

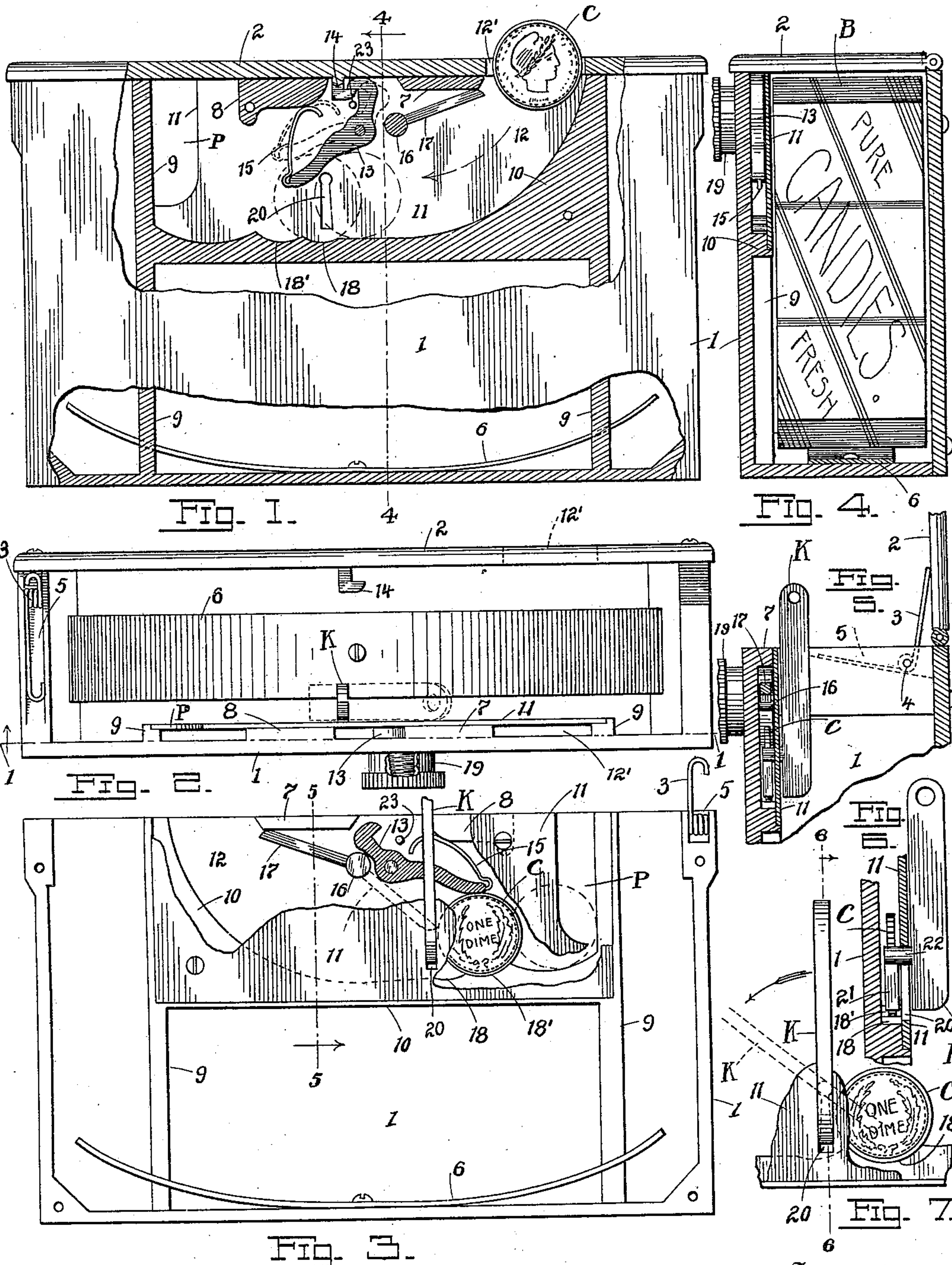
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D. SULLIVAN.
COIN CONTROLLED DISPENSING DEVICE.

(Application filed Jan. 27, 1902.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

DANIEL SULLIVAN, OF ST. LOUIS, MISSOURI, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO CHARLES F. KELLY AND HENRY MURMANN, OF ST. LOUIS, MISSOURI.

COIN-CONTROLLED DISPENSING DEVICE.

SPECIFICATION forming part of Letters Patent No. 712,740, dated November 4, 1902.

Application filed January 27, 1902. Serial No. 91,437. (No model.)

To all whom it may concern:

Be it known that I, DANIEL SULLIVAN, a citizen of the United States, residing at St. Louis, State of Missouri, have invented certain new and useful Improvements in Coin-Controlled Dispensing Devices, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

10 My invention has relation to improvements in coin-controlled dispensing devices; and it consists in the novel arrangement and combination of parts more fully set forth in the specification and pointed out in the claims.

15 In the drawings, Figure 1 is a front sectional elevation of the receptacle, the section being taken on line 1 1 of Fig. 2. Fig. 2 is a top plan of the receptacle with the lid thrown open. Fig. 3 is a view of the rear of the front wall of the receptacle, the rear wall being removed and the cover-plate protecting the several parts being partly broken away. Fig. 4 is a transverse vertical section on line 4 4 of Fig. 1, with bonbon-box, however, in the receptacle. Fig. 5 is a sectional detail on line 5 5 of Fig. 3, showing application of the ejecting-key for the coin. Fig. 6 is an enlarged sectional detail taken through the keyhole and showing the key in face elevation, and Fig. 7 is a view at right angles to Fig. 6.

The present invention is an improvement on the device for which Letters Patent of the United States, numbered 677,748, were granted to me under date of July 2, 1901, and while contemplating the several objects set forth in the specification of said patent the present device presents advantages not inherent in the patented construction. Among these advantages is the specific control of the locking-latch, by which the same is held disengaged from the lid by the coin after the lid has been thrown open. Another is the final ejection of the coin by a key specially constructed for the purpose. Another is in the means for preventing any possible retreat of the coin after being once advanced sufficiently to disengage the trigger from the catch on the lid.

50 The present device presents further ad-

vantages better apparent from a detailed description of the invention, which is as follows:

Referring to the drawings, 1 represents a receptacle having a hinged cover or lid 2, the latter being adapted (under circumstances to be presently referred to) to be swung to an open position by one of the arms of a spring 3, coiled about a pin 4, mounted at the base of an inclined pocket 5, formed in one of the end walls of the receptacle, the opposite arm of said spring resting against the base of said pocket. At the bottom of the receptacle is fixed an upwardly-curved resilient spring-supporting plate 6, upon which the bonbon-box B rests and which is forced to assume a flat or expanded position when the box has been forced into the receptacle and under the lid thereof when the latter has been closed. The moment, however, the lid is disengaged from its trigger the resiliency of the plate 6 forces the box upward sufficiently beyond the upper edge of the receptacle, when it may be readily seized by the operator and removed from the receptacle. The manner of opening the lid by the introduction of a coin (a dime) is as follows, the construction being in some respects similar to the patented device referred to: Formed along the rear surface of the front wall of the receptacle and disposed along the upper longitudinal edge of said wall are ridges 7 and 8, respectively, on either side of which are disposed the ribs 9 9, between which is the raised formation 10, the whole being adapted to support a cover-plate 11, between which and the said front wall is thus formed a space or housing for the mounting of the coin-controlled devices. There is thus formed between the plate 11 and front wall of the receptacle and the contour of the upper edge of the formation 10 a coin-chute 12, opening along the upper edge of the front wall of the receptacle and registering with the coin-slot 12' in the lid. Mounted pivotally at a point below and between the ridges 7 and 8 is a trigger 13, the upper end of which is adapted to engage the catch 14, secured to the free edge of the lid when the lid is closed, the engagement being effected by the resiliency of a spring 15, carried by the trigger,

the free end of said spring bearing against and being free to ride over the lower curved edge of the ridge 8. Mounted across the space formed between the plate 11 and the front wall of the receptacle is a spring-controlled spindle 16, (the same as is in my patent referred to,) to which is secured the coin-advancing arm 17, the oscillation of the latter being limited in one direction by the ridge 7 and in the opposite direction by the hub portion of the trigger. (Figs. 1 and 3.) Normally the arm 17 rests against the ridge 7, being turned from the latter to advance the coin in the proper direction. As the coin is first introduced into the chute 12 it rolls down the same and rests against the concave depression formed on the long arm of the trigger, the lower edge of the coin resting adjacent to the depression 18, formed in the portion 10. Upon the turning of the spindle 16 and a corresponding swinging of the arm 17 in the proper direction the arm 17 will force the coin against the trigger, tilting the latter against the resilience of the spring 15 and forcing it to the point of disengagement with the catch 14, the lid at the moment of said disengagement flying open under the action of the spring 3, whereupon the plate 6 will eject the box B, as previously indicated. While the advance of the coin to the extent indicated will suffice to tilt the trigger sufficiently to disengage the catch 14, the majority of operators will turn the spindle 16 to its limit, (such spindle being provided with a knob or milled head 19, as in my patent referred to,) when the coin will be forced into the second depression 18', the upper edge of the coin now bearing against the end of the long arm of the trigger; but whether the coin rests in the depression 18 or 18' the trigger is held thereby out of any possible engagement with the catch 14 should the lid be accidentally closed after the abstraction of the box B and before the insertion of a fresh box, so that under my present construction a reengagement between the trigger and its catch is only possible upon a final ejection of the coin and its consequent release of the trigger to allow the latter to resume its original position under the action of the spring 15. The final release of the trigger from the coin is accomplished as follows: By the time the coin has advanced to have lodged in the depression 18' the rear edge of the coin comes approximately flush with the edge of a keyhole 20, formed in the cover-plate 11. Said hole 20 serves to receive the tooth 21 of a key K, such tooth being inserted behind the coin C through the hole from the inside of the receptacle. (Figs. 5, 6, 7.) When once inserted, the key is rocked about the stud 22, which separates the tooth from the body of the key, in a direction shown by arrow in Fig. 7, the tooth by said rocking motion forcing the coin out of engagement with the end of the trigger, the latter at once resuming its normal position and the coin being simultaneously ejected and forced into

the pocket P, designed for its reception, from which it can be abstracted by the operator or attendant, the plate 11 being suitably cut away to facilitate the seizure of the coin. It is to be understood, of course, that the key K is only in possession of the attendant or operator.

The object of the first depression 18 is to arrest the coin against any possible retreat after being advanced to the point of disengaging the trigger from the catch, an accident which would not only permit the trigger to resume its normal position, but one which would leave the coin in the chute 12, thus interfering with the introduction of a fresh coin by a subsequent purchaser, and should any purchaser release the knob or head 19 before the arm 17 has shoved the coin to the second depression 18' the attendant can complete the advance of the coin at the proper time to its position to be operated upon by the key K, as already explained. Under my present construction, therefore, it would be impossible for unauthorized persons to lock the lid after a bonbon-box was once abstracted, since the trigger is held by the coin in a position where its engagement with the catch 14 is impossible, so that the lid can only be permanently closed and locked by the attendant carrying the key by which the coin is finally forced out of engagement with the trigger.

It is apparent, of course, that I may vary the present construction in slight details without departing from the nature or spirit of my invention.

23 represents a pin by which the trigger 13 is limited in its swing in one direction.

Having described my invention, what I claim is—

1. In a coin-controlled dispensing device, a suitable receptacle, a spring-actuated lid hinged to the receptacle, a catch carried by the lid, a spring-controlled pivoted trigger carried by the front wall of the receptacle, a rotatable spindle mounted adjacent to the trigger, an arm carried by the spindle for advancing the coin in one direction, a coin-chute, a coin-slot formed in the lid and registering with the coin-chute, and means located adjacent to the trigger for arresting the coin and preventing the same from retracing its path after being advanced sufficiently to disengage the trigger from the catch, a keyhole being formed in the receptacle at a point adjacent to the edge of the coin when occupying the position it has assumed after disengaging the trigger from the catch, said keyhole being adapted to receive the tooth of a key for disengaging the coin from the trigger, substantially as set forth.

2. In a coin-controlled dispensing device, a suitable receptacle, a spring-actuated lid hinged to the receptacle, a catch carried by the lid, a spring-actuated pivoted trigger carried by the front wall of the receptacle, a rotatable spindle mounted adjacent to the trig-

ger, a coin-advancing arm carried by the spindle and limited by the hub of the trigger in its swing in one direction, a coin-chute, a coin-slot formed in the lid and registering with the chute, and depressions at the base of the coin-chute for arresting the coin and preventing the same from retracing its path after being once advanced sufficiently to effect disengagement between the trigger and catch, a keyhole being formed in the receptacle at a point adjacent to the edge of the coin when occupying the position it has assumed after disengaging the trigger from the catch, said keyhole being adapted to receive the tooth of a key for disengaging the coin from the trigger, substantially as set forth.

3. In a coin-controlled dispensing device, a suitable receptacle, the front wall thereof having adjacently-located ridges formed along the upper edge thereof, ribs on either side of the ridges, a raised formation between the ribs, and depressions formed along the upper edge of said formation, a cover-plate supported thereover and forming with the front wall a suitable housing, a spring-actuated lid hinged to the rear wall of the receptacle, a catch at the free edge of the lid, a spring-actuated trigger pivoted between the ridges aforesaid, a rotatable spindle mounted adjacent to the trigger, and having a coin-advancing arm limited in one direction by one of the ridges and in the opposite direction by the hub of the trigger, a keyhole being formed in the

cover-plate at a point adjacent to the edge of the coin when the latter occupies the last depression formed for its reception, the said keyhole being adapted to receive the tooth of a rotatable key for disengaging the coin from the trigger, the parts operating substantially as and for the purpose set forth.

4. In a coin-controlled dispensing device, a suitable receptacle, a spring-actuated lid hinged thereto, a catch at the free edge of the lid, a spring-controlled trigger pivoted to the front wall of the receptacle, a rotatable spindle operated from the outside of the receptacle and having an inner coin-advancing arm adapted to force the coin against the trigger, the latter being adapted to be held disengaged from the catch by the coin upon an advance by the latter to a point sufficient to effect such disengagement and after a return of the coin-advancing arm to its normal position, a keyhole being formed in the receptacle at a point adjacent to the edge of the coin when occupying the position it has assumed after disengaging the trigger from the catch, said keyhole being adapted to receive the tooth of a key for disengaging the coin from the trigger, substantially as set forth.

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

DANIEL SULLIVAN.

Witnesses:

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