

(No Model.)

H. BAILEY.
VENDING APPARATUS.

No. 394,904.

Patented Dec. 18, 1888.

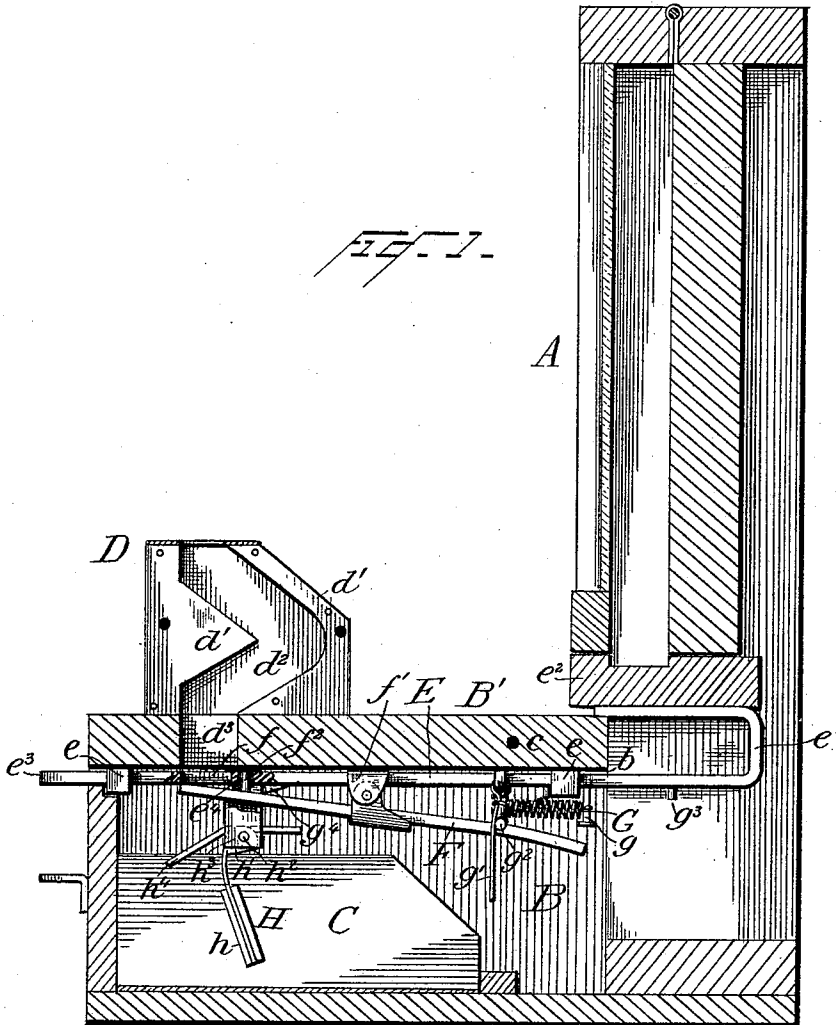


FIG. 2.

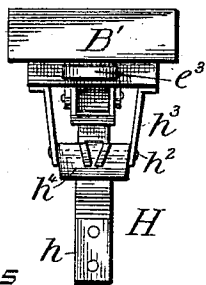
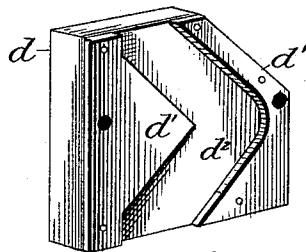


FIG. 3.



WITNESSES

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VENDING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 394,904, dated December 18, 1888.

Application filed March 30, 1888. Serial No. 263,945. (No model.)

To all whom it may concern:

Be it known that I, HENRY BAILEY, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Vending Apparatus; 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.

My invention relates to the vending of articles of merchandise upon the deposit by the purchaser of a coin of the proper denomination in the machine or apparatus, which contains both the said articles and the mechanism for delivering them.

The object of the invention is to simplify and cheapen the construction of such machines, and thus increase their efficiency, and also lessen their liability to get out of repair. Most of such machines as put upon the market have been so complicated, composed of such a number of parts, and so delicately fitted and adjusted that they are by no means certain and constant in their operation, and thus become a greater source of annoyance than of convenience both to owner and purchaser.

Generally speaking, my apparatus consists of a vertical receptacle for the goods, in which the latter are placed so as to drop by gravity, whereby the place of an article extracted is immediately filled by the one next above it. Connected with this vertical merchandise-holder is a horizontal box or casing, which contains a cash-drawer or other cash-receiver, the delivering mechanism, and means for locking the same and the coin-passage from the outside to the delivery mechanism.

The invention consists in the peculiar construction and arrangement of the delivery mechanism and its locking devices and in a peculiar automatic device to prevent the delivery mechanism from being unlocked by tilting or otherwise changing the position of the entire apparatus.

It consists, also, in certain special details of construction, which will be fully hereinafter described and claimed.

In the drawings, Figure 1 is a central longitudinal section, the delivery and locking

mechanism being shown in elevation. Fig. 2 is a front elevation of the delivery mechanism and the automatic device for preventing its unlocking. Fig. 3 is a detail view of the coin-passage.

A represents the vertical receptacle for the goods—such as chewing-gum, cigarette-packages, &c.—of such size that the separate articles may be conveniently stacked or placed therein one above another. It may have a glass front, if desired, in order to show the exact quantity of goods contained in it. This receptacle A is mounted at one end of a horizontal box, B, the bottom of which may contain a cash-drawer, C, or which may itself act as a cash-receiver. Ledges *b* are formed on the inner sides of box B, which support the block or frame B', the latter being flush with the top of the box B and forming a cover therefor. The box B and block B' are firmly secured together—for instance, as shown at *c*.

On top of the block B' and near its front end is secured the coin-receiver D. This is shown as composed of two sections, *d*; which inclose a metal plate, *d'*, Fig. 3, in which the coin chute or passage is formed. In many devices now in use the coin-passage is straight, so that a wire may be inserted from the outside either to effect the unlocking of the delivery mechanism or possibly with no other purpose than to stop its operation.

It will be observed here that my coin-passage is formed by a double-inclined or V-shaped slot, *d*², down which the coin rolls easily, but which absolutely prevents the passage of a wire to the interior. This slot is formed in the metal plate *d'*, Fig. 3, which, as stated, is firmly inclosed and secured between the sections *d*. It may, however, be preferred to make this coin receiver and passage in one piece. The lower end of the angular passage *d*² registers with a slot, *d*³, in the block B', through which it is permitted to fall to the delivery mechanism. The latter is shown fully in Figs. 1 and 2.

E represents a sliding bar supported by guides *e* below the block B' and extending back of said block, its rear end being bent up, as shown at *e'*, to support the plate *e*², which, when the bar is drawn forward, slides over the upper surface of the block B' a sufficient distance to bring the bottom one of the pile

of packages within reach of the purchaser and yet continue to support the remainder of the pile within the receiver A. A handle, e^3 , is provided at the front end of the bar for thus drawing it forward. In Fig. 1 the delivery mechanism is shown as pushed back in its normal or locked position. In this state a slot, f , in the bar E registers with the slot d^3 and permits the coin to fall through the bar onto the lever F. This lever is pivoted in hangers f' , so that its rear end slightly overbalances the other; but the weight of the coin is sufficient to depress the front end. When, however, the rear end is down, a pin, f^2 , is caused to enter a hole, e^1 , just in rear of slot f , and thus locks the bar E immovably. When a coin falls upon the front end of the lever F, the pin leaves the hole e^1 and the bar E can be drawn forward, exposing the article for sale upon the plate e^2 , while the coin rolls off the depressed lever into the cash-drawer. The bar E, when the handle is released, is immediately retracted by a spring, G, which is connected at one end to the standard g on the block B' and at the other to a hinged arm, g' . This arm is carried forward by a pin, g^2 , on the bar E against the pressure of the spring, which acts immediately upon the release of the handle. A stop, g^3 , on the bar E bears upon the rear guide, e , and limits its forward motion. A stop, g^4 , is also provided on said bar just in rear of the hole e^1 , which prevents any possibility of the pin f^2 sliding past the hole by a quick forward movement of the bar after such bar has been once unlocked.

As it might be possible by tilting the apparatus to change the balance of the lever F, and thus unlock the delivery mechanism, I have provided the automatic locking device H, which is put in requisition only under the

circumstances just mentioned. This consists of a weight, h , pivoted by means of a yoke, h' , upon a rod, h^2 , supported in hangers h^3 . The weight is so balanced as to hang freely, but will swing in either direction, according as the apparatus is tilted. The yoke h' carries oppositely-projecting arms h^4 , one of which when the weight swings is brought in contact with the lever F, and thus prevents it from falling.

The operation of this device is very simple and effective and entirely automatic.

Having described my invention, I claim—

1. In a vending apparatus, the combination of a slotted sliding bar for delivering articles of sale, a locking-lever below the same and having its forward end normally in engagement therewith, a spring-pressed hinged arm to retract the bar, and a coin-chute registering with the slot in said sliding bar, whereby a coin deposited in the chute passes through said bar and upon said locking-lever and disengages the latter from the bar, substantially as set forth.

2. The combination, with the block B', carrying the coin-receiver and coin-chute, of the sliding bar E, having a slot normally in register with said coin-chute and a hole, e^1 , and the pivoted locking-lever F, having the pin f^2 , substantially as described.

3. The combination, with the tilting locking-lever, of an automatic swinging stop, as H, substantially as and for the purposes set forth.

In testimony whereof I have affixed my signature in presence of two witnesses.

HENRY BAILEY.

Witnesses:

L. W. SEELY,
J. R. LITTELL.