

No. 836,675.

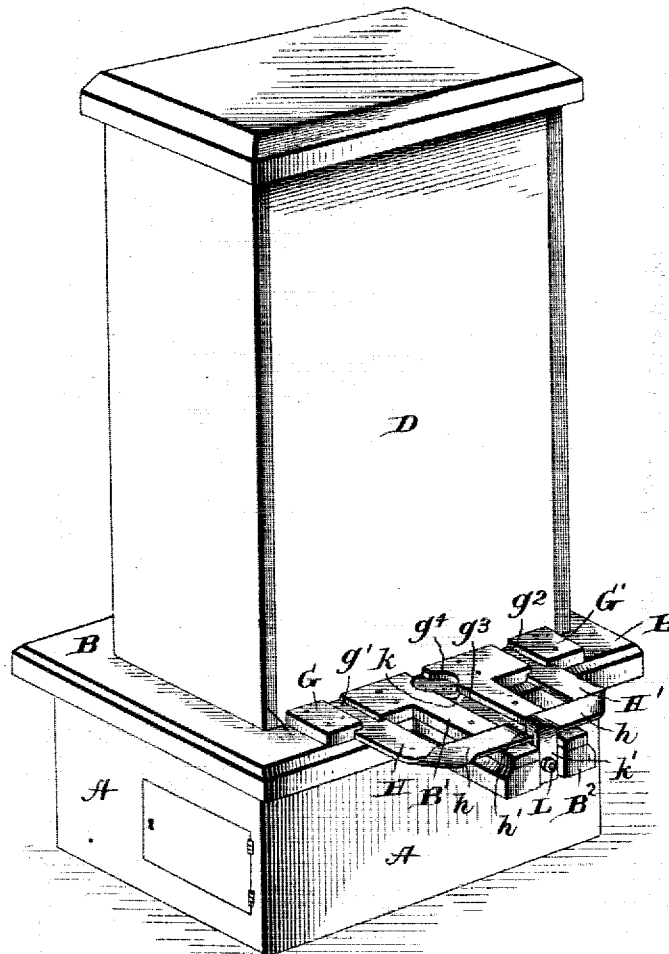
PATENTED NOV. 27, 1906.

J. D. FRAZEY.
VENDING DEVICE.

APPLICATION FILED AUG. 29, 1904.

3 SHEETS—SHEET 1.

Fig. 1.



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3 SHEETS—SHEET 2.

Fig. 2.

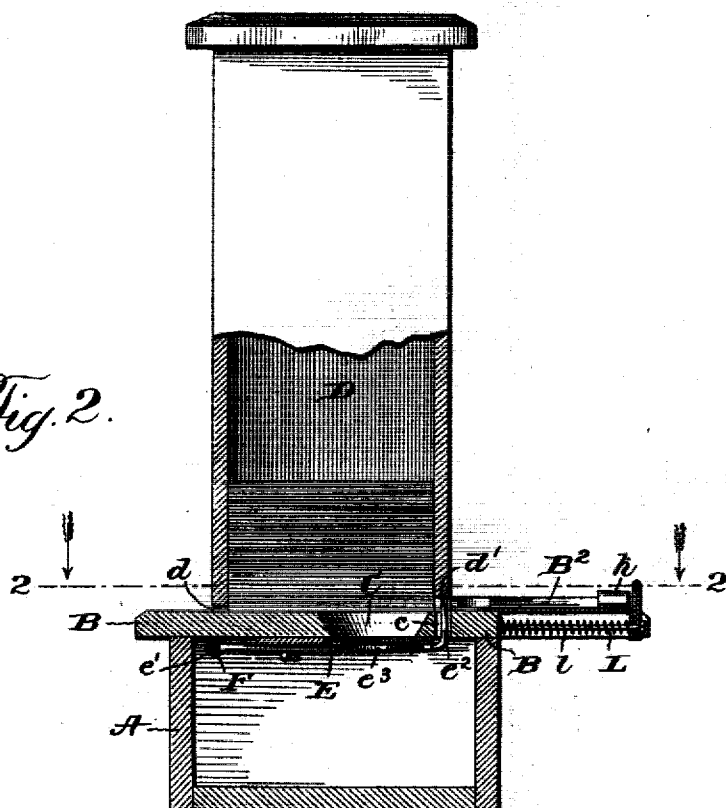
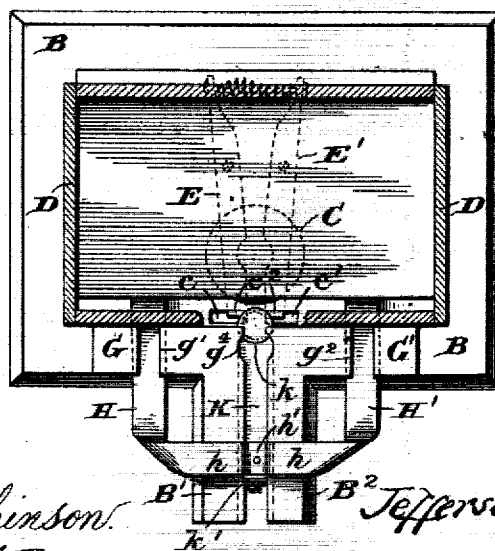


Fig. 3.



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3 SHEETS—SHEET 3.

Fig. 4.

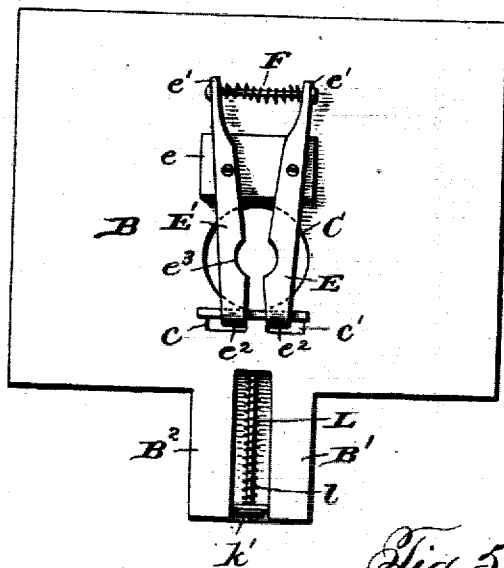


Fig. 5.

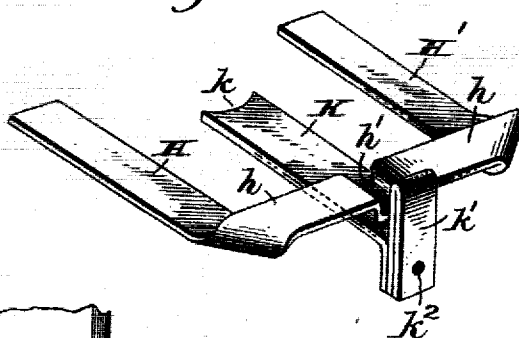


Fig. 6.

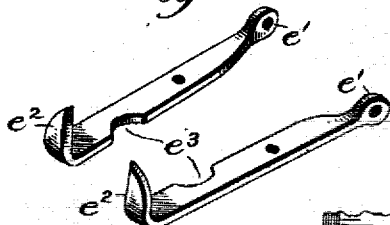
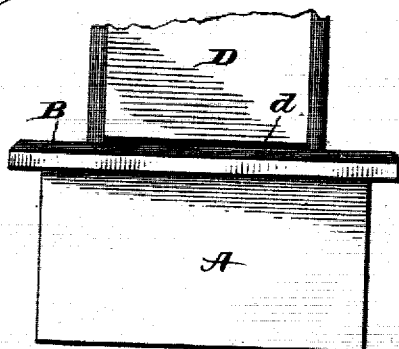


Fig. 7.



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UNITED STATES PATENT OFFICE.

JEFFERSON D. FRAZEY, OF ANTONITO, COLORADO.

VENDING DEVICE.

No. 838,675.

Specification of Letters Patent.

Patented Nov. 27, 1906.

Application filed August 28, 1904. Serial No. 222,543.

To all whom it may concern:

Be it known that I, JEFFERSON D. FRAZEY, a citizen of the United States, residing at Antonito, in the county of Conejos and State of Colorado, have invented certain new and useful Improvements in Vending Devices, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to improvements in vending devices, and it is embodied in the construction and arrangement of parts presently to be described, and defined in the claims.

The invention relates more particularly to that class of vending devices wherein a coin is employed as a means for rendering operative an ejecting member or mechanism, the coin being the means for unlocking the mechanism.

In the accompanying drawings I have shown the invention as applied to a vending device designed more particularly for the reception and disposition of cards, such as postal cards, picture-cards, and illuminated cards, although it is to be understood that the invention can be applied to machines for dispensing various other articles without departing from the inventive idea expressed and shown in this specification.

It is to be understood that the construction illustrated and described, while being eminently satisfactory for the purposes presently to be described, may, however, be varied, altered, or modified in many particulars without materially changing or departing from the spirit of the invention. I therefore desire it understood that the construction illustrated is employed herein more particularly for the purpose of illustrating the invention and not for the purpose of circumscription or limitation.

In the drawings, Figure 1 represents a perspective view of the machine with the ejecting mechanism set for the reception of a coin. Fig. 2 is a longitudinal vertical section taken transversely through the machine, showing parts in elevation. Fig. 3 is a sectional plan view taken on the line 2 2 of Fig. 2. Fig. 4 is a bottom plan of the top or cover of the base. Fig. 5 is a perspective view of the ejector. Fig. 6 is a perspective view of the dogs, and Fig. 7 is a front elevation of the base portion of the machine.

A designates a base consisting conveniently of a rectangular structure the interior of which is designed as a receptacle for coins.

B designates the top of the base, which is of a dimension greater than that of the base, extending beyond the same at front and sides. This top portion is provided with a circular opening C, located between the center and the rear portion thereof, and between this opening and the rear wall of the base are provided two longitudinal slots *c c'*. Extending out of the top at the rear are two arms *B' B''*, separated by an elongated opening *b*.

D designates the storage-receptacle for the articles to be delivered, the same being shown as a receptacle for cards, the lower forward part of which, as at *d*, being cut away to form an opening conveniently of the width of the card or article to be delivered from the receptacle.

Pivotally supported on a cleat *e* on the under side of the top portion B are two locking-dogs E E', constructed conveniently with eyes *e'* at their rear and angularly-extending tongues *e''* at their forward ends. These dogs are pivotally supported on the cleat *e* for pivotal horizontal movement, their tongues *e''* being projected into and above the slots *c* in the top portion B. Interposed between the opposite ends of the dogs E E' is a coil-spring F, sleeved on a suitable rod, the ends of which pass through the eyes *e'* of the dogs and are suitably capped. The spring F serves to normally force the opposite ends of the dogs toward each other, as shown in Fig. 4. It will be noticed that the dogs are pivoted in front of the opening C in the top B and extend across the same, their tongues projecting into the openings *c c'*. At a point directly below the opening C the dogs are cut away to form substantially semicircular recesses *e''* for purposes presently to be described.

G G' designate guiding-blocks secured on the rear portion of the top B and its projections *B' B''*, said blocks being formed with guideways *g' g''* on opposite sides of the center and placed to form a central way or guide *g''* and terminating adjacent the receptacle in a coin-receiving opening *g''*, as shown in Fig. 1. The guideways *g' g''* are conveniently provided with overhanging parts, and in these guideways are positioned for movement the ejector-arms H H', the forward ends of which project through openings in the rear lower wall of the receptacle D. The ejector-arms are of a thickness to engage a single card in the receptacle and by moving forward force

the same out through the opening d . The ejector-arms are conveniently formed of a single piece of metal and are connected at their outer ends by the cross-bar h , which cross-bar is raised so as to project over the guide-blocks and is provided with a centrally-arranged depression h' , fitting into guideway g^3 between the guide-blocks.

K designates a plunger conveniently of flat formation having a circular seat k at its forward end. This plunger is rigidly secured to the depressed portion of the cross-bar h , and its outer end is provided with a suitable knob or hand-piece k' , extending above and below the plane of the plunger. A portion of the plunger and its hand-piece below the same is provided with a perforation k^2 , through which a suitable rod L passes, the same being rigidly secured to the rear edge of the top B. The rod L passes loosely through the aperture k^2 and has thereon a coil-spring l , one end of which abuts the end of the plunger or its hand-piece and the other the rear edge of the top B. The spring l serves to normally force the plunger and the ejecting-arms outward.

The rear wall of the receptacle D directly above the opening c in the top B is recessed, as shown in Fig. 2, into which recesses the upper ends or tongues of the locking-dogs project, the size of the recesses d' being such as to permit a lateral movement of the dogs on their pivots and the passage of the plunger.

It will be noticed that in the ejecting mechanism the plunger is relatively shorter than the ejectors and does not serve as a means for coming in contact with the cards, but, on the contrary, is designed to engage a coin only.

When the receptacle D is supplied with the requisite number of cards, a party desiring to secure one places the coin in the coin-receiving opening g^1 in front of the seat in the plunger K. While in this position the tongues e^2 of the spring-actuated dogs are arranged directly in front of the plunger, but are normally spaced apart for a short distance, as shown in Fig. 4. Upon a coin being placed in position the operator forces the plunger forward, the curved sides of the coin strike the tongues e^2 , which are conveniently beveled or curved on their adjacent edges, forces the tongues apart, and as the plunger is of a width substantially that of the coin the dogs are thereby held apart, permitting the movement of the ejectors H H' and the displacement of the lower one of the stack of cards in the receptacle. As the operator continues the movement of the ejecting mechanism the coin reaches a position over the opening C in the top B, and as the arms are still maintained in their separated position by the tongues engaging the sides of the plunger the coin will immediately fall and pass between the dogs through the space formed in part by the semi-

circular cut-out portions e^3 . The coin is deposited in the base A, from which it can be removed when required through a suitable door or other closure. As soon as the coin has been deposited, the card secured by the operator, and pressure released from the ejecting mechanism, the spring l immediately forces the latter backward into its normal position ready for a subsequent operation.

It will be noticed that in this reciprocatory movement the ejecting mechanism is guided throughout by the blocks G G', the parts being held from removal by the overhanging portions of the blocks, while the rod L limits the outward movement of the ejecting mechanism.

While I have shown the parts of the ejecting mechanism somewhat crudely, I desire it understood that a suitable handle will be employed and other features will be changed to suit the taste and desires of users. It is also to be understood that the receptacle D can be made with suitable glazed panels, if desired.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. In a vending device, the combination with a base and a receptacle thereon, of an ejector mechanism comprising two arms, a cross-bar connecting the arms, guides for the arms, an intermediate plunger connected with the cross-bar, a rod loosely engaging a part carried by the cross-bar, the said part, a spring on the rod, to force the bar outwardly, and pivoted dogs in advance of the plunger normally retaining the same from movement.

2. In a vending device, the combination with a base and a receptacle thereon, of an ejector mechanism comprising two arms, a cross-bar connecting the same, guides for the arms, an intermediate plunger connected with the cross-bar, a hand-piece for the plunger, a rod loosely engaging the hand-piece of the plunger, a spring on the rod adapted to force the bar outwardly, and means for normally retaining the same from movement.

3. In a vending device, the combination with a base, and a receptacle thereon, of an ejector mechanism comprising two arms, a cross-bar connecting the arms, guides for the arms, an intermediate plunger connected with the cross-bar, a rod loosely engaging a part carried by the cross-bar, the said part, a spring on the rod arranged to force the bar outwardly, and means for normally retaining the plunger from movement.

4. In a vending device, the combination with a base and a receptacle thereon, of an ejector mechanism comprising two arms, a cross-bar connecting the arms, an intermediate plunger connected with the cross-bar having a circular seat at its forward end, and means arranged in advance of the plunger

normally retaining the same from movement, said means adapted to be released upon the insertion of a coin.

5 In a vending device, the combination with a base and a receptacle thereon, of an ejector mechanism comprising two arms, a cross-bar connecting the arms, an intermediate plunger connected with the cross-bar, the plunger being of a length somewhat less than
10 said arms and having a circular seat at its forward end, pivoted dogs having means normally arranged in the path of the plunger for preventing movement thereof, and means for permitting the placement of a coin in advance of the plunger to release said retaining
15 means.

6. In a vending-machine, the combination with a base and a receptacle thereon, of an ejector mechanism comprising two arms, a
20 cross-bar connecting the arms, guides for the arms, and an intermediate plunger connected with the cross-bar, and means for normally retaining the same from movement including oppositely-movable spring-actuated dogs secured to a stationary part of the machine
25 and having angular projections thereon arranged in advance of the plunger-arm.

7. In a vending device, the combination with a receptacle, of ejector mechanism comprising a plunger and ejector parts, and
30 means for normally preventing movement of the plunger comprising two oppositely-disposed complementary dogs pivotally supported intermediate their ends to a stationary part of the machine in a horizontal position and having angled projecting ends extending upward in the path of the coin, and a spring interposed between the opposite
35 ends of the dogs for normally moving the said projecting ends toward each other.
40

8. In a vending device, the combination with a base, of a receptacle, an ejector mechanism, means engaging the ejector mechanism to lock the same against movement, comprising movable dogs arranged in advance
45 thereof, the dogs being pivoted intermediate their ends to a stationary part of the machine, and having at one end an arm arranged in the path of the ejector mechanism
50 and at the opposite end a connecting-spring sleeved upon a rod extending between the

dogs and normally moving said ends toward each other, the said rod and means whereby the dogs are moved in opposite directions upon the placing of a coin in advance of the
55 ejector mechanism and between the dogs.

9. In a vending device, the combination with a receptacle, of an ejector mechanism comprising ejector-arms and a connected plunger member having a curved seat at its
60 forward end, means for normally preventing movement of the ejector mechanism including dogs pivotally supported to a stationary part of the machine and having upwardly-extending terminals arranged in the path of
65 the plunger, a spring interposed between the opposite ends of the dogs, and a guide-rod for said opposite ends.

10. In a vending device, the combination with a base having a top formed with an
70 opening therein and a receptacle on the top, of an ejector mechanism comprising ejector-arms and a plunger-arm, means for normally retracting the ejector mechanism, means for normally retaining the plunger from move-
75 ment including dogs pivotally secured intermediate their ends to the under side of the top of the machine and having upturned ends projecting through the top in the path of the plunger, means for forcing the up-
80 turned ends of the dogs toward each other and provisions for permitting the placement of a coin between the plunger and the upturned ends of the dogs.

11. In a vending device, the combination 85 with a receptacle, of an ejector-arm and a connected plunger member, means for normally preventing movement of the ejector-arm including dogs pivotally supported to a stationary part of the machine and having
90 offset terminals arranged in the path of the plunger, a spring interposed between the opposite ends of the dogs, and a guide-rod for said opposite ends, on which is mounted the
95 spring.

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

JEFFERSON D. FRAZEY.

Witnesses:

FRANK C. HARPER,
EDW. TOFFLER.