

No. 627,702.

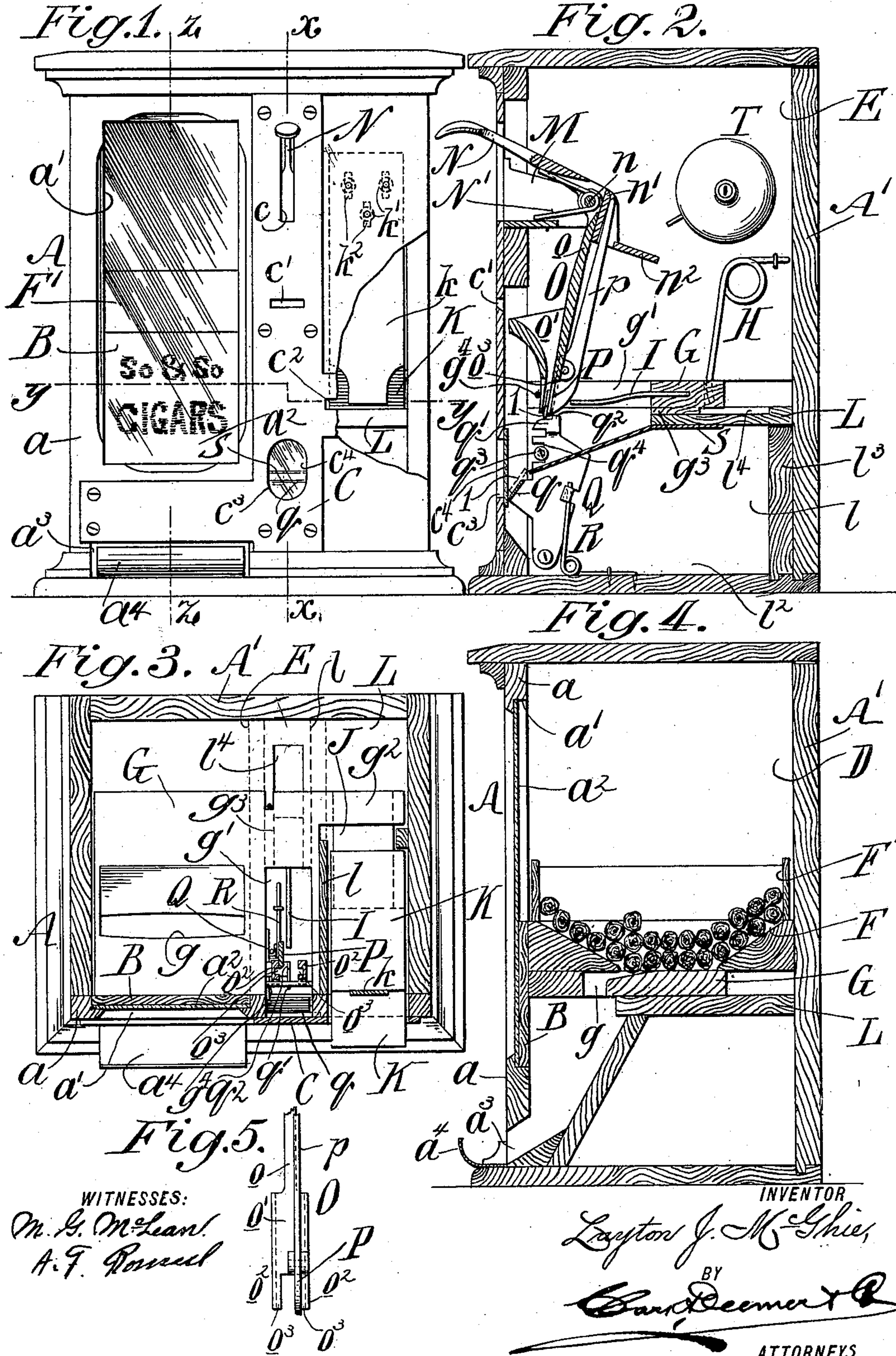
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L. J. MCGHIE.

COIN OPERATED CIGAR VENDER.

(Application filed July 19, 1898.)

(No Model.)



UNITED STATES PATENT OFFICE.

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COIN-OPERATED CIGAR-VENDER.

SPECIFICATION forming part of Letters Patent No. 627,702, dated June 27, 1899.

Application filed July 19, 1898. Serial No. 686,341. (No model.)

To all whom it may concern:

Be it known that I, LAYTON J. MCGHIE, a citizen of the United States, and a resident of Wilkes-Barré, county of Luzerne, and State of Pennsylvania, have invented certain new and useful Improvements in Coin-Operated Cigar-Venders, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar letters and numerals of reference indicate corresponding parts.

This invention relates to improvements in coin-controlled vending-machines adapted especially for vending and advertising cigars, the object thereof being to provide an apparatus of this character which is operative for delivery of the goods contained therein only by the means of a specific coin of predetermined denomination and proportion. The construction of the machine is such that a spurious coin will not operate its parts, and it is exceedingly simple, inexpensive, durable, and reliable in continuous use.

The invention will be hereinafter fully described, and specifically set forth in the annexed claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a front elevation of my improved machine, showing a portion of the casing broken away. Fig. 2 is a vertical sectional elevation taken on the line $x x$ of Fig. 1. Fig. 3 is a sectional plan view taken on the line $y y$ of Fig. 1. Fig. 4 is a vertical sectional elevation taken on the line $z z$ of Fig. 1, and Fig. 5 is a detail view illustrating the coin-chute forming part of the machine.

In the practice of my invention I provide, primarily, a box or casing A, preferably composed of wood and being of rectangular contour. The front wall a of said box is provided with an opening a' , containing a glass plate a^2 for the purpose of exhibiting the goods contained within the apparatus and an advertising-card B, secured back of the said glass plate. This card is used to advertise the goods contained within the box. Secured to the front wall a of the box is a plate C, composed of metal, which acts as a means for strengthening the device and contains apertures or slots c , c' , c^2 , and c^3 . The apertures c' and c^2 are adapted, respectively, for receiving

a coin and for discharging a card, as will be hereinafter described. The aperture c guides the operating-lever of the machine, and the aperture c^3 is covered by a glass plate c^4 for the purpose of exhibiting the coin used to operate the mechanism. An aperture a^3 is further provided in the front wall of the casing for the purpose of discharging the goods contained therein, and a trough a^4 receives the goods as they are discharged.

This machine is especially constructed for vending cigars, and a compartment D is formed to the rear of the glass plate a^2 by means of a vertical partition E. This compartment contains a hopper F and an original package or box F' , containing the cigars to be vended. This said box bears the customary revenue-stamps, and they are exhibited through the glass plate a^2 , and one wall of the box, preferably the bottom thereof, is removed, thus allowing free access to the hopper F. The lid of the box is also removed for the purpose of exhibiting the cigars. Located beneath the hopper F is a slide G, having an aperture g formed therein of a size sufficient to contain one cigar. This said slide is normally maintained in its forward position, as illustrated in the drawings, by means of a spring H of any suitable adapted form, preferably a bow-spring, as illustrated in the drawings. The slide is also provided with a recess g' , within which the operating mechanism works, and a projecting rod I is extended within this recess for contact with the coin which operates the slide, as will be hereinafter described. An arm g^2 is extended laterally and formed integrally with the said slide and carries a plate J, adapted to discharge cards K, which may contain advertising or other printed matter. These said cards are automatically delivered one at a time simultaneously with the cigars, and as a means for preventing the delivery of more than one card at a time an adjustable plate k is secured to the inner surface of the front wall of the box by means of screws k' , which pass through slots k^2 , formed in the said plate. The lower end of this said plate partially closes the aperture c^2 , formed in the face of the box, whereby only the lowermost card is forced through the aperture c^2 by means of the forward movement of the plate J. These said cards rest upon a hori-

zontal partition L, and lateral movement thereof is prevented by means of a vertical partition l , which said partition is also extended downwardly to the base of the box for forming a money box or receptacle l^2 , which is closed at the rear by means of a movable door l^3 , which is adapted to be locked by any suitable means. A removable door A' also closes the rear of the machine. This door is preferably supplied with a locking mechanism of any suitable adapted form, whereby the contents of the machine are protected. The slide G does not contact with the two side walls of the box A, and therefore it moves freely back and forth without danger of becoming jammed by reason of lateral expansion, and to prevent lateral motion thereof a tongue g^3 is formed thereon, which engages with a groove l^4 , formed in the partition L. Located to the rear of the opening c is a hanger M, which carries the operating-lever N by means of a pivot n , the lever being maintained in its normal position by means of a bow-spring N' , which is coiled around the pivot n . Also pivotally attached to the hanger M by means of the pivot n is a swinging coin-chute O, which comprises an arm o and the chute proper, o' . The lower end of this said chute is forked, the prongs o^2 of the fork being respectively supplied with grooves o^3 for receiving the coin 1. This machine is built to receive a nickel, and the width of the fork is of a size just sufficient to receive a coin of this denomination, and a coin of smaller diameter, if inserted, will drop out between the prongs of the fork. Pivotaly secured to the coin-chute and bearing upon one prong thereof is a knife P, which has an arm p , projected upwardly therefrom, engaging a projection n' of the lever N, whereby the downward movement of the lever will swing the knife-edge across the path of the coin for the purpose of clamping the same within the forks or for the purpose of cutting a coin of a spurious nature to prevent the operation of the machine. Located beneath the coin-chute and pivotaly secured to the partition l is a swinging arm Q, which has a plate q , extended laterally therefrom, for retaining the coin after it leaves the chute, as illustrated by dotted lines 2. A projected stop q' is also extended from this plate for engagement with the lower edge of the coin while it is within the chute. This stop is provided with a shoulder q^2 for engagement with the rear surface of the coin during the process of operating the machine. The arm Q is maintained in its normal position by means of a bow-spring R, and forward motion of the arm is limited by a screw q^3 , secured to the partition E and which engages a slot q^4 , formed in the said arm.

Located beneath the swinging coin-chute is an inclined plane S. This plane comprises a metallic plate which is secured to the under surface of the horizontal partition L, and it discharges the coin onto the plate q after it is dropped from the swinging coin-chute.

To limit the forward motion of the coin-chute and also to assist in operating the slide G, a rod g^4 is extended across the recess g' , as illustrated clearly in Figs. 2 and 3 of the drawings.

In the operation of the device the several parts are normally maintained in the position illustrated in Fig. 2 of the drawings, and in order to operate the machine a coin 1 is passed through the slot c' into the swinging coin-chute O, through which it passes down into the fork and rests upon the stop q' of the swinging arm Q. Then downward pressure of the lever N will force the coin-chute rearwardly until the coin therein contacts with the shoulder q^2 of the stop q' , and at the same time the knife will be swung forwardly to a sufficient extent to clamp the coin within the fork. A further rearward movement causes the coin to contact at a point approximating the center thereof with the end of the rod I for the purpose of moving the slide rearwardly and bringing its aperture g in a line with the opening of the hopper, whereby one cigar will drop therein, so that it may be automatically carried forward and dropped by the return motion of the slide. The return motion of the coin-chute releases the coin by the automatic action of the spring N' , and the arm Q is carried back to its normal position by means of its spring R; but the return movement of the said arm is accomplished before the slide attains its maximum rearward motion, because the shoulder q^2 passes out of the arc of the circle described by the coin in its rearward movement, thus bringing the plate q in position for receiving the coin after it is discharged from the coin-chute, as illustrated by Fig. 2 of the drawings. The lever N is preferably provided with an extended finger n^2 for operating a bell T to be used as a signal when the device is operated.

By the use of this machine when it is constructed to be operated by means of a nickel a coin of softer material than a nickel will obviously be cut by means of the knife P during the operation of throwing the coin-chute and before it has a chance to contact with the rod I, thus dropping the major part of the spurious coin and preventing the operation of the machine. If a coin of smaller diameter than the nickel is used, it will obviously drop between the forks of the coin-chute, and should a person attempt to use a common washer of a diameter equaling the nickel the rod I will simply pass through the opening therein, and thus render the operation of throwing the coin-chute inoperative, and the slit c' for receiving the coin will not receive a coin larger than a nickel, thus rendering the machine inoperative by use of anything but a coin of predetermined size and material.

I do not confine myself to the specific details of mere mechanical construction as herein shown and described, as it is obvious that under the scope of my invention I am entitled to slight structural variations.

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

1. In a cigar-vending machine of the class 5 described, the combination of a casing having a coin-slot, a delivery-opening, a card-slot, a lever-opening and glass-covered exhibition-openings in the face thereof, with a hopper and a spring-actuated slide beneath said hopper, said slide being provided with a transverse opening for receiving cigars from the 10 hopper, with a projecting rod and with a plate for discharging cards, through the card-slot of the casing, and a swinging coin-chute having 15 a forked lower end, the prongs of the fork being slotted to receive a coin of a predetermined diameter whereby a coin of smaller diameter will not be retained therein, and a swinging spring-actuated rest supporting the 20 coin within the fork, and a lever for swinging the coin-chute, whereby the coin therein contacts with the rod of the said slide to throw the same against the action of its spring, to receive a cigar from the hopper, substantially as shown and described.

2. In a cigar-vending machine, the combination of a casing having a coin-slot, a delivery-opening, a card-slot, a lever-opening and glass-covered exhibition-openings in the face 30 thereof, a swinging coin-chute comprising a chute proper with a grooved and forked lower end, a spring-actuated lever and a knife for clamping a proper coin within the fork and for cutting a spurious coin, and a swinging 35 arm having a stop thereon for engaging the coin before it is clamped, and a hopper and a spring-actuated slide having an opening therein for receiving cigars from the hopper, a projecting plate for discharging cards through 40 the card-slot of the casing, and a projecting rod for engagement with the face of a coin used for operating the device, whereby the swinging action of the coin-chute operates the slide for delivering the cigars; the said swinging 45 arm being provided with an inclined plate for receiving the coin after it leaves the chute,

for the purpose of exhibiting it, substantially as shown and described.

3. In a cigar-vending machine, the combination of a suitably-apertured casing and a 50 hopper and slide contained therein, the said slide being spring-actuated and provided with an aperture for receiving cigars one at a time from the hopper, and with a projecting rod, and a lever and spring actuated swinging 55 coin-chute, comprising a chute proper having a grooved and forked lower end and a knife engaging the said fork for clamping a proper and for cutting a spurious coin, and a swinging arm having a stop for engaging the coin 60 before it is clamped within the chute and a plate for receiving the coin after it leaves the chute, substantially as shown and described.

4. In a cigar-vending machine, the combination of a casing having a coin-slot, a delivery-opening, a lever-opening and a glass-covered exhibition-opening in the face thereof, 65 and a hopper and a spring-actuated slide beneath said hopper, said slide being provided with a transverse opening for receiving cigars 70 from the hopper, and with a projecting rod, with a swinging coin-chute having a forked lower end, the prongs of the fork being slotted to receive a coin of predetermined diameter, whereby a coin of smaller diameter will 75 not be retained therein, and a swinging spring-actuated rest supporting the coin within the fork, and a lever for swinging the coin-chute, whereby the coin therein contacts with the rod of the said slide to throw the same against 80 the action of its spring and bring its opening into position to receive a cigar from the hopper, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 16th day of July, 1898.

LAYTON J. MCGHIE.

Witnesses:

M. G. McLEAN,
A. F. ROUSSEL.