Oct. 28, 1941. R. E. BAKER 2,260,734

BOTTLED BEVERAGE VENDING MACHINE

Filed June 26, 1939

Fig. 1.

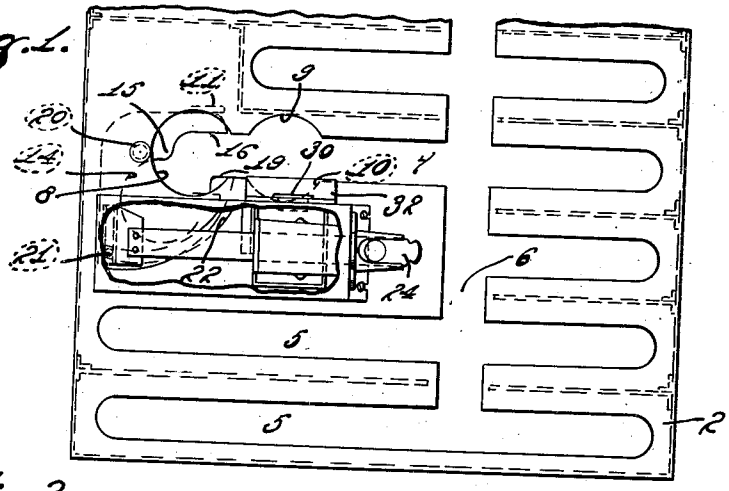


Fig. 2.

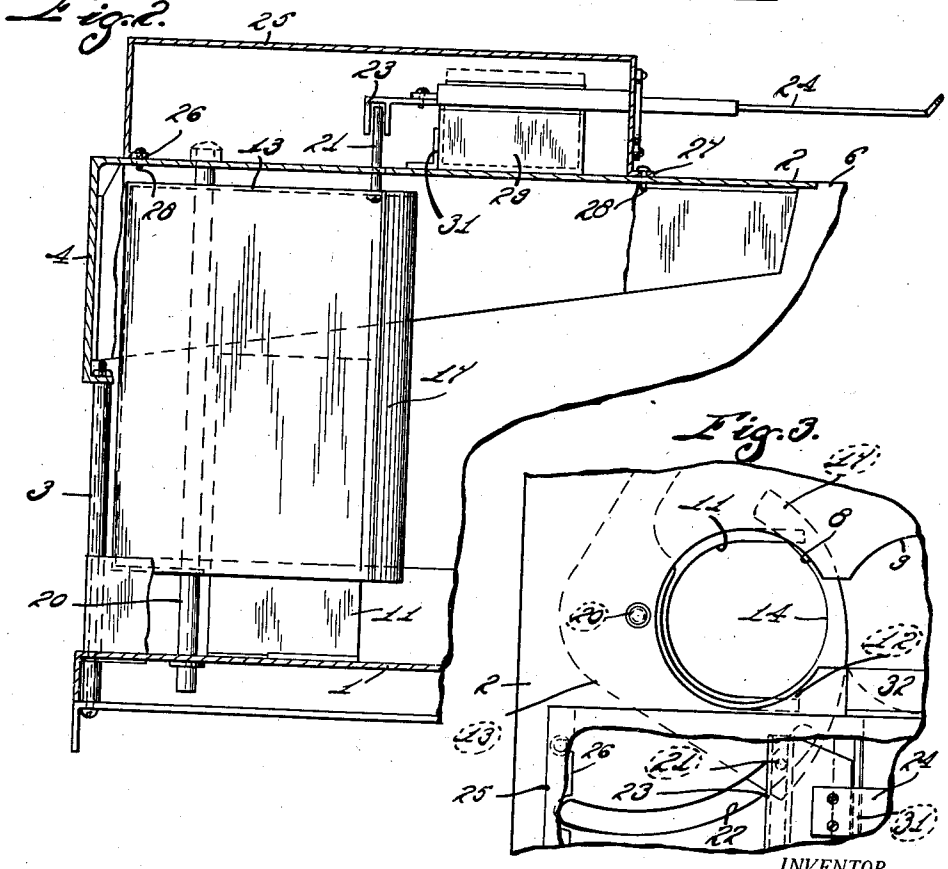


Fig. 3.

INVENTOR.
Robert E. Baker,
BY
Hood & Hahn
ATTORNEYS.

Patented Oct. 28, 1941

2,260,734

UNITED STATES PATENT OFFICE

2,260,734

BOTTLED BEVERAGE VENDING MACHINE

Robert E. Baker, Muncie, Ind., assignor to Glascock Brothers Mfg. Co., Muncie, Ind., a corporation of Indiana

Application June 26, 1939, Serial No. 281,150

3 Claims. (Cl. 312—88)

My invention relates to improvements in coin-controlled dispensers for bottled beverages and the like.

One of the objects of my invention is to provide a dispenser which may be disposed in any suitable refrigerating cabinet and which will provide means whereby the customer may select one of any number of different types of bottled beverage and by the insertion of a proper coin in the coin-controlling unit, remove the selected bottle.

More specifically, my invention relates to improved means whereby the selected bottle may be moved in dispensing position, said means preventing, at the same time, another bottle from being moved into dispensing position, and when the coin mechanism is properly operated, the preselected bottle may be removed from said dispensing position.

Another object of my invention is to provide means whereby different types of coin-controlled apparatus may be used in connection with the coin-controlled mechanism.

For the purpose of disclosing the invention, I have illustrated an embodiment thereof in the accompanying drawing, in which:

Fig. 1 is a plan view of a dispenser embodying my invention;

Fig. 2 is a partial longitudinal sectional view thereof; and

Fig. 3 is an enlarged detail of the dispensing mechanism.

In the embodiment illustrated, a suitable skeleton frame may be provided consisting of a bottom 1 and a top 2 connected together by corner bolts or standards 3. The top is preferably provided with downturned side flanges 4 and has a plurality of longitudinally extending slots 5 communicating with one another through the medium of a transversely extending slot 6. These slots are sufficiently wide to permit the necks of the bottles to protrude therethrough but are not sufficiently wide to permit the body of the bottle to pass therethrough. One of the slots 7 terminates in an enlarged opening 8 which is sufficiently large to permit the removal therethrough of the body of a bottle so that when a bottle has been moved to this point, the entire bottle may be removed from the structure.

In addition to this discharge opening, the sides of the slot 7 are at the points 9 and 10 widened sufficiently to permit a passage of a bottle therein.

The first opening may be termed as the discharge opening or station and the second opening formed by the enlarged sides 9 and 10 may be designated as the filler opening.

Disposed beneath the discharge opening 8 is a positioning stall 11 which is secured, by welding or otherwise to the bottom 1, is substantially cylindrical in shape and is open on its receiving side as at 12 to permit the passage of a bottle thereinto. This stall is so arranged that when a bottle is placed therein, it is immediately beneath and centered with respect to the delivery opening 8.

A rotatable closure plate 13 is located beneath the cover 2 and this plate is provided with an opening 14 which in one position of the plate will coincide with the opening 8. The opening 14 communicates through a narrow neck 15 with an inlet slot 16 in the plate. The slot 16 and the neck 15 are of such dimensions that while the neck of a bottle may pass therethrough, the body of a bottle cannot be vertically removed through the same. This plate has extending downwardly therefrom a closure sleeve 17 which sleeve surrounds the stall 11 and is provided at one point with an opening 19 adapted to coincide with the opening 12 in the stall. The sleeve and closure plate provide practically a unitary structure and this structure is pivoted on a pivot rod 20 extending vertically through the top 2 and the bottom 1.

The closure plate is provided with an operating arm or pin 21 which extends through an arcuate slot 22 in the top 2 and is adapted to be engaged by an operating fork 23 on the coin-control slide 24. The coin-control mechanism, in itself, may be of any of the suitable commercial types of mechanisms now used which include an operating slide 24 provided with means for the insertion of a coin which, when inserted, permits the slide to move the full length of its stroke, inwardly to thereby rotate the cover plate 13 to a position where the opening 14 therein will coincide with the opening 8 in the cover plate. This coin-controlled mechanism is mounted within a housing or cover 25 having, at one end, inturned slotted feet 26 and at the opposite end out-turned slotted feet 27. The slots of these feet are adapted to slidingly engage beneath headed studs 28—28 in the top 2 for preventing vertical displacement of the cover after the same has been placed in position. The cover 25 is also adapted to receive a coin box 29 which slides into position through an opening in the side of the cover plate to a point immediately beneath the deposit point of the coin-controlled mechanism and this coin box is provided with a suitable lock 30 for locking the

same against removal. An upwardly extending lip 31 is secured on the top 2 in such a position that when the coin box 29 is inserted in position, the rear side of the coin box will abut against this lip. Therefore, due to the fact that the coin box cannot be moved relatively to the cover plate 25 when the coin box is in position, lateral displacement of the cover box 25 is prevented so that unwarranted removal of the coin-controlled mechanism is prevented. On the other hand, if it is desired to substitute a different box, the coin box unit as a whole may be removed simply by removing the coin-receiving box from position. This permits the interchange of different types of coin-controlled units. In some states, for instance, a sale tax is imposed, which necessitates not only the deposit of the coin for the purchase of the beverage but also the deposit of a coin in payment of the sales tax. Therefore, where the structure disclosed above is intended for use in such states, one coin-control unit may be removed and another readily substituted without the use of tools and without any great effort on the part of the operator.

It will also be noted that when the coin-control unit is in position, the widened portion 10 of the slot 7 is covered by a laterally extending flange 32 on the coin box so that when the coin box is in position, it is impossible to remove a bottle through this filling opening. However, when it is desired to refill the unit by removing the coin box from the coin-control unit, the refill opening is exposed in such a manner that bottles may be inserted through the refill opening.

In operation, the parts are normally in the position wherein the opening 14 in the cover member coincides with the opening 8 in the top 2. However, when the parts are in this position, the opening 12 in the stall 11 is closed by the sleeve 17. If the operator wishes to remove a bottle from the dispenser, the preselected bottle is moved to a position ready to be slid into the stall 11. By placing a coin in the coin-controlled slide 24 and pushing the coin-controlled slide inwardly to the limit of its movement, this limit being permitted by the coin, the cover or the closure member 13 and the sleeve 17 will be rotated so that the slot 16 coincides with the slot 7 and the open face of the sleeve 17 coincides with the opening 12 in the stall. Therefore, the selected bottle may be slid into the stall 11 and into a position immediately beneath the opening 6.

The operator now pulls the coin slide 24 outward to the limit of its outward movement. This outward movement again closes the stall 11 against the insertion of another bottle and also closes the slot 7 against movement of a bottle therein into the stall. At the same time, the opening 14 in the closure plate 13 is moved to coincide with the opening 8 in the top 2 and the selected bottle may be removed from the dispenser leaving the parts in a position ready to be manipulated by an operator as soon as another coin is placed in the coin-control mechanism.

I claim as my invention:

1. A coin-controlled dispenser for bottles, comprising a slotted cover member having a plurality of inter-communicating slots of such dimension as to permit the neck of a bottle to project therethrough while restricting passage of the body of a bottle, one of said slots being enlarged to provide a pasageway permitting the axial passage of the body of a bottle therethrough, an oscillating closure for said passageway oscillating on an axis parallel with the axis of said passageway, said oscillating closure having an opening therein sufficiently large to permit the axial passage of a bottle body therethrough and having a slot extending from said opening to the periphery of the closure of a dimension to permit the passage of a bottle neck therethrough while restricting the axial movement of the bottle body therethrough, the slot in the closure being adapted to be moved into coincident relation with a slot in the cover when the closure is oscillated to one point and the opening in the closure being adapted to be moved into coincident relation with the passageway in the cover when the closure is oscillated to another position, and coin-controlled means for oscillating said closure.

2. A coin-controlled dispenser for bottles, comprising a slotted cover member having a plurality of intercommunicating slots of such dimension as to permit the neck of a bottle to project therethrough while restraining the passage of the body of a bottle, one of said slots being enlarged to provide a passageway for the passage of the body of a bottle therethrough, a closure member for said passageway pivoted to oscillate relatively to the passageway on an axis parallel with the axis of said passageway, said closure member having an opening therein coincident in size to said passageway, the center of said opening being on a line radially extending from the pivot point of the closure member, said closure member also having a radially extending slot extending from the periphery of the closure member to said opening and coincident in size with a slot in the cover member, the center of said slot in the closure member being on a second line radially extending from the pivot point of the closure member, and coin-controlled means for oscillating said closure member.

3. A coin-controlled dispenser for bottles, comprising a slotted cover member having a plurality of intercommunicating slots of such dimensions as to permit the neck of a bottle to project therethrough while restricting the passage of the body of a bottle, one of said slots being enlarged to provide a passageway for the body of a bottle, a receiving stall arranged beneath said passageway having an inlet opening therein coinciding with the walls of one of said slots in the cover, an oscillating closure for said passageway oscillating on an axis parallel with the axis of said passageway, said closure having an opening therein coincident in size with the passageway and having a slot extending from said opening to the periphery of said closure member and coinciding in dimension with the dimensions of a slot in said cover member, and a second closure for said stall carried by said first-mentioned closure member and adapted to close the entrance to said stall when said first-mentioned closure member is oscillated to position the opening therein in coincidence with said passageway.

ROBERT E. BAKER.