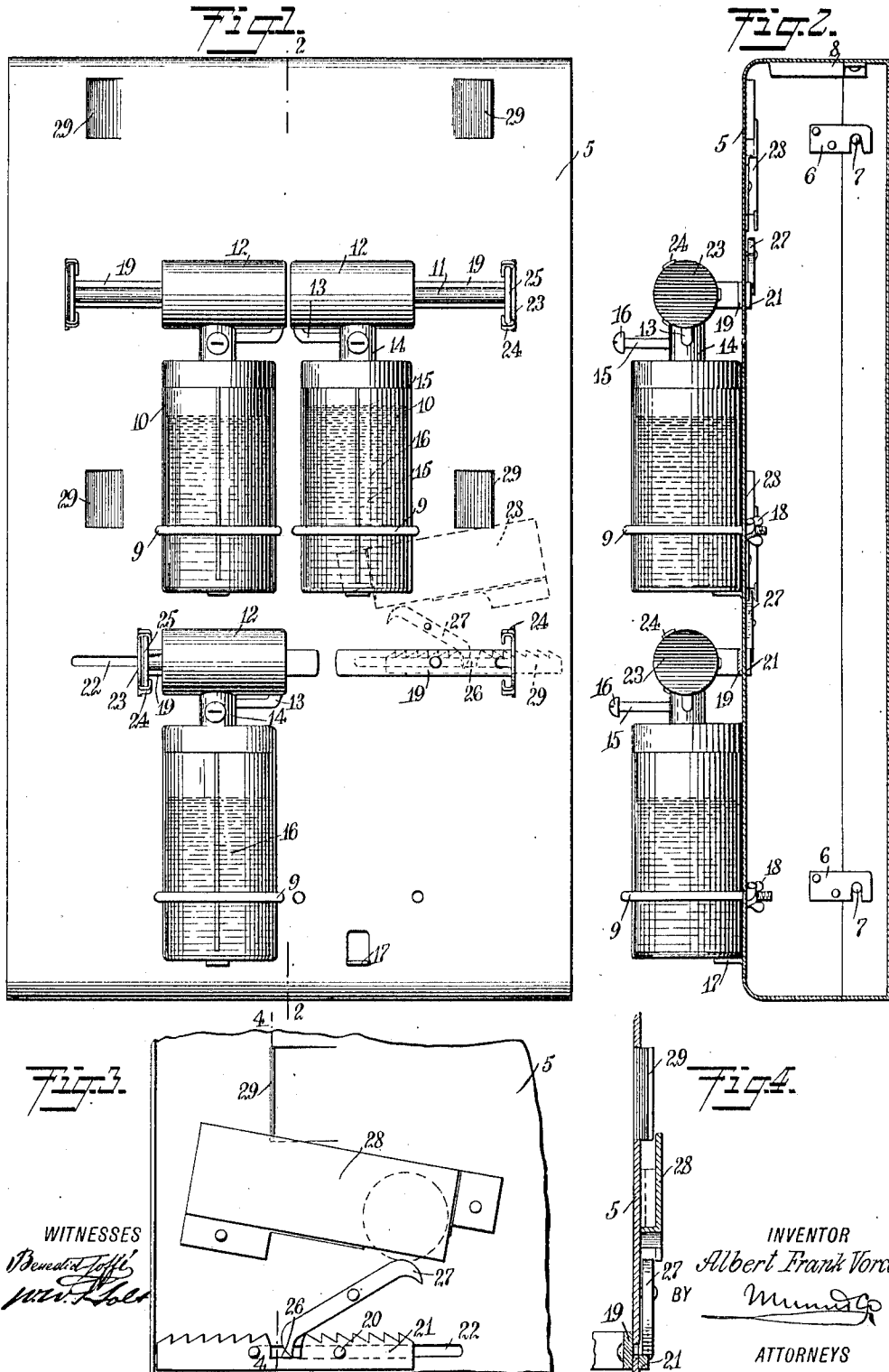


A. F. VORCE.
 PERFUME VENDING MACHINE.
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1,020,334.

Patented Mar. 12, 1912.



UNITED STATES PATENT OFFICE.

ALBERT FRANK VORCE, OF BENZONIA, MICHIGAN, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, OF ONE-FOURTH TO WELLINGTON M. POWERS, OF BENZONIA, MICHIGAN, AND ONE-HALF TO GRAND RAPIDS TOOL & STAMPING COMPANY, OF GRAND RAPIDS, MICHIGAN, A CORPORATION OF MICHIGAN.

PERFUME-VENDING MACHINE.

1,020,334.

Specification of Letters Patent.

Patented Mar. 12, 1912.

Application filed February 2, 1911. Serial No. 606,113.

To all whom it may concern:

Be it known that I, ALBERT FRANK VORCE, a citizen of the United States, and a resident of Benzonia, in the county of Benzie and State of Michigan, have invented a new and Improved Perfume-Vending Machine, of which the following is a full, clear, and exact description.

The invention is an improvement in perfume vending machines, and has in view in such a machine, a piston-actuated atomizer which is strapped or otherwise fastened on the outer side of a case, the fastenings being removable to release the atomizer only from within the case, and the atomizer provided with a coin-actuated mechanism within the case to lock the piston against retraction in successive positions as it is advanced, and lock the piston after being fully advanced, against advancement in successive positions as the piston is retracted.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is an outer face view of a perfume vending machine constructed in accordance with my invention, the machine being shown as constructed for four atomizers, with one of the atomizers removed, and the locking mechanism within the case, for the piston, shown in dotted outline in normal position; Fig. 2 is a central vertical section substantially on the line 2—2 of Fig. 1; Fig. 3 is an inner face view of a fragment of the case, showing the coin-controlled locking mechanism; and Fig. 4 is a section on the line 4—4 of Fig. 3.

In carrying out my invention, I provide a suitable case 5, preferably constructed of a front and back section detachably connected by suitable catches, such as hooks 6, fastened to the front section of the case at each side, both adjacent to the bottom and top, and adapted to engage over pins or projections 7, correspondingly located within the back section of the case, this manner of connecting the two sections of the case adapting the front section to be lifted from the back section when the two sections are unlocked, the lock 8 being suitably placed between the two case sections, ordinarily at the top. The

case may be supported on a suitable base, but usually by fastening the back to a wall or any upright support.

To the front section of the case at the outer side thereof are suitably fastened, as by U-straps 9, a number of atomizers 10. These atomizers, as shown, are preferably arranged in pairs, one pair directly over the next lower pair, each atomizer being provided with an actuating piston 11, with the pistons of the atomizers of each pair turned outwardly to the opposite sides of the case. The pistons 11 work within cylinders 12, each cylinder discharging from the end to a discharge pipe 13 within a neck 14 communicating with the body of the atomizer, which is shown to be transparent. A perfumery discharge pipe 15 leads from the bottom of each atomizer through the neck 14, from which it is downwardly and forwardly inclined and provided at the terminus with a spray nozzle 16.

Tongues 17 are pressed outwardly from the outer section of the case, each tongue located to form a seat for one of the atomizers. The U-straps 9 pass through the front wall of the case and are screw-threaded at the extremities to receive thumb-nuts 18, by which the atomizers are bound to the case and are adapted to be released only by access within the case.

At the side of each piston 11, a piston carrier 19 is slidable, each piston carrier being rigidly connected, as by rivets 20, to a ratchet bar 21, slidable within the case, the rivets passing through a horizontal slot 22 formed in the front of the case, and limiting the sliding movement of the piston carrier and ratchet bar in each direction. Each carrier has a head 23, provided with inwardly-turned fingers 24, to engage the head 25 of the piston, whereby the piston and carrier are detachably connected and enforced to travel together. Each ratchet bar 22 has a relatively deep notch 26 formed substantially centrally at the upper edge, with the teeth at each side of the notch oppositely arranged and inclining toward the center. A double-ended pawl 27 is fulcrumed at an intermediate point so that one end will normally swing within the notch under its own weight and presenting the opposite end underneath a coin opening at

the bottom and lower point of a coin chute 28, the upper portion of each coin chute being positioned to receive the coin inserted through a coin slot 29. Several coin slots, as best shown in Fig. 1, are formed by pressing tongues outwardly from the outer wall of the case so that the coin instead of being inserted in the slot edgewise to the case, is passed therinto in a plane approximately parallel therewith, ordinarily by placing the coin flat against the outer face of the case and sliding it under the vertical edge of the tongue. When the coin rolls to the bottom of the chute, it is brought to bear on the short arm of the double-ended pawl, forcing this arm against the ratchet bar and raising the opposite arm clear of the teeth. The piston carrier with the piston opposite the coin chute can then be forced inwardly to discharge the spray of perfumery. During the inward movement of the piston, the same is locked in successive positions against retraction by reason of the engagement of the short arm of the pawl with one set of the ratchet bar teeth. When, however, the piston has been fully advanced, this arm of the pawl drops into the notch 26 and allows the coin to escape, bringing the opposite arm into engagement with the teeth at the opposite side of the notch. The piston can then be returned, but will be locked in successive positions against advancement by the long arm of the pawl. When the notch 26 is reached, this end of the pawl drops thereinto and raises the short end of the pawl into operative position under the chute.

Having thus described my invention, I

claim as new and desire to secure by Letters Patent.

1. In a coin controlled mechanism, a slidable ratchet bar, means limiting the movement of said ratchet bar, said bar having a relatively deep notch formed centrally therein at the upper edge with the teeth of the bar oppositely arranged and inclining toward said notch, a double-ended pawl fulcrumed so that one end thereof will normally engage with said notch, and a coin slot having its lower opening disposed adjacent the free end of said pawl whereby the falling coin will raise one end of said pawl out of said notch, whereby said bar may be actuated.

2. In combination, a ratchet bar having teeth thereon, an actuating member rigidly connected therewith, and a pawl engaging said teeth, to lock the same in successive positions against retraction while said bar is advancing, said ratchet bar having a relatively deep notch intermediately arranged to receive the pawl and having teeth inclining inwardly at the opposite sides of the notch, and the pawl fulcrumed intermediate its length, with one arm relatively heavier than the other arm, said other arm constituting a coin-actuated arm.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ALBERT FRANK VORCE.

Witnesses:

IRVING P. JONES,

MATTIE E. MARSHALL.