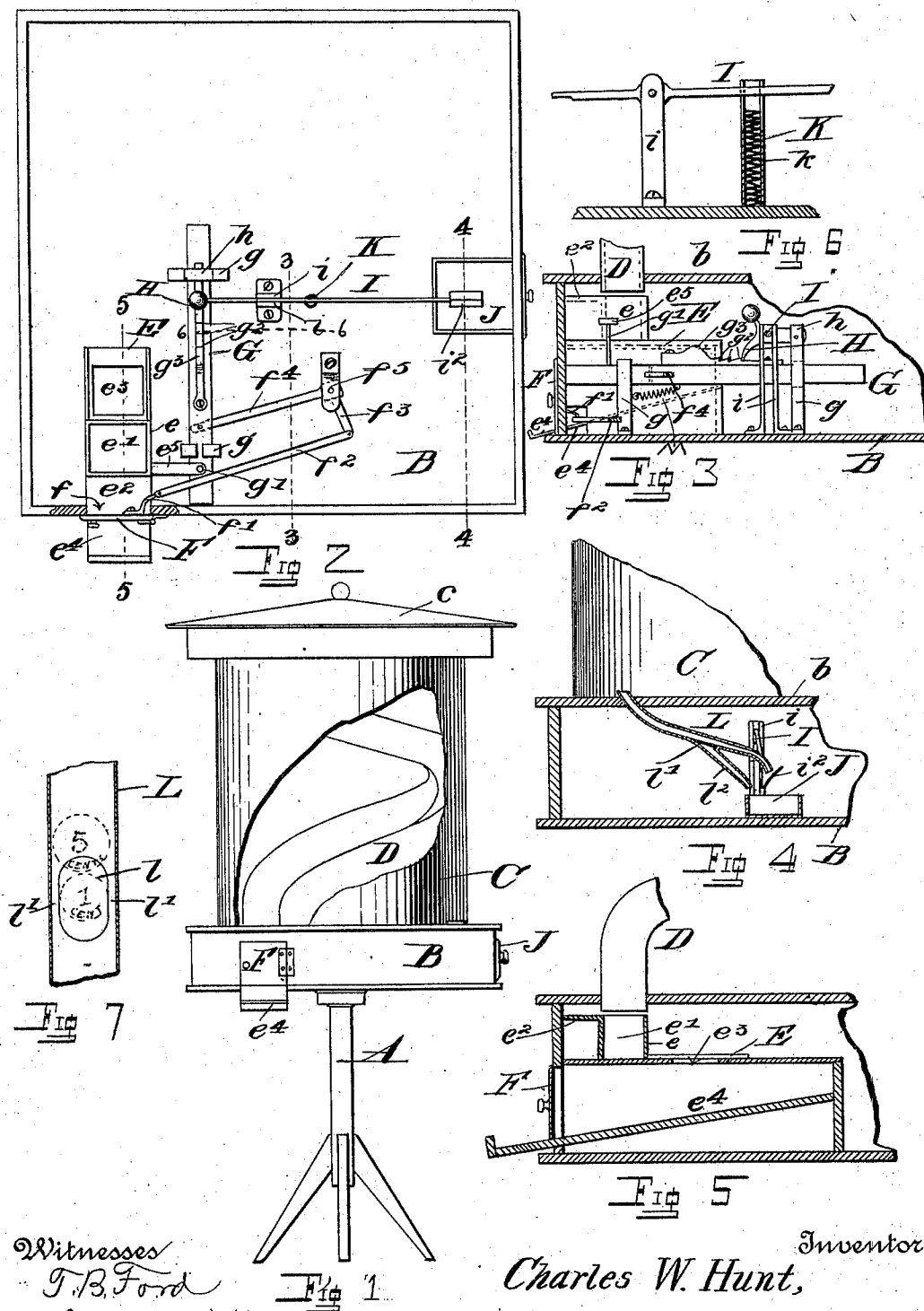


(No Model.)

C. W. HUNT.
COIN CONTROLLED VENDING MACHINE.

No. 575,284.

Patented Jan. 12, 1897.



Witnesses
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UNITED STATES PATENT OFFICE.

CHARLES W. HUNT, OF CALHOUN, GEORGIA.

COIN-CONTROLLED VENDING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 575,284, dated January 12, 1897.

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To all whom it may concern:

Be it known that I, CHARLES W. HUNT, a citizen of the United States of America, and a resident of Calhoun, in the county of Gordon and State of Georgia, have made a certain new and useful Coin-Controlled Vending-Machine; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

In the accompanying drawings, Figure 1 is a side elevation of the device with a hole cut in the side of the upper casing, showing the storage-tube for packages of goods to be sold. Fig. 2 is a plan of the casing holding the operative parts, the upper casing being removed. Fig. 3 is a detail in section on the line 3 3, Fig. 2. Fig. 4 is a section on the line 4 4, Fig. 2, and showing the coin-tube and separator. Fig. 5 is a section on the line 5 5, same figure. Fig. 6 is a section taken at about the middle of the line 6 6, Fig. 2, showing the coin-depressed lever and the supplementary spring therefor. Fig. 7 is a section of the coin-tube, showing the means for separating coins.

In the figures like reference-characters are uniformly employed in the designation of corresponding elements of construction in all the views.

A is a base which may be of any form desired, either in the form of a leg, as shown, a pedestal, or may be dispensed with entirely, according to requirements.

B is a casing within which are the operative parts, and C is another casing, shown as being cylindrical in form and seated upon the upper side of the casing B. c is a cover for said casing C, which may either be removable or may have a door or gate corresponding with the upper end of the spiral tube D, which is set within said casing C and which opens through the top b of the casing B, directly over the slide, to be hereinafter described. By reason of the spirality of the tube D a greater number of packages of the goods to be sold may be stored therein than would be the case were said tube straight.

Seated upon a guideway E, within the casing B, is a slide e, so situated as to have its opening e' correspondingly under the opening of the tube D when at rest, and being provided with a shutter e² for closing said tube when the opening e' is moved over the hole e³ in the guideway E, through which the article drops onto the inclined slide-board e⁴, which projects outwardly of the casing B through the opening f, normally closed by the door F, hinged to the casing.

Projecting from the back side of the door F, which forms the closure of the discharge-opening, is an arm f', and to this arm is connected a pitman f², as shown in Fig. 2, its other end being connected to the arm f³ of the bell-crank lever, formed of said arm f³, and a longer arm f⁴ and pivoted upon the horizontally-extended end of the bracket f⁵.

In guides in the uprights g is mounted a bar G, and to this bar G is connected the free end of the arm f⁴, and by the movement of said arm f⁴ on its pivotal point the said bar is caused to slide in its guides. A pin g', projecting upwardly from the said bar, is connected to a lug e⁵, projecting from the side of the slide e, and by means of this construction it is seen that the said slide will move from a position under the end of the spiral tube where it may receive a package of merchandise to a position over the opening e³, through which it may discharge itself thereof, as hereinbefore specified, and on a reverse movement of the said bar will be returned to its normal position, both of which movements have been shown to occur upon the opening and closing of the door F, respectively.

On the upper side of the bar G are ratchet-teeth g² and an inclined surface g³, and a pawl H, mounted in upwardly-extending arms h on the upright guide g, (right, Fig. 3,) engages said teeth to prevent the movement of said bar in a direction correlative to the opening of the door F, the complete opening of the door when the pawl H is disengaged from said teeth causing the inclined surface g³ to pass under the end of the pawl and lift it still farther than is required to disengage it, the purpose of which will be hereinafter set forth.

Pivoted on uprights i, secured to the floor of the casing, is a lever I, which is connected at one end with the pawl H and is extended

on its other end to a position over the till J, into which the coins are dropped after operating the releasing mechanism. Seated on a pin and projecting upwardly from the floor of the casing is a spring K, which is preferably provided with a casing k and which is normally out of contact with the lower edge of the lever I, but will contact therewith as soon as that end of said lever which is connected to the pawl H is elevated a sufficient distance to disengage the pawl from its ratchet-teeth; and any movement downwardly of the free end of the lever will then be against the action of said spring and takes place upon the movement of the bar G to a position in which the end of the pawl H will contact with the incline g^3 thereon and ascend same. The purpose of this further descent of the coin-holding end of the lever will now be described in connection with the coin-assorter. As shown in Fig. 4, a tube L, preferably rectangular in cross-section, is inserted through the upper part of the casing B, and its main branch extends to a position over the end of the lever I, which should be so constructed as to prevent said coin from passing same as it protrudes from the end of the said tube, the form shown being a V-shaped angle-plate, as shown in Figs. 2 and 4. When the coin contacts with the said angle-plate, it depresses the lever I a sufficient distance to lift the pawl out of engagement with the ratchet-teeth and the closure may be opened and the bar G thereby moved longitudinally, together with its connected parts, until the end of the pawl shall contact with the inclined surface on said bar and ascend same, thereby depressing the coin-holding free end of the lever I against the action of the spring K a sufficient distance to allow the coin to descend therewith and pass entirely from the end of the tube, when the inclination of the lever I at that time will cause the said coin to roll into the till and the parts be allowed to return to their normal position on the closing of the closure. Of course if it is found necessary to have a spring to close said door, and thereby avoid relying upon the purchaser to do so, such a spring may be connected to any of the moving parts of the device, such as, for instance, the spring M, attached to the bar G and to one of its guiding-uprights, as shown in Fig. 3. A hole l is cut in the lower side of the tube L, leaving lips l' on each side thereof, and a tube l^2 is connected to said tube under said hole and led to the coin-receptacle, as shown in Fig. 4. A coin of the desired denomination will pass over said hole, while a smaller coin will fall into said hole and, passing down the tube l^2 , avoid contact with the lever I, and hence cannot operate the coin-releasing mechanism. It is intended that the adjustment of the spring K shall be such that a coin or slug heavier than the coin which will properly operate the device will at once depress the

said lever I to its full extent and fall into the till without a lapse of sufficient time for the purchaser to operate the door and receive his package.

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

1. In a vending-machine, a receptacle and a closure therefor, a toothed, reciprocable rack operatively connected to said closure, a pawl engaging the teeth thereof in a direction to prevent the opening of said closure, a lever connected to said pawl and adapted by its movement to disengage same, a coin-holder on the free end of said lever, adapted to retain the coin until depressed beyond the point necessary to release the pawl and means for producing such further depression.

2. In a vending-machine, a receptacle and a closure therefor, a toothed reciprocable rack operatively connected to said closure, a pawl engaging the teeth thereof in a direction to prevent the opening of said closure, a lever connected to said pawl and adapted by its movement to disengage the same, a coin-holder on the free end of said lever, adapted to retain the coin until depressed beyond the point necessary to release the pawl, and means for producing such further depression, consisting of an enlarged tooth on the afore-said rack, substantially as specified.

3. In a vending-machine, a receptacle and a closure therefor, a toothed reciprocable rack operatively connected to said closure, a pawl engaging the teeth thereof in a direction to prevent the opening of said closure, a lever connected to said pawl and adapted by its movement to disengage the same, a coin-holder on the free end of said lever, adapted to retain the coin until depressed beyond the point necessary to release the pawl and means for producing such further depression, and a resilient motion-limiting stop under said lever.

4. In a vending-machine, a receptacle and a closure therefor, a toothed reciprocable rack operatively connected to said closure, a pawl engaging the teeth thereof in a direction to prevent the opening of said closure, a lever connected to said pawl and adapted by its movement to disengage the same, a coin-holder on the free end of said lever, adapted to retain the coin until depressed beyond the point necessary to release the pawl, and means for producing further such depression and a shutter governing the discharge-opening of said receptacle and connected operatively with said reciprocable rack.

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

CHARLES W. HUNT.

Witnesses:

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S. M. WOOD.