H. HANSON.

COIN CONTROLLED VENDING MACHINE.

APPLICATION FILED SEPT. 26, 1919.

1,349,953. **Patented Aug. 17, 1920.**

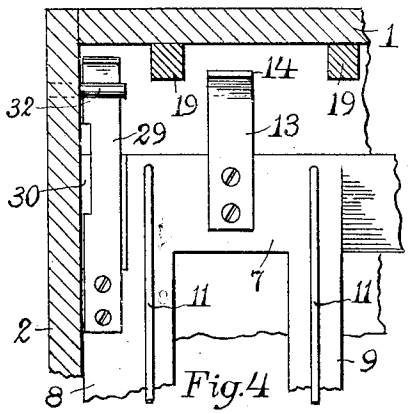


Fig. 4

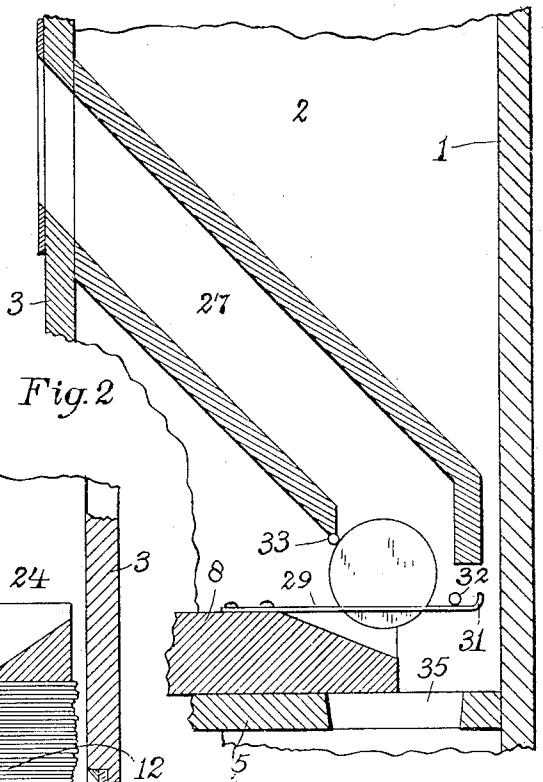


Fig. 2

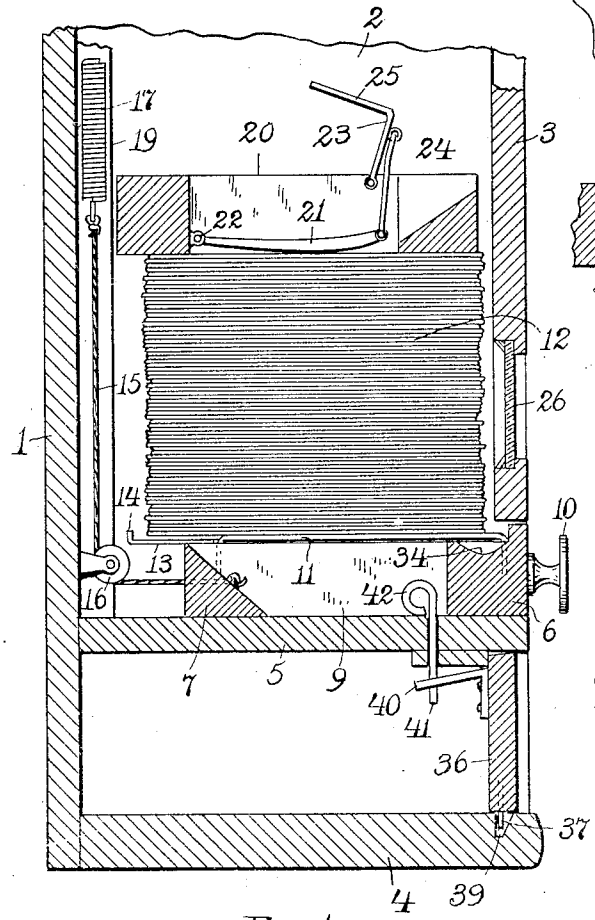


Fig. 1

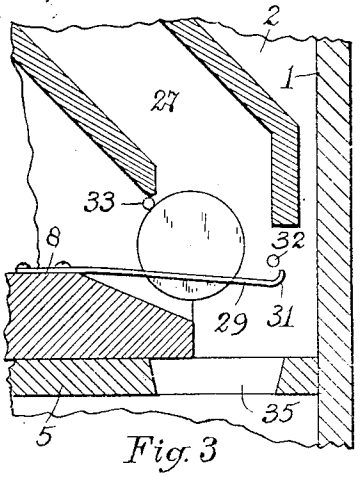


Fig. 3

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UNITED STATES PATENT OFFICE.

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COIN-CONTROLLED VENDING-MACHINE.

1,349,953. Specification of Letters Patent. Patented Aug. 17, 1920.

Application filed September 26, 1919. Serial No. 326,663.

To all whom it may concern:

Be it known that I, HARRY HANSON, a citizen of the United States, and a resident of Watertown, in the county of Middlesex and Commonwealth of Massachusetts, have invented certain new and useful Improvements in Coin-Controlled Vending-Machines, of which the following is a full, clear, and exact specification.

This invention relates to machines for vending cards, postals, paper and envelops and the like, and has for its object the effecting of simplified means for enabling a coin to release the delivery device; for showing when the machine is empty; for locking the coin receiver, and for effecting certain improvements in details of construction hereinafter set forth.

In the drawings forming part of this specification, Figure 1 is a side sectional view of a vending machine embodying my improvements. Fig. 2 is a side sectional view of the same showing the coin delivery devices. Fig. 3 is a similar sectional view showing the coin as unlocking the delivery devices. Fig. 4 is a sectional plan view of a part of the machine.

The reference numeral 1 designates the back of the vending machine case, 2 the sides, 3 the removable front, 4 the bottom of the coin receiver and 5 the top of the coin receiver and bottom or floor of the article containing chamber.

Upon the floor 5 rests the delivery frame comprising cross members 6 and 7 and longitudinal members 8 and 9, the member 6 having a knob 10 for enabling the frame to be withdrawn more or less from beneath the front or door 3. Upon the members 8, 9 are secured wires 11, and upon these wires rest the pile of cards, envelops or the like, as 12. For enabling the withdrawal of the frame to bring with it the undermost one of the articles 12, the frame member 7 is provided with plates 13, preferably one near each side, having each an upturned lip 14 at its rear end, as shown in Figs. 1 and 4, which is just high enough to seize the lowermost card or envelop but none of the others.

A cord 15 attached to the frame member 7 and passing thence about a pulley 16 to a suitably anchored spring 17, serves to draw the delivery frame back into place after its withdrawal and release. Preferably the spring will retract the frame back far enough to present its lips 14 behind the front surfaces of the rails 19 with which the back 1 is provided, in order to make sure that no envelops can rest on top of the lips 14 and so escape removal. In Fig. 1, however, the delivery frame is not shown thus retracted to its normal limit.

Upon the pile of envelops or the like, is laid a weight 20 centrally apertured and having a flap 21 pivoted at 22 therein. Above the free end of the flap 21 is pivoted a plate 23 bent approximately at right angles to itself, and connected with the flap by a wire 24. So long as any one or more of the envelops are between the weight and the delivery frame, the elbow-plate 23 remains with its free portion nearly horizontal; but when the last envelop has been withdrawn the flap descends between the frame members and thereby lowers the elbow-plate to present its portion 25 substantially vertical and immediately behind the small window 26. The portion 25 having been inscribed with a suitable word or characteristic sign indicating the emptiness of the case, no customer will deposit his coin therein.

The designated coin is introduced into a chute 27 and descends therein to a leaf spring 29 attached to the delivery frame, preferably to the frame member 8 and close to the side 2, a slot or notch 30 being provided in the spring, into which the coin enters. The rear end of the spring 29 is formed with a hook 31 adapted normally to engage a pin 32 projecting from the side 2 and thereby to prevent the delivery frame from being withdrawn more than a quarter of an inch or thereabout. When, now, the coin is resting in the slot or notch 30 as shown in Fig. 2, and the delivery frame is drawn outwardly, the coin comes against a pin 33 projecting from the side 2, and the only way whereby the coin can pass this pin and the delivery frame have its hook 31 put out of reach of the stop pin 32, is for the spring 29 to flex downward as shown in Fig. 3. After this has occurred, the delivery frame can be withdrawn sufficiently for the envelop delivered thereby to be seized and taken out, the frame member 6 being formed with a groove 34 for better enabling the finger tips to get hold of the envelop's edges. When the delivery frame

has thus been drawn out the proper distance, the coin will become dislodged from the spring 29 and will descend through the slot 35 in the floor 5 and fall into the coin receiver below.

For permitting the removal of the coins which have accumulated on the bottom 4 of the coin receiver, a movable front 36 is fitted to the receiver, as shown in Fig. 1, a pin or two 37 projecting from the bottom edge of the front into holes 39 in the bottom 4, while from the upper part projects an arm 40 having an opening entered by a removable bolt 41 descending through the roof or floor 5, its head 42 being accessible through a space between the frame members. The door 3 having been removed, the replenisher's fingers can easily reach the head 42 and withdraw the bolt to permit the front 36 to be taken out and the coins scraped out.

Thus constructed, the envelop or card delivery machine is found to be comparatively inexpensive, certain in action, and its coin-controlled device sufficiently safe for the purpose of delivering articles which do not appeal either to appetite or avarice.

What I claim is:

1. A coin controlled machine comprising a slidable article-removing member, a fixed stop, a leaf spring supported at one end by said member and having a hooked free end adapted normally to engage said stop, said spring having an opening disposed to partially receive a designated coin, and a stationary device, whereby, a designated coin being deposited in said opening, the withdrawal of the article-removing member will cause the spring to press the coin against the stationary device and to be itself sufficiently depressed to permit its hooked end to freely pass said fixed stop.

2. A coin controlled vending machine comprising a slidable article-removing member, a fixed pin, a leaf spring supported at one end by said member having a hook at its free end and a notch in its side, a stationary pin, and means for depositing a designated coin in said notch, whereby the withdrawal of the article-removing member causes said spring to press such coin against said stationary pin and thereby to depress its hooked end out of possible engagement with said fixed pin.

In testimony that I claim the foregoing invention, I have hereunto set my hand this 25th day of September, 1919.

HARRY HANSON.