F. G. SCHENKEL, DEC'D.
R. SCHENKEL, ADMINISTRATRIX.
VENDING MACHINE.
APPLICATION FILED FEB. 18, 1916.

1,266,998. Patented May 21, 1918.

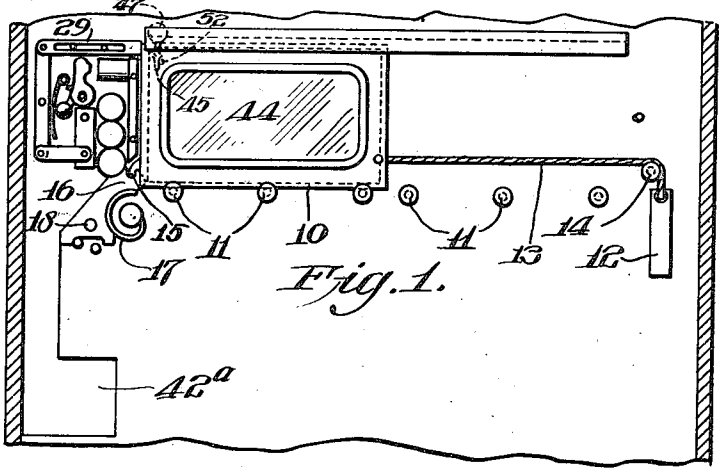


Fig. 1.

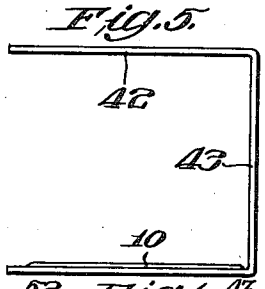


Fig. 5.

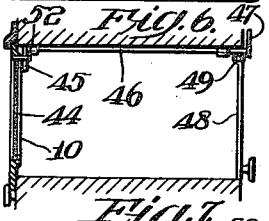


Fig. 6.

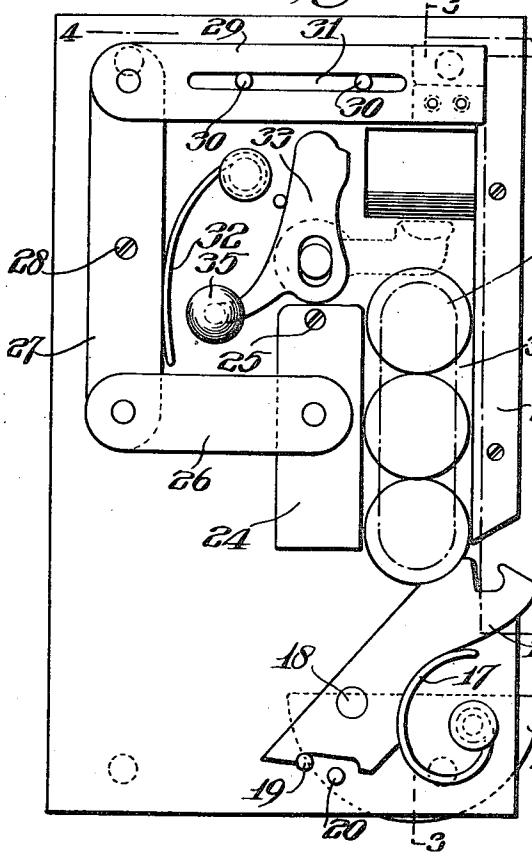


Fig. 2.

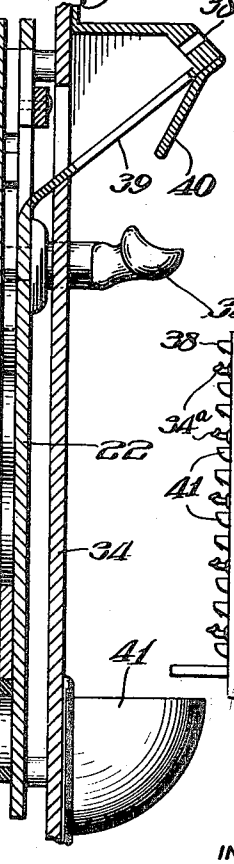


Fig. 3.

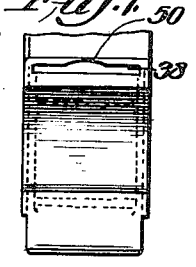


Fig. 7.

Fig. 8.

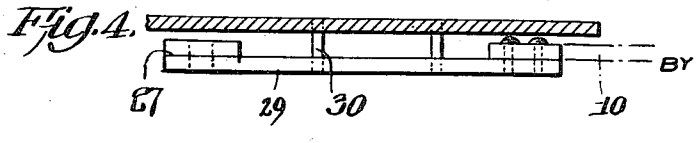


Fig. 4.

INVENTOR
Frederick G. Schenkel
BY
By Thos. Crozdale,
his ATTORNEY

UNITED STATES PATENT OFFICE.

FREDERICK G. SCHENKEL, OF WILMINGTON, DELAWARE; ROSE SCHENKEL ADMINISTRATRIX OF SAID FREDERICK G. SCHENKEL, DECEASED.

VENDING-MACHINE.

1,266,998. Specification of Letters Patent. Patented May 21, 1918.

Application filed February 18, 1916. Serial No. 79,007.

To all whom it may concern:

Be it known that I, FREDERICK G. SCHENKEL, a citizen of the United States, residing at Richardson Park, Wilmington, in the county of New Castle, State of Delaware, have invented a new and useful Vending-Machine, of which the following is a specification.

My invention relates to improvements in coin controlled vending machines. The object is to provide improved means whereby coins of required denomination are utilized to render effective releasing mechanism for automatically operated closures, means whereby coins other than that of required denomination cannot be inserted in the device or else are rejected or returned to the customer, means whereby the proper coins after having performed the functions above recited, are released and delivered to a proper receptacle, means whereby the opening of the closure is indicated to the rear of the device so that the attendant may know when the contents of any vending compartment have been removed so that he may replenish the same and means whereby he may simultaneously close the compartment subject to the coin opening operation and also to indicate that the compartment is provided with its supply. The invention also comprises improvement in details of construction.

Referring to the drawings, which illustrate merely by way of example suitable means for the embodiment of my invention:—

Figure 1 is a sectional elevation showing the coin controlled latching mechanism and coin releasing and door operating mechanism.

Fig. 2 is a similar view on enlarged scale of the latching and releasing mechanism.

Fig. 3 is a vertical section on line 3—3 of Fig. 2.

Fig. 4 is a horizontal section on line 4—4 of Fig. 2.

Fig. 5 is a plan view on reduced scale of the door or closure.

Fig. 6 is a sectional view on reduced scale showing modifications of the closure construction.

Fig. 7 is an elevation of the coin slot device.

Fig. 8 is an elevation on reduced scale showing the arrangement of a plurality of vending compartments.

Similar numerals refer to similar parts throughout the several views.

A suitable compartment is provided for containing the object or objects to be sold, for example, a sandwich and a cup of coffee. The receptacle or compartment is accessible upon one side for example, the rear, to the atendant who replenishes the supply from time to time as required. This compartment is also accessible upon the other side, for example the front, to the customer who desires to purchase the contents thereof, but it is not accessible to the customer until he has performed certain predetermined requirements. This is secured by door or closure 10 which is adapted to cover the front opening of the compartment. This door is slidably mounted on the rollers 11, or other suitable means, and is normally actuated or moved into the open position by the weight 12 secured to cord 13, which cord 13 is secured to the door 10 and moves over the roller or pulley 14. The door 10 is provided with the pin 15 adapted to engage with the latch or detent 16, moved into the locking position by spring 17. This latch 16 is pivotally supported at 18. The stops 19 and 20 are provided to limit the movement of the latch in both directions of its actuation.

Between the walls 21 and 22 of the casing or framework are provided the fixed member 23 and the movable member 24 pivoted at 25. It will be noted that these two members 23 and 24 form a channel which will just accommodate the desired number of coins of desired denomination—in the present example, three nickels. The upper concave portion of the latch 16 normally forms a stop for the lowest nickel. It will be understood that the walls 21 and 22 are spaced apart a distance slightly greater than the thickness of the coin. The member 24 is connected by the link 26 to the lever 27 pivotally mounted at 28, and at its upper end pivotally connected to the bar 29 slidably mounted on the pins or rollers 30 projecting into slot 31. The end of bar 29 is adapted to abut against door 10, when the door is in the closed position. This serves to maintain lever 27 in the position shown in Fig. 2, against the tension of spring 32. The lever

33 is provided with a free end adapted to engage the top of the uppermost coin. This lever is actuated by the handle 34ª connected with the spindle projecting from lever 33 through the front wall 34 of the casing. Lever 33 has a counterbalance 35 and a stop 36 for limiting its counterbalanced actuation. A chute is provided for delivering the coins from the front of the panel or casing wall 34, to the channel 37 formed between the walls 21 and 22 and the members 23 and 24. This chute is provided with an opening 38 of size suitable for the required coin. The lower inclined wall 39 is slotted or cut away, as to part of its extension, leaving narrow marginal edges only which will support the required coin, for example, a nickel, but will not support a cent or a dime, but will permit the same to drop through, guided by the apron 40 to the cup 41.

In operation—

When the required number of coins of required value have been inserted through the slot 38, and have assumed the position in channel 37 as shown in Fig. 2, the hand lever 34ª is actuated causing the depression of the free end of lever 33 to engage the top of the three coins and push the same downwardly to actuate the latch 16 against the tension of spring 17, depressing the latch so as to disengage the pin 15 on the door 10, whereupon the door 10, responding to the actuation of the weight 12, moves into the open position, or away from the front of the compartment, which it has normally closed. Upon the movement of the door or closure to the open position and away from the end of bar 29, bar 29 is permitted to move to the right in response to the actuation of spring 32 pressing against lever 27. This carries the lower end of lever 24 to the left which opens the lower end of channel 37 sufficiently to permit the coins to drop into receptacle 42ª.

When the customer opens the compartment in the manner above described, the attention of the attendant should be called to the same in some suitable way. In Fig. 5 is shown the door 10 connected with another door or movable member 42, by an arm 43 or other suitable means, so that when door 10 moves to the open position, the member 42 moves to a corresponding position. After the attendant has replenished the compartment, the member 42 may be moved into the closing position which simultaneously moves door 10 into the closing position and into engagement with latch member 16, ready for the next opening operation. Door 10 is preferably provided with a glass panel 44, so that the customer may inspect the contents of the compartment. In Fig. 6 an alternative arrangement is shown, in which the door 10 is provided with a pin 52 which actuates a lever 45 on rod 46 which is connected to any suitable signal 47, at the rear of the compartment. The rear door 48 in this example is shown hinged at 49, and normally held in the closed position by gravity. The slot 38 is shown slightly beveled at the top, as at 50, to prevent catching the sharp peripheral edge of the coin. The wall of the casing overlying the coin guideway may be provided with a transparent panel as of glass, as indicated at 51, in order that the coins may be inspected, when in the position shown in Fig. 2.

What I claim is:—

1. In combination with a container, a movable closure therefor, a detent for the closure, means for actuating the detent including a manually operated lever, adapted to communicate movement from the lever through a coin or coins to the detent, and means forming a guide-way for the coin or coins, said guide-way forming means including a movable member controlled by the closure.

2. In combination with a container, a movable closure therefor, a detent for the closure, means for actuating the detent including a manually operated lever, adapted to communicate movement from lever through a coin or coins to the detent, and means forming a guide-way for the coin or coins, said guide-way forming means including a movable member controlled by the closure and adapted to release the coin after the actuation of the detent.

3. The combination of a container, a slidably movable door therefor, door actuator, a latch for restraining said actuator, a lever for actuating the latch, means providing a guide-way for a predetermined arrangement of coins to establish operative relationship between lever and latch, said guide-way means including a member forming part of the guide-way operated to release the coin when the door is moved.

4. The combination of a container, a door therefor, door actuating means, a latch for said door, latch actuating means comprising a coin actuating lever and means forming a coin guide-way to the latch, said guide-way-forming means including a movable member controlled by the door for releasing the coins.

FREDERICK G. SCHENKEL.

Witnesses:
HENRY KERN,
MAE HOFMANN.