



1

2,913,143

## COIN CONTROLLED VENDOR

Henry P. Compton, Abilene, Tex.

Application October 25, 1957, Serial No. 692,427

1 Claim. (Cl. 221-268)

The present invention relates to coin controlled vendors of the stacked merchandise type.

The primary object of the invention is to provide a vendor which will upend the merchandise from a flat position to an upright position for movement through the delivery chute.

Another object of the invention is to provide a vendor of the class described above in which the vending operation is performed by horizontal movement of the merchandise utilizing the forces of gravity.

A still further object of the invention is to provide a coin controlled vending machine which is inexpensive to manufacture, simple to use, and which is easily operated in the dispensing of merchandise therefrom.

Other objects and advantages will become apparent in the following specification when considered in the light of the attached drawings, in which:

Figure 1 is a fragmentary vertical cross-section taken along the line 1-1 of Figure 2, looking in the direction of the arrows.

Figure 2 is a horizontal cross-section taken along the line 2-2 of Figure 1, looking in the direction of the arrows.

Figure 3 is an enlarged fragmentary vertical cross-section taken along the lines 3-3 of Figure 1 and Figure 2, looking in the direction of the arrows.

Figure 4 is a perspective view of the merchandise dispensing slide.

Referring now to the drawings in detail wherein like reference characters indicate like parts throughout the several figures, the reference numeral 10 indicates generally a coin controlled merchandise vendor constructed in accordance with the invention.

The vendor 10 includes a housing, indicated generally at 11, including a forward wall 12, a rear wall 13, opposed side walls 14, a bottom wall 15, and a removable top wall 16. A horizontal shelf 17 extends between the side walls 14 intermediate the bottom wall 15 and the top wall 16, having its forward edge 18 arranged in spaced parallel relation to the forward wall 12 and its rear edge 19 arranged in spaced parallel relation to the rear wall 13.

Upright end walls 20 have their lower ends secured to the shelf 17 adjacent the opposite side walls 14 extending upwardly to a point beneath the removable top wall 16. A wall 21 extends between the forward edges of the end walls 20 terminating at a point spaced slightly above the shelf 17, and a second wall 22 is arranged in rearwardly spaced relation with respect to the wall 21 terminating at a point spaced above the shelf 17.

A pair of arcuate walls 23, 24 have their upper ends arranged rearwardly of the shelf 17 and curve downwardly and forwardly therefrom in spaced apart relation to provide a delivery chute 25 terminating in a delivery opening 26 and a flange 27 formed on the lower forward end of the wall 23, as best shown in Figure 1.

A coin mechanism, generally indicated at 28, includes a slide member 29 having a coin receiving opening 30 therein. The slide 29 is supported in a guide 31 secured

2

to the wall 12 of the housing 11 so that the slide 29 may be moved inwardly thereof dropping coins from the opening 30 into a coin box 32. A coin sensing mechanism 33 of conventional construction is arranged to overlie the slide 29 to permit the slide 29 to move therepast if the coin opening 30 has a coin of the correct physical properties positioned therein.

An ejector 34 is positioned on the shelf 17 between the parallel walls 20 and has a rearwardly extending offset portion 35 integrally formed thereon. An upstanding flange 36 is integrally formed on the rear edge of the offset portion 35 and has a transverse length equal to that of the ejector 34.

A plate 37 is arranged in spaced parallel relation above the ejector 34 and has an upright flange 38 depending from the rear end thereof terminating in a perpendicularly extending flange 39 arranged in contacting relation to the upper surface of the ejector 34 and secured thereto by welding or the like. The upright flange 38 is arranged parallel to the flange 36 in spaced apart relation thereto. The slide 29 is secured at 40 to the plate 37 so that movement of the slide 29 moves the ejector 34 rearwardly with respect to the housing 11.

A plurality of candy bars 41 are stacked on the shelf 17 and the rearwardly extending offset portion 35 of the ejector 34 between the walls 21, 22 and the walls 20. Upon rearward movement of the slide 29 with the proper coin in the coin opening 30, the ejector 34 is moved rearwardly so that the upright flange 38 presses against the lowermost candy bar 41 moving it rearwardly beneath the wall 22 off of the shelf 17.

As the candy bar 41 leaves the shelf 17 it upends, as seen in Figure 3, due to the force of gravity since one end of the candy bar 41 is supported on the offset extension 35 of the ejector 34. The wall 22 prevents the candy bar 41 next above the lowermost candy bar 41 from being moved rearwardly along with the lowermost candy bar 41, and the plate 37 engages under the candy bar 41 next above the lowermost candy bar 41 to support it and the stack of candy bars 41 during the ejection of the lowermost candy bar 41.

Obviously, upon withdrawal of the coin slide 29, the plate 37 moves from beneath the stack of candy bars 41, and the stack moves downwardly until the lowermost candy bar thereof engages the shelf 17 and the offset portion 35 of the ejector 34.

The candy bar 41 is delivered through the chute 25 and is removed therefrom by the operator of the vending machine. It should be understood that a plurality of devices of this character can be arranged in laterally aligned relation in the same housing 11 with the candy bars 41 delivered through a single chute 25.

Having thus described the preferred embodiment of the invention, it should be understood that numerous structural modifications and adaptations may be resorted to without departing from the scope of the appended claim.

What is claimed is:

A merchandise vending machine comprising a housing, a horizontal shelf supported in said housing, a merchandise delivery chute depending from the rear edge of said shelf, means supported in said housing above said shelf for vertically guiding a vertical stack of merchandise articles, an upstanding ejector plate positioned for sliding movement on said shelf, a rearwardly offset horizontal extension arranged on the lower edge of said ejector plate and adapted when in its foremost position to support one end of the lowermost merchandise article in said stack, horizontal means extending integrally forwardly from the upper edge of said ejector plate for engaging beneath the article in said vertical stack next above the lowermost article for supporting said stack

**3**

with said ejector plate in a rearward position, and means for sliding said ejector plate rearwardly to move the lowermost merchandise article rearwardly off of said shelf while one end thereof is supported on said offset extension whereby said lowermost merchandise article is up-  
ended into said chute with the remaining articles in said stack supported on said horizontal means.

**5****4**

## References Cited in the file of this patent

## UNITED STATES PATENTS

470,508	Schade -----	Mar. 8, 1892
1,315,416	Rindfleisch -----	Sept. 9, 1919
1,666,849	Fry -----	Apr. 17, 1928