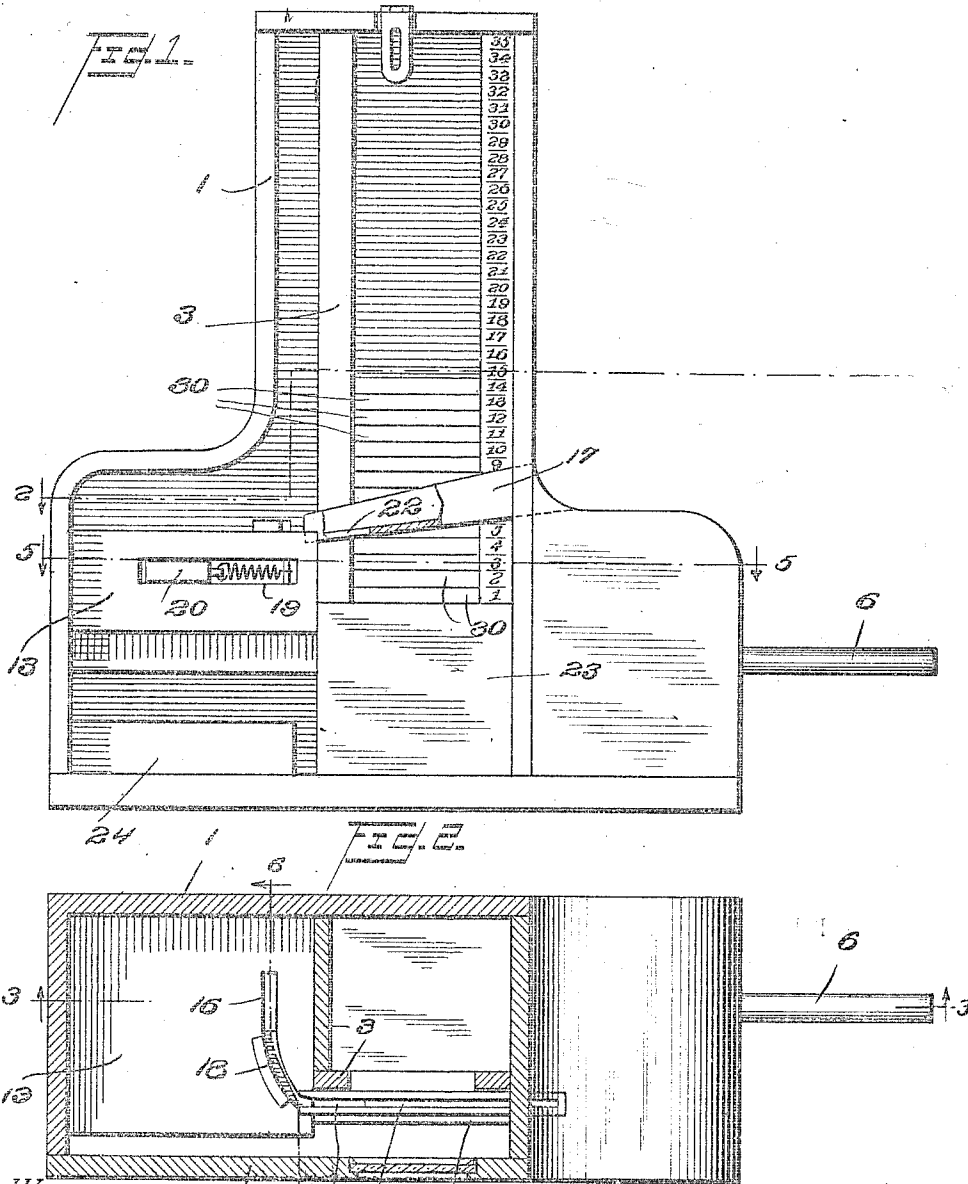


P. AMADEO.
 COIN CONTROLLED VENDING MACHINE.
 APPLICATION FILED NOV. 7, 1911.

1,044,622.

Patented Nov. 19, 1912.

2 SHEETS—SHEET 1.



WITNESSES:

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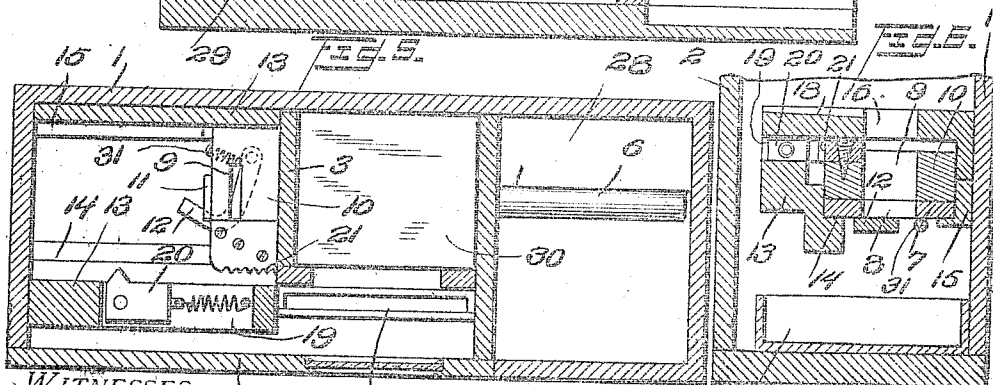
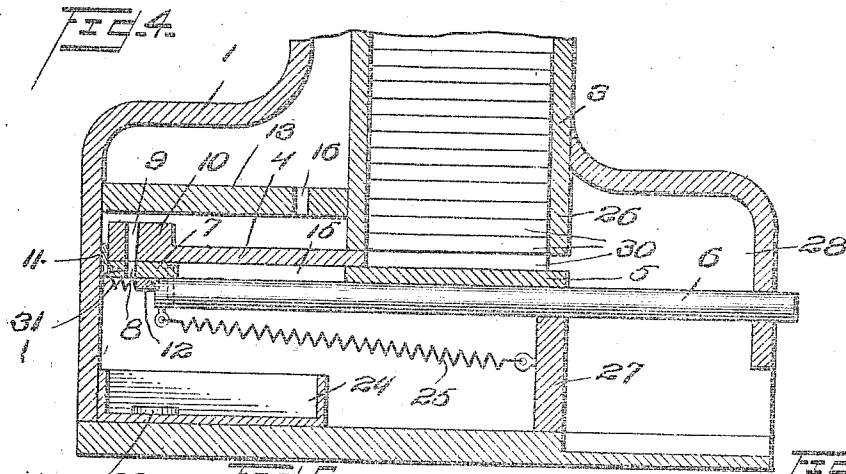
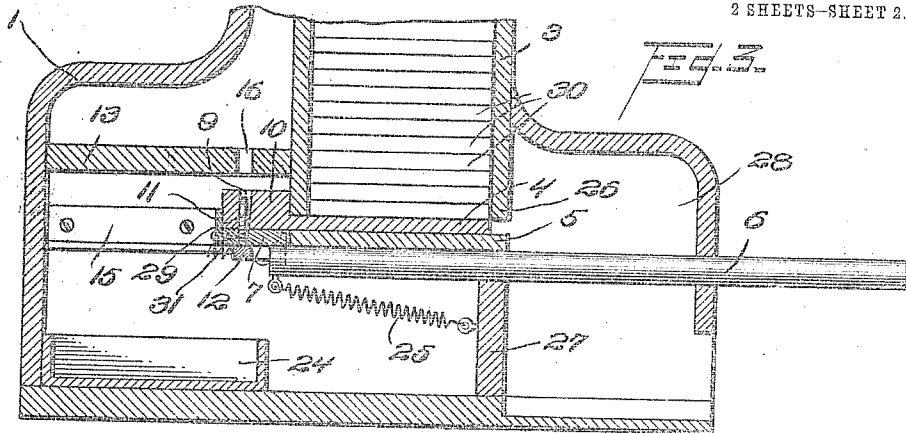
Attorney

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2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

PAUL AMADEO, OF SHENANDOAH, PENNSYLVANIA.

COIN-CONTROLLED VENDING-MACHINE.

1,044,622.

Specification of Letters Patent.

Patented Nov. 19, 1912.

Application filed November 7, 1911. Serial No. 658,951.

To all whom it may concern:

Be it known that I, PAUL AMADEO, a subject of the King of Italy, residing at Shenandoah, in the county of Schuylkill and State of Pennsylvania, have invented certain new and useful Improvements in Coin-Controlled Vending-Machines, of which the following is a specification.

My invention relates to improvements in coin controlled vending machines, and has for an object to provide a machine of this character, whereby when a coin is dropped in a coin chute, and a plunger operated, a box of cigarettes or some other commodity is delivered.

A further object is to provide a machine of this character in which the coin itself is utilized to bring the discharge mechanism under direct control of the plunger.

A further object is to provide a machine in which the mechanism is exceedingly simple and compact, and yet will positively operate when the proper coin is inserted.

With these and other objects in view, the invention consists in certain novel features of construction and combinations and arrangements of parts, as will be more fully hereinafter described and pointed out in the claims.

In the accompanying drawings: Figure 1, is a view in side elevation with one side of the casing removed. Fig. 2, is a view in horizontal section on the line 2—2 of Fig. 1. Fig. 3, is a view in vertical section on the line 3—3 of Fig. 2. Fig. 4, is a view similar to Fig. 3, but showing the plunger in its inner position. Fig. 5, is a view in horizontal section on the line 5—5 of Fig. 1, and Fig. 6, is a view in vertical cross section on the line 6—6 of Fig. 2.

1, represents a casing of any desired shape and material, and having a removable side 2 so that the machine can be easily refilled and the money removed.

3, represents a slide way in which the cartons 30 to be vended are placed. The cartons illustrated in the drawings represent boxes of cigarettes, but it is to be understood that I do not limit myself in this particular, as cartons containing other goods might be used. The boxes are arranged in the slide way in a vertical column as shown, and the lowermost box rests on an ejector 4, which is adapted to be moved inwardly, allowing the box to drop on a platform 5, and then in its outward movement push the box off the

platform as will be more fully hereinafter explained.

A plunger 6, which is held in normal position by a spring 25 projects through the casing, and at its inner end is connected to a cross piece 7. This cross piece 7 has a slot 8 which registers with a slot 9 in an enlarged portion 10 of the ejector 4. A tongue 11 is secured to the rear edge of cross piece 7, and an L-shaped lever 12 is pivotally secured to the under side of the cross piece, and normally projects across the slot 8 in the cross piece. This lever 12 is held in its normal position by a spring 31, but when the plunger 6 is moved inwardly to its extreme position, the lever strikes the rear wall of the casing, and is moved from under the slot 8.

A frame 13 is located in the casing 1, and is formed as shown at 14 so that with angle bar 15, it forms a guide way for the cross piece 7. This frame 13 is provided in its top with a slot 16 which registers with the slots 8 and 9 in the cross piece and ejector respectively. A coin chute 17 projects through the casing 1 and is disposed at an incline to direct the coin downwardly into a curved groove or guide way 18, which in turn, directs the coin into slot 16 above referred to. The frame 13 also has a slot 19 in its side, and a spring held pivoted dog 20 is located therein, and is adapted at certain times, to engage a toothed rack 21 secured to the enlargement 10. In the bottom of the coin chute 17 is an opening 22 so that if the wrong coin or a piece of metal, which is thinner than the proper coin is used, it will drop through the opening 22 into a receptacle 23 provided for that purpose. Another box or receptacle 24 is also provided to receive the proper coins when they are released from the slots 8 and 9. The slide way 3 extends down as shown at 26, and this projection together with a partition 27 forms a delivery pocket 28 in the end of the casing into which the cartons are delivered.

The operation is as follows: A coin is dropped in the coin chute 17, and rolls down the said chute and also through the guide 18, through the slot 16, into the slots 8 and 9, and rests on the lever 12. The plunger 6 is then pushed inwardly, and carries with it the cross piece 7, and the ejector 4, the latter being connected to the cross piece 7 by the coin 29, as shown in Fig. 3. When the plunger reaches its inner position, the

lever 12 strikes the rear wall of the casing, and moves from below the slots 8 and 9 allowing the coin 29 to drop down into the receptacle 24. At the same time, the ejector 4 has moved from under the column of boxes 30, and allowed the lowermost box to drop onto platform 5. When plunger 6 is released, it is returned to its normal position by the spring 25, and carries with it cross piece 6. On this return movement, the tongue 11 will press against enlargement 10 on the ejector 4, and return the ejector to its normal position, thereby pushing the box, which dropped onto the platform 5, into the delivery pocket 28, where it can easily be reached with the hand. If the plunger and cross piece are pushed inwardly, when no coin has been dropped in the chute, the ejector will ordinarily not be carried with them, but will be held in normal position by the weight of the boxes. If by chance, however, the ejector should move inwardly, the dog 20 will engage the toothed rack 21, and prevent any further inward movement of the ejector. This movement from the normal position until the dog engages the rack, is not enough to allow a box to drop onto the platform and be pushed off, consequently there is no danger of a box being obtained free.

The enlargement 10 forms a shoulder which bears against the slide way, and prevents any outward movement of the ejector when it is in normal position.

Various slight changes might be made in the general form and arrangement of parts described without departing from my invention, and hence I do not limit myself to the precise details set forth, but consider myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of the appended claims.

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

1. A vending machine, comprising a casing, an ejector in the casing, a plunger movable longitudinally below the ejector and projecting through the casing, a cross piece on the plunger having a coin slot therein, an enlargement on the inner end of the ejector limiting the outward movement thereof and having a coin slot normally registering with the slot in the cross piece, said plunger and ejector adapted to be coupled by a coin in the slot whereby the plunger when forced inwardly will move the ejector in one direction, a tongue on the cross piece engaging behind the ejector, whereby the outward

movement of the plunger causes the outward movement of the ejector, and a spring exerting outward pressure on the plunger to move the plunger and the ejector outwardly ejecting the goods, substantially as described.

2. A vending machine, comprising a casing, an ejector in the casing, a plunger movable longitudinally below the ejector and projecting through the casing, a cross piece on the plunger having a coin slot therein, an enlargement on the inner end of the ejector limiting the outward movement thereof and having a coin slot normally registering with the slot in the cross piece, said plunger and ejector adapted to be coupled by a coin in the slot whereby the plunger when forced inwardly will move the ejector in one direction, a tongue on the cross piece engaging behind the ejector, whereby the outward movement of the plunger causes the outward movement of the ejector, a spring exerting outward pressure on the plunger to move the plunger and the ejector outwardly ejecting the goods, and means for releasing the coin when the plunger reaches its innermost position, substantially as described.

3. A vending machine, comprising a casing, an ejector in the casing, a plunger movable longitudinally below the ejector and projecting through the casing, a cross piece on the plunger having a coin slot therein, an enlargement on the inner end of the ejector limiting the outward movement thereof and having a coin slot normally registering with the slot in the cross piece, said plunger and ejector adapted to be coupled by a coin in the slot whereby the plunger when forced inwardly will move the ejector in one direction, a tongue on the cross piece engaging behind the ejector, whereby the outward movement of the plunger causes the outward movement of the ejector, a spring exerting outward pressure on the plunger to move the plunger and the ejector outwardly ejecting the goods, a spring held coin releasing lever pivotally secured to the under face of the cross piece and adapted to strike the rear wall of the casing to release the coin when the plunger reaches its innermost position, substantially as described.

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

PAUL AMADEO.

Witnesses:

MICHELE PETITTS,
JOHN YETTER.