

(No Model.)

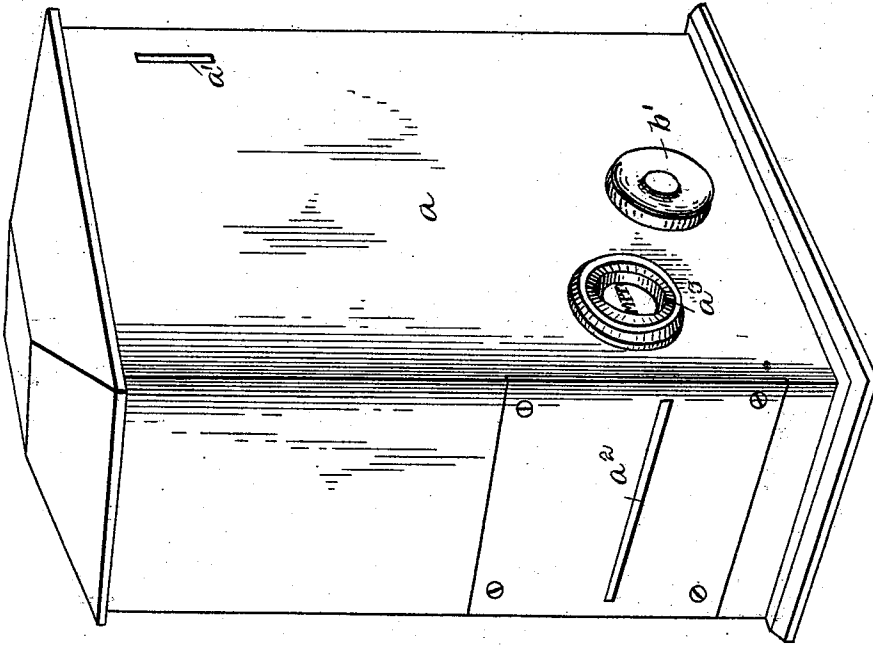
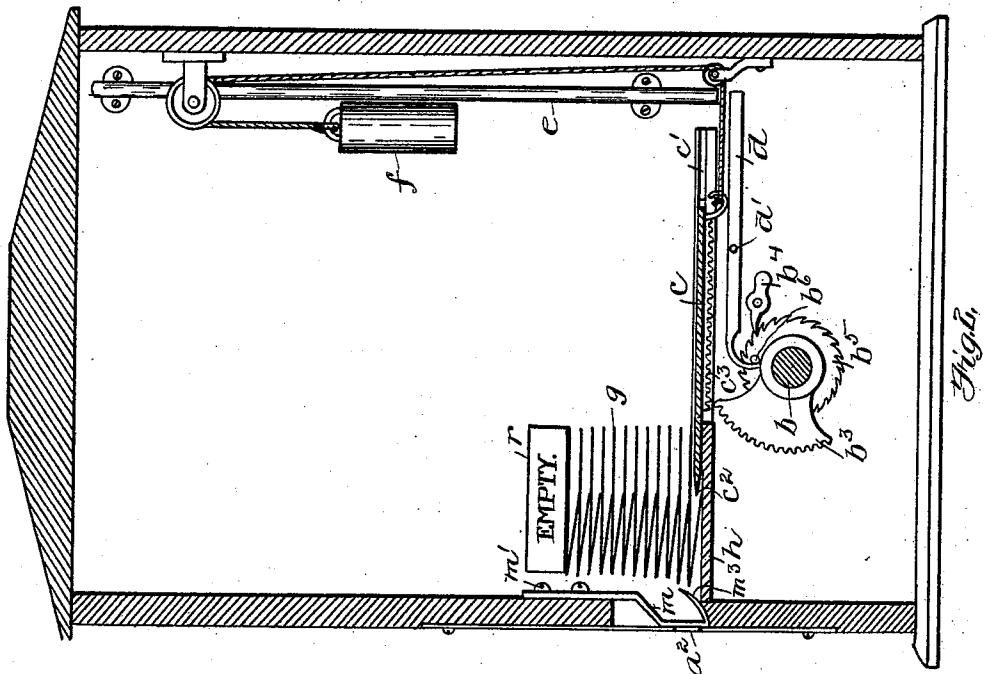
2 Sheets—Sheet 1.

F. E. HOUSH.

APPARATUS FOR DISPENSING ENVELOPES, &c.

No. 536,627.

Patented Apr. 2, 1895.



Witnesses;
 L. de Broun.
 Henry Williams

Fig. 1

Inventor,
 Frank E. Housh
 By *James A. Wilson*
 His Attorney.

(No Model.)

2 Sheets—Sheet 2.

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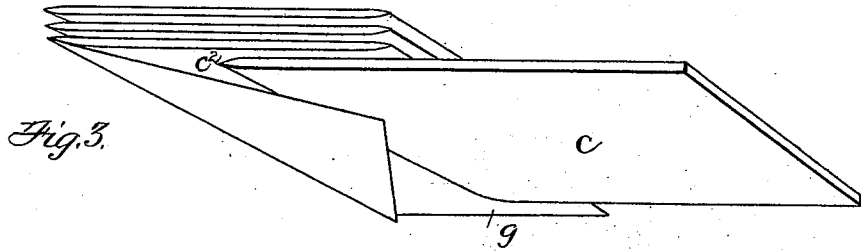


Fig. 3.

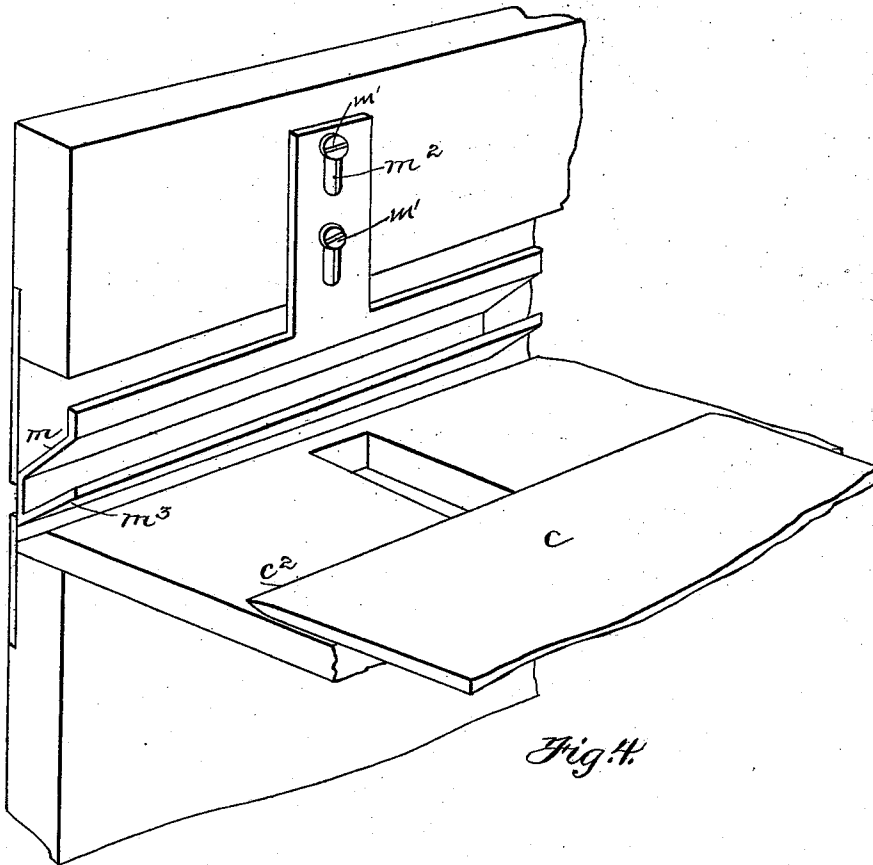


Fig. 4.

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L. L. Vernon.
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Inventor,
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UNITED STATES PATENT OFFICE.

FRANK E. HOUSH, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO HOSEA MANN, JR.

APPARATUS FOR DISPENSING ENVELOPES, &c.

SPECIFICATION forming part of Letters Patent No. 536,627, dated April 2, 1895.

Application filed May 29, 1893. Serial No. 475,848. (No model.)

To all whom it may concern:

Be it known that I, FRANK E. HOUSH, of Boston, in the county of Suffolk, and State of Massachusetts, have invented a new and useful Apparatus for Dispensing Envelopes or other Articles, of which the following is a specification.

My invention relates to improvements in coin controlled delivery devices, and particularly to that class thereof which are adapted to deliver envelopes, and the like, and it consists in an improved apparatus for dispensing envelopes, and other like articles, the construction and arrangement of the parts of which will be hereinafter fully described and particularly pointed out in the claims.

The object of my invention is to provide a machine which will accurately, and with certainty, deliver a single article of the type dispensed thereby, when actuated by the insertion of a coin of proper denomination, and especially to provide for the delivery of envelopes and other articles so bent as to be formed with a downwardly turned flap.

In the machine I have constructed to accomplish the object of my invention, the articles to be delivered, each of which is so bent as to be formed with a downwardly turned flap, are supported in the path of a reciprocating carrier, whose end, whether sharpened or not, enters between the flap and body of the article, and delivers said article through the discharge orifice provided in the casing or body of the machine. The articles are so supported that only one of them is in position to be engaged at a time, and means are provided for automatically closing the discharge opening when the machine is not in operation, and as soon as the article which is in the process of delivery has been taken away by the operator.

In the accompanying drawings forming part of this specification Figure 1 is a perspective view of the apparatus; Fig. 2, a sectional view; Fig. 3, a detached detail showing the carrier about to engage the envelope, and Fig. 4 a detail of the device for closing the delivery aperture.

The articles to be delivered, of which envelopes are a type, and the entire operative mechanism of the delivery device are inclosed

within a suitable casing *a*. This casing is provided with a slot *a'* to receive the coins, and a discharge orifice *a²* through which the envelopes, or other articles, are delivered. In the side of the casing there is formed an opening *a³*, which provides means for determining when the envelopes are exhausted, in a manner which will be hereinafter set forth.

The envelopes *g* are supported at their ends by the guides *c'*, which are provided for the reciprocating carrier *c*, with their flap sides down. The table *h* on a plane with the delivery aperture *a²* prevents the flaps of the envelopes from opening too far to permit the proper action of the carrier *c*, and supports them in such a manner that only one of them is in position to be engaged at a time.

The reciprocating carrier *c*, which, as before stated, travels in the guides *c'*, is provided at one end with a sharpened or knife edge *c²* to facilitate its entrance between the body of the envelope and the flap of the same. It is also formed on its bottom surface with a rack *c³*. The carrier is actuated and reciprocated through the action of a toothed segment *B³* which is formed upon the spindle *b*, and which meshes with the rack *c³*. The spindle *b* is rotated by the wheel *b'*, which is on the outside of the casing *a*, so as to be readily grasped by the hand.

In my machine I have provided for the reciprocation of the carrier forward by the turning of the wheel *b'*, and for the backward reciprocation of the carrier by independent automatically operated means. It is thus necessary to provide means for preventing the backward turning of the said wheel *b'*. For this purpose a ratchet wheel *b⁵* is mounted on spindle *b* and is engaged by the pawl *b⁴*, suitably journaled in the casing. On one side of the ratchet wheel *b⁵* there projects a pin *b⁶* which is normally engaged by the detent *d*, pivoted as shown at *d'*, the rear end of which is directly under chute *e*, through which the coin passes as soon as it has been inserted into the opening *a'*.

A counter-weight *f* is provided, connected, as shown, to carrier *c*, to withdraw the said carrier into the casing as soon as the person operating the wheel *b'* has turned the segment *b³* out of engagement with the rack on

the bottom of the carrier. In this manner I prevent the possibility of the machine being so handled as to permit more than one article to be delivered by one actuation of the detent *d* by the insertion of a coin.

To provide for the closing of the aperture *a'* while the apparatus is not in operation, a sliding flap *m* is secured by pins *m'* to the casing, slot *m²* in the flap providing for its vertical play. The flap hangs by gravity against aperture *a²* and has an inclined surface *m³* which is acted upon by carrier *c* to raise the flap away from the aperture when the envelope is to be delivered, falling back into place when the carrier is withdrawn. In some instances I prefer to connect the flap with the carrier or the spindle so that the flap will rise out of the way as the spindle begins to turn or the carrier to move forward.

The operation of the apparatus will now be fully understood. The carrier *c* being in the position shown in Fig. 2 a coin is dropped into slot *a'* and falling through chute *e* strikes detent *d*, releases pin *b⁶* and the spindle *b* is partially revolved to bring pin *b⁶* out of reach of detent *d* by the weight of segment *b³*. Spindle *b* is now rotated by wheel *b'* carrying segment *b³* into mesh with rack *c³* moving carrier *c* forward which engages the flap of the envelope and pushes it forward raising flap *m* until the envelope projects from the aperture *a²* at which moment the segment *b³* travels out of engagement with rack *c³* and the carrier is withdrawn by weight *f* ready for another delivery while the detent *d* engages pin *d⁶* and prevents the segment from again operating the rack until another coin is inserted.

To maintain the envelopes in proper relation to the carrier *c*, I provide a weight *r* which rests upon the package. Upon one side of the weight is printed the word "Empty" and when the envelopes are exhausted this word will be visible through the hole *a²* in the casing.

It will be understood that the invention is not limited to the dispensing of envelopes as any articles can be used which are capable of being engaged by the carrier *c* as for instance postage stamps can be folded to provide a flap to be acted upon in a similar manner.

What I claim is—

1. In a coin controlled device, the combination with a casing, and a platform adapted to support a series of the articles to be delivered, said articles being bent so as to be formed with a downwardly turned flap, of a carrier having a sharpened edge moving closely over said platform, and means for actuating the same, whereby the carrier will

engage the article to be delivered between the flap and the body of the article, and deliver the same, substantially as described.

2. In a coin controlled device, the combination with a casing, and a platform adapted to support a series of the articles to be delivered, said articles being bent so as to be formed with a downwardly turned flap, of a reciprocating carrier having a sharpened edge moving closely over said platform, and means for reciprocating the same, whereby the carrier will engage the article to be delivered between the flap and the body of the article, and deliver the same, substantially as described.

3. In a coin controlled delivery device, the combination with a casing, of a reciprocating carrier traveling therein, means operated by the hand for reciprocating said carrier outward, and separately mounted independent means for reciprocating the same inward, when disengaged from the outwardly actuating means substantially as described.

4. In a coin controlled delivery device, the combination with a casing, of a reciprocating carrier having a rack formed on its surface operating therein, a spindle, a segment gear carried by the spindle and operating said rack, means for operating said spindle to reciprocate the carrier outward, and separately mounted independent means for reciprocating the carrier inward, when disengaged from the outwardly actuating means substantially as described.

5. In a coin controlled delivery device, the combination with a casing, of a reciprocating carrier having a rack formed on its surface operating therein, a spindle carrying a segment operating said rack, means for preventing the spindle from rotating in one direction, a coin operated detent for controlling the rotation of the spindle in the other direction, means for operating the spindle to reciprocate the carrier outward, and separately mounted independent means for withdrawing the carrier, when disengaged from the outwardly actuating means substantially as described.

6. In a coin controlled delivery device, the combination with a flap normally closing the delivery opening, said flap having an upwardly bent lower end, of a reciprocating carrier having a sharpened end adapted on its outward reciprocation to engage said flap, raise the same and permit the discharge of the article, substantially as described.

FRANK E. HOUSH.

Witnesses:

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JONATHAN CILLEY.