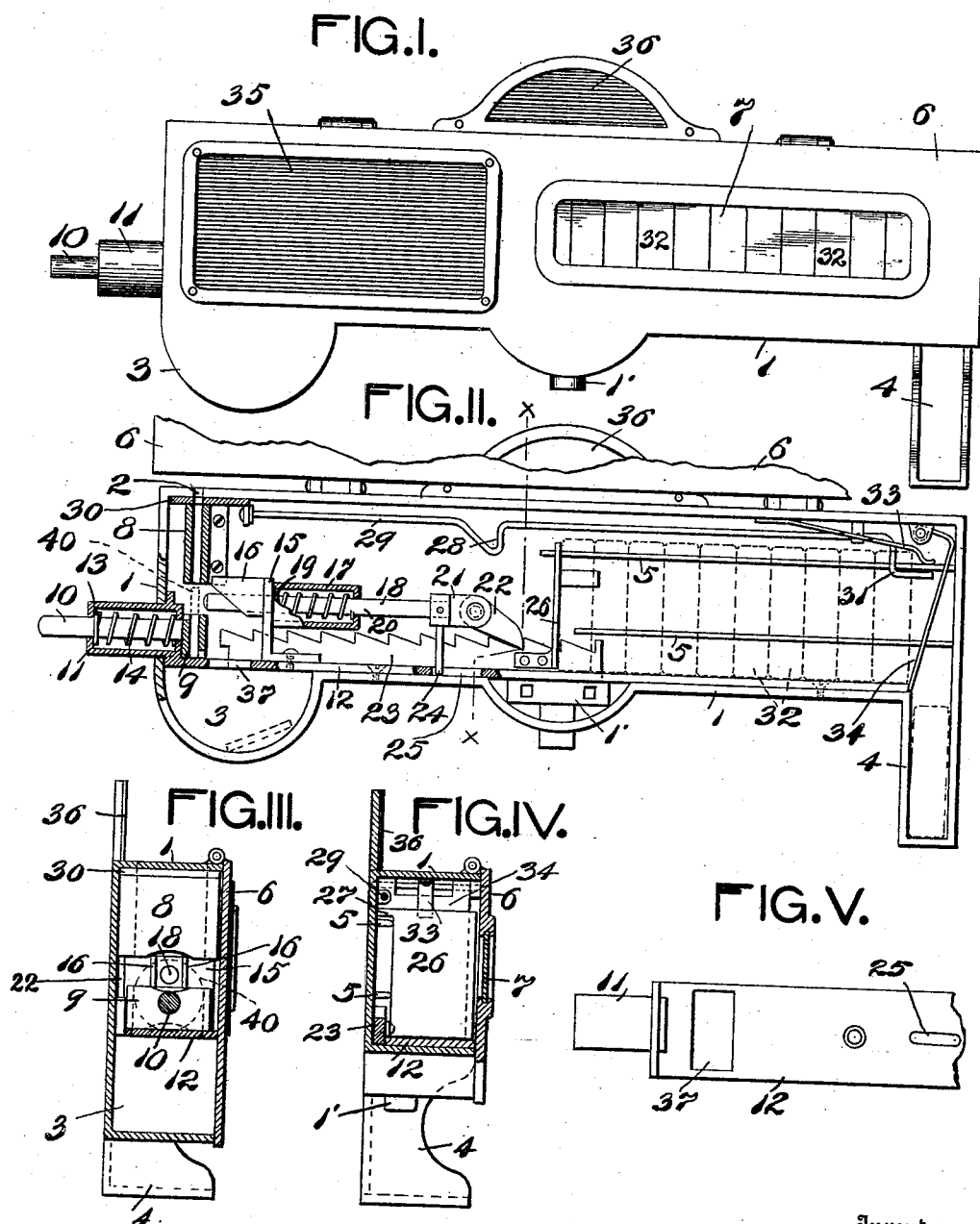


M. STOLTZ.
 COIN ACTUATED VENDING DEVICE.
 APPLICATION FILED MAR. 4, 1908.

910,599.

Patented Jan. 26, 1909.



Inventor

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Witnesses

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UNITED STATES PATENT OFFICE.

MELVILLE STOLTZ, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR TO PEERLESS VENDING MACHINE COMPANY, OF PITTSBURG, PENNSYLVANIA, A CORPORATION OF NEW JERSEY.

COIN-ACTUATED VENDING DEVICE.

No. 910,599.

Specification of Letters Patent.

Patented Jan. 26, 1909.

Application filed March 4, 1908. Serial No. 419,082.

To all whom it may concern:

Be it known that I, MELVILLE STOLTZ, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Coin-Actuated Vending Devices, of which the following is a specification.

My invention relates to improvements in coin actuated vending machines, particularly to that class wherein the coin is caused to coöperate with a plunger carriage, and attending members, to dislodge and deliver the goods.

The invention has for its object, the provision of a device of the above class, embracing new and novel features of construction and operation as will be hereinafter more fully described and particularly pointed out in the appended claims.

In the accompanying drawings which form a part of this specification the invention is illustrated in various ways, in which views, Figure I, is a longitudinal front view of the device. Fig. II, is a similar view having the lid open to disclose the interior mechanism. Fig. III, is an end view in section near the coin chute, Fig. IV, is also an end section, taken on the line X. X, of Fig. II, and Fig. V, is a plan view of a portion of the base plate, said views having similar detail parts designated by like numerals of reference.

The invention embraces in its structure, a horizontally disposed casing 1, having a coin receiving slot 2, and a coin receptacle 3, at one end and a goods delivery receptacle 4 at the other end, said casing being provided with internal ribs 5 and has a hinged lid 6 with a glass portion 7 therein to disclose the goods within. Secured to the back-wall of said casing and registering with the aforesaid coin slot, is a vertically disposed coin chute 8, beneath which is arranged a slotted coin carriage 9 having a horizontally disposed plunger rod 10 extending therefrom through the tubular extension 11 of the base-plate 12 which has an opening 37 therein, said carriage plunger rod having a collar 13 thereon engaging a spiral spring 14 in said extension to normally maintain the carriage in operative position and return the same after service beneath the chute.

Secured to the aforesaid base plate is an upright bracket 15 provided at one side with a coin ejecting member 16 formed of the two

flanges projecting toward the coin chute the under edges of which taper up toward said chute, said bracket being provided at its opposite side with a cylindrical extension 17 through which is loosely arranged a horizontally disposed coin-engaging rod 18 having a collar 19 thereon engaging a spiral spring 20 in said tubular extension to maintain and return the rod to operative position, said rod projecting at one end to a point between the coin chute and carriage and is provided at its opposite end with a bracket 21 to which is pivotally secured a gravity pawl 22 to engage a horizontally disposed toothed rack 23 containing as many teeth as packages of goods to be contained by the casing, said bracket being provided with a vertically disposed guide pin 24 operating in an elongated slot 25 in the base plate, and said toothed rack being provided with a goods-disengaging head 26 having a projection 27 at its rear, which head is adapted when moved to its extreme position on the left, to engage a shoulder 28 on the rod 29 to cause the plate 30 to slide and open the slot in the casing for the insertion of the coin, and when moved in its extreme opposite direction engages a shoulder 31 on said rod to cause the said plate to move in the opposite direction and close the said slot after the last piece of goods has been delivered.

To maintain the goods 32 temporarily in position, at the right, a spring 33 is attached to the upper side of the casing the free end of which is bent so as to lightly engage the upper corner of the goods package, and to prevent the insertion of a knife or other implement for the purpose of dislodging goods a gravity plate 34 is pivotally secured to the casing, said casing being further provided with spaces 35 and 36 for advertising.

In practice, the coin is inserted in the slot 2 and passes down into the carriage, as indicated by the dotted lines designated as 40, after which the plunger 10 is forced inward, causing the coin to engage the rod 18, forcing the said rod forward, and, through the medium of the pawl 22, cause the rack to advance one tooth and give a corresponding advance of the line of goods, with the result that the package in the end of the row, at the right, is advanced into the space at the end of the casing, forcing the plate 34 aside until it has fallen into the delivery receptacle 4 where it may be readily removed. During the above described oper-

ation, the coin in its movement engages the member 16 at its tapered portion, causing the coin to slightly cant and bind in its carriage during its movement to and over the opening 37, said coin being at the same time forced downward by its engagement with the tapered portion of the member 16, and upon reaching the end of the tapered portion of said member, the rod 18 being released returns to its normal position and the coin being likewise released, said coin falls through the opening 37 into the receptacle 3, and upon pressure being removed from the plunger 10 it returns to its normal position for further service. When all the goods have been removed, as described, the slot 2 is closed from further insertion of coins by reason of the projection 27 of the head 25 engaging the shoulder 31 of the rod 29, causing the plate 30 to move thereover. In reloading, the lid is opened, the pawl 22 raised and the rack adjusted to its extreme position on the left, causing the said projection 27 to engage the shoulder 28 of the rod 29 and thus opening the coin slot, after which the goods are placed in position within the receptacle.

The carriage has one of its walls on the top, cut down on a plane level with the top of the plunger, thus permitting the insertion of one or more coins, one after the other, in the chute, the second coin, after the carriage containing the first one has been moved inward to perform its operation on the rod 18, descends and rests upon the carriage plunger and upon the carriage returning to its normal position, the said second coin passes into the carriage slot in position for service preparatory to being deposited in the coin receptacle, the number of coins capable of insertion depending upon the distance from the carriage to the slot in the casing, said carriage also having a portion of its front wall cut away, as shown, to more readily release the coin after service.

Having thus fully shown and described my invention, what I claim and desire to secure by Letters Patent, is

1. In a device of the character described, a casing, an article delivery follower therein, a rod formed with a projection, a coin chute, a closing member therefor connected with the rod, said projection being arranged in the path of travel of said follower to be engaged thereby to move the rod endwise to close the chute, and positive means for positively returning the rod and closing member to normal or open position upon return movement of the follower.

2. In a device of the character described, an article delivery follower therein, a rod parallel with the line of travel of the follower, projections on said rod one adjacent each end of movement of the follower and in the path of travel thereof, said projections being adapted to be engaged by said follower to move the rod endwise, a coin chute, and a

closing slide therefor connected with said rod to be moved endwise thereby.

3. In a device of the character described, a casing, a push rod therein formed with a transverse vertically disposed coin pocket therein adapted to receive the lower portion only of a coin, a vending rod disposed in parallel relation thereto and one end thereof being adapted to be engaged by the upper or protruding face portion of a coin when deposited in said pocket and to be moved endwise thereby upon endwise movement of the said push rod, and a coin receptacle opening in the casing, and an inclined coin ejector arranged above the path of movement of the push rod to be engaged by the upper edge of the coin to force a coin when contained in the pocket edgewise into said receptacle opening, said casing normally forming a bottom closure for said pocket.

4. In a device of the character described, a casing having a coin receptacle opening therein, a push rod formed with a transverse coin pocket adapted to receive a coin in a vertical position, the casing normally closing the bottom of the pocket until the latter is moved adjacent said opening, and an inclined coin ejector overlying said opening for engaging the upper edge of and ejecting a coin when contained in said pocket from the same and through said opening in a vertical position, and a vending rod adapted to be engaged by the face of a coin in said pocket and moved endwise thereby.

5. In a device of the character described, a casing having a coin receptacle opening in the bottom thereof, an inclined coin ejector and vending rod spaced therefrom, a push rod movable between the said coin ejector and vending rod and the floor, said push rod being provided with a transverse coin pocket adapted to inclose the lower portion only of a coin whereby the upper or protruding portion of the latter will engage said vending rod and ejector to simultaneously operate the former and be ejected from the pocket in said opening.

6. In a device of the character described, a casing formed with a coin opening in its bottom, an inclined coin ejector overlying said opening, a push rod provided with a coin pocket, the bottom of the casing normally closing the bottom of the coin pocket, said push rod being adapted to be moved to bring its pocket into juxtaposition with the said opening and beneath said coin ejector whereby the upper edge of a coin contained in said pocket will engage said inclined coin ejector and be forced thereby from the pocket through said opening.

7. In a device of the character described, a casing, a push rod formed with a coin pocket, a coin chute having a stationary delivery end directly adjacent said rod and normally in line with said pocket, the distance between said rod and the adjacent

stationary end of the coin chute being less than the diameter of the coin deposited to prevent displacement of succeeding coins of a deposited number of coins.

5 8. In a device of the character described, a coin chute comprising in its entirety a single stationary member, a push rod therebeneath serving when in its advanced position to retain coins in said stationary chute, 10 said rod being formed with a coin pocket into which a single coin will be deposited from the stationary chute when the rod is in its retracted position, the upper adjacent edge of the pocket being in line with the 15 upper edge of the push rod.

9. In a device of the character described, a casing, an article delivery element provided with a feeding ratchet bar, a coin operated rod, a pawl on one end thereof coöper-

ating with said ratchet bar, a rigid coin ejector 20 formed with an inclined face, the other or forward end of said rod projecting slightly beyond said ejector, a push rod formed with a pocket to receive and allow a portion of a 25 deposited coin to project therefrom whereby said projecting portion when the push rod is advanced will engage and operate said first rod said inclined face of the rigid ejector being in a position to be engaged by and 30 positively force the coin downwardly from the coin pocket during the forward movement of the push rod.

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

MELVILLE STOLTZ.

Witnesses:

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