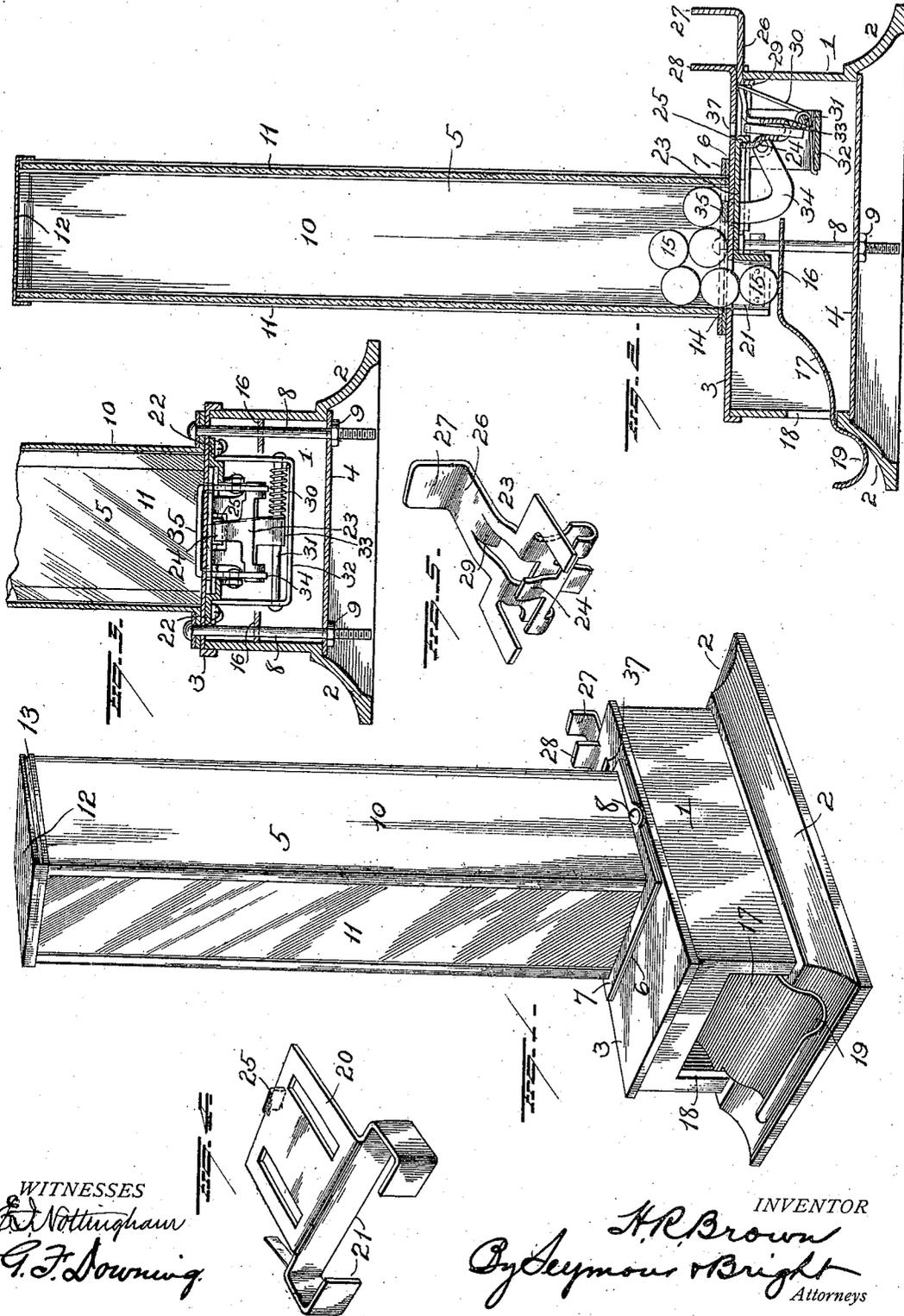


H. R. BROWN.
 VENDING MACHINE.
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VENDING-MACHINE.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, HENRY R. BROWN, a citizen of the United States, and a resident of Greeneville, in the county of Greene and State of Tennessee, have invented certain new and useful Improvements in Vending-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in vending machines,—one object of the invention being to provide a machine whereby cylindrical articles such as pencils, confections in stick form or in cylindrical packages, and toilet articles having general cylindrical form, may be readily vended without possibility of sticking together and thus facilitate the discharge of a single article at a time without interference of other articles which may be adjacent thereto in the magazine.

A further object is to provide a vending machine of the character above specified, with means for agitating the articles to be vended simultaneously with the operation of the machine to discharge an article therefrom.

A further object is to simplify and improve the mechanism which controls the vending of the articles so that said mechanism shall comprise comparatively few parts; be easy and sure in operation, and not liable to get out of order.

With these and other objects in view the invention consists in certain novel features of construction and combinations of parts as hereinafter set forth and pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of a vending machine embodying my improvements. Fig. 2 is a vertical sectional view of the same. Fig. 3 is a sectional view at right angles to Fig. 2. Fig. 4 is a detail view of the article discharging device, and Fig. 5 is a detailed view of the device for moving the discharging device.

1 represents a hollow base or body of the structure and may be provided with depending flanges 2 to rest upon any suitable support. A top plate 3 is located upon the hollow base or body 1 and a plate 4 closes the bottom of said base or body within the confines of the flanges 2. The body 1 thus con-

stitutes means for housing the operating mechanism of the machine and for receiving the coins deposited therein, as more fully hereinafter explained.

A magazine 5 is mounted upon the top plate 3,—said magazine being provided at its lower end with flanges 6 to receive a retaining frame 7. Bolts 8 pass downwardly through said retaining frame 7 and through the top and bottom plates 2 and 4,—the lower ends of said bolts being threaded and of such length as to project below said bottom plate. Nuts 9 are screwed on the bolts 8 and bear against the bottom plate 4, and thus the framework of the machine is held together. By running the nuts 9 downwardly for a comparatively short distance on the bolts 8, the bottom plate 4 may be sufficiently removed to permit the discharge of the coins from the body 1 and thus the necessity for a door and lock is obviated.

The magazine 5 may comprise two sides of sheet metal having flanged edges to receive glass front and back plates 11, and the top of the magazine is closed by means of a removable cap 12 which may be retained in place by means of a rib-and-groove construction between the flanges of the cap and the metal sides of the magazine, as indicated at 13.

The top plate 3 of the base or housing 1 is provided with an elongated slot 14 to permit the passage of a cylindrical article 15 from the magazine and within the housing directly under said elongated slot, a platform 16 is located to receive and support the article 15. An inclined guideway 17 extends from one end of the platform through a discharge opening 18 in the base or housing and terminates in a trough 19 to receive the vended article.

A slide 20 is disposed against the under face of the top plate 3 and provided at one end with a discharging frame 21 approximately equal in size to the elongated opening 14 in the top plate and is normally disposed in line with said opening. Guides 22 for the slide 20 are secured to the top plate 3.

A coin carrier 23 is movable between the guides 22 and is provided with a lug 24 to engage a lug 25 at one end of the slide 20. The coin carrier is provided with an arm 26 which projects beyond the base or housing 1 and provided at its free end with an upturned thumb piece 27,—the top plate 3 being provided with a finger piece 28 whereby

the operation of the coin carrier may be facilitated. The arm 26 is provided with a lug 29 against which one end of a spring 30 bears,—said spring being coiled on a pin 31 mounted in a frame 32, and bearing at its other end against said frame. The spring 30 thus operates to retain the coin carrier and the slide with which it is connected in their normal positions and return them to such positions, the return movement of the coin carrier being limited by the engagement of a projection 33 thereon with the pin 31.

The L-shaped arms 34 of an agitator 35 are pivotally mounted within the frame 32 and project through slots 36 in the top plate 3. Normally the cross-bar of the agitator rests upon the top plate 3 and portions of the arms of said agitator are disposed in the path of movement of the coin carrier so that when the coin carrier is moved it will engage said arms and, by cam action, operate the agitator in such manner as to cause the same to rise within the magazine and engage the articles in the lower portion thereof in a manner to separate them in the event that they adhere to each other. In this manner the discharge of a single article at a time and without interference with other articles will be assured.

When a coin is inserted through the coin slot 37 in the top plate 3, it will pass through the coin carrier and rest upon the frame 32. The coin will also become disposed in front of the lug 25 on the slide 20 so that when the coin carrier is pushed inwardly, the engagement of the coin with the lug 25 will cause the slide 20 and the discharge frame 21 to be moved forwardly. This will cause the article 15 to be moved off the platform 16 and permitted to be discharged into the trough 19. During the movement of the parts as above described, the coin will be moved edgewise over the bottom of the frame 32 and finally drop from said frame. When the coin carrier is now permitted to return to its normal position, the lug 24 thereon will engage the lug 25 on the slide

20 and return the latter with its discharging frame 21 to normal position.

Having fully described my invention what I claim as new and desire to secure by Letters-Patent, is:

1. In a vending machine, the combination with a base housing and a magazine communicating therewith, of coin controlled vending means, and an agitator carried by the base housing and movable into the magazine, said agitator having arms disposed in the path of movement of a part of said coin controlled vending means so as to be raised into the magazine when said mechanism is operated.

2. In a vending machine, the combination with a base housing and a magazine communicating therewith, of an article discharging device, a manually operable coin carrier to be coupled to said discharging device by a coin, and an agitator having a part in the path of movement of said coin carrier, whereby said agitator will be raised into the magazine when the coin carrier is moved inwardly.

3. In a vending machine, the combination with a base housing and a magazine mounted thereon and communicating therewith, of a slide provided with a discharging frame to receive an article from the magazine, said slide having a lug at one end and the housing having coin slot adjacent to normal position of said lug, a manually operable coin carrier to be coupled to said slide by a coin engaging one face of said lug, said coin carrier having a lug to engage the other face of the lug on the slide, and a spring engaging the coin carrier for retaining the same and the slide in and returning these parts to normal position.

In testimony whereof, I have signed this specification in the presence of two subscribing witnesses.

HENRY R. BROWN.

Witnesses:

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