Aug. 5, 1958 W. JENKINS ET AL 2,846,122

VENDING MACHINE

Filed Nov. 20, 1953 4 Sheets-Sheet 1

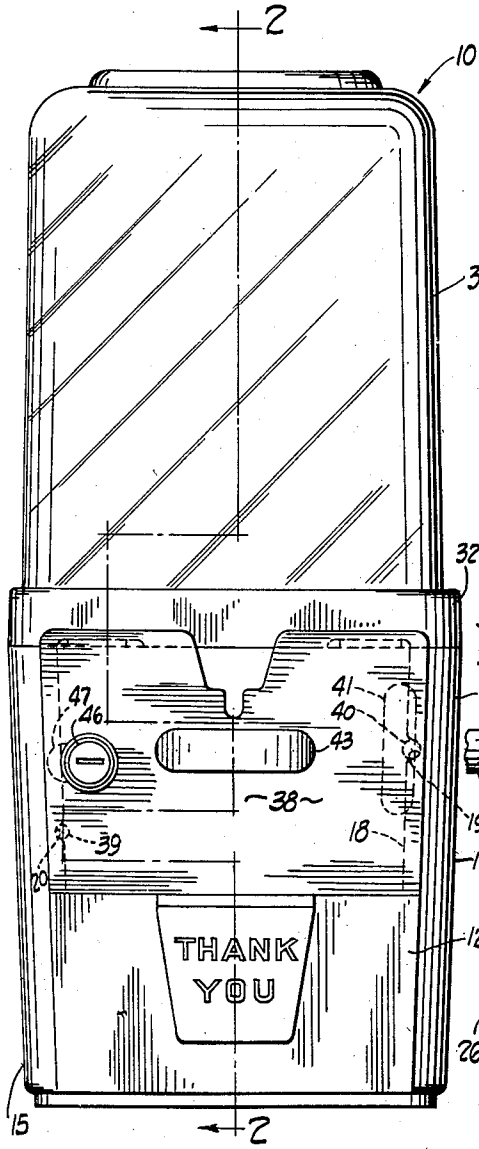


FIG. 1

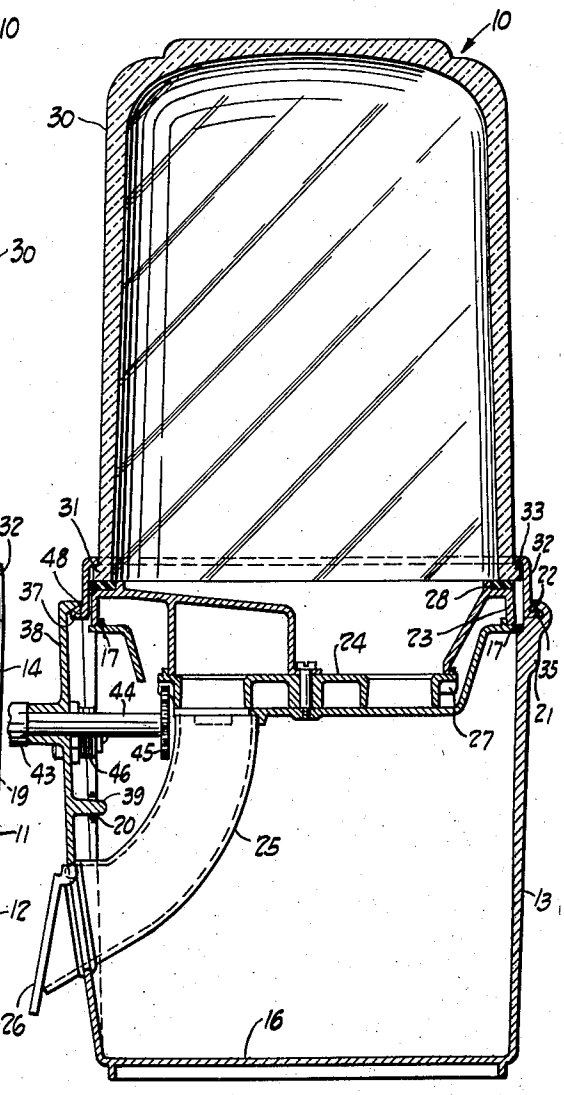


FIG. 2

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VENDING MACHINE

Filed Nov. 20, 1953 4 Sheets-Sheet 2

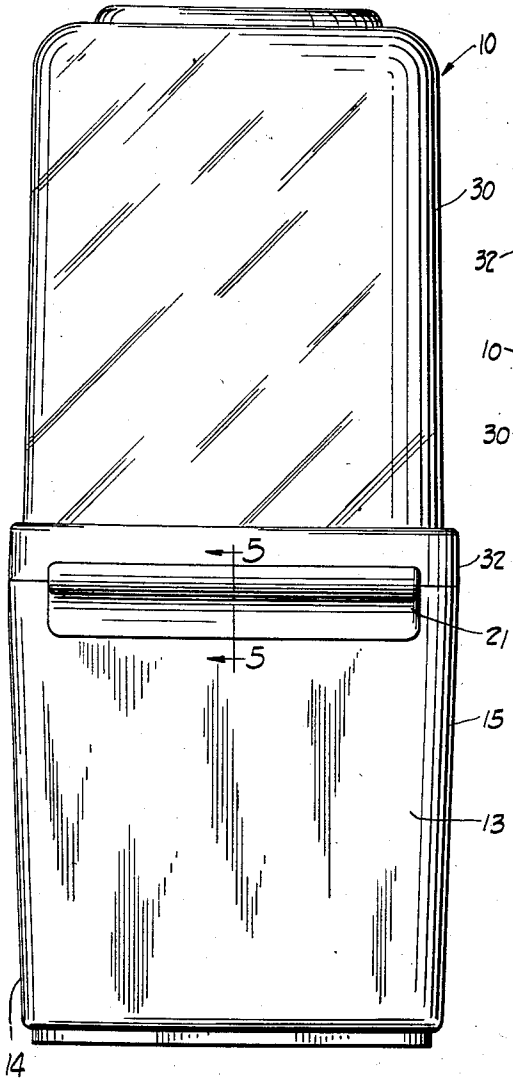


FIG. 3

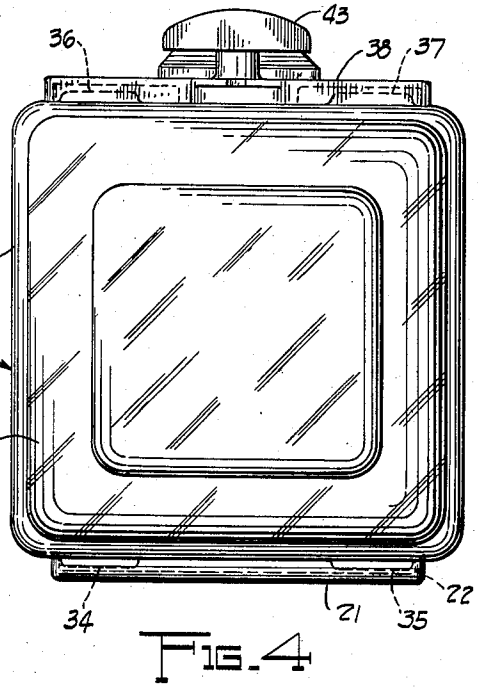


FIG. 4

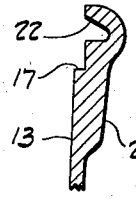


FIG. 5

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VENDING MACHINE

Filed Nov. 20, 1953 4 Sheets-Sheet 3

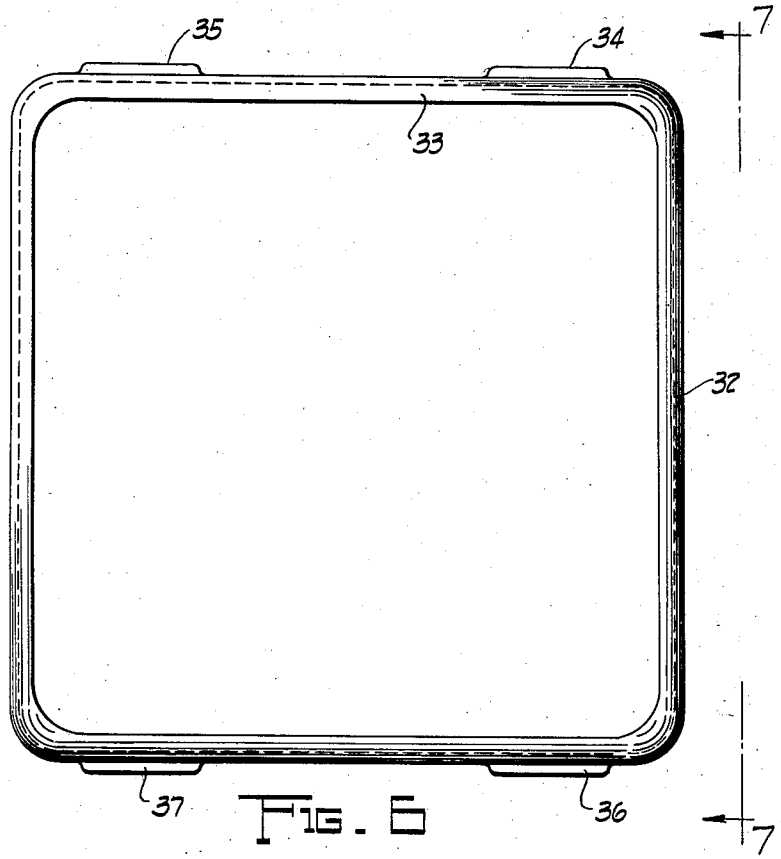


Fig. 6

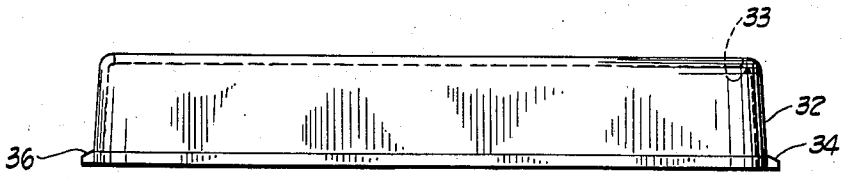


Fig. 7

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Aug. 5, 1958 W. JENKINS ET AL 2,846,122

VENDING MACHINE

Filed Nov. 20, 1953 4 Sheets-Sheet 4

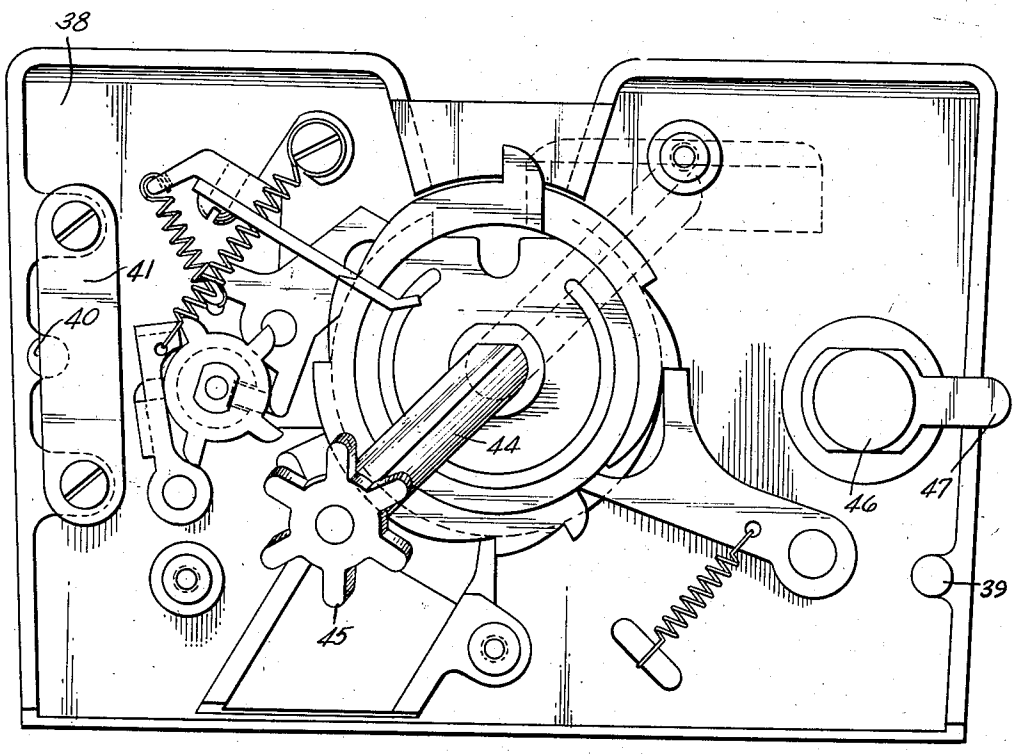


Fig. 8

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United States Patent Office 2,846,122 Patented Aug. 5, 1958

2,846,122

VENDING MACHINE

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Application November 20, 1953, Serial No. 393,454

2 Claims. (Cl. 222—153)

This invention relates to a coin operated vending machine.

Conducive to a better understanding of this invention, it may be well to point out that the ordinary coin operated vending machine comprises a number of superposed housing elements secured together by means of rods running through the interior of the housing. These rods hold the several elements together by means of anchoring nuts or threaded bosses positioned in the end elements. Such rods not only obstruct the interior of the housing, but also make its assembly and disassembly difficult because the various rods must be carefully aligned with their anchoring threaded elements during the assembling operation. Furthermore, the globe or merchandising container usually has a contricted base end that fits into a seat in the bottom element. The constricted construction of the globe base end makes it difficult to fill the globe and keep the merchandise in place while the globe is being attached to the base.

It should also be pointed out that it is now common practice to disburse so called "feature items" such as small toys, rings, or other trinkets throughout the candy, gum, or nuts ordinarily vended by the machine as an added inducement to the prospective purchaser. It is customary when filling the globe to place such feature items against the globe so that they may be easily seen. With the ordinary globe having a constricted bottom, it is difficult to keep such feature items in place on the globe face while the candy is being placed in the center of the globe. However, with the improved straight walled globe that is the subject of this invention, the globe may be loaded by mechanical means that assure that the feature items will be positioned against the globe face and be held there by the contained merchandise.

The primary object of this invention, therefore, is to provide a vending machine that is assembled without employing any rods, bands, bars, or other threaded elements.

Another object is to provide a vending machine of the type stated whose globe or merchandise container is entirely open at the bottom and of substantially uniform cross-section from top to bottom.

A further object is to provide such a vending machine whose globe is made of one piece of cast glass with a solid top and an outwardly flanged bottom edge, which is the sole means through which the globe is secured to the base of the housing.

Still another object is to provide a vending machine whose globe is entirely weather-proof.

Further objects are to provide a vending machine that is simple in structure, easy to service and requiring a minimum of repair and replacement.

These and other objects of the invention will become apparent from a reading of the following specification and claims, together with the accompanying drawings wherein:

Figure 1 is a front elevation of the vending machine that is the subject of this invention;

Figure 2 is a vertical sectional view taken along the line and in the direction of the arrows 2—2 of the Figure 1;

Figure 3 is a rear elevation of the vending machine;

Figure 4 is a top plan view of the same;

Figure 5 is a vertical sectional view of the clasp element taken along the line and in the direction of the arrows 5—5 of the Figure 3;

Figure 6 is a top plan view of the collar; and

Figure 7 is a side view of the same taken in the direction of the arrows 7—7 of the Figure 6.

Figure 8 is a rear elevation of the front plate.

Referring more particularly to the drawings, there is seen in the Figure 1 the vending machine that is the subject of this invention, broadly indicated by reference numeral 10.

Reference numeral 11 indicates a first hollow body or base member cast from any suitable metal such as iron or aluminum and having a front wall 12, a rear wall 13, side walls 14 and 15 and a bottom wall 16. The top of the base member 11 is open and a groove or shoulder 17 is formed therearound on the upper edge of the several walls. The front wall 12 has a large rectangular slot 18 cut therein which intersects the shoulder 17 along the top edge of the front wall 12.

A clasp 21 is located proximate the top edge of the rear wall 13. The clasp 21 has an infaced angular lip 22 that extends the full length thereof. The clasp 21 is preferably formed integral with the rear wall 13, but may be made as a separate unit that is riveted to the wall, if so desired.

Reference numeral 23 indicates a second or intermediate body member that is superposed and seated on the shoulder 17 of the base 11, as shown in Figure 2.

The merchandise dispensing unit 24 of the vending machine is suspended from the intermediate member 23, and when so suspended becomes an integral part thereof. The dispensing unit 24 is of the usual type, having a dispensing disk rimmed by a toothed gear 27 that meshes with the coin controlled operating mechanism described hereinafter.

Vended merchandise is delivered through chute 25 to door 26 in the front wall of the housing. A glass globe 30 is positioned on top of the intermediate member 23 and defines a closed cavity in which the merchandise is both displayed and stored prior to vending. The globe 30 is made in one piece and is given substantially the same shape as that of the base member 11. The globe has straight walls that define an entirely open bottom. The bottom edge of the globe 30 is formed with an outwardly extending flange 31 that is formed integral with the globe and extends entirely therearound. The one piece construction of the globe 30 provides a weatherproof display surface that can be easily kept clean since there are no crevices or grooves to hold dirt and moisture as is the case with a globe having a separate metal cap to close the top thereof. Reference numeral 28 indicates a sealing gasket seated on the middle member 23. The globe flange 31 is seated on the gasket 28 as illustrated in Figure 2.

A metallic retaining collar 32 having an inturned upper edge 33 and outwardly extending angular ears 34, 35, 36 and 37 is seated on the top of the base 11 with its inturned edge 33 fitted around the upper face of the globe flange 31.

Reference numeral 38 indicates a front plate that fits into the slot 18 of the front wall 12 above the outlet of the chute 25, as illustrated in Figures 1 and 2. This plate has two locating pins 39 and 40 which engage notches 20 and 19 respectively in the edge of the slot 18. The plate 38 has an angular infaced lip 48 along its upper edge for a purpose to be hereinafter disclosed. The plate 38 is held in place on the front wall 12 by means of a slot hinge 41 and a lock 46 which has a

finger 47 that engages the inside surface of the front wall to draw the front plate thereagainst.

Coin operated control mechanism such as that described in our co-pending United States application Serial No. 393,394, filed November 20, 1953, now Patent No. 2,784,827, dated March 12, 1957, entitled, "Coin Operated Mechanism For Vending Machines," is mounted on the inside of the plate 38 and controls the dispensing unit 24, suspended in the housing, by means of handle 43, shaft 44 and star wheel 45 which engages the dispensing unit gear 27, as seen in Figure 2.

To assemble the vending machine just described, the second member 23 to which the dispensing unit is attached, is superposed as a unit on the base shoulder 17. The flange bottom edge 31 of the globe 30 is superposed on the gasket 28 of the second member 23. The collar 32 is placed around the globe flange 31 and both the globe 30 and collar 32 are pressed backward toward the clasp lip 22 so that the ears 34 and 35 of the collar are forced under the lip 22. It will be noted that the ears 34 and 35 and lip 22 are of mating angular cross section so that rearward pressure on the collar 32 causes the collar and globe 30 to be drawn downward into compressed engagement with the gasket 28. While rearward pressure is maintained against the collar 32, the front plate is placed on the front wall of the base 11 by slipping the hinge 41 inside of the slot 18 and by a swinging motion bringing the lock side of the front plate 38 into contact with the opposite side of the slot 18. The angular ears on the front edge of the collar 32 are now engaged with the front plate lip 48. At the same time, the front plate locating pins 40 and 39 are engaged with the front wall notches 19 and 20 respectively. The front plate is then secured in place by means of lock 46. As the front plate is locked in place, the locating pins 39 and 40 cause the front plate to be drawn into place on the base 11 against upward displacement. The plate 38 so secured holds the collar ears 36 and 37 down by means of its lip 48. The collar 32 so clamped between the clasp lip 22 and the front plate lip 48, in turn holds the several members 11 and 23 and globe 30 together in superposed engagement to provide a weathertight housing that is securely locked against unauthorized disassembly.

The improved vending machine, just described, is assembled without the need for any rods or bars which pass through the interior of the housing and also without the need for any special wrenches or keyed screw drivers such as required with prior art devices. Furthermore, the entirely open bottom of the globe 30, together with the absence of any rods which pass through the globe, permit the easy loading of the globe with merchandise and permit a simple, flat plate to be used to cover the bottom opening to hold the goods therein while the globe is inverted, as it is being seated on the gasket 28. After the globe is in position on the gasket 28, it is only necessary to pull out this loading plate and proceed with the further re-assembly of the housing.

It will now be clear that there is provided a device which accomplishes the objectives heretofore set forth. While the invention has been disclosed in its preferred form, it is to be understood that the specific embodiment thereof as described and illustrated herein is not to be considered in a limited sense as there may be other forms or modifications of the invention which should also be construed to come within the scope of the appended claims.

We claim:

1. A vending machine, comprising in combination, a first body member, said first body member having bottom, front, rear and side walls and an open top with a shoulder therearound, said rear wall having an infaced lip positioned at the upper edge thereon, said front wall having a slot therein intersecting said shoulder; a plate, having operating mechanism mounted thereon, seated in said slot and including an infaced lip positioned above said shoulder; a second body member seated on said shoulder, superposed on said first body member, and having a dispensing unit mounted thereon operatively connected with said operating mechanism; a mechandise container of substantially uniform cross-section from top to bottom, superposed on said second body member, forming an enclosed cavity above the dispensing unit, said container having a continuous outwardly extending flange at the bottom edge thereof; and a retaining collar having laterally extending ears, fitted around said container at said flange and superposed on said first and second body members, said collar ears being engagable by said plate and rear wall lips to secure said members and container together against unauthorized detachment.

2. A vending machine, comprising in combination, a first body member, said first body member having bottom, front, rear and side walls and an open top with a shoulder therearound, said rear wall having an infaced lip positioned at the upper edge thereof, said front wall having a slot therein intersecting said shoulder, the opposed edges of said slot being notched; a plate having operating mechanism mounted thereon, seated in said slot and having locating pins engageable with said front wall notches, said plate also including an infaced lip positioned above said shoulder; a second body member seated on said shoulder, superposed on said first body member, and having a dispensing unit mounted thereon operatively connected with said operating mechanism; a merchandise container of substantially uniform cross-section from top to bottom, superposed on said second body member, forming an enclosed cavity above the dispensing unit, said container having a continuous outwardly extending flange at the bottom edge thereof; a retaining collar having laterally extending ears, fitted around said container at said flange and superposed on said first and second body members, said collar ears being engageable by said plate and rear wall lips to secure said members and merchandise container together; and locking means mounted on the plate, engageable with said first body member at the slot, to lock said plate in position against unauthorized detachment.

References Cited in the file of this patent

UNITED STATES PATENTS

1,321,382	Mason	Nov. 11, 1919
1,991,736	Epstein	Feb. 19, 1935
2,537,317	Probasco	Jan. 9, 1951
2,652,916	Mason	Sept. 22, 1953