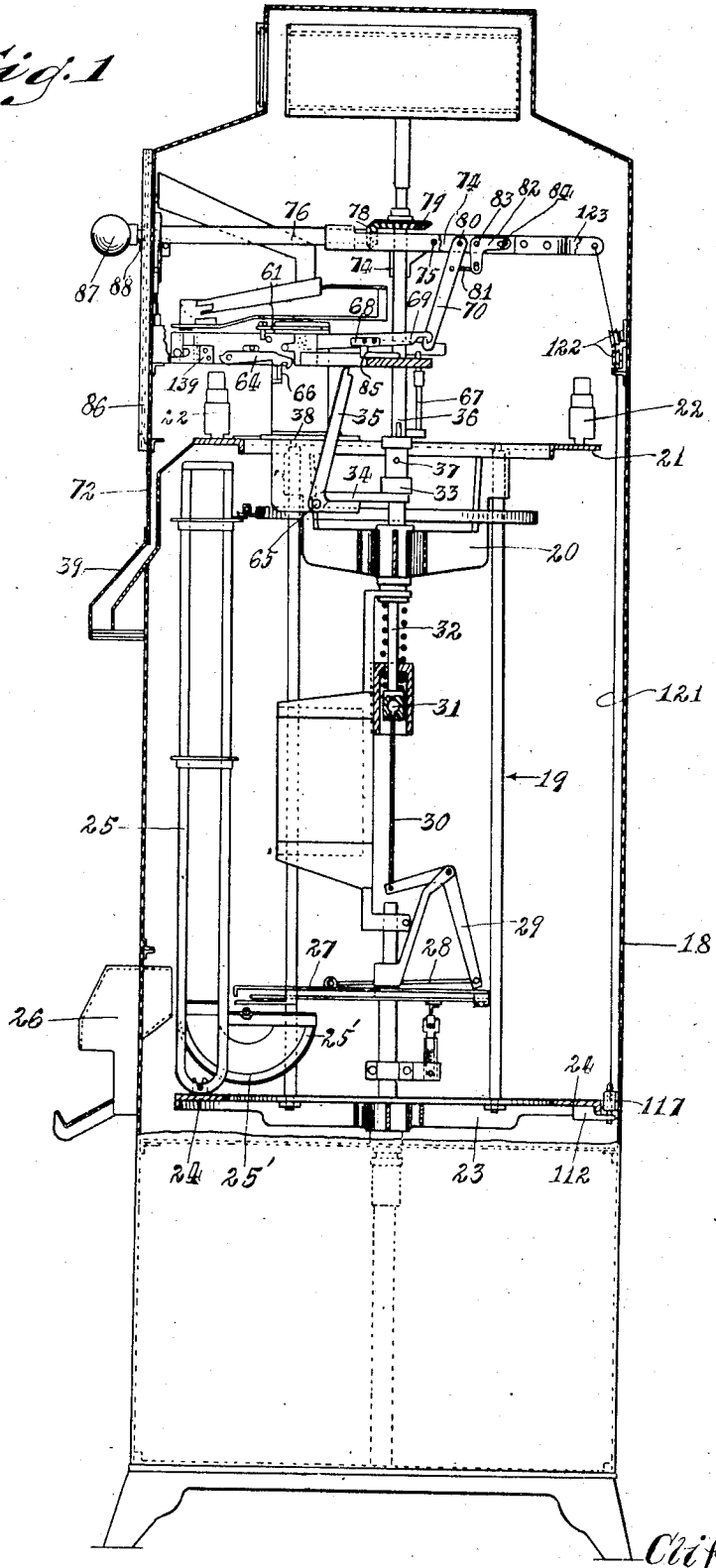
April 1, 1930. C. W. NIXON 1,753,090

VENDING AND CHANGE MAKING MACHINE

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Fig. 1



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VENDING AND CHANGE MAKING MACHINE

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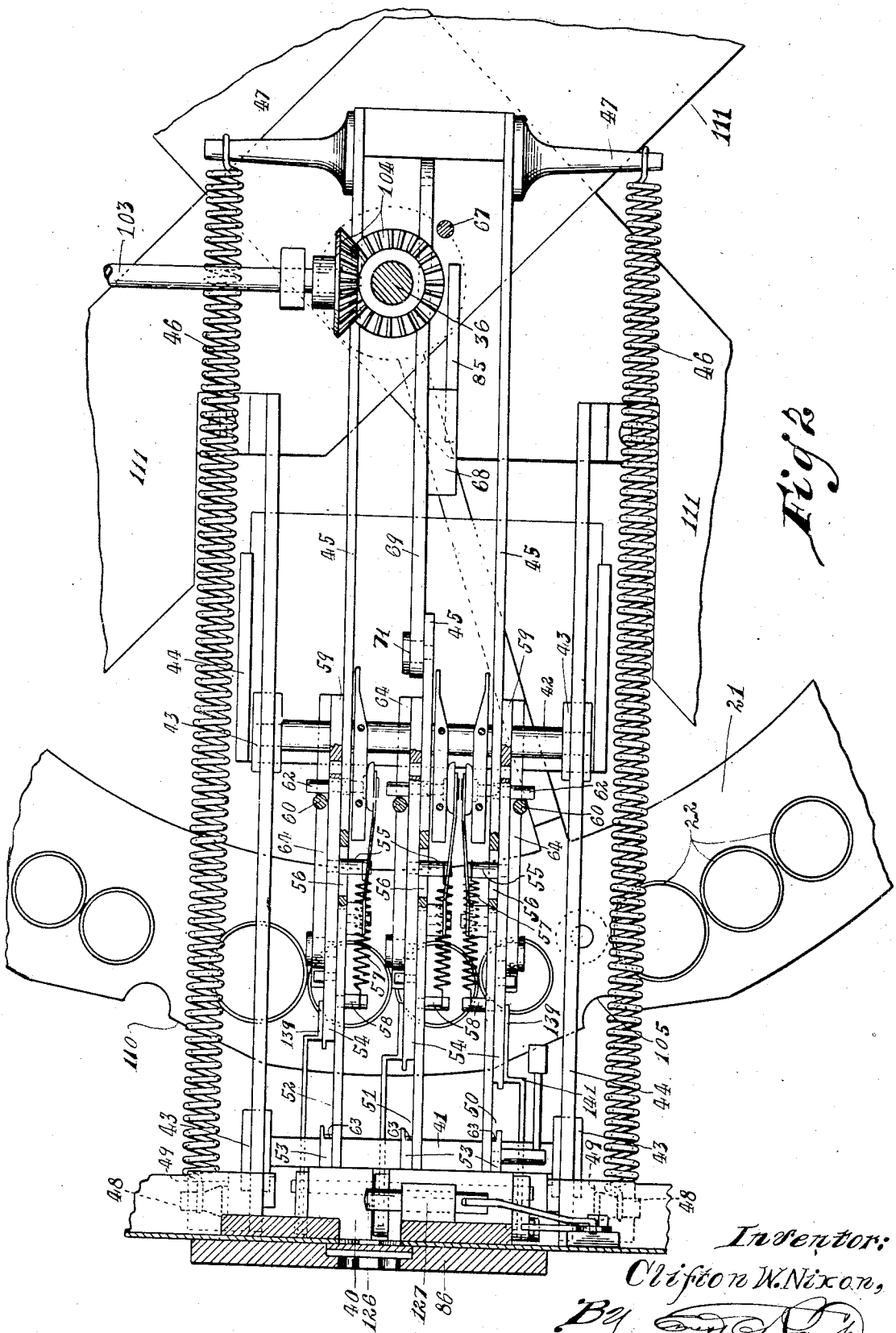


Fig. 2.

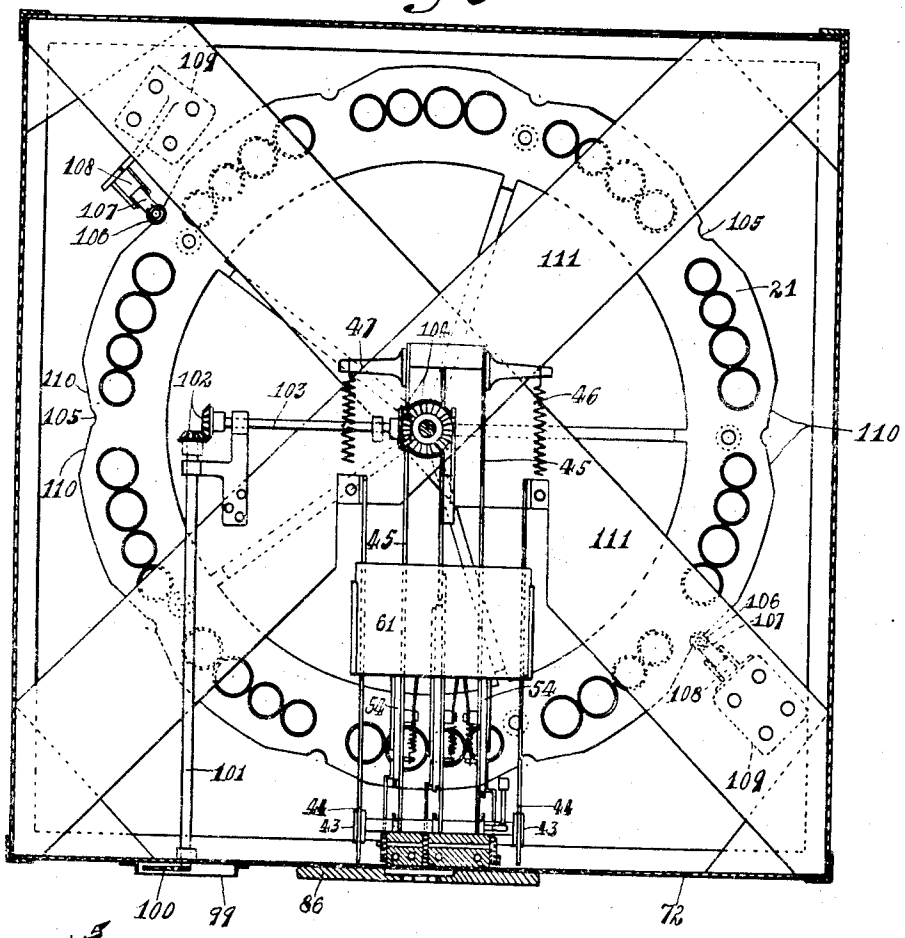
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VENDING AND CHANGE MAKING MACHINE

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Fig. 3



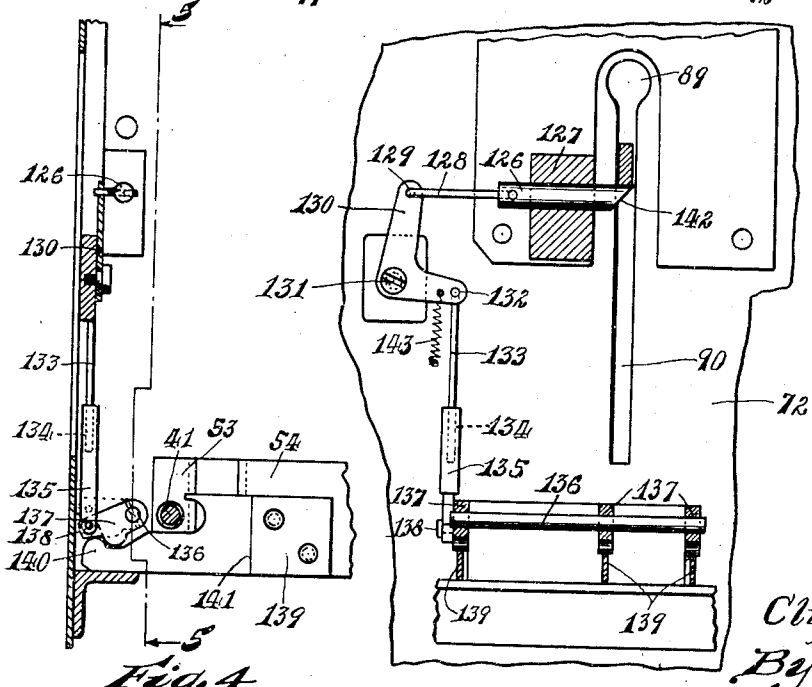


Fig. 4

Fig. 5

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VENDING AND CHANGE MAKING MACHINE

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Fig. 6

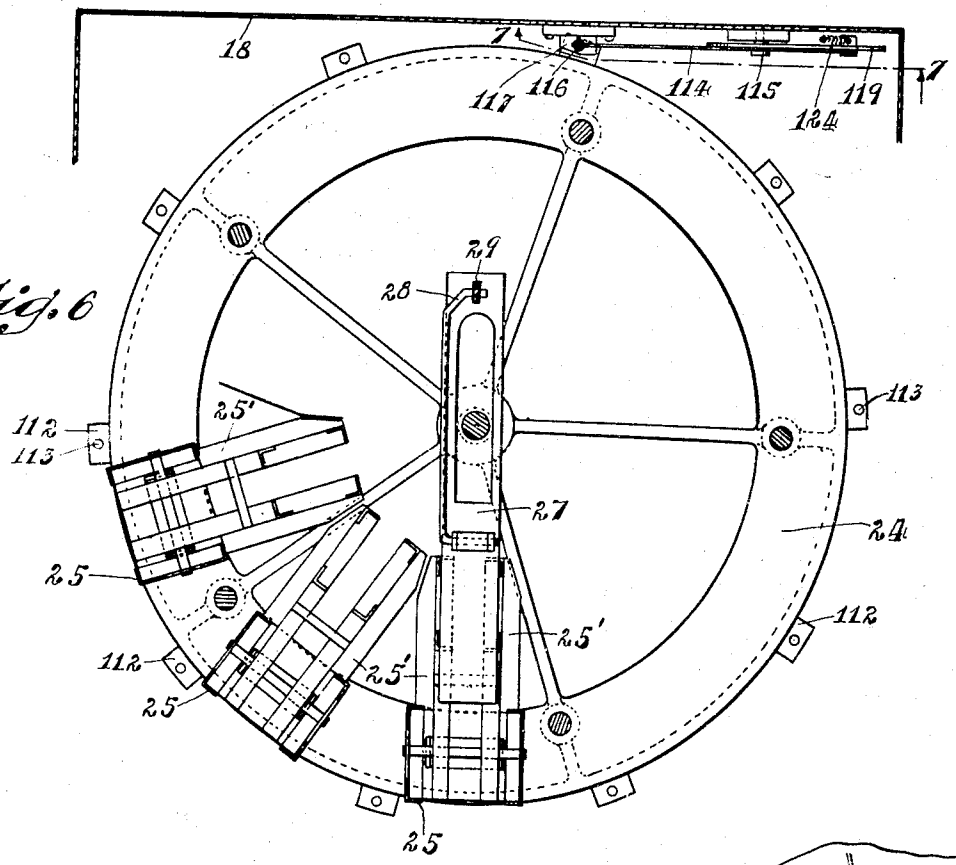
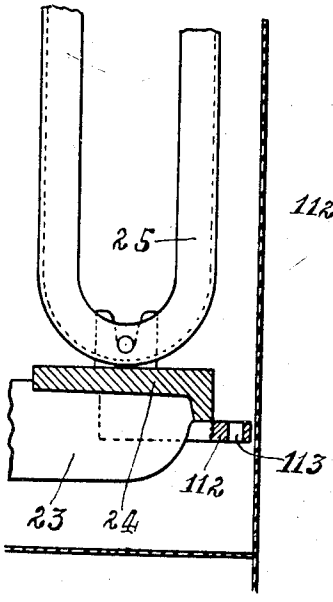


Fig. 8



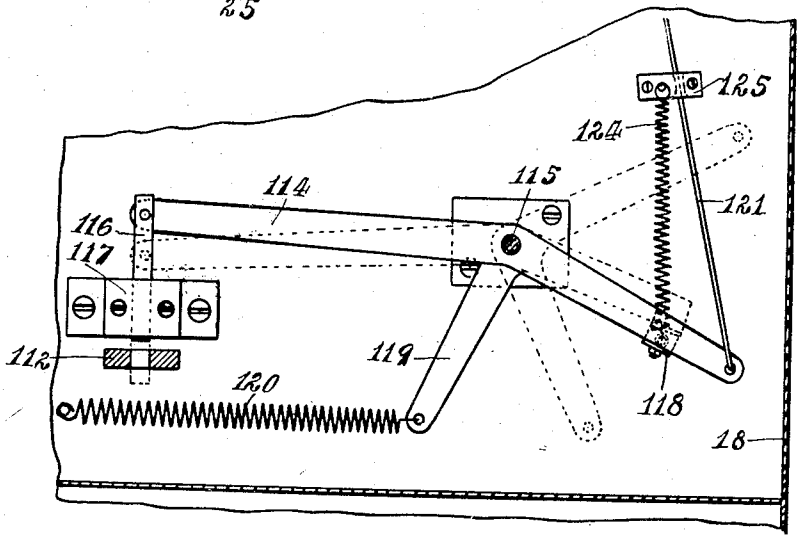


Fig. 7

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VENDING AND CHANGE MAKING MACHINE

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Fig. 13

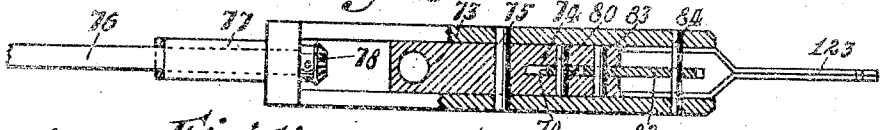


Fig. 10

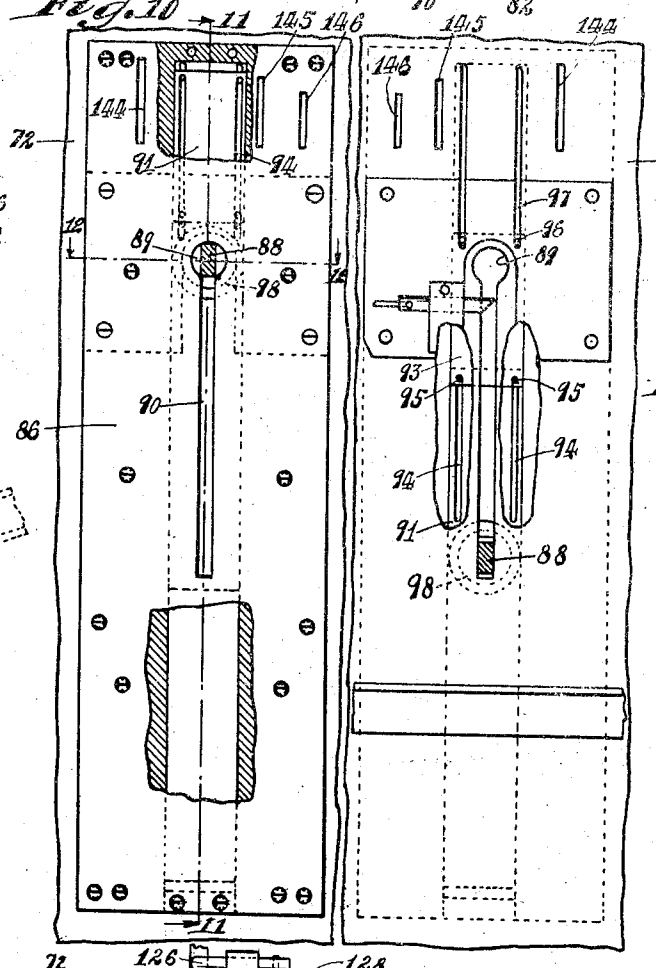


Fig. 11

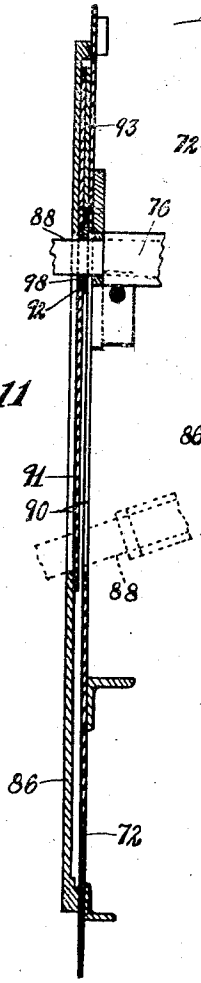


Fig. 9

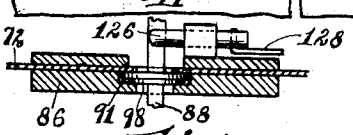


Fig. 12

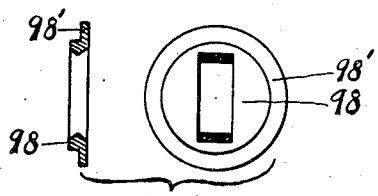


Fig. 14

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Patented Apr. 1, 1930

1,753,090

UNITED STATES PATENT OFFICE

CLIFTON W. NIXON, OF NEW YORK, N. Y., ASSIGNOR TO NIXON VENDING AND CHANGE MAKING MACHINES, INC., OF NEW YORK, N. Y., A CORPORATION OF DELAWARE

VENDING AND CHANGE-MAKING MACHINE

Application filed June 7, 1927. Serial No. 197,076.

This invention relates to vending and change-making machines, more particularly to machines that are dependent for their operation upon the deposit therein of a coin or coins, and the invention has for its principal object to improve generally in vending and change-making constructions of this class.

The present invention has for an important object the provision of an efficient construction of means whereby through a single manually operated element movement may be imparted to a coin-controlled structure and to a rotary magazine structure.

Another object of the invention is the provision of operating mechanism in the form of a manually operated element arranged to have both a rotary function and a pivoting function; and further in this connection the provision of means in association with the manually operated element for rendering either of its said functions operative and the other inoperative.

Another object of the invention is the provision in a machine of the class described comprising a movable coin-controlled structure and a manually operated element by which to move the same, of arresting means for the manually operated element arranged to be controlled by the coin-controlled structure to limit the functioning of the manually operated element except where the prescribed coin has been entered in the coin-controlled structure.

Another object of the invention is the provision of a slot closing construction in association with the manually operated element and the slot in which the same operates, the construction in this regard being such that the slot will be closed at all times irrespective of the position of the manually operated element with respect both to its rotary function and to its pivoting function.

It is also within the province of this invention to so arrange and support the manually operated element that it will be easy and convenient to operate, and so to arrange and support the parts under the control of the manually operated element that they will be adaped not only to operate readily, but to operate without danger of being put out of order through reprehensible methods of operation.

Other objects will appear hereinafter.

The invention consists in the combinations and arrangements of parts hereinafter described and claimed.

The invention will be best understood by reference to the accompanying drawings forming a part of this specification, and in which:

Fig. 1 represents a side elevational view in partial section of a combined vending and change-making machine embodying my present improvements, parts being omitted, broken way or shown in section where necessary in order readily to disclose the relationship of the various mechanisms of the machine;

Fig. 2 represents a top plan view of the coin-controlled carrier structure with parts broken away and shown in section;

Fig. 3 represents a cross section of the machine, this view being taken at a point above the coin-controlled carrier structure, certain of the parts associated with the carrier structure being shown in section to disclose the arresting means controlled thereby;

Fig. 4 represents a fragmentary elevational view, showing the arresting means for the manually operated element;

Fig. 5 represents a fragmentary elevational view of the inner side of the cabinet front, showing the means by which the manually operated element is arrested, this view being taken on the line 5—5 of Fig. 4;

Fig. 6 represents a partial plan and section of the lower ring plate and holding units for packages of cigarettes and matches, this view also showing some of the parts by which the rotary magazine structure is locked;

Fig. 7 represents a fragmentary elevation showing the parts for locking the rotary magazine against movement, this view being taken on the line 7—7 of Fig. 6;

Fig. 8 represents a sectional elevation, showing a fragment of the lower spider frame with its ring plate and projection which constitutes a keeper for the locking means;

Fig. 9 represents a fragmentary view from

the inside of the cabinet front, showing the slot closure means as it appears when the manually operated element is in depressed position, parts being broken away;

Fig. 10 represents an elevation of the housing structure on the cabinet front, parts being broken away to disclose the slot closure means as they appear when the manually operated handle is in elevated position;

Fig. 11 is a vertical sectional view taken on the line 11—11 of Fig. 10;

Fig. 12 is a cross section taken on the line 12—12 of Fig. 10;

Fig. 13 represents a plan and section of the manually operated element; and

Fig. 14 shows views in front elevation and in section of the collar device associated with the manually operated element.

With more particular reference to the accompanying drawings, wherein I have illustrated my present improvements as embodied by way of example in my improved cigarette vending and change-making machine, 18 designates a cabinet containing a rotary skeleton magazine 19 including an upper spider frame 20 with a ring plate 21 upon which are mounted a series of change bank units 22, and including also a lower spider frame 23 with a ring plate 24 upon which are mounted a corresponding series of combined holders 25 and 25′ for containing, respectively, packages of cigarettes and packages of matches.

For the discharge of the packages of cigarettes and matches into a delivery receptacle 26, there is an ejector mechanism 27 operated through link 28, bell crank 29, line rod 30, ball and socket joint 31, lift line shaft 32, sleeve 33, connecter frame 34 and bell crank actuator 35 (there being three such bell crank actuators although but one is shown herein). Said line shaft 32 at its upper portion has loose fit within rotary shaft 36 and the sleeve 33, which is pinned at 37 to line shaft 32, has sliding fit on rotary shaft 36, an arrangement which makes it possible, owing to the ball and socket joint 31, to turn the shaft 36 without effecting the operation of the ejector mechanism 27 and to operate any one of the bell crank actuators 35 without rotating said shaft 36. Each bell crank actuator 35 is operatively associated with coin pusher mechanism 38 by which the correct change is ejected from a change bank unit 22 into delivery receptacle 39 during the same operation that results in the delivery of cigarette and match packages into receptacle 26.

The means for transmitting movement to one of the three bell crank actuators 35 comprises a carrier structure arranged for movement from and to an end abutment 40 and containing in the present embodiment three independently operated coin-controlled units or actions in agreement with the number of bell crank actuators to which movement is to be imparted. As best shown in Fig. 2, the carrier structure comprises cross pieces 41 and 42 furnished at their extremities with shoes or blocks 43 slidable along guide rails 44 extending from the abutment 40, and three vertically disposed strips 45 arranged in lengthwise relation and connecting the cross pieces 41 and 42 so as to constitute a unitary framework. This carrier structure is normally drawn against the abutment 40 by means of coil contractile springs 46 which connect lateral projections 47 on the longer or outside strips 45 with lateral projections 48 on fixed brackets 49. With each strip 45 is associated a coin-controlled unit providing, in the present instance, a "two dimes" coin space or pocket 50 with one strip, a quarter coin space or pocket 51 with another strip, and a half-dollar coin space or pocket 52 with the third strip.

The coin-controlled unit associated with each strip comprises a head piece 53 and an action slide 54, the latter being mounted to have movement limitedly toward and away from its head piece, the mode of mounting each action slide consisting in providing it with a pin 55 working in an elongated slot 56 in its strip and in connecting said pin 55 by a pull spring 57 with a pin 58 projecting from its strip. Said action slides have flatwise sliding contact with their strips and they are forked at their rear ends 59 to slide astride the cross piece 42 and in suitable guiding grooves therein alongside their strips (the forks and guiding grooves not being shown in detail). Said pull springs 57 resiliently urge the action slides toward their head pieces to the full extent of their end play in that direction. To set the action slides so as to make the coin spaces of proper coin receiving dimensions when the carrier structure is in station position against the abutment 40, there are stop posts 60 depending from an overhead frame 61 in position to engage other stop posts 62 projecting laterally from the action slides. Under this arrangement, as the carrier structure moves into station position against the abutment, the action slides are set so as to enable coins to be dropped into the coin spaces where the coins will be supported at their rims by transverse pins 63 in the head pieces; and as the carrier structure moves from station position, the action slides have a clamping action effect upon the supported coins. Through coins placed in the coin spaces, the action slides are rendered effective to cause the engagement of hooked draw bars 64, which are pivotally carried thereby, with the bell crank actuators 35 when the carrier structure is moved to its extreme position from the abutment. On the other hand, where there are no coins in the coin spaces, the pivoted draw bars 64 will fall short of

engagement with their bell crank actuators when the carrier is moved to its extreme position. In this way, when the carrier structure is moved to its extreme position, that coin-controlled unit which carries a coin will be rendered effective to impart movement to its bell crank actuator, it being clear from an inspection of Fig. 1 that the engaged bell crank actuator will be moved on its pivot 65 during the retiring movement of the carrier structure toward the abutment. When the burden of the connected bell crank actuator is transmitted to the action slide, the sustained coin will be released since the action slide is drawn to the full extent of its end play in a direction away from its head piece. During the retiring movement of the carrier structure the draw bar 64 is forced out of engagement with the bell crank actuator by a stationary pin 66, but this action does not occur until after a push-up pin 67, which rests on the sleeve 33 to rise therewith under the power stroke of the bell crank actuator, has engaged a ledge 68 on the pull bar 69 of the carrier structure and forced said pull bar out of engagement with a draw lever 70, the instrumentality through which movement is imparted to the carrier structure. Said pull bar 69 is mounted by a pivot 71 on the middle strip 45. By this arrangement, the full retractile force of the springs 46 is transmitted to the engaged bell crank actuator momentarily prior to the disengagement therewith of the draw bar 64, with the result that the change coins, merchandise and matches are discharged by a quick impulse transmitted through the bell crank actuator to the discharging mechanisms. For a more complete illustration and description of the carrier structure, reference is to be had to my companion application Serial Number 197,075, filed June 7, 1927, in which claims are made for the carrier structure and coin-controlled units; and therefore the omission of such claims from this application is not to be considered as an abandonment of the subject matter.

My present improvements involve means in the form of a single operating element by which to transmit turning movement to the shaft 36 to which the upper spider frame 20 is made fast in order to turn the rotary magazine structure, and by which to impart movement to the draw lever 70 in order to effect the operation of the carrier structure. It is through the turning of the rotary magazine that a holder as 25 containing the selected brand of cigarettes and a change bank unit as 22 corresponding therewith are brought into delivery position at the front 72 of the cabinet, so that upon the operation of any one of the bell crank actuators 35, the selected package of cigarettes, a package of matches, and the correct change, if any change be due, will be delivered to the customer.

The preferred form of construction of the single operating element as illustrated in Figs. 1 and 13 of the accompanying drawings comprises a rocker in the form of a yoke 73 slidably embracing a supporting bracket 74 and movable on a fulcrum pin 75 carried by said supporting bracket, and a handle 76 having one end thereof journalled for rotation in a bearing 77 provided at one end of the yoke. This handle at its inner end carries a bevel gear 78 adapted to be engaged with and disengaged from, a cooperating bevel gear 79 fastened on the shaft 36; and it therefore serves as the means by which to turn the rotary magazine and as the means for pivoting the rocker upon its fulcrum pin, it being noted that the handle is mounted for depressible movement and that at the commencement of its depression the driving connection between bevel gears 78 and 79 will be disestablished so that the rotary magazine cannot be turned during the pivoting of the rocker. The draw lever 70 is mounted at its upper end on a pivot pin 80 carried by the supporting bracket and it is pivotally connected by a link 81 with one arm of a bell crank 82 which is pivotally mounted by a pin 83 to the supporting bracket and with a lost motion effect by a pin 84 to the rocker. By this arrangement, when the handle is depressed, draw lever 70 is caused to be given a rearward and upward movement for pulling the carrier structure away from the abutment; and this arrangement is such that when the handle is depressed to its full extent the carrier structure will be moved to its extreme position away from the abutment. Draw lever 70 and pull bar 69 have cooperating hooked ends as shown in Fig. 1 and the said pull bar 69 is maintained in operative relation with respect to the draw lever 70 by means of a cam-like rest 85 with which the ledge 68 cooperates. The shaft 36 has turning fit within the supporting bracket 74 and may constitute the supporting means for said bracket.

Upon the front 72 of the cabinet is secured a housing structure 86; and where the handle 76 has operative passage in the cabinet front and housing structure thereon, it is made adjacent the knob 87 with a portion 88 of rectangular form in cross section. The cabinet front and the housing structure thereon each has a circular aperture 89 and a therewith communicating slot 90. The circular apertures 89 make provision for the turning of the handle while the slots 90 serve as guides during the pivoting movement of the same. Closure means, operated by the handle, is provided to keep the aperture and slot in the housing structure closed at all times irrespective of the position of the handle. The closure means comprises a slide plate 91 having

a circular opening 92 for the passage of the handle, and a slide plate 93 overlapping behind the slide plate 91 above the handle, the slide plate 91 having slots 94 therein for slidably receiving pins 95 on the plate 93. Said plate 93 may also be provided with other pins 96 adapted to work in slots 97 provided in the cabinet front. Rotatably fitted in the opening 92 and having sliding fit upon the handle is a circular collar 98, there being a flange 98' on this collar for turning and sliding between the plate 91 and the cabinet front. In operation, the collar turns with the handle within the plate 91 and when the handle is depressed the plate 91 accompanies it as does also the other plate 93 when the pins 95 thereof have reached the limit of the end play permitted by the slots 94. On elevating the handle, the plate 93 is engaged by the flange of the collar and repositioned.

Provided on the cabinet front is dial means 99 on which are produced in circular series in any suitable manner (mode not shown) the names of the brands of cigarettes offered for sale by the machine together, if desired, with the prices thereof. Associated with this dial means is an index 100 which is mounted on the end of a rotatable shaft 101. This shaft is operated in synchronism with the magazine structure by receiving its movement from the shaft 36 through interconnected gears 102, shaft 103 and interconnected gears 104.

In order to position the magazine structure at the place where the brand selected and accompanying change may be delivered in agreement with the selection dialed, the ring plate 21 is provided on its periphery with seats or notches 105 adapted to receive positioning rollers 106 which turn on the periphery of this plate. The seats or notches 105 correspond in number with the number of merchandise holders and change bank units. The positioning rollers, of which as herein shown there may be two arranged at diametrically opposite points, are carried by plungers 107 spring-cushioned (springs not shown) in cylinders 108 carried by brackets 109. Leading from and to each of the seats or notches 105 is a suitably inclined edge 110 on which the rollers travel. The brackets 109 are supported on the underside of the X-shaped frame 111 in which the rear portion of the carrier structure is fixed and in which the shaft 36 has turning movement.

Means is arranged to be controlled by the pivoting movement of the handle and rocker for locking the rotary magazine in the position in which it is held by the positioning rollers during the pivoting of the said handle and rocker. To this end the ring plate 24 is provided with projecting lugs 112 having keeper openings 113, the number of these lugs corresponding with the seats or notches 105. A lever 114 mounted to turn on a pivot pin 115 is provided at one end with a pivoted locking pin 116 slidable in a guiding block 117. At its opposite end said lever 114 is equipped with a lip 118. A second lever 119 in the form of a bell crank is also mounted to turn on pivot pin 115. To one arm of lever 119 is attached a pull spring 120 which serves as a resilient means for holding this lever in the position in which the other arm thereof will engage the lip 118 so as to hold the lever 114 in the position where the locking pin 116 will escape engagement with the lugs 112. A cable 121, trained over suitably disposed pulleys as 122, connects an extension 123 on the rocker with the free arm of lever 119. A pull spring 124 connects the lip 118 with a bracket 125 fastened to the cable 121. On the initial pivoting of the rocker, the lever 119 against the tension of the spring 120 is raised so that the pull spring 124 may be called into action to swing the lever 114 and thereby engage locking pin 116 with a keeper opening 113. Conversely, as the handle approaches the terminal of its upward stroke lever 119 through its engagement with lip 118 causes the lever 114 to withdraw the locking pin from the keeper opening. In this arrangement, the pull spring 120 serves as the means for effecting the upward stroke of the handle in the event the customer does not perform this operation.

According to an important feature of my present improvements, provision is made whereby, when there is no coin reposing in the coin space of any of the coin-controlled units, the down stroke of the handle will be arrested so as to prevent the carrier structure from being advanced to a position where the machine will be operated. In carrying out this provision, a pin 126 is slidably mounted in a block 127 so as to be movable to and from a position in which it will arrest the down stroke of the handle 76. As best shown in Figs. 5 and 9, the arresting pin 126 is thus mounted for operation at the inner side of the cabinet front 72 and just behind the elongated slot 90 therein and at an appreciable distance below the circular aperture 89 therein, so as to permit the handle to have a limited movement in the upper portion of said slot 90. Projecting from the arresting pin 126 is a rod 128 having a pivotal connection at 129 with one arm of a bell crank 130 which is mounted on a pivot 131. To the other arm of this bell crank is pivoted at 132 a rod 133 having sliding fit within a bore 134 formed in a stem 135. Operatively mounted in the end abutment 40 is a rock shaft 136 with which three separate lifting cams 137 are made fast at their ends, this arrangement being such that said rock shaft will be turned on the movement of any one of the lifting cams. The stem 135 is pivoted at 138 to the forward end of one of these lifting cams, so that the upward movement of any one of the lifting

cams will cause the arresting pin 126 to be withdrawn from the path of the handle 76.

Rigidly secured to the outer face of each of the action slides 54 is an impact member 139 which extends well beyond the head piece 53 and is provided with a cam-like head 140 adapted to cooperate with its corresponding lifting cam 137, each of these impact members being suitably offset as at 141 in order to provide plenteous clearance about the coin space across which it extends as best shown in Fig. 2. Now, under this arrangement, when there is no coin reposing in the coin space of any one of the coin-controlled units, the arresting pin 126 will obstruct the downward stroke of the handle 76 before the lifting cams 137 can be raised by the cam-like heads 140 of the impact members, because the action slides 54 will yield sufficiently to compensate for the slight advancing movement of the carrier structure that is permitted to it by the limited downward stroke of the handle. On the other hand, if a coin is reposing between the action slide and head piece of any one of the coin-controlled units, then the action slide of that unit containing the coin will yield merely enough to clamp the coin with the result that on the initial downward stroke of the handle the lifting cams will be raised and the arresting pin withdrawn to make a clear path for the handle. As best shown in Fig. 5 the end of the arresting pin is suitably beveled at 142 so that the handle will itself serve as the means for moving the pin out of the way during its upward stroke, and in view of the sliding connection between the rod 133 and stem 135 this operation will be effected without turning the rock shaft. A tension spring 143 is associated with the bell crank 130 in order to reposition the arresting pin after each withdrawing action. Under this arrangement, the handle can be freely rotated in order to dial the brand of cigarettes which it is desired to purchase, but the customer can not depress the handle sufficiently to operate the machine and thereby obtain the cigarettes without first introducing the prescribed coin.

Suitable coin deposit slots 144, 145 and 146 may be provided in the housing structure 86 as well as in the cabinet front 72 for receiving half-dollars, quarters and dimes, respectively. Any suitable means may be employed for conducting the inserted coins from the deposit slots to the coin spaces of the coin-controlled units.

The operation of the several features of my invention has been described in connection with the description thereof and need not be repeated here. In the operation of the machine as an organization, the customer by turning the handle first dials the brand or kind of goods he desires to purchase, then he introduces the prescribed coin or coins and pulls the handle all the way down, with the result that the goods selected will be discharged into receptacle 26 while the change, if any be due, will be discharged into receptacle 39. The ratio between the gears 78 and 79 is such that each time a selection is dialed the positioning rollers 106 will engage peripheral seats or notches 105 in the ring plate 21 and the handle will be in position to be moved from the circular slot 89 into the elongated slot 90 where it cannot be turned. On the initial depression of the handle, the driving connection between gears 78 and 79 is disestablished and the magazine is positively held against movement by the locking mechanism. Until through the introduction of a coin or coins, as prescribed, the arresting pin 126 has been withdrawn, the handle cannot be depressed far enough to cause the delivery of goods and change; for it is only through the lodgment of a coin between one of the action slides and its head piece that the arresting pin will be caused to be withdrawn under the initial depression stroke of the handle. The slots 89 and 90 are closed at all times irrespective of the position of the handle, so that no trash can be poked into the machine and so that there can be no interference with the working parts of the machine from the outside thereof.

While I have illustrated and described the preferred form of construction for carrying my invention into effect, this is capable of variation and modification without departing from the spirit of the invention. I, therefore, do not wish to be limited to the precise details of construction set forth but desire to avail myself of such variations and modifications as come within the scope of the appended claims.

Having thus described my invention, what I claim is:

1. A machine of the kind set forth comprising a rotary structure; a movable coin-controlled structure; an operating element arranged to be rotated in the capacity of a rotary shaft for turning said rotary structure; and movable means in which said operating element is journaled for rotation adapted to be actuated by said operating element for imparting pulling movement to said coin-controlled structure.

2. A machine of the kind set forth comprising a rotary structure; a movable coin-controlled structure, an operating element adapted, when in normal position, to be employed as a rotary shaft, and further adapted, on movement to one side of normal position, to be employed as a lever; means for establishing an operative connection between said element and said rotary structure when the former is in normal position; and means for establishing a coupling connection between said element and said coin-controlled

structure as the former is moved to one side of normal position.

3. A machine of the kind set forth comprising a rotary structure; a movable coin-controlled structure; rocking means adapted on the rocking action thereof to be coupled with said coin-controlled structure for pulling the same; and a handle associated with said rocking means, to be employed as a lever for actuating the same, said handle being mounted to serve as a rotary driving shaft through which to impart rotary movement to said rotary structure.

4. A machine of the kind set forth comprising a rotary structure; a movable coin-controlled structure; rocking means adapted on the rocking action thereof to be coupled with said coin-controlled structure for pulling the same; a handle journaled for rotation in said rocking means capable of rocking the same; and means including gearing arranged to be actuated by the rotation of said handle controlling the operation of said rotary structure.

5. A machine of the kind set forth comprising a rotary structure; a reciprocating structure having a coin-controlled action; an operating element arranged to have rotary function for turning the rotary structure and to have pivoting function for imparting movement to said reciprocating structure; an actuable device for restraining the pivoting function of said element; and means arranged to be controlled by the coin-controlled action for controlling the operation of said restraining device.

6. A machine of the kind set forth comprising a rotary structure; an operating element arranged to have rotary movement for turning said structure and also to have pivoting movement; a locking device for said structure; and means arranged to be controlled by the pivoting movement of said element for controlling the operation of said locking device.

7. A machine of the kind set forth comprising a rotary structure; a reciprocating structure having a coin-controlled action; an operating element arranged to have rotary movement for turning the rotary structure and to have pivoting movement for imparting movement to the reciprocating structure; locking means for the rotary structure connected to be controlled by the pivoting movement of said element; and restraining means for the pivoting movement of said element connected to be controlled by the coin-controlled action of said reciprocating structure.

8. A machine of the kind set forth comprising a stationary structure having therein an aperture and a slot; a rotary structure; a coin-controlled structure movable along guides; an operating element adapted to have rotation in said aperture as a rotary shaft and to have pivoting movement in said slot as a lever; means arranged to be controlled by the rotation of said element controlling the operation of said rotary structure; and means under the control of the pivoting movement of said element arranged to be coupled with said coin-controlled structure for advancing the same along its guides.

9. In a machine of the kind set forth, the combination with a cabinet provided with a slot and a therewith communicating aperture, and containing a rotary structure and a reciprocating coin-controlled structure, of an operating element mounted in the cabinet to have rotary function for operating the magazine structure and to have pivoting function for operating the coin-controlled structure, said operating element being receivable in said slot and therewith communicating aperture and being constructed and arranged to have only pivoting function in said slot and only rotary function in said aperture.

10. In a machine of the kind set forth, the combination with a support and a rotary shaft, of a frame movable on a fulcrum on the support; a handle journaled for rotation in the frame and capable of moving the frame on its fulcrum; and gearing adapted to establish and disestablish a gearing connection between said handle and said shaft depending on the position of said handle and frame.

11. In a machine of the kind set forth, consisting of a structure to be moved, a support and an operating element movable on a fulcrum thereon, a bar pivoted on the support adapted to engage with said structure; a bell crank pivoted at one point on the support and at another point on the operating element; and an operative connection between said bell crank and bar to cause said bar to be moved in the capacity of a lever to engage and move said structure on the pivoting movement of said operating element.

12. Means for imparting movement to a rotary structure and to a carrier structure comprising a shaft for the rotary structure; a support; a single operating element comprising a rocker movable on a pivot on the support and a handle journaled for rotation in the rocker and capable of moving the rocker on its pivot; a separable gearing connection between said handle and said shaft; a pair of cooperating hooked bars pivoted respectively to said carrier structure and said rocker; and a bell crank affording a pivotal connection between said support and said rocker and link connected to the hooked bar of said rocker.

13. In a machine of the kind set forth, the combination of a rotary structure; an operating element arranged to have rotary movement and pivoting movemet; means adapted to establish a driving connection to operate the rotary structure from the rotary movement of said operating element; means for

locking the rotary structure; and means arranged to be controlled by the pivoting movement of said operating element controlling the operation of said locking means.

14. In a machine of the kind set forth, the combination with an operating element comprising a rocker mounted on a pivot and a handle journaled for rotation in the rocker and capable of pivoting the same, of a rotary structure arranged to be turned by the rotation of said handle; means movable to and from a position in which it locks the rotary structure against movement; and means constituting an operative connection between said rocker and sail locking means for controlling the locking means during the pivoting of said rocker.

15. In a machine of the kind set forth, the combination with an operating element comprising a rocker mounted on a pivot and a handle journaled for rotation in the rocker and capable of pivoting the same, of a rotary structure arranged to be turned by the rotation of said handle; means for locking the rotary structure in selected position comprising receiving means on the rotary structure and a pair of pivoted spring tensioned levers of which one has means adapted to interlock with said receiving means and tends normally to effect an interlocking engagement therewith and the other tends normally to arrest the interlocking tendency of the first lever; and an operative connection between said rocker and said second lever.

16. In a machine of the kind set forth, the combination with a rotary structure provided with a circular series of seats adapted to receive positioning means and a corresponding series of keeper devices, of an operating element comprising a rocker mounted on a pivot and a handle journaled for rotation in the rocker and capable of pivoting the same; means for establishing a driving connection between the handle and rotary structure; locking means movable to and from a position in which it effects interlocking engagement with a keeper device whereby to lock the rotary structure in the position in which it is positioned; and means constituting an operative connection between said rocker and locking means for controlling the locking means during the pivoting of said rocker.

17. In a machine of the kind set forth, means for locking a magazine structure against turning movement comprising a keeper device on the structure; a pivoted spring tensioned lever having means for interlocking with said keeper device and tending normally to effect an interlocking action with said keeper device; a second pivoted spring tensioned lever arranged to cooperate with the first and tending normally to arrest the interlocking tendency thereof; and means for moving the second lever in a direction to permit the first lever to be called into action.

18. A machine of the kind set forth comprising a rotary structure provided with seats adapted to receive station positioning means; a shaft for the rotary structure; an operating element comprising a rocker arranged for pivoting movement and a handle journaled for rotation in said rocker and capable of pivoting the same; a gearing connection between said handle and said shaft; an index connected to be operated from said shaft to indicate when through the turning of the handle a station positioning engagement is established for the rotary structure; and a coin-controlled structure arranged to be actuated by the pivoting movement of said rocker; the said gearing connection being arranged for separation on the pivoting of said rocker to prevent the turning of said shaft during the actuation of said coin-controlled structure.

19. A machine of the kind set forth comprising a rotary structure including a shaft by which to turn it; a rocker mounted for pivoting movement; a handle journaled for rotation in said rocker and capable of pivoting it; a coin-controlled structure arranged to be actuated by the pivoting movement of said rocker; and a gearing connection between said handle and said shaft, said gearing connection being arranged for separation on the pivoting of said rocker.

20. A machine of the kind set forth comprising a rotary structure including a shaft by which to turn it; a rocker mounted for pivoting movement; a handle journaled for rotation in the rocker and capable of pivoting the same; a coin-controlled structure arranged to be actuated by the pivoting movement of said rocker; a gearing connection between said handle and said shaft and arranged for separation on the pivoting of said rocker; means movable to and from a position in which it arrests the pivoting movement of said handle; and means under the control of the coin-controlled structure for controlling the operation of said arresting means.

21. A machine of the kind set forth comprising a rotary structure including a shaft by which to turn it; a rocker mounted for pivoting movement; a handle journaled for rotation in the rocker and capable of pivoting the same; a coin-controlled structure arranged to be actuated by the pivoting movement of said rocker; a gearing connection between said handle and said shaft and arranged for separation on the pivoting of said rocker; means movable to and from a position in which it locks the rotary structure against movement; and means under the control of the pivoting movement of said rocker controlling the operation of said locking means.

22. A machine of the kind set forth comprising a magazine adapted to be rotated; a coin-controlled structure adapted to be given pulling movement from one position to another; an operating element; means under the control of the operating element for imparting rotary movement to the magazine; and further means separate from said first means under the control of the operating element for imparting pulling movement to the coin-controlled structure.

In testimony whereof, I have signed my name to this specification.

CLIFTON W. NIXON.