No. 702,918. Patented June 24, 1902.

D. BOURNE.

COIN CONTROLLED VENDING APPARATUS.

(Application filed Feb. 10, 1902.)

(No Model.)

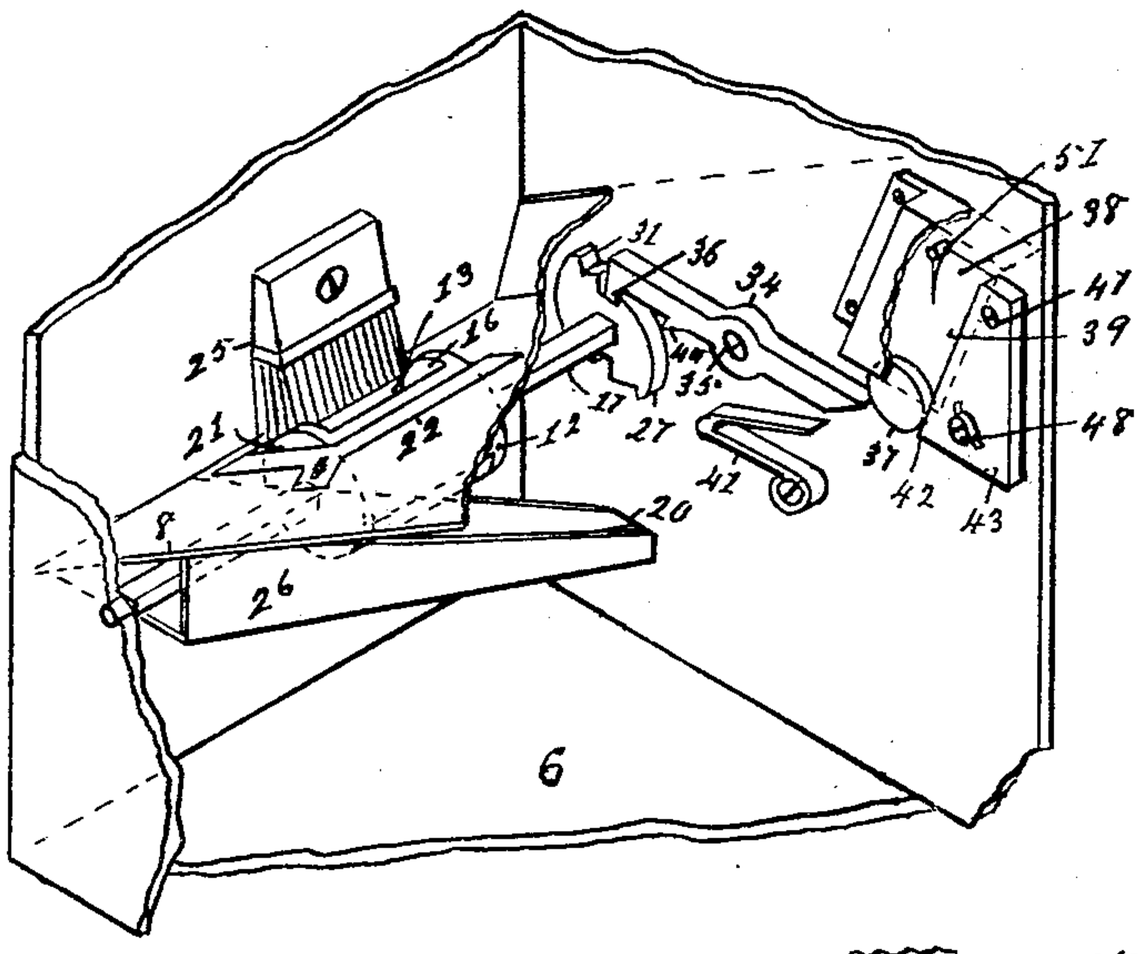

Fig. 1.

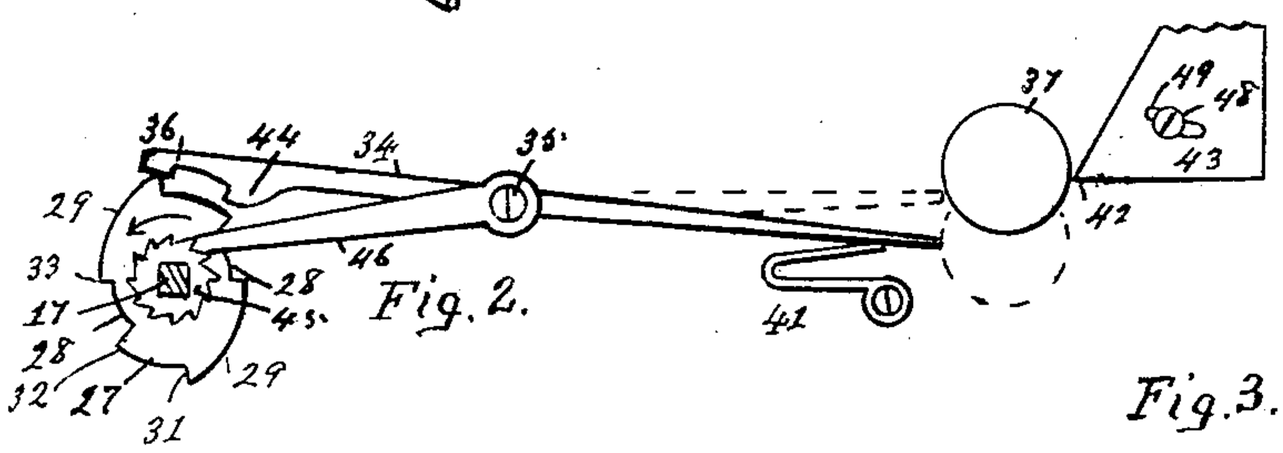

Fig. 2.

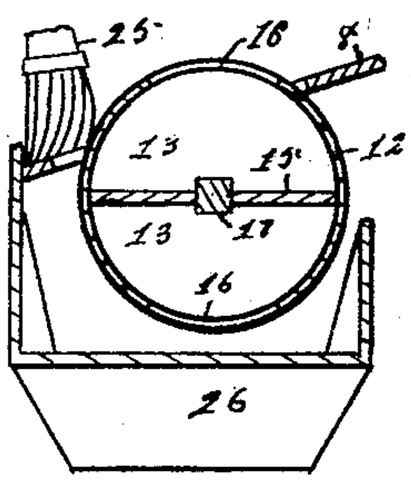

Fig. 3.

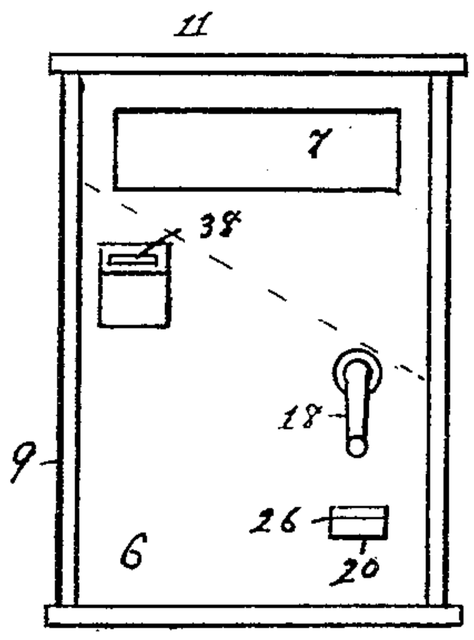

Fig. 4.

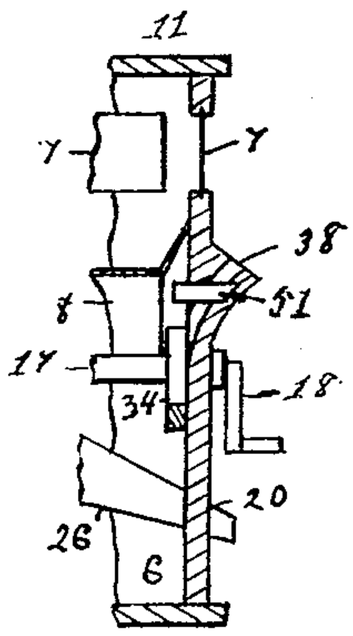

Fig. 5.

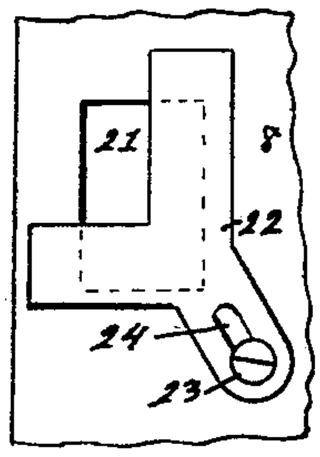

Fig. 6.

WITNESSES.

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COIN-CONTROLLED VENDING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 702,918, dated June 24, 1902.

Application filed February 10, 1902. Serial No. 93,425. (No model.)

To all whom it may concern:

Be it known that I, DORY BOURNE, a citizen of the United States, residing at Hamilton, Ohio, have invented a new and useful Improvement in Coin-Controlled Vending Apparatus, of which the following is a specification.

My invention relates to coin-controlled vending apparatus of the class adapted to dispense salted peanuts, candy, and similar articles; and the objects of my improvement are to provide means whereby the apparatus may be adapted to the use of coin of different sizes, to use a cylindrical dispenser containing two pockets, to adjust the opening in the partition to suit dispensers of different capacities, and to prevent the mechanism from being moved in a reverse direction. These objects are attained in the following-described manner, as illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the interior of my apparatus with parts broken away; Fig. 2, a diagram of the coin-controlled mechanism; Fig. 3, a transverse section of the cylindrical dispenser; Fig. 4, a front elevation; Fig. 5, a vertical section through the coin-slot; and Fig. 6, a portion of the inclined partition, showing adjustable opening therein.

In the drawings, 6 represents a rectangular box formed with glass windows 7 near the top of its respectives sides. Slanting partitions 8 separate the box into an upper and a lower compartment, which are both accessible through a hinged door 9. Lid 11 is also secured with hinges (not shown) for convenience in filling the upper compartment with the articles to be dispensed. Said door and the top may be locked in the usual manner when closed.

Cylindrical dispenser 12 is separated into two similar chambers 13 by means of longitudinal partition 15, and each chamber is formed with a rectangular mouth 16. Said dispenser is removably secured on transverse shaft 17, which is journaled at its ends in opposite walls of the lower compartment and actuated by outside crank 18, secured on one end thereof. A portion of the upper side of said dispenser projects into the upper compartment through a rectangular opening 21, formed in slanting partition 8. Said opening is adjustable in size to adapt it to different-sized dispensers by means of plate 22, extending over one side and one end thereof and being adjustably secured in different positions on the partition more or less toward the center of the opening by means of clamping-screws 23, which extend through slot 24. Brush 25, secured on the wall perpendicular to the surface of the dispenser and with its point in contact therewith, serves to sweep the mouth of chambers 13 as they are passed thereunder. At each half-turn of the dispenser one of the chambers is automatically emptied and the other is filled from the contents of the upper compartment, and a uniform quantity only will pass under the brush, that none may be crushed against the edge of the opening in the partition. Chute 26 is so situated and inclined as to receive and discharge the contents of the chambers on the outside of the box through opening 20 in the front wall thereof. Notched wheel 27 is secured on shaft 17 within the box, and contiguous to the front wall thereof it is formed with notches 28 on opposite sides and with cams 29 between said notches. Each cam terminates abruptly in a shoulder 31, and the front side 32 of each notch 28 projects farther than the rear side 33 thereof. Coin-actuated lever 34 is fulcrumed near its middle portion on screw 35 and terminates at its heavier front end in a downwardly-projecting lug 36, adapted to automatically engage with either of the notches 28 and lock wheel 27 from being turned in either direction.

When a coin 37 is inserted from the outside of the box through slot 38, formed in the front wall thereof, and falls through coin-chute 39 and on the rear end of lever 34, its weight actuates the lever to disengage lug 36 thereon from the corresponding notch 28 and to move the lever in contact with spring 41, secured thereunder to the front wall of the box. In this position of the lever the coin is retained in place thereon by the lower corner 42 of adjustable block 43, which forms one edge of the coin-chute, being less distant from the rear extremity of lever 34 than the diameter of the coin. In this position of lever 34 the engagement of the higher front side 32 of notch 28 with lug 36 prevents wheel 27 from being turned in a rearward direction; but it may now be turned forward by means of the

crank until cam 29 actuates the lever to depress spring 41 and release the coin from between the extremity thereof and the block 43, as shown in Fig. 2. Before the coin is released shoulder 31, which terminates the cam, has passed beyond the catch 44, which depends from lever 34 a short distance in the rear of lug 36 thereon. Any attempt to reverse the direction of the wheel 27 at this point would be prevented by the engagement of said catch with shoulder 31. As the wheel is moved farther forward, however, lug 36 successively escapes shoulder 31 and the front side of notch 28 and falls into engagement with the rear side 33 of said notch and securely locks the wheel from being turned in either direction until again disengaged by a coin in the same manner as before. While the successive engagement of catch 44 and lug 36 with either shoulder 31 and of said lug with the front side 32 of either of the notches 28 limits the reverse movement of wheel 27, said movement may be still further limited by means of an auxiliary ratchet-wheel 45, being secured on shaft 17 and adapted to engage with pawl 46 in the usual manner, as shown in Fig. 2.

To adjust the apparatus for the use of coins of different diameters, blocks 43 may be turned on screw 47, with its corner 42 more or less distant from the rear end of lever 34 and secured by means of screw 48 being inserted through slot 49, formed in the block. The width of slot 38 should be correspondingly changed by the insertion or removal of pin 51 of the proper size across one of its ends, as shown in Figs. 1 and 5.

By forming wheel 27 with but one instead of two cams the partitions and one of the mouths may be omitted from the cylindrical dispenser, when it could be filled and discharged with each rotation instead of each chamber with every half-rotation of the crank. In this manner double the quantity would be dispensed by the insertion of each coin.

Having fully described my improvement, what I claim as my invention, and desire to secure by Letters Patent of the United States, is—

1. The combination with a rotative shaft, and a cylindrical dispenser mounted thereon, of a cam-wheel formed with a peripheral notch fast upon said shaft, a block with inclined upper face, a lever pivoted between its ends and disposed between said block and cam-wheel, a spring beneath the end of the lever nearest said block, the other end of said lever being provided with a downwardly-projecting lug and a catch, substantially as and for the purpose specified.

2. The combination with a rotative shaft, a cam-wheel secured thereon and formed with a peripheral notch and shoulder adjacent thereto, a cylindrical dispenser mounted on said shaft, a block with inclined upper face, a lever interposed between said block and cam-wheel and having downwardly-depending lug and catch, a ratchet on the shaft of the cam-wheel and a pawl carried by the lever to engage the same.

3. The combination of a rotative shaft, a cam-wheel secured thereon and formed with a peripheral notch and shoulder adjacent thereto, a cylindrical dispenser mounted on said shaft, a block with inclined upper face, a lever interposed between said block and cam-wheel and having downwardly-depending lug and catch, a ratchet on the shaft of the cam-wheel and a pawl carried by the lever to engage the same, said pawl being pivotally mounted on the fulcrum of the lever.

4. The combination with a rotative shaft, a cam-wheel secured thereon and formed with a notch and a shoulder, of a coin-actuated lever formed with a lug and with a catch adjacent thereto whereby the rotation of the shaft is limited by the automatic engagement of the catch with the shoulder or of the lug with either the notch or the shoulder.

DORY BOURNE.

Witnesses:
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