Nov. 15, 1938. A. F. PARKS 2,136,561

COIN HANDLING MECHANISM FOR VENDING MACHINES AND THE LIKE

Filed Oct. 4, 1935 3 Sheets-Sheet 1

Fig. 1

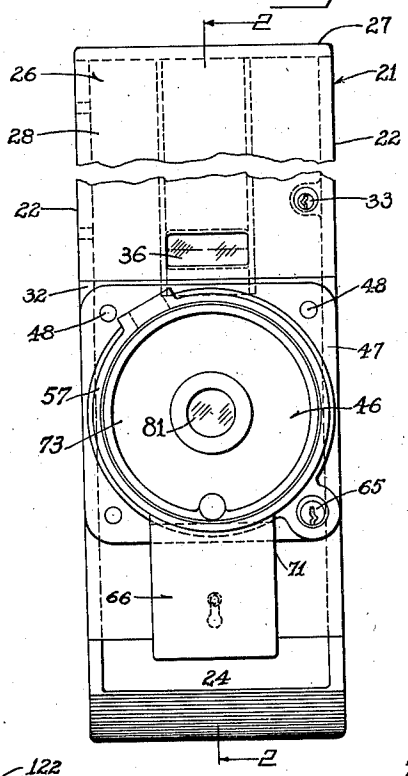


Fig. 2

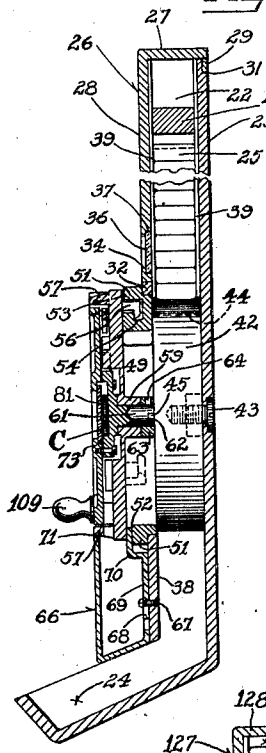


Fig. 3

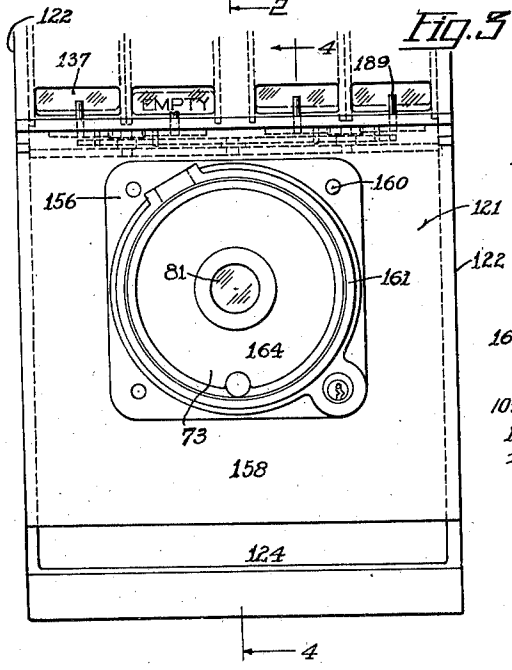
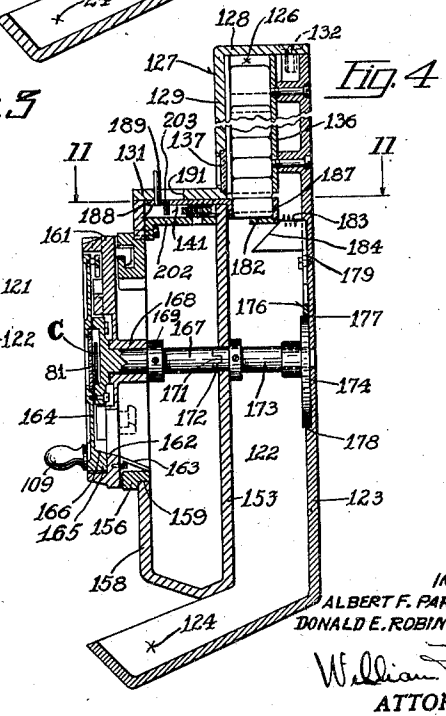


Fig. 4



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COIN HANDLING MECHANISM FOR VENDING MACHINES AND THE LIKE

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Fig. 6

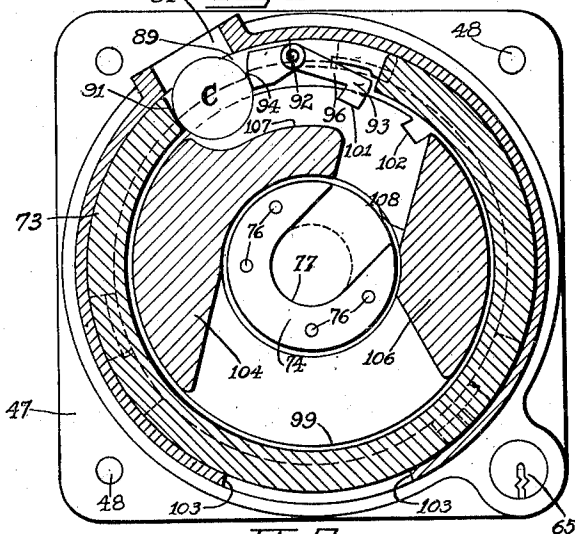


Fig. 5

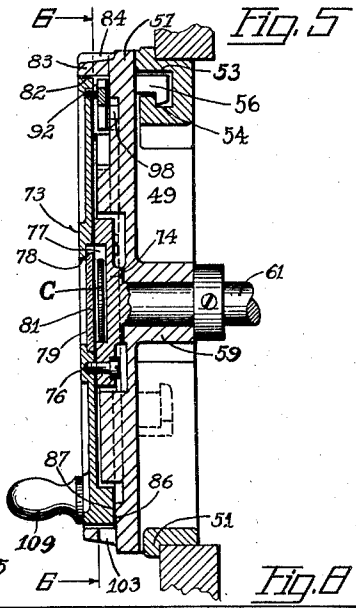


Fig. 7

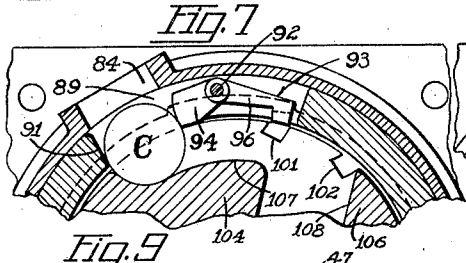


Fig. 8

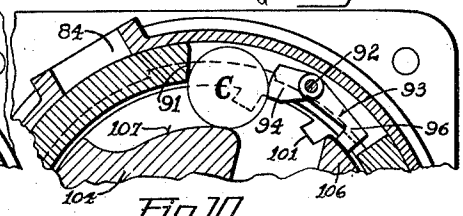


Fig. 9

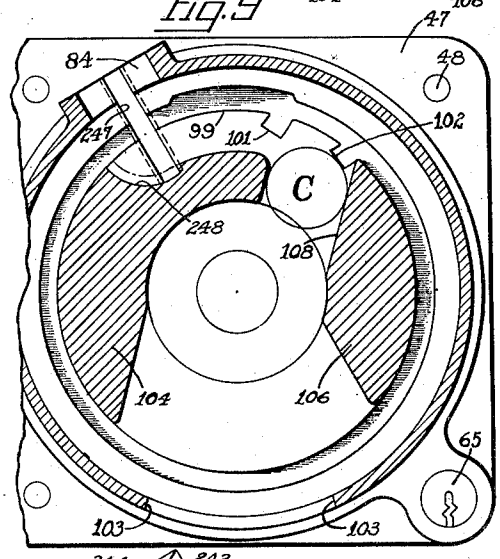


Fig. 10

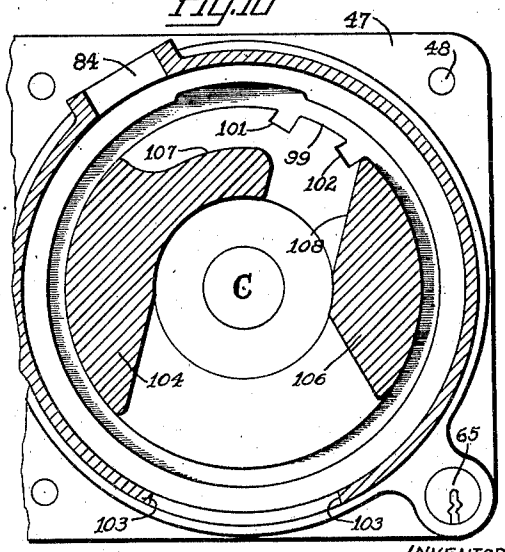
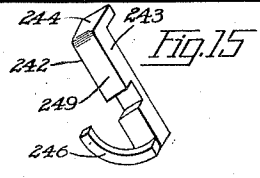


Fig. 15



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COIN HANDLING MECHANISM FOR VENDING MACHINES AND THE LIKE

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Fig. 11

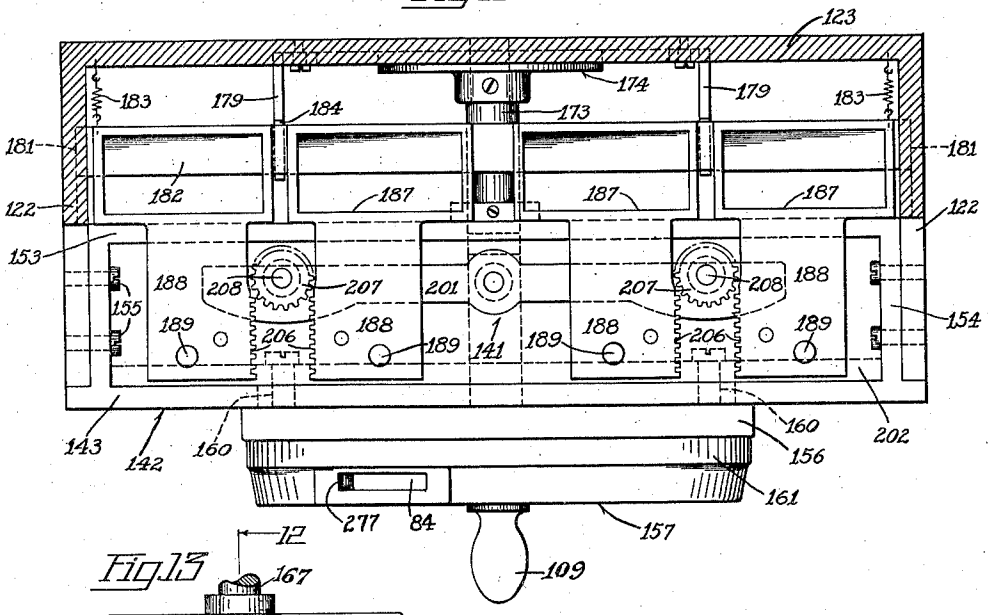


Fig. 13

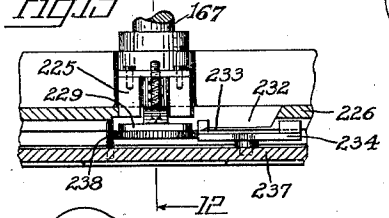


Fig. 14

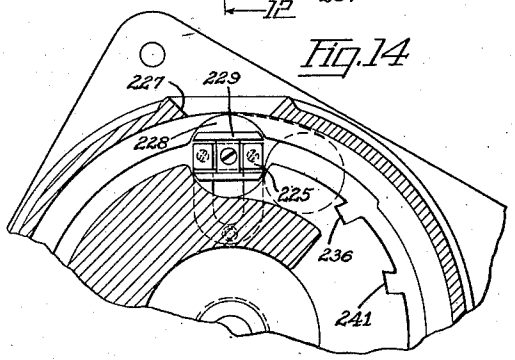
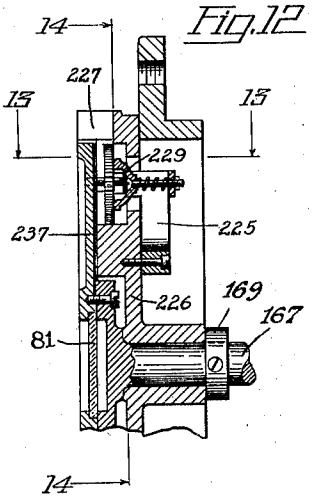


Fig. 12



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Patented Nov. 15, 1938 2,136,561

UNITED STATES PATENT OFFICE

2,136,561

COIN-HANDLING MECHANISM FOR VENDING MACHINES AND THE LIKE

Albert F. Parks, deceased, late of Fairfield County, Conn., by Donald E. Robinson, executor, Burlington, N. C.

Application October 4, 1935, Serial No. 43,622

14 Claims. (Cl. 194—22)

This invention relates to vending machines and the like and more particularly to improvements in coin-handling mechanisms for vendng machines and the like.

An object of the invention is to provide a coin-controlled machine relatively simple in construction and more efficient in operation than those heretofore known.

Another object of the invention is to provide an actuating mechanism for vending or other machines which will be proof against fraud and theft.

Another object of the invention is to provide in a coin-handling mechanism for the normal visibility of the coin after its use in the operation of the mechanism.

Another object of the invention is to provide for automatically locking the coin-handling mechanism against effective operation except through use of a proper coin.

Another object of the invention is to provide in a coin-handling mechanism for the immediate elimination therefrom of fraudulent devices or counterfeit coins sought to be used.

Another object of the invention is to provide a vending machine having a plurality of article magazines which may be conveniently actuated to deliver an article from a selected magazine.

With these and other objects in view the invention resides in the novel details of construction and combinations of parts as will be disclosed more fully hereinafter and particularly pointed out in the claims.

Referring to the accompanying drawings forming a part of this specification, in which like numerals designate similar parts in the several views,

Fig. 1 is a front elevation of a preferred embodiment of my invention, the article-magazine portion thereof being broken away for convenience;

Fig. 2 is a vertical section taken on the line 2—2 of Fig. 1;

Fig. 3 is a fragmentary view of a modified form of my invention representing the plural-magazine type, the upper portion of the magazine being broken away for convenience;

Fig. 4 is a view corresponding to Fig. 2, but showing a vertical section of the embodiment shown in Fig. 3;

Fig. 5 is a fragmentary sectional view enlarged from Fig. 2 and showing the coin-controlled mechanism in detail;

Fig. 6 is a section taken on the line 6—6 of Fig. 5;

Fig. 7 is a fragmentary view of the mechanism shown in Fig. 6 and illustrating a second step in the operation thereof;

Fig. 8 corresponds to Fig. 7 and illustrates further operation of the actuating mechanism;

Fig. 9 is a view corresponding to Figs. 5 to 8 and showing the subsequent movement of the coin during the article delivery;

Fig. 10 is a view corresponding to Fig. 9 and showing the coin movement upon completion of the operating cycle;

Fig. 11 is a section taken on the line 11—11 of Fig. 4, and enlarged for clarity;

Fig. 12 is a fragmentary view in transverse section showing a modification of the coin-slot structure to incorporate a magnetic counterfeit throwout;

Fig. 13 is a fragmentary view taken on the line 13—13 of Fig. 12;

Fig. 14 is a fragmentary view taken on the line 14—14 of Fig. 12; and

Fig. 15 is a view showing a coin expeller for the coin slot.

The invention contemplates, in a coin-actuated mechanism, provision for moving the coin in a curved path from the deposit slot in order to prevent tampering, advancing it therealong to release a locking latch and, upon completion of the cycle of operation of the mecahnism, transfering it from said path to an axial point available for inspection. The frame of the machine may include a vertical magazine of articles to be dispensed and a rotatable shaft. On the magazine end of the shaft is an ejector for the articles and the other end connects by means of a recessed hub to axially support a circular plate for manual three hundred and sixty degree rotation in the coin-controlled mechanism. The frame has a pair of slots spaced successively from the coin slot. The circular plate supports the latch which normally rests in the first slot to lock the mechanism; but use of a proper coin permits the plate to be rotated to actuate the article ejector, the coin riding upon the periphery of the hub until, upon termination of the plate's rotation, it falls into the hub's recess wherein it remains visible through a glass plate in the circular plate.

One form of vending machine, shown in Figs. 1 and 2, includes a rectangular casing 21 having sides 22—22 and a back 23 which are inclined forwardly at the bottom to form an open delivery tray 24 for the ejected articles. The upper part of the casing 21 is a storage space for the articles 25 to be dispensed and is closed by means of a

right-angle plate 26 having a top portion 27 and a front portion 28. The top portion 27 is formed with a hook 29 which fits into a retaining niche 31 in the back 23. The front portion 28 extends downwardly to rest firmly upon a horizontal band 32 connecting the sides 22—22 and is provided with a lock 33 accessible from the front whereby the cover plate 27 may be secured in place to close the casing 21 and safeguard the supply 25. The front plate portion 28 is apertured at 34 and fitted with a sight glass 36 secured in suitable grooves 37 in the front portion. Above the delivery tray 24 a band 38 extends across the front of the casing substantially integral with the sides 22.

Spaced fins 39—39 rigidly mounted in the back 23 and front 28 define a gravity feedway for the articles 25 stacked in the casing. A dummy "Empty" telltale 41 rides atop the articles, and the column is supported on the periphery of an ejector wheel 42 journalled on a stud 43 countersunk in the back 23. The wheel 42 has a peripheral slot 44 for accommodating the article to be ejected, which article drops into said slot 44 when the wheel occupies its normal position shown. It will be understood that the periphery of the wheel 42 clears the lower ends of the fins 39 whereby, upon rotation of the wheel, the article in the slot 44 is slid from under the stack and ultimately dropped into the delivery tray 24. Rotating the wheel 42 through three hundred and sixty degrees returns the slot 44 to receive the succeeding article of the stack. Fast to the forward face of the wheel 42 at the axis thereof is a diametrically extending key 45 adapted to be connected for driving the wheel in a manner to be described hereinafter.

A controlling mechanism 46, preferably constructed as a unit, is attached to the front of the vending machine by means of a base 47. The base 47 may be a rectangular casting secured between the casing bands 32 and 38 by spaced screws 48 from the back. The base 47 has a central aperture 49 for admitting an attendant's hand for inspection purposes. Surrounding the hand aperture is an annular boss or raised collar 51. At preferably three spaced points the face 52 of the boss 51 is provided with apertures 53 communicating with bayonet slots 54 for the reception of lock tongues 56 fast on the back of a control plate 57 constituting part of the controlling mechanism. The control plate 57 is axially apertured at 58 and from the rear face thereof projects an alined annular external bearing 59 for a drive shaft 61. One end of the shaft 61 projects beyond the bearing 59 and has a diametrically extending groove 62 adapted to snugly receive the key 45 for driving the ejector wheel 42. Contiguous to the wheel 42 the shaft 61 has a collar 63 held thereon by any suitable means such as a screw 64, the inner end of which keys in a peripheral groove cut in the drive shaft 61 for permitting rotation of the shaft while retaining same against movement longitudinally of the bearing 59.

The mechanism described is assembled for operation by advancing the control plate 57 to project the lock tongues 56 into the bayonet slots 54 of the base 47, and giving the plate 57 an axial twist, thereby tightening the bayonet slot connections and causing the axial drive key 45 and groove 62 to mesh. A lock 65 of suitable conventional design is provided adjacent the lower right-hand bayonet connection. Upon turning the key thereof the lock will engage the lock tongue 56 to rigidly interconnect the base 47 and the control plate 57.

At the bottom of the mechanism a rectangular coin storage box 66 is provided, securely attached to the front of the band 38 by a screw 67 extending through a slot 68 in the back 69 of the box and threaded in the band 38. The back 69 is offset at 70 to overlie the boss face 52 of the base 47. When the plate 57 is locked in place as above described, the offset portion 70 is clamped tightly against the base 47; the frontal and lateral edges 71, 71 at the top of the box being fitted snugly to the periphery of the plate 57 to effectually close the box against tampering. The box 66 is made readily accessible to the authorized attendant by unlocking the lock 65 and removing the control plate 57. The box is then open at the top to admit a screw driver or other tool to loosen the screw 67, whereupon the box may be removed and emptied.

An actuating disc 73, shown in detail in Figs. 5 and 6, is rigidly connected to an U-shaped hub 74 integral with the forward end of the drive shaft 61 by suitable spaced screws 76 extending into the rear face of the disc 73. When the disc 73 is locked in position, as shown, the U-shaped hub 74 forms a pocket 77 for holding a proper coin C. The disc 73 is axially apertured at 78 and has an annular groove 79 in which is secured a glass closure 81 forming a sight window for the coin C.

The disc 73 rotates a round recess 82 in the plate 57, the plate having an annular shielding rim 83 which surrounds the disc 73. The edge of the rim 83 is flush with the outer surface of the disc and lies close thereto to prevent tampering, sufficient clearance merely being provided therebetween to permit rotation of the disc 73. In the upper left-hand quadrant of the rim 83 is a coin deposit slot 84 designed to admit a proper coin while excluding such as are of larger diameter. Radially alined with the deposit slot 84 the plate 57 has an annular bearing 86 against which slides a peripheral shoulder portion 87 of the disc 73. The disc shoulder 87 projects into the plane of the deposit slot 84 as a rotating closure most of its extent, but is cut away at 89 to receive a proper coin. The cut-away section 89 provides an abutment 91 on the disc adapted to aline with the lower edge of the deposit slot 84 when the mechanism is locked. Rockably mounted on a pin 92 fast in the disc at the cut-away section 89 is an unbalanced latch member 93 comprising a nose portion 94 and a heavier dog 96. The dog 96 has an ear 98 which extends laterally into an annular groove 99 in the plate 57 to normally rest in a notch 101, formed in the wall of the groove 99. The latch nose portion 94 lies in the plane of the slot 84 sufficiently to be impinged by a proper coin deposited therein, but not to be disturbed by a coin of less than proper diameter. A notch 102 provided in the groove wall 99 is spaced from the notch 101 a distance not less than the diameter of a proper coin to receive the dog ear 98 to lock the mechanism in case of attempted fraud, as when the nose 94 has been initially depressed by a tool passed through the slot 84.

A slot 103 through the rim 83 at the bottom of the mechanism provides for the discharge of coins into the rectangular coin box 66. Areas 104 and 106 on the plate 57 are relatively thick portions thereof having edges 107 and 108 respectively which define the path of the coin during operation of the device in a manner to be

described hereinafter. A smooth knob or handle 109 is secured to the outer face of the disc 73 for manually actuating the device.

The operation of the coin-controlled mechanism is shown in Figs. 5 to 10, inclusive. The actuating disc 73 is normally locked against rotation by the engagement of the latch dog 96 in the notch 101 when the disc abutment 91 and latch nose 94 rest at opposite edges of the coin-deposit slot 84. In this relation the U-shaped hub 74 is substantially upright, the pocket 77 thereof being disposed between the coin guide edges 107 and 108. The coin C therein represents one utilized in a next preceding operation of the mechanism, and is visible for inspection from without the device through the axial window 81.

To actuate the mechanism for driving the shaft 61 and ejector wheel 42, a coin C is inserted into the slot 84 to pass therethrough by gravity and unlock the machine. Being of proper value, it will have the requisite diameter to clear the slot. Falling between the abutment 91 and the latch nose 94, Fig. 6, the coin engages the latch nose 94. Its weight thereon counterbalances the latch member 93 to lift the latch dog 96 from the detent notch 101, Fig. 7, thus freeing the disc 73 for actuation, the coin C being supported on the guide edge 107 under the slot 84. Rotating the knob or handle 109 clockwise, as seen in Fig. 6, carries the coin C along a concentric portion of the guide edge 107, the coin riding between the abutment 91 and the nose 94 to balance the latch 93. Further rotation of the disc 73 carries the dog 96 along the continuous groove 99 over and beyond the second detent notch 102. Simultaneously, the slot 84 is closed by the disc shoulder 87, the coin C resting at the end of the concentric portion of the guide edge 107. Continued rotation of the disc 73 causes the coin C to fall from the cut-away section 89 between a radial portion of the edge 107 and the opposite guide edge 108. Referring particularly to Fig. 5, it will be noted that rotation of the disc 73 turns the U-shaped hub 74, the pocket 77 thereof being closed at the quarter revolution by the area 106, causing the coin C to ride on the periphery of the hub 74. Subsequent rotation of the disc 73 inverts the pocket 77, causing the coin C to be discharged therefrom through the slot 103 and into the collector box 66. For the balance of the rotation of the disc 73 the coin C rides on the hub 74, and lies between the guide areas 104 and 106. Referring to Figs. 6, 10, the actuation cycle terminates when the cut-away section 89 moves across the slot 84, the abutment 91 and latch nose 94 being again alined at opposite sides of the slot 84 when the unbalanced latch dog 96 falls into the first detent notch 101 to again lock the machine. Simultaneously, the hub 74 rotates to aline the pocket 77 with the guide edges 107 and 108, thereby permitting the coin C to slide by gravity into the hub recess 77, where it is held available for inspection through the glass 81 until a subsequent operation of the device.

From the foregoing it will be observed that the mechanism cannot be readily operated without the use of a proper coin. The slot 84 will not pass a larger coin, and a smaller coin will not impinge on the nose 94 to unlock the latch from the detent notch 101. The latch may be unlocked by depressing the nose 94 with a wire or other tool inserted through the slot 84, but initial actuation of the disc 73 closes the slot 84, liberating the nose 94 to permit the dog to fall in locking engagement with the second detent notch 102. Use of a counterfeit coin of proper size may be readily detected because the coin is observable through the axial window 81 immediately after operation of the machine.

Another embodiment of my invention is shown in Figs. 3, 4 and 11. A rectangular casing 121 has parallel sides 122—122 connected by a back 123. The sides and back extend forwardly at the bottom to form an open inclined delivery tray 124 for ejected articles. The upper part of the casing is adapted to contain a supply of the articles to be dispensed arranged in magazines 126, 126. Although the present embodiment shows an arrangement of four magazines for storing as many different varieties of articles, it will be understood that the invention is practicable with any number of magazines 126. The casing 121 is closed by a plate 127 having a cover portion 128, a front portion 129 and a lower table portion 131. The back 123 is locked to the plate 127 by any suitable lock 132. Rigidly mounted spaced fins 136 constitute guideways for the magazines 126. The plate front portion 129 is provided with a spaced sight window 137 for each of the magazines. A selector mechanism 141 includes a rectangular frame 142 beneath the cover table portion 131. The selector frame has a frontal apron 143 extending downwardly from the table portion 131, and a parallel back 153 connected thereto by sides 154—154. Screws 155 extending outwardly through the sides 154 secure the selector frame within the casing sides 122. The back 153 of the frame 142 extends downwardly to provide a coin box, access thereto for an attendant being provided through the base 156 forming part of a controlling mechanism 157. The front 158 of the coin box extends upwardly to fit snugly in a recess 159 of the base 156, the latter being secured by suitable screws 160 from the back. Referring to Fig. 3, it will be noted that the coin box front 158 extends across the vending machine, thus serving to reinforce the structure as well as providing accommodation for greater receipts incident to the plurality of magazines.

It will be understood that the controlling mechanism 157 is similar in construction and operation to the controlling mechanism 46 previously described, except for certain minor modifications described hereinafter requisite to adapt same to the present construction. A control plate 161, locked to the base 156, is recessed and beveled off at 162 in the lower portion thereof and fitted with an inclined tray 163 leading to the coin box, construction corresponding to the discharge slot mentioned above being unnecessary here. A rotating actuator disc 164 has its peripheral shoulder 165 correspondingly beveled as at 166 for directing a discharged coin through the beveled plate recess 162. The actuator disc 164 is fast to a rotatable drive shaft 167 extending rearwardly through the plate bearing 168, a collar 169 secured to the shaft holding it against longitudinal movement in the bearing 168. The drive shaft 167 has an end key 171 which engages an end groove 172 on an axially alined shaft 173 journaled in the coin box plate 153 and the back plate 123.

Secured to the shaft 173 is a cam disc 174 supporting a follower plate 176 slidably mounted thereabove on the back plate 123. Normally, or when the coin-actuated mechanism is locked, the follower plate 176 rests in a low point 177 of the cam, as shown in Fig. 4. Diametrically opposite

the low point 177 the cam has an elevation 178 shaped to lift the follower plate 176 a distance corresponding to the thickness of spaced fingers 179—179 at the top of the follower plate. Mounted in guide grooves 181—181 in the opposite sides 122 of the casing is a slide plate 182 for supporting the articles stacked in the four magazines. Springs 183—183 attached to the back 123 connect with the slide plate 182, tending to retain it against forward beveled faces 184 on the spaced fingers 179—179. Normally, the slide plate 182 supports the stack by engaging the rearward edge of the lowermost article.

The selector mechanism 141 is provided to enable the purchaser to receive an article from any one of the magazines 126, and is designed to be operated for the purpose of selection prior to rotation of the coin-actuated disc 164. Referring to Fig. 11, each magazine 126 is provided with a movable framework or bottomless tray 187 surrounding the lowermost article in the stack. As will be noted by referring to Fig. 4, the trays and lowermost articles are clear of the stack guide fins 136. Each tray 187 rests at the rear on the slide plate 182 and has an integral arm 188 which extends forwardly adapted to slide between the upper edge of the back plate 153 and the under-surface of the table portion 131, see Fig. 4. Each arm 188 has a handle 189 operable in individual slots 191 in the table plate 131. In Fig. 11 the selector trays are alined in position for initial operation.

If the purchaser wishes to procure an article from the extreme right-hand magazine, he pushes the handle 189 of the right-hand tray-arm to the end of the slot 191, causing the lowermost article to be pushed rearwardly so that its forward edge only is supported on the slide plate 182. A proper coin is then inserted in the machine and the actuator disc rotated, the cam disc 174 being turned to raise the follower plate 176 the beveled fingers 179 of which force the slide plate 182 forwardly. Being thus left without support, the lowermost article drops into the selling tray or chute 124. The follower plate 176 falls as the cam 174 completes its rotation and the slide plate 182 is drawn back by the springs 183, the tray-arm 188 remaining in the plane of the magazine until it is withdrawn to permit the succeeding article to fall thereinto. The tray-arm may be restored to its original position by pulling the handle 189 to the front end of the slot 191. Selections may be made from any of the magazines 126 in the above-described manner.

For automatically returning a tray and arm after use, upon selection from another magazine, there is provided a bar 201 centrally pivoted on a horizontal bracket 202 secured beneath the table portion 131. By means of studs 203 on the under-face of the tray-arms 188, the bar 201 is rotated when one of the trays is pushed in. When a tray on the other side of the pivot is subsequently actuated, its stud 203 will revolve the bar 201 in reverse direction to restore the first tray to initial position.

The adjacent edges of the two right-hand tray-arms, as well as the corresponding edges of the two left-hand tray-arms, are formed along a portion of their extent with rack teeth 206. Pinions 207—207, rotatable on stub shafts 208, are mounted on the under-surface of the table portion 131 between each of the pairs of tray-arms 188. When one of the right-hand or one of the left-hand pairs of tray-arms is pushed to select an article, its rack teeth 206 engage the pinion 207. If the next magazine selected is that served by the other tray-arm of the pair, pushing in of said other arm 188 will cause the rack teeth of the latter to rotate the pinion 207, thereby causing the arm earlier actuated to be restored to initial position.

It will be observed that the embodiment described immediately above has all the advantages of the preferred form, and is especially suitable for the vending of different varieties of articles, such as different brands of cigarettes, gum, soap and the like.

The mechanisms above described may, if desired, be modified to include provision for throwing out slugs or spurious coins of magnetic material. Figs. 12, 13 and 14 show a construction suitable for the purpose. A magnet 225 is fixed to the stationary control plate 226 with its poles alined with the coin slot 227 and extending toward the normal coin path through an opening 228 in the plate 226. The magnet carries a brass bracket supporting a spring pad 229 in the opening 228. The opening 228 communicates with a coin-sized diversion outlet 232, which is separated from the normal coin path by a beveled knife-edge 233 positioned clockwise from the coin slot 227. When a proper coin is deposited in the slot 227, the magnet 225 has no effect thereon, and the coin may be moved in due course to permit designed actuation of the device. However, if a spurious magnetic slug or coin of proper size to open the latch 234 is placed in the coin slot 227, the magnet 225 will draw it laterally as soon as the latch 234 is unlocked from the first detent notch 236. The coin is held upright agaisnt the spring pad 229 which yields slightly to enable the coin to lie beyond the plane of the knife-edge 233. When the actuating disc 237 is rotated the abutment 238 thereof pushes the coin from the spring pad to the knife-edge 233 which turns it aside into the diversion outlet 232. Relieved of the weight of the coin, the latch will fall immediately into the second detent notch 241, thus locking the machine. If desired, the magnet may be electrically operated from any suitable source of current, not shown.

For expelling coins or slugs which have been placed in the slot 84 but which are of insufficient diameter to unlock the mechanism, a coin-expeller 242, Fig. 15, may be provided. The coin-expeller 242 includes a shank 243 having an upper ear 244 by which the expeller may be manually grasped to eliminate the inadequate coin and, at the bottom, a curved finger 246 for receiving the coin. As shown, for example, in Fig. 9 a radial slot 247 is cut in the plate 57 for accommodating the expeller in alinement with the coin slot 84, the slot 247 communicating with a recess 248 for the finger 246. When deposited, a coin will slide along the outer face 249 of the expeller to rest on the finger 246, subject to be expelled if of insufficient diameter to unlock the latch lock by the lifting of the expeller 242 from the slot 247. If the coin is of proper size to operate the mechanism, the latter is unlocked in the manner described, the abutment 91 moving across the outer face 249 to advance the coin in its curvilinear path.

It will be understood that the coin-actuated units described above are not restricted to use in vending machines, but may be utilized readily for controlling operation of other kinds of devices such as game-boards, door-locks, coin-meters and like mechanisms.

It is obvious that those skilled in the art may

vary the details of construction as well as arrangements of the parts without departing from the spirit of the invention, and therefore it is not desired to be limited to the foregoing except as may be required by the claims.

What is claimed is:

1. A unit-type coin-actuated controlling mechanism including a stationary control plate having an upper coin-receiving aperture, an axial bore and a detent notch adjacent to the aperture; a rotatable actuating disc coaxial with the plate; a drive shaft in the bore and having a hub portion connected to the disc, said hub portion having an axial coin pocket; and a latch element on the disc normally engageable in the detent notch for locking the disc against rotation in the plate.

2. A unit-type coin-actuated controlling mechanism including a stationary control plate having an upper coin-receiving aperture, an axial bore and two detent notches spaced successively from the aperture; a rotatable actuator disc coaxial with the plate; a drive shaft in the bore having a hub portion connected to the disc, said hub portion having an axial coin pocket, a latch member on the disc normally engageable in the first detent notch for locking the disc against rotation on the plate; a nose portion on the latch member adapted to be impinged by a coin inserted in the coin-receiving aperture to disengage the latch from the first notch to permit rotation of the disc; and means for rotating the disc to move the latch to the second detent notch.

3. A unit-type coin-actuated controlling mechanism including a stationary control plate having an upper coin-receiving aperture, an axial bore and a detent notch adjacent to the aperture; a rotatable actuating disc coaxial with the plate; a drive shaft in the bore and having a hub portion connected to the disc, said hub portion having an axial coin pocket; a latch element on the disc normally engageable in the detent notch for locking the disc against rotation in the plate; a nose portion on the latch adapted to be impinged by a coin deposited in the aperture to disengage the latch from the notch; means for rotating the actuating disc, and means for guiding the coin into the coin-receiving pocket of the hub portion.

4. A unit-type coin-actuated controlling mechanism as defined in claim 1, the rotatable actuating disc having a glass-enclosed sight window in axial alinement with the hub coin pocket.

5. A coin-controlled mechanism comprising a fixed control plate having a coin-receiving slot; an actuator disc coaxial with the plate and adapted for rotation thereon, and having a coin-receiving section adapted to be alined with the coin-receiving slot; a coin-controlled latch in the coin section normally connected with the control plate to lock the disc against rotation and subject to being impinged by a proper size coin to unlock the disc; and magnetic throwout means on the control plate for removing a spurious coin from the latch.

6. In a coin-controlled mechanism the combination of a fixed control plate having a peripheral coin slot; an actuator disc coaxial with the disc and adapted for rotation thereon, the disc having a coin-receiving section adapted to be alined with the coin slot; locking means in the coin-receiving section for the disc adapted to be released by a coin of predetermined size; magnetic means alined with the coin slot for positioning a spurious coin laterally in the section; a knife-edge portion on the control plate at the coin slot; and means for rotating disc to move the coin upon the knife-edge.

7. In a device of the character described the combination of a fixed control plate having an upper coin-receiving aperture, an axial bore and a radial coin-receiving passage; a rotatable actuating disc coaxial with said plate and having a sight opening; an abutment on said disc, rotatable therewith to move a coin deposited in said aperture to said radial passage; coin-released means normally locking said disc from rotary movement relative to said plate; and a drive shaft in said bore, having a hub portion connected to said disc, said hub portion having an axial coin pocket therein in alinement with said sight opening and adapted to receive the coin from said radial passage, whereby the same may be viewed through the sight opening after the operation of the device.

8. In a device of the character described the combination of a fixed control plate having an upper coin-receiving aperture, an axial bore, a coin-receiving passage extending from said aperture, and a detent notch adjacent said aperture; a rotatable actuating disc coaxial with said plate, having a sight opening; detent means on said disc, normally engageable in said notch and releasable by a coin inserted in said aperture; means on said disc for moving the coin in the passage upon releasing of said detent from the notch; and a drive shaft in said bore, having a hub portion connected to said disc, said hub portion having an axial coin pocket therein in axial alinement with said sight opening, adapted to receive the coin from said passage.

9. In a device of the character described the combination of a fixed control plate having an upper coin aperture, a coin passage with a wall facing and radially spaced from said aperture and extending therefrom for supporting a coin inserted in said aperture, and a pair of detent notches spaced successively from said aperture; a rotatable actuating member; releasable detent means on said member for locking the latter relative to said plate, normally engageable in the notch nearest said aperture and movable to an inoperative position out of said notch upon deposit of a coin in said aperture; and means on said actuating member for moving the coin in said passage to maintain the detent in the inoperative position until the latter passes said second notch.

10. In a device of the character described the combination of a casing having a coin-receiving slot; fixed means in said casing providing a coin passage extending to said slot; movable actuating means; coin-released means normally locking said actuating means relative to said fixed means; a drive shaft having a hub portion connected to said actuating means, said hub portion having an axial coin pocket therein adapted to receive a coin from said passage; and sight means for viewing the coin in said pocket.

11. In a device of the character described the combination of a casing having a coin aperture therein; fixed means in said casing providing a coin passage and a detent notch; rotatable actuating means; a latch pivotally mounted on said actuating means for normally locking the latter to said fixed means, said latch having a dog portion normally engageable in said notch and a nose portion engageable by a coin when inserted in the aperture to move the dog out of the notch; a drive shaft having a hub portion connected to

said actuating means, said hub portion having a pocket therein adapted to be alined with said passage to receive the coin therefrom on the completion of the rotation of the actuating means; and sight means for viewing the coin in the pocket.

12. A coin-controlled mechanism comprising a fixed control plate having a coin-receiving slot; an actuator disc coaxial with the plate, rotatable thereon, and having a coin-receiving section adapted to be alined with the coin-receiving slot; a coin-controlled latch in the coin section normally connected with the control plate to lock the disc against rotation and in position to be contacted by a proper size coin inserted in the coin-receiving slot to unlock the disc; a drive shaft having a hub portion connected to said disc, said hub portion having a coin-receiving pocket; means for rotating the disc; means for guiding the coin from said aperture to said pocket; and sight means for viewing the coin in the pocket.

13. A coin-controlled mechanism comprising a fixed means having a coin-receiving slot; an actuating member coaxial with said fixed means and rotatable thereon; coin-controlled latch means normally locking said fixed means and said actuating member from rotation relative to each other and in position to be released by a proper size coin inserted in the coin-receiving slot; a drive shaft having a hub portion connected to said actuating member, said hub portion having a coin-receiving pocket; means for directing the coin from the coin-receiving slot to said hub portion; means for rotating said actuating member and hub portion to aline said pocket with the directing means to receive the coin therefrom, and to subsequently discharge the coin from the pocket; and sight means for viewing the coin in the pocket.

14. In a device of the character described the combination of a fixed control plate having an upper coin aperture, a coin passage with a wall facing and radially spaced from said aperture and extending therefrom for supporting a coin inserted in said aperture, and a detent notch adjacent the coin aperture; a rotatable actuating member; releasable detent means on said member for locking the latter relative to said plate, normally engageable in said notch and movable to an inoperative position out of said notch upon deposit of a coin in said aperture; and means on said actuating member for moving the coin in said passage.

DONALD E. ROBINSON,
Executor for Albert F. Parks, Deceased.