

No. 754,616.

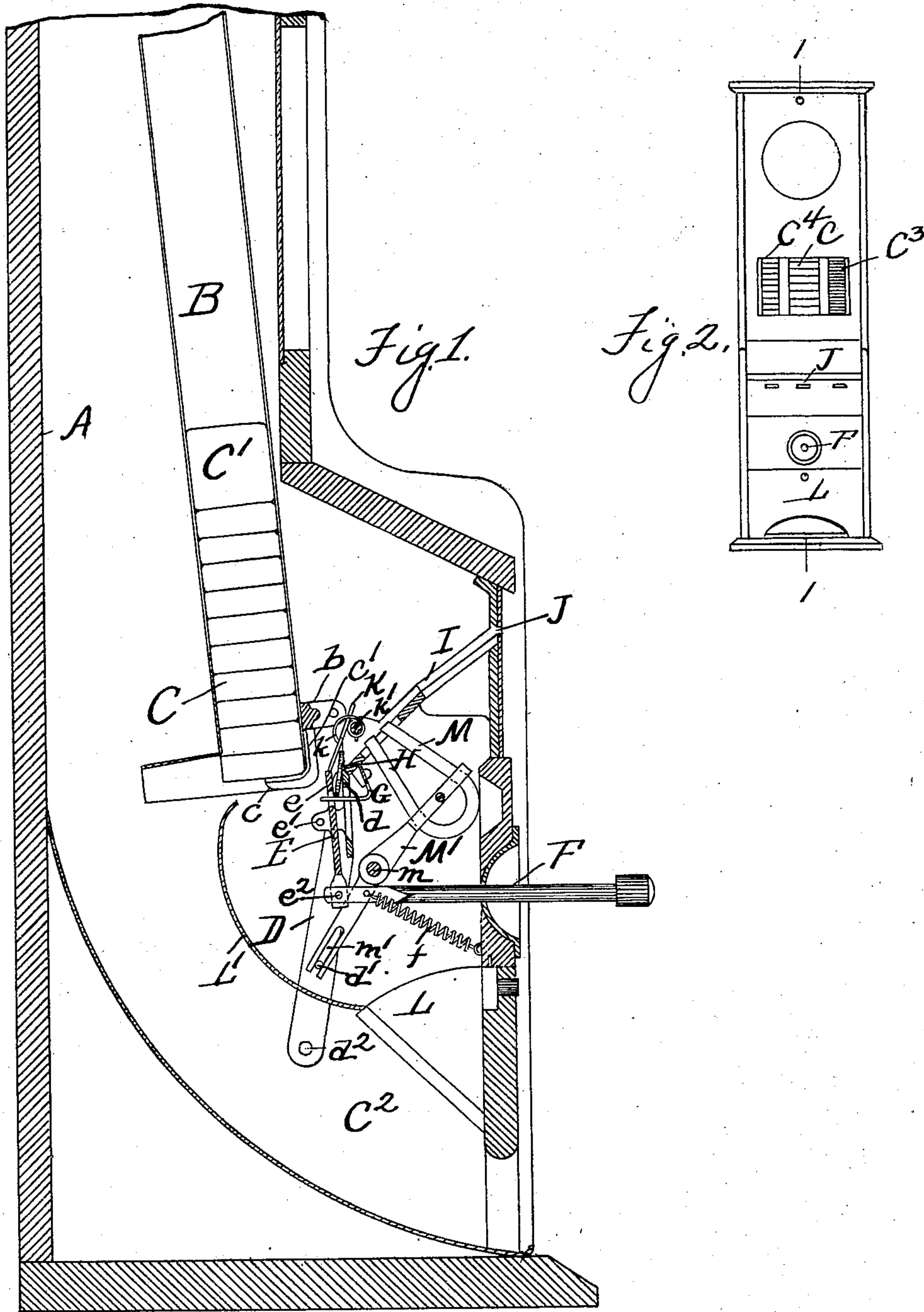
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C. A. SMILEY.

COIN ACTUATING VENDING MACHINE.

APPLICATION FILED DEC. 4, 1902.

NO MODEL.



Witnesses

C. G. L. M. C. C. C.  
Margaret Sullivan.

Inventor

Charles A. Smiley  
by H. C. Lord.  
Attorney



# UNITED STATES PATENT OFFICE.

CHARLEY A. SMILEY, OF ERIE, PENNSYLVANIA.

## COIN-ACTUATING VENDING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 754,616, dated March 15, 1904.

Application filed December 4, 1902. Serial No. 133,881. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLEY A. SMILEY, a citizen of the United States, residing at Erie, in the county of Erie and State of Pennsylvania, have invented new and useful Improvements in Coin-Actuating Vending-Machines, of which the following is a specification.

This invention relates to coin-actuated vending-machines; and it consists in certain improvements in the construction thereof, as will be hereinafter fully described, and pointed out in the claims.

The invention is illustrated in the accompanying drawings, as follows:

Figure 1 shows a section on the line 1 1 in Fig. 2. Fig. 2 shows a front elevation of the machine.

A marks the case; B, the chute in which the articles C to be vended are stored. Arranged on the top of the packages C is a weight C', which assures the proper feeding of the packages down the chute. The lower end of the chute is provided with a support *e*, the back of the chute being open, so that packages may be forced off the support *e* into the way *c*<sup>2</sup>, where they are carried to a position to be taken by the customer. The chute B may be supported in any manner by the case, but preferably by the lug *b*. The front edge of the bottom of the chute—that is, the part opposite the support *e*—is open.

In the operation of this device the coin which is dropped into the machine is used to move the package off the support by immediate contact. A rock-lever D is pivoted at *d*<sup>2</sup> on the case. Its upper end *d* forms one jaw of the clamp which acts in conjunction with the jaw *e* of a clamp-lever E. The clamp-lever is pivoted on the rock-lever at *e*'. The operating-rod F is pivoted on the clamp-lever at *e*<sup>2</sup>. A spring *f* tends to retract the rod and the parts to which it is connected. Extending through the jaws *e* and *d* is a coin-support G. This extends only a short distance in front of the clamp when the clamp is in its normal position. A coin H is shown in Fig. 1, with the parts in their normal position. A guideway I carries the coin from the slot J to the position shown in Fig. 1 between the jaws *e* and *d*. The plate K is arranged at

the end of the guideway in position to deflect the coin at the end of the guideway. A spring *k* presses this plate K to its normal position. The plate is pivoted at *k*', so as to rock out of the way of the coin as the rock-lever D is moved forward.

The operation of the device so far as described is as follows: The coin is inserted at the slot J, passes down the guideway I, is deflected by the plate K between the jaws *e* and *d* upon the support G. The operating-rod F is then pressed forward. It will be noted that the force of gravity acting upon the rock-lever D retards its forward action, so that the initial movement of the rod F moves the clamp-lever E and closes the jaw *e*. As soon as the rock-lever E has moved as far as the interposed coin will permit the rock-lever D is forced forward, carrying with it the coin. The coin presses up the plate K and in its forward movement contacts the lowermost package C and forces it into the way C<sup>2</sup>. In this forward movement of the lever D it passes over the pivot *d*<sup>2</sup>, so that as the spring *f* retracts the rod F its initial movement operates the clamp-lever E, opening the jaw *e*, and as the parts are in front of the coin-support G the coin drops onto the plate L' and is carried by the plate into the till L.

I prefer to provide the mechanism with a fraud-detecting device, which is as follows: Arranged beneath the guideway I is a magnet M. This magnet is carried by a lever M'. The lever M' is pivoted on the rod *m*, which rod is secured to the case. The lower end of the lever has the slot *m*', which operates upon the pin *d*', carried by the lever D. The operation of this part of the device is as follows: If a magnetic slug is inserted in the slot, it is arrested by the magnet M. As the operating-rod F is pushed in and the rock-lever D is moved forward away from the end of the guide I the magnet M is rocked away from the guide, so that before the lever D completes its movement the magnet has been carried away from the guide I a sufficient distance to permit the slug to move off the guide I and drop into the till. Of course the lever D without the coin in the jaw does not vend a package.



In Fig. 2 the series of packages C<sup>3</sup> and C<sup>4</sup> are shown.

Any number of chutes may be provided, and any number of mechanisms may be arranged 5 on the rock-lever D to operate in conjunction with such chutes.

What I claim as new is—

1. In a coin-actuated vending-machine, the combination of a chute; a rocking lever; a 10 positively-actuated clamp carried by said lever and arranged to carry a coin past the bottom of the chute as the lever is rocked; means for actuating the rock-lever; and means for guiding the coin into the clamp.

15 2. In a coin-actuated vending-machine, the combination of a chute; a rocking lever arranged to move over the center of its pivot; a positively-actuated clamp carried by said lever and arranged to carry a coin past the 20 bottom of the chute as the lever is rocked; means for actuating the rock-lever; and means for guiding the coin into the clamp.

3. In a coin-actuated vending-machine, the combination of a chute; a rocking lever; a 25 positively-actuated clamp carried by said lever and arranged to carry a coin past the bottom of the chute as the lever is rocked; means acting initially upon the clamp for operating the rocking lever; and means for guiding the 30 coin into the clamp.

4. In a coin-actuated vending-machine, the combination of a chute; a rocking lever arranged to move past a vertical line extending from its pivot as it is rocked; a positively-actuated clamp carried by said lever and arranged to carry a coin past the bottom of the chute as the lever is rocked; means acting initially upon the clamp for operating the rock-

ing lever; and means for guiding the coin into the clamp. 40

5. In a coin-actuated vending-machine, the combination of a chute; a rocking lever having a jaw *d*; a clamp carried by said lever, said clamp comprising the lever E pivoted on the rocking lever and the jaw *e* arranged to 45 operate in connection with the jaw *d* on the rocking lever; the operating-rod F secured to the clamp-lever; the spring *f* for retracting the rod; and means for guiding coin into the clamp. 50

6. In a coin-actuated vending-machine, the combination of a chute; a rocking lever; a clamp carried by said lever and arranged to carry a coin past the bottom of the chute as the lever is rocked; a coin-support arranged 55 in the clamp when the clamp is in its normal position; means for actuating the rock-lever; and means for guiding the coin into the clamp.

7. In a coin-actuated vending-machine, the combination of a chute B; a rocking lever D 60 having the jaw *d* thereon; the clamp-lever E pivoted on the rocking lever D having the jaw *e* thereon; the operating-rod F connected with the clamp-lever E; the spring *f* arranged to operate on the rod F; the guideway 65 I; movable deflecting-plate K; a magnet M adjacent to the guideway I; the lever M' carrying the magnet; and a connection between the lever M' and the lever D.

In testimony whereof I have hereunto set 70 my hand in the presence of two subscribing witnesses.

CHARLEY A. SMILEY.

Witnesses:

C. SWALLEY,  
A. E. TONSON.