May 24, 1932. P. R. GALT 1,859,964

DISPENSING DEVICE

Filed Feb. 5, 1931

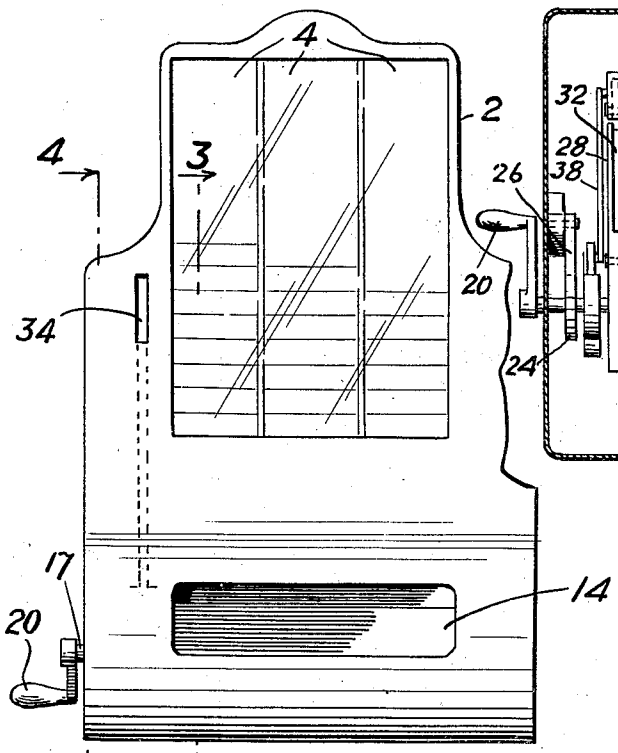

FIG. 1.

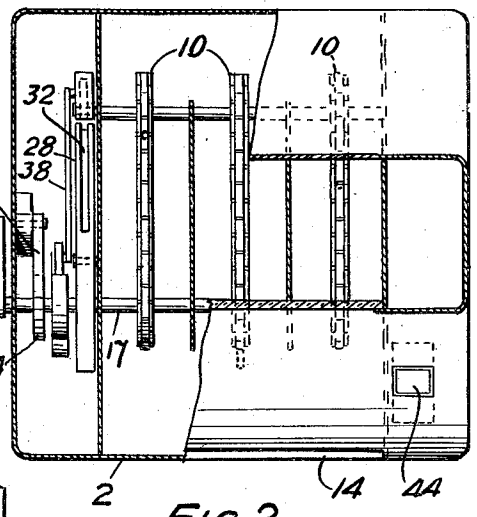

FIG. 2.

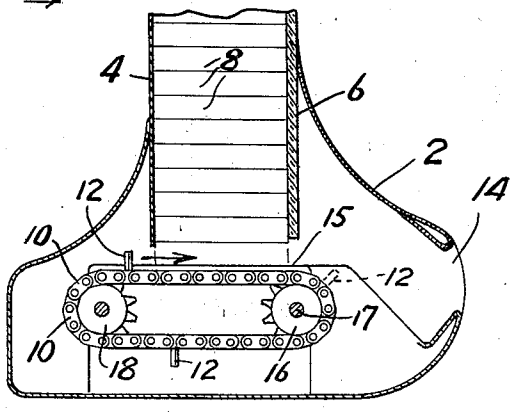

FIG. 3.

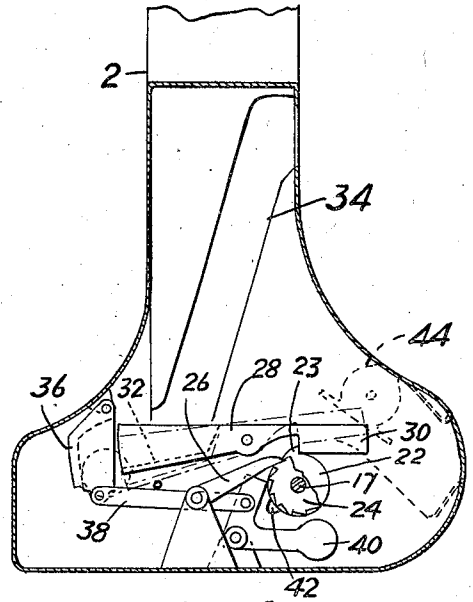

FIG. 4.

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UNITED STATES PATENT OFFICE

PERCE R. GALT, OF MERCHANTVILLE, NEW JERSEY

DISPENSING DEVICE

Application filed February 5, 1931. Serial No. 513,566.

This invention relates to a dispensing device and more particularly a dispensing device of coin operated type for the sale of packaged goods.

It has become common practice to dispense candy, chewing gum or the like automatically from dispensing machines actuated by the insertion of a coin which trips mechanism permitting the delivery of packages upon the manual operation of a crank or the like. It is the object of the present invention to provide a simple device of this character.

It is a further object of the present invention to provide a device of this character which will be capable of containing a large number of articles to be dispensed within a small space.

Other objects of the invention relating to details thereof will be apparent from the following description read in conjunction with the accompanying drawings in which:

Fig. 1 is a front elevation of the device;

Fig. 2 is a horizontal section showing parts of the operating mechanism in plan;

Fig. 3 is a vertical section taken on the plane indicated by the line 3—3 in Fig. 1; and

Fig. 4 is a vertical section taken on the plane indicated by the line 4—4 in Fig. 1.

The device comprises a suitable casing 2 providing a plurality of chutes 4 preferably faced by glass so that the contents are visible to a purchaser, which chutes are arranged to contain the packaged merchandise indicated at 8. The present device is formed so that the same type of merchandise is dispensed from all of the chutes.

Located beneath each of the chutes is a continuous conveying chain 10, each of the conveying chains carrying a pin 12 upstanding therefrom and adapted to engage the rear of an article to move it from the bottom of the chute to the exit 14. It will be noted that the articles fall upon spacing members 15 extending slightly above the chain so that as the chain moves it does not contact with the lowermost article. Each pin 12 however extends above the members 15 and advances the packages therealong. In the present case three pins are provided, one on each side of the chains, the pins being spaced, as indicated in Fig. 3, one-third of a chain length apart from each other so that the chains at each operation move through one-third of a length. The packages are successively distributed from the three chutes. In this way a large number of the articles may be included within a relatively small vertical height.

The chains are trained over front sprockets 16 carried by a shaft 17 and rear sprockets 18. The shaft 17 outside the casing is provided with a crank 20 which may be manually manipulated by a purchaser. The shaft 22 within the casing carries a member 22 provided with a lug 23 and also with a ratchet 24 engaged by a detent 26 so that reverse operation thereof is prevented. The lug 23 is arranged to engage a shoulder on a lever 28 pivoted to the casing and weighted at its forward end as indicated at 30 so as to normally assume the full-line position illustrated in Fig. 4. The rear of the lever 28 is groovel as indicated at 32 in Fig. 2 so as to receive a coin inserted into the chute 34. Rearwardly of the lever 28 is a member 36 provided with a pocket adapted to receive a coin, this member 36 being normally held in forward position by a link 38 pivoted to the upright arm of a bell crank 40 capable of being rocked in a counter-clockwise direction as viewed in Fig. 4 by a cam 42 carried by the member 22.

When the device is at rest the parts assume the position indicated in Fig. 4, the lug 23 being held engaged with the shoulder of lever 28 or being adapted by further forward rotation to engage the same. When a coin is inserted in the chute 34 it drops into the groove 32 of lever 28 causing the same to rock into the dotted line position illustrated in Fig. 4. The coin rolls rearwardly until it engages the member 36. The arrangement of parts is such that the coin cannot drop into the base of the casing but is prevented from further rearward movement by the member 36 and still rests upon the member 28 which is now held in its lower position against a suitable stop the weight of the coin maintaining it thus. When the lever is in this position the shoulder thereof is disengaged from the lug

23 and accordingly a purchaser may rotate the shaft 17 so as to move the chains simultaneously forwardly with the result that one of the pins 12 will force a package to the exit 14. When part of a revolution has been accomplished, the cam 42 will rock the bell crank 40 moving the member 36 rearwardly and permitting the coin to drop. Thereupon the weighted end of the lever causes it to again assume the full line position illustrated in Fig. 4 so that as further rotation of shaft 17 occurs the rotation will be positively limited by engagement of lug 23 with the shoulder of the lever.

A single rotation of shaft 17 corresponds to a movement of the chains 10 through a distance equal to one-third of a chain length. Accordingly but one of the articles can be dispensed upon any single actuation of the device.

The counter 44 may be provided to register the number of articles discharged, this counter being suitably connected to the shaft 17.

What I claim and desire to protect by Letters Patent is:

Coin controlled means for a vending machine including a lever, a coin chute arranged to guide a coin upon one end of the lever to tilt the same, a shaft, a member carried by the shaft, interengaging means on the member and lever whereby the lever holds the shaft against rotation except when tilted by a coin, a pivoted element adjacent that end of the lever which receives the coin, a weighted bell crank, a link connecting the element and bell crank whereby the element is normally held in position to prevent a coin from falling off the lever, and means carried by the shaft operative when the shaft revolves to rock the bell crank and so move the pivoted element to release the coin from the lever.

In testimony of which invention, I have hereunto set my hand, at Philadelphia, Pennsylvania, on this 2nd day of February, 1931.

PERCE R. GALT.