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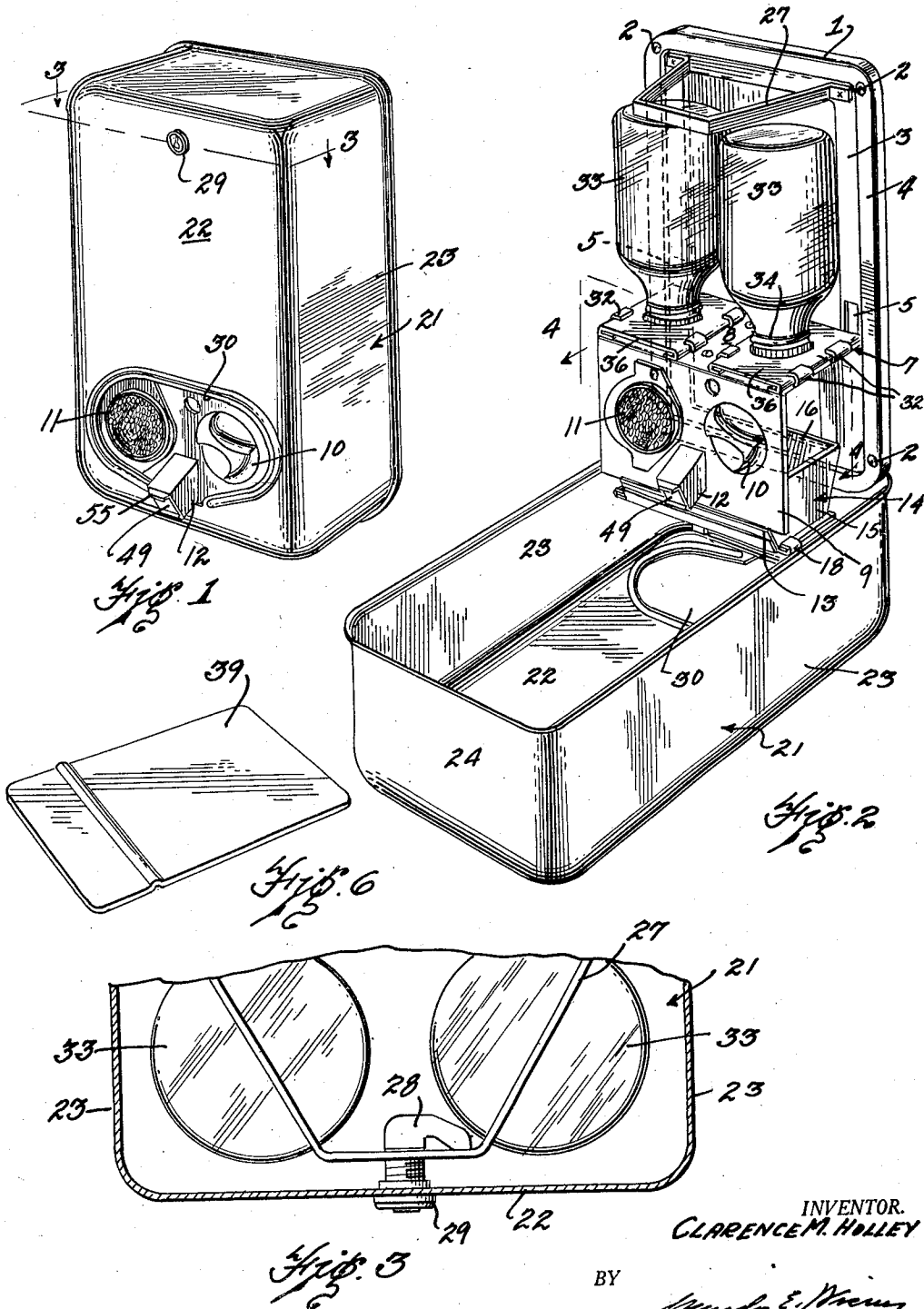
C. M. HOLLEY

1,885,201

VENDING MACHINE

Filed April 1, 1931

3 Sheets-Sheet 1



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Nov. 1, 1932.

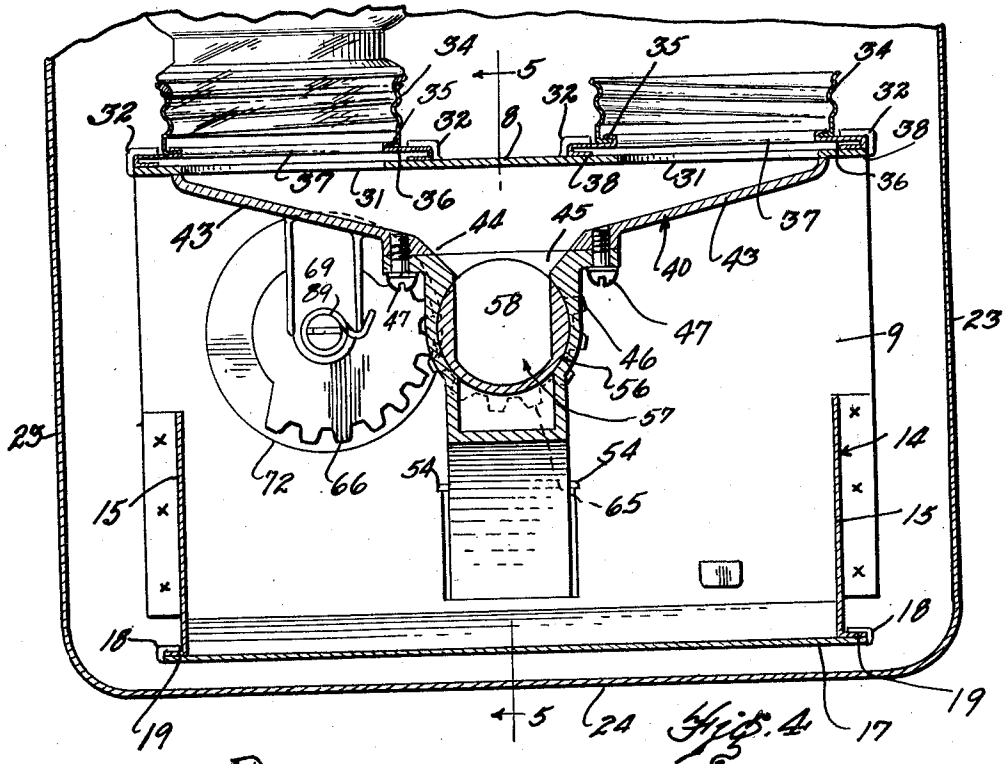
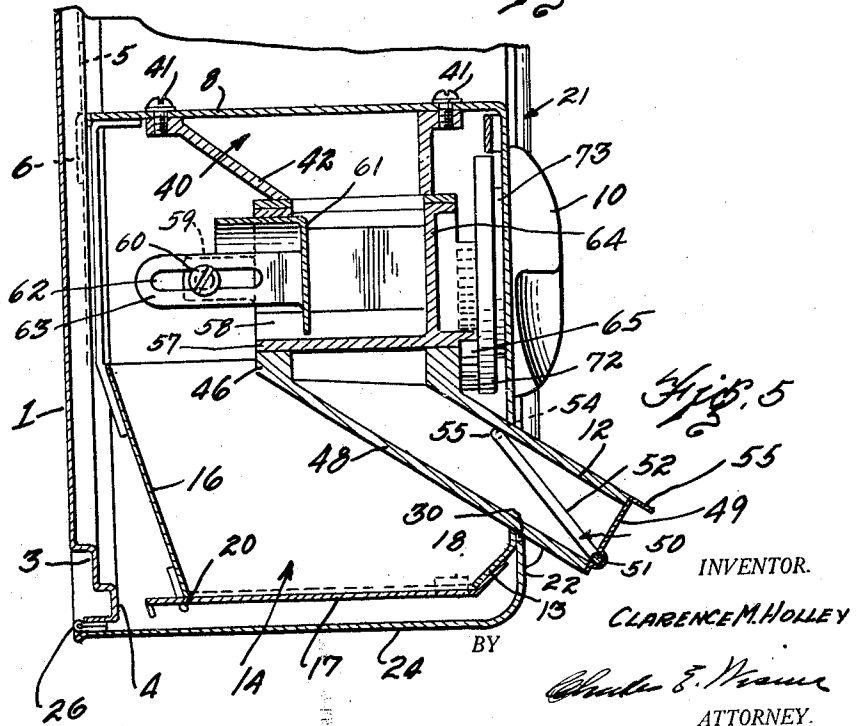
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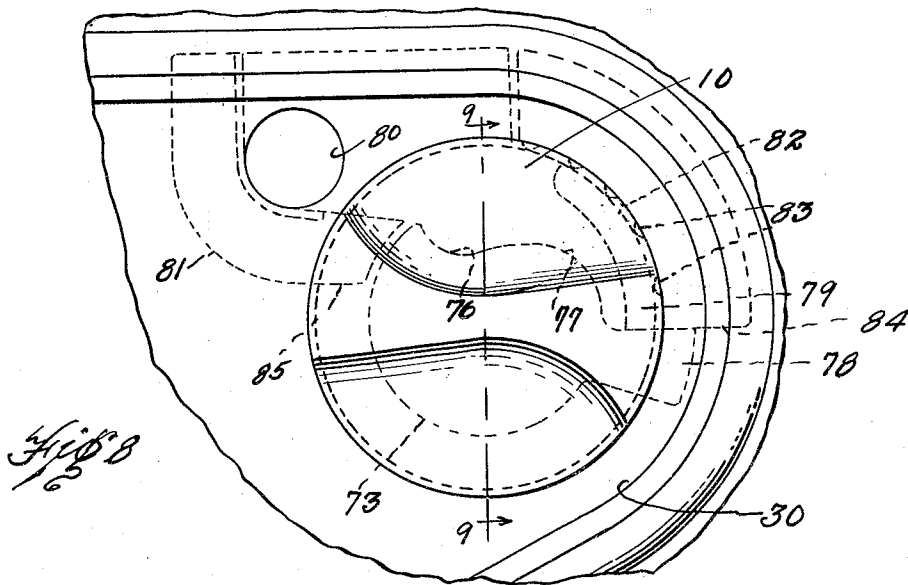
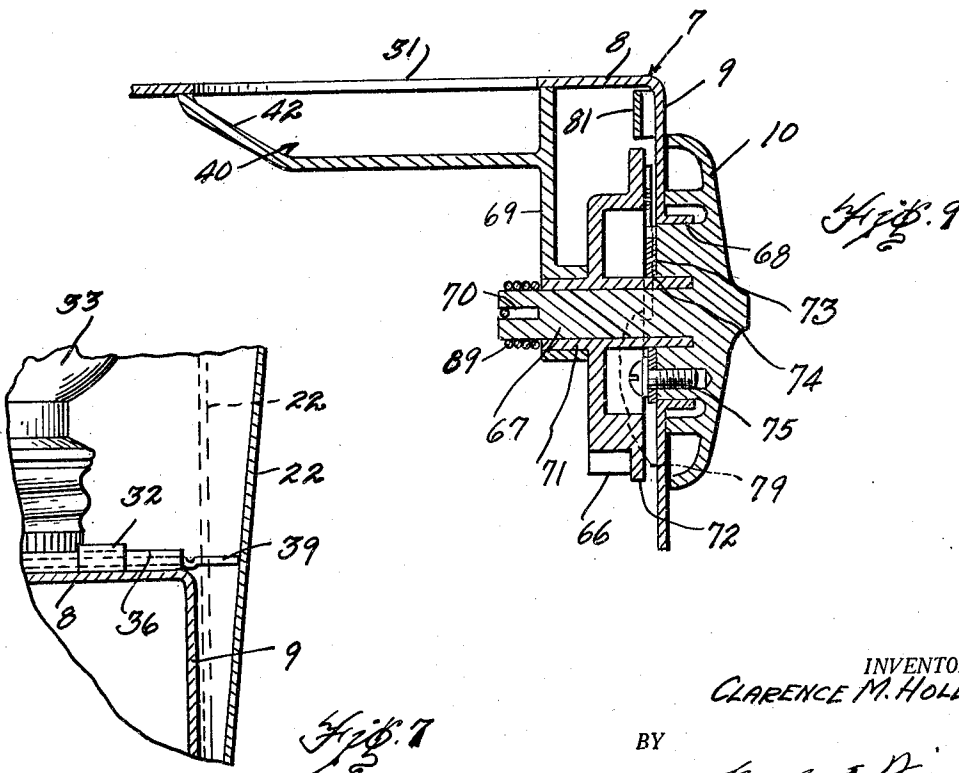
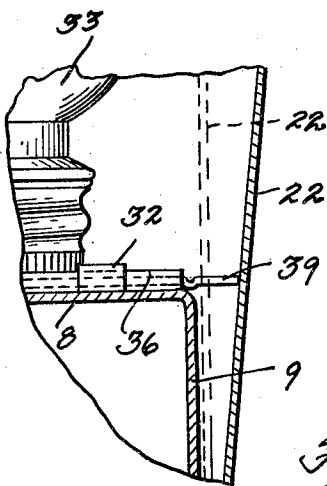
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VENDING MACHINE

Filed April 1, 1931

3 Sheets-Sheet 3



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VENDING MACHINE

Application filed April 1, 1931. Serial No. 526,903.

This invention relates to vending machines for delivering a predetermined amount of bulk merchandise to the purchaser, upon the insertion of a suitable coin into the mechanism.

The device is used principally for vending shelled peanuts or small candies or the like and an object of the invention is to provide a vending machine in which the delivering mechanism is adjustable within certain limits to vary the amount of merchandise delivered to the purchaser.

Another object of the invention is to provide a vending machine in which the merchandise to be sold is stored in glass containers open only on the lower end so there can be no appreciable amount of air circulation through the merchandise thus tending to keep the same fresh for an appreciable length of time.

Another object of the invention is to provide a device in which the operating mechanism is quickly and easily removable from the cabinet in which it is housed, thus permitting the person servicing the machine to substitute another operating mechanism in the cabinet in case the one in the machine becomes plugged or gets out of order.

A still further object is to provide a vending machine which is extremely cheap to manufacture and which is attractive in appearance and which is provided with a hinged front so that access may be readily had to the operating mechanism, or to fill the containers.

Another object is to provide a vending machine in which the containers may be readily slid out to fill them with merchandise and in which the slides on the open ends are provided with guides for receiving a plate to cover the opening therein so that the containers may be inverted to slide them into the machine when they have been filled and the plates are so constructed as to prevent the hinged front from being locked in place until the plates have been removed, thus preparing the machine for operation, as the merchandise in the machine will then fall by gravity into the discharge receptacle.

These objects and the several novel fea-

tures of the invention are hereinafter more fully described and claimed and the preferred form of construction by which these objects are attained is shown in the accompanying drawings in which—

Fig. 1 is a perspective view of my assembled device.

Fig. 2 is a similar view showing the hinged cover swung down.

Fig. 3 is a section taken on line 3—3 of Fig. 1 showing the means utilized for locking the front cover in place.

Fig. 4 is a section taken on line 4—4 of Fig. 2 with the front cover in closed position.

Fig. 5 is a section taken on line 5—5 of Fig. 4.

Fig. 6 is a detail of the plate for closing the opening in the containers.

Fig. 7 is a detail section showing the plate in place in the lower part of the container.

Fig. 8 is an enlarged elevation of the operating handle and the coin mechanism.

Fig. 9 is a section taken on line 9—9 of Fig. 8.

Referring now to the drawings it will be seen that the base 1 is secured to a wall or the like by means of the screws 2 and is provided with the raised portions 3 and 4 as is more clearly seen in Figs. 2 and 5. The vertical raised portions 3 are provided with the vertically extending slots 5 for receiving the downturned tongues 6 formed on the rear edge of the member 7. The slots 5 are slightly longer than the tongues 6 so that the member 7 may be disengaged from the base 1 by lifting the same until the lower edges of the tongues clear the lower edges of the slots 5. The member 7 comprises the horizontally disposed portion 8 and the vertically extending portion 9 on which the operating handle 10 and the display device 11 are mounted and through which the discharge spout 12 extends. The lower edge of the vertically extending portion 9 is rearwardly inclined as indicated at 13 and a money receptacle 14 comprising the ends 15 and the rear wall 16 is secured to the rear face of the portion 9. A plate 17 closes the bottom of the receptacle 14 and is loosely hinged to the lower edge of the wall 16 and

the clips 18 formed integral with the plate 17 engage the outturned portions 19 of the sides 15 to hold the plate 17 thereagainst.

By pulling the plate 17 forward the clips 18 will become disengaged from the flange 19 allowing the said plate to be swung downwardly about the hinge 20 to remove the money from the container 14. A cover 21 comprising the front wall 22, the sides 23 and the ends 24, has its rearward lower edge hinged at 26 to the lower edge of the plate 1. A horizontally disposed bracket 27 is welded or otherwise secured to the front face of the plate 1 and near the upper edge thereof and is engaged by the locking member 28 secured to the front wall 22 of the cover and operable by the turning of a suitable key in the lock 29. The front wall 22 of the cover 21 is apertured at 30 to permit the operating handle 10, the display device 11, and the discharge spout 12 to extend therethrough as will be clearly seen by reference to Figs. 1, 2 and 5. As is best illustrated in Fig. 4 the horizontal portion 8 of the member 7 is apertured at 31 and is further provided with a plurality of clips 32 for a purpose to be later described. The containers 33 are made preferably of glass and are provided with the caps 34 threaded upon the lower end thereof. The caps 34 are provided with the inturned flanges 35 and the slides 36 are apertured at 37 and the metal adjacent the aperture is spun over the inturned flanges 35 of the caps 34 thus rigidly securing the caps 34 and the containers 33 to the slides 36. The edges 38 of the slides 36 are inturned and are spaced sufficiently from the main portion of the slide to permit insertion of the plates 39 therein for a purpose to be later described.

A casting 40 is secured to the lower face of the horizontal portion 8 of the member 7 by means of the screws 41. The rear wall 42 is downwardly and forwardly inclined while the sides 43 are downwardly inclined toward the vertical center line of the machine. The lowermost portion of the member 40 is apertured at 44 the same being in alignment with the aperture 45 formed in the upper face of the member 46 that in turn being secured to the member 40 by means of the screws 47. The lower portion of the member 46 terminates in the discharge spout 12 and is hollow and is downwardly and forwardly inclined as indicated at 48. A member 49 normally closes the opening in the end of the spout and a U shaped rod 50 has its base portion 51 welded to the rear face of the member 49 and the legs 52 of the U have their ends 53 outturned at 54 and extend through apertures 55 provided in the side walls of the spout 12. It will be understood there is sufficient spring in the legs 52 to allow the same to be contracted sufficiently to permit the ends 54 to be slid into the hollow portion of the spout 12 and then snapped into the apertures 54. A forwardly extending portion 55 is provided near

the upper edge of the member 49 and acts as a grip to allow the same to be lifted thereby permitting the merchandise to fall by gravity into the hand of the purchaser.

It will be seen by reference to Figs. 4 and 5 that the member 46 is provided with a cylindrical bore 56 which closely encircles the cylindrical member 27, the same being provided with the recess 58 extending from the rear thereof toward the front wall 64. The hollowed out portion 58 extends through the outside of the member 57 and is of a width equal to the width of the aperture 45 and connects therewith when the parts are in the position shown in Fig. 4. The rear end of the member 57 is provided with the extension 59 provided with a threaded aperture to receive the screw 60. A slide 61 is positioned in the recess 58 and is adjustable longitudinally of the same by means of the elongated slot 62 provided in the extension 63 encircling the screw 60. It will thus be seen that the amount of merchandise permitted to fall into the recess 58 is limited by the slide 61 so that the amount of merchandise delivered to the purchaser may be regulated by movement of the slide 61 either toward or away from the front wall 64 provided in the member 57. The forward end of the member 57 is provided with the segmental toothed portion 65 the same engaging with the toothed segment 66 mounted upon the stud 67 extending rearwardly from the operating handle 10. The handle 10 is mounted in a bearing 68 provided on the portion 9 of the member 7.

The stud 67 is carried in a bracket 69 formed integral with the member 40 and the spring 89 is coiled around the extreme end of the stud 67 and one end of the same engages in the slot 70 provided in the end of the stud while the opposite end of the spring is hooked under the bracket 69 and the spring is so wound as to tend to cause the handle 10 to move in a counter-clockwise direction. The toothed member 66 is provided with the hub portion 71, one portion of the same extending through the bracket 69 and the forward portion extending into the operating handle 10. A circular flange 72 is provided on the forward face of the member 66, the same being spaced from the rear face of the wall 9 a distance slightly greater than the thickness of a coin which is to be used to operate the machine. A disc 73 is provided with an aperture 74 for fitting over the hub portion 71 of the member 66 and is secured to the rear face of the handle 10 by means of the screws 75. It will be seen that the disc 73 is of a thickness approximately equal to the space provided between the wall 9 and the flange 72. The disc 73 is provided on its periphery with the cut out portion 76 adapted to receive a coin of suitable size. The continuation of the cut out portion 76 forms a cam 77 and an extension 78 is provided upon the periphery of

the disc for a purpose to be later described. The front face of the flange portion 72 is provided with a segmental raised portion 79 the lower end of which abuts the upper edge of the extension 78, while the upper edge of the same is adapted to be engaged by the coin.

A circular aperture 80 is provided in the wall 9 of the member 7 adjacent the operating handle 10 and a bracket 81 is welded or otherwise secured to the rear face of the wall 9 and forms a guide for the coin to permit the same to roll down into the notch 76 formed in the disc 73. The bracket 81 is formed with the circular portion 82 and that in turn is provided with the extensions 83, the same just clearing the outer periphery of the segmental raised portion 79 and the lower edge 84 of the bracket 81 forms a stop abutting the extension 78 to limit the rotation of the disc 73 and the handle 10 attached thereto. The portion 85 of the bracket 81 acts as a stop against which the extension 78 strikes when the handle 10 is rotated in a clockwise direction.

The operation of the coin mechanism is as follows: A coin of suitable size is inserted in the aperture 80 and rolls down the bracket 81 until it rests in the cut out portion 76 whereupon rotation of the handle 10 and consequently rotation of the disc 73, will carry the coin with the disc until the same strikes against the upper end of the raised portion 79 formed integral with the member 66, whereupon the same will be rotated and since the toothed portion 66 engages with the toothed portion 65 formed integral with the member 67, that in turn will be rotated.

It will be understood that the recess 58 will be filled with merchandise as the containers 33 are in direct communication therewith and since they are open at the bottom merchandise will fall by gravity through the openings 31 and 37 and keep the member 40 full of merchandise. The handle 73 will be rotated until the extension 78 strikes against the edge 85 of the bracket 81 whereupon no further movement may be imparted to the handle. The member 57 at this time will have been rotated approximately 180 degrees and the merchandise that is in the recess 58 will fall by gravity into the discharge spout 12 and when the slide 49 is raised the merchandise will fall by gravity into the handle of the purchaser. When the handle 10 is released the spring 89 will rotate the same in a counter-clockwise direction until the extension 78 abuts the lower edge 84 of the bracket 81. The extension 78 on the disc 73 will abut the lower end of the raised segmental portion 79 thus returning the toothed member 66 and the member 57 to the position occupied by the parts shown in Fig. 4 whereupon the device is again ready for use. After a coin has been inserted in the aperture 80 and the handle 10 rotated

part way around the coin positioned in the recess 76 will be brought into juxtaposition to the extensions 83 then if the handle is released or an attempt made to return the same to its original position the coin will be shoved up between the extensions 83 by means of the cam face 77 whereupon it will be impossible to rotate the handle further in its counter-clockwise direction but upon rotation of the same in a clockwise direction the device will function as heretofore described.

When it is desired to replenish the merchandise in the machine a key will be inserted in the lock 29 and rotated thus disengaging the member 28 from the bracket 27 and the cover 21 will be swung down to a position shown in Fig. 2. The containers 33 and the slides 36 secured thereto will be slid forward until the slides disengage the clips 32. The containers 33 will then be inverted so that the opening therein is at the top and the same will be filled with merchandise, such as peanuts or the like. A plate 39 for each container will then be slid in the recess formed between the plate 36 and the intumed portion 38. It will thus be seen that the containers may then be inverted without the merchandise falling therefrom. The plates 39 will then be removed from their position in the bottom of the container and when the hinged cover 21 is swung up into position and locked to the bracket 27 the device will be ready for use. In case the person filling the machine neglects to remove the plates 39 from the bottom of the containers and then attempts to swing the cover 21 into position it will become immediately apparent to him that the plate 39 is still in place as it is of sufficient length to extend beyond the vertical portion 9 of the member 7 and abut the cover as shown in Fig. 7 thus preventing the cover from being locked.

From the foregoing description it becomes evident that I have provided a vending machine which is neat and attractive in appearance and which will deliver a predetermined amount of bulk merchandise to the purchaser upon insertion of a suitable coin into the mechanism and since the containers in which the merchandise is held are open only at one end very little circulation of air can take place in the containers thus tending to keep the merchandise in a fresh condition for an appreciable length of time. It is further evident that the device may be quickly serviced and in case the operating mechanism gets out of order or the coin slot becomes plugged the same may be quickly removed from the back, on which it is mounted, and a new one substituted therefor.

Having thus fully described my invention, its utility and mode of operation, what I claim and desire to secure by Letters Patent of the United States is:—

1. A vending machine comprising a verti-

cally positioned rear wall, a dispensing device detachably secured thereto including a merchandise container, a dispensing spout extending from the front of the dispensing device and connected to the container, an operating handle also positioned on the front of the dispensing device and means in the dispensing spout controlled by the operating handle for dispensing a predetermined amount of merchandise, a cover hinged to the rear wall and turnable outwardly therefrom and provided with an aperture through which the operating handle and the dispensing spout extend when the cover is closed, and means for locking the cover in its closed position.

2. A vending machine comprising a rear wall, a dispensing device detachably secured thereto, including a merchandise container, a dispensing spout extending forwardly of the dispensing device and connected to the container, an operating handle also extending forwardly of the dispensing device, means in the dispensing spout controlled by the operating handle for dispensing a predetermined amount of merchandise, and means for varying the amount of merchandise dispensed and a cover hinged to the rear wall and provided with an aperture through which the operating handle and the dispensing spout extend when the cover is closed.

3. A vending machine comprising a rear wall, a dispensing device detachably secured thereto and removable as a unit therefrom, including a merchandise container open at one end, a dispensing spout extending forwardly from the dispensing device, and connected to the opening in the container, an operating handle also extending forwardly of the dispensing device, means controlled by the operating handle for dispensing a predetermined amount of merchandise, and a cover hinged to the rear wall and provided with an aperture through which the operating handle and the dispensing spout extend when the cover is closed.

4. A vending machine comprising a back wall, a dispensing device detachably secured thereto and removable as a unit therefrom, the dispensing unit provided with an aperture, and a guide member positioned adjacent the aperture, a container open at its lower end and provided with a base portion for engagement with the guide for permitting the container to be slid into place above the aperture in the dispensing unit, a dispensing spout connected to the dispensing device and aligned with the aperture therein, and a hollow box like cover hinged to the rear wall for encasing the dispensing device when the cover is closed, and provided with an aperture for allowing the dispensing spout to extend therethrough.

5. A vending machine comprising a back wall, a dispensing device detachably secured

thereto and removable as a unit therefrom, the dispensing unit provided with an aperture, and a guide member positioned adjacent the aperture, a container open at its lower end and provided with a base portion for engaging the guide to permit the container to be slid into place above the aperture in the dispensing unit, a dispensing spout connected at one end to the dispensing device and aligned with the opening therein, the other end projecting forwardly of the dispensing device, an operating handle also extending forwardly of the dispensing device, means controlled by the operating handle for measuring the quantity of merchandise to be dispensed and a hollow box like cover hinged to the rear wall and provided with an aperture through which the dispensing spout and the operating handle extend when the cover is closed.

6. In a vending machine, an angular metal plate, the horizontal portion of the plate provided with an aperture and a guide member, a merchandise container open at its lower end and provided with a portion for engaging the guide to permit the container to be slid into place, so that the opening in the container is aligned with the aperture in the plate, a trough secured to the lower face of the horizontal portion of the plate and provided with sloping walls, the same terminating to form a central aperture, a measuring device positioned below the aperture in the trough, one end of the same provided with a gear segment, a gear positioned on the rear face of the vertical portion of the plate and meshing with the gear segment, an operating handle positioned on the front wall of the vertical portion of the plate, and a coin controlled mechanism positioned between the gear and the operating handle and constructed so that insertion of a coin in the coin mechanism will permit the gear to be rotated by rotation of the handle thereby operating the measuring device to dispense the merchandise therein.

7. In a vending machine, a dispensing device comprising a merchandise container, open at one end, a trough shaped member aligned therewith and provided with an opening, a measuring device aligned with the opening in the trough, one end thereof provided with a gear, and second gear meshing with the first gear and carried by the dispensing device, an operating handle also carried by the dispensing device, and a coin controlled mechanism positioned between the handle and the second gear, and so constructed that insertion of a coin in the coin mechanism will permit the gear to be rotated by rotation of the handle, thereby operating the measuring device to dispense the merchandise therein.

8. A vending machine comprising a rear wall, a dispensing device detachably secured thereto and removable as a unit, a merchan-

discharge container detachably supported on the dispensing device, means adapted for introduction between the container and the unit to prevent discharge of material from the container to the dispensing unit and to permit removal of the container and the material contained from the unit without loss of material, a hollow box like cover encasing the device and supported on the said rear wall and adapted to be locked in position covering the container and dispensing devices to prevent removal of the said parts when the cover is in locked position.

9. A vending machine comprising a rear wall, a dispensing device detachably secured thereto and removable as a unit, a merchandising container detachably supported on the dispensing device and having an opening through which material may discharge by gravity to the dispensing device, means associated with the container adapted to support a closure member over the said opening to permit the container and material to be removed from the dispensing device or a filled container to be positioned thereon, said closure member being removable from the closing position whereby on assembly of the container with the dispensing device the material is allowed to flow through the said opening, and a hollow box like cover member adapted to be locked in position encasing the container and dispensing device to prevent removal of the said parts, said dispensing device having an operating means and said cover having an aperture whereby when the cover is closed the said operating means is accessible from the exterior of the cover.

10. A vending machine comprising a base, a dispensing device including a merchandise container supported on the base, a second filled container the contents of which are non-accessible and a portion of which is sufficiently transparent to display the material contained, an operating means for the dispensing device positioned adjacent the said second container, a cover member adapted to be locked in position on the base and enclosing the dispensing apparatus and the filled container, said cover member being so constructed that the said second container and operating means for the dispensing device are visible and accessible when the cover is in locked position.

In testimony whereof I sign this specification.

CLARENCE M. HOLLEY.