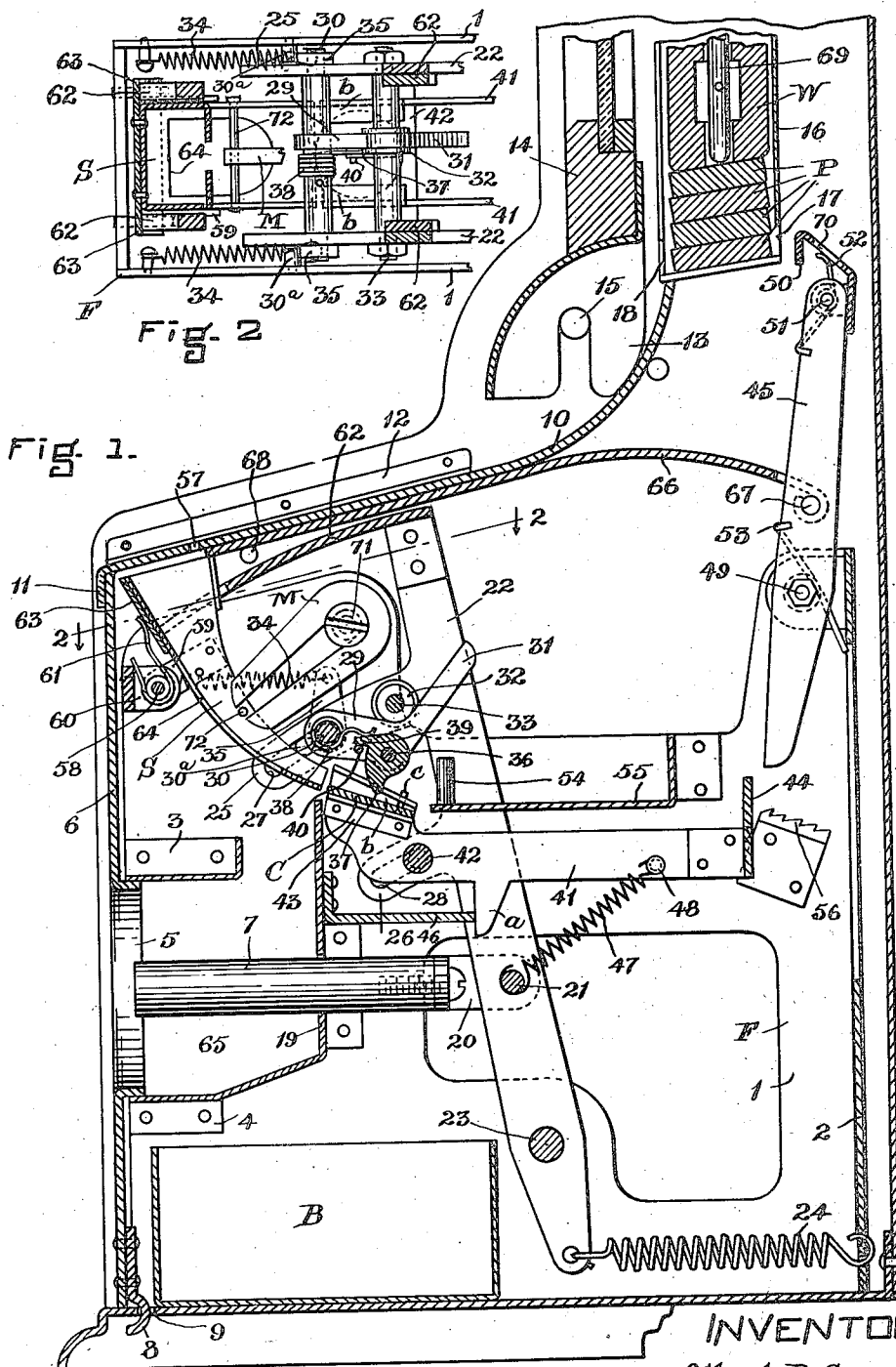


A. D. GROVER.
 COIN CONTROLLED VENDING MACHINE.
 APPLICATION FILED AUG. 10, 1916.

Patented June 4, 1918.
 4 SHEETS—SHEET 1.

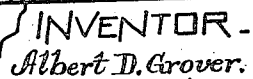
1,268,564.



INVENTOR.
 Albert D. Grover.
 by *A. A. Thomas*
 Att'y.

1,268,564.

4 SHEETS—SHEET 2.



by A. Alvarez Thomas
Att'y.

A. D. GROVER.
 COIN CONTROLLED VENDING MACHINE.
 APPLICATION FILED AUG. 10, 1916.

1,268,564.

Patented June 4, 1918.

4 SHEETS—SHEET 3.

Fig. 5.

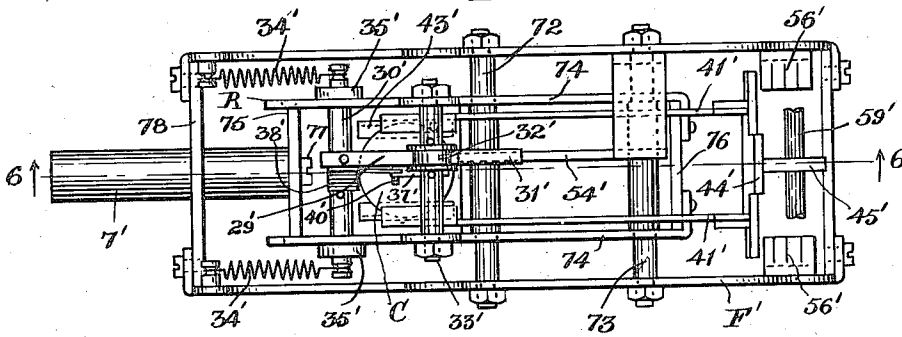


Fig. 6.

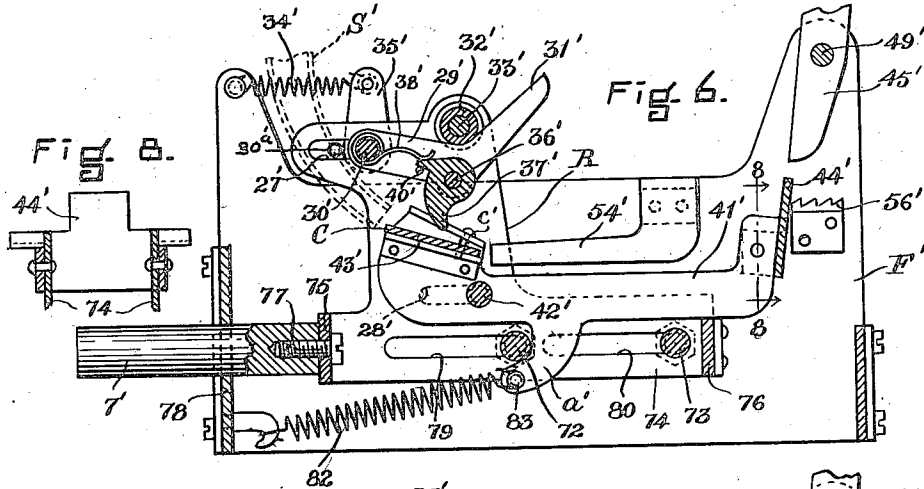
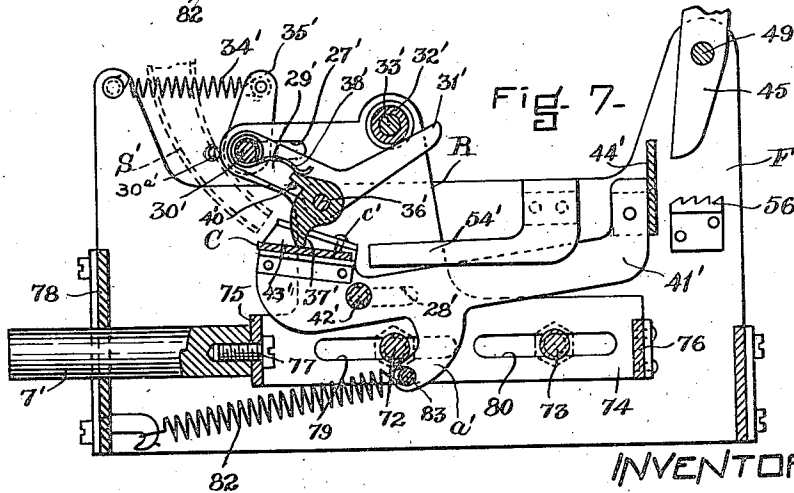


Fig. 7.



INVENTOR.

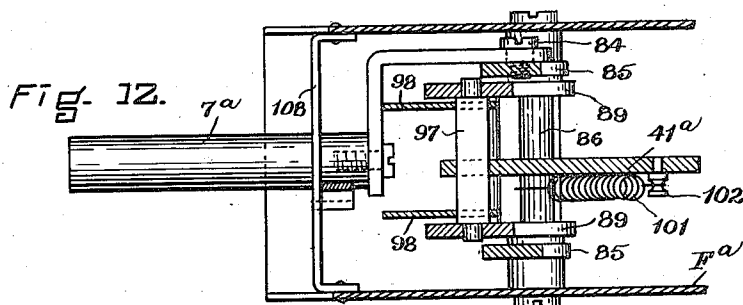
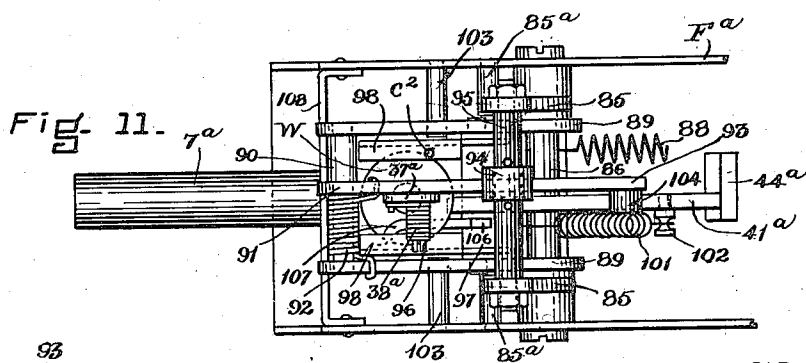
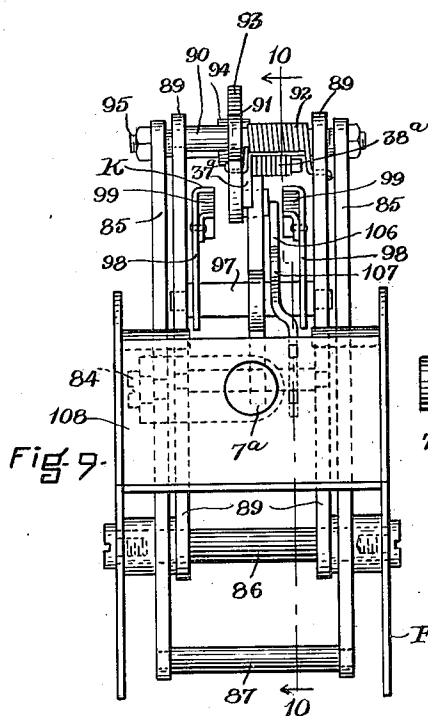
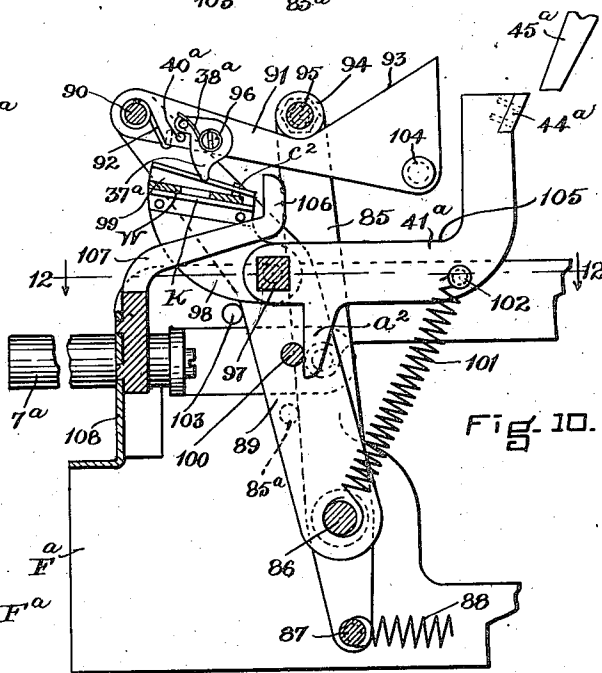
Albert D. Grover.

by A. Alexander Thomas
 Atty.

A. D. GROVER.
 COIN CONTROLLED VENDING MACHINE.
 APPLICATION FILED AUG. 10, 1916.

1,268,564.

Patented June 4, 1918.
 4 SHEETS—SHEET 4.



INVENTOR.
 Albert D. Grover.
 by A. Alexander Thomas
 Atty.

UNITED STATES PATENT OFFICE.

ALBERT D. GROVER, OF NEW YORK, N. Y., ASSIGNOR TO AUTOSALES GUM & CHOCOLATE COMPANY, A CORPORATION OF NEW YORK.

COIN-CONTROLLED VENDING-MACHINE.

1,268,564.

Specification of Letters Patent.

Patented June 4, 1918.

Application filed August 10, 1916. Serial No. 114,092.

To all whom it may concern:

Be it known that I, ALBERT D. GROVER, a citizen of the United States, and a resident of New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Coin-Controlled Vending-Machines, of which the following is a specification.

My invention relates to coin-controlled vending machines and embodies various features of novelty over machines heretofore constructed.

One of the main objects of my invention is to provide a coin-controlled mechanism which will reject perforated tokens, whether magnetic or non-magnetic, such as washers, rings and the like. For this purpose the coin-controlled mechanism includes a coin-testing member which is so constructed and arranged as to enter the opening of the perforated token and thereby prevent the proper positioning of a member which controls the ejection of the goods.

Another object of my invention is to provide a tiltable coin-chute which is automatically positioned, when the hand-operable mechanism is out of normal position, to refund the deposited coin.

I have also made provision for automatically closing the coin-slot when the goods-ejecting device or member of the coin-controlled mechanism is out of normal position. This occurs not only during each operation of the machine, but also when the supply of goods in the magazine becomes exhausted.

A further object of my invention is to provide means for intercepting magnetic tokens in the coin-chute and automatically stripping them from the magnet at each operation of the machine.

The above and other objects and advantages of my invention will become apparent from a detailed description of the accompanying drawings which form part of this specification and which illustrate three forms of my new coin-controlled mechanism. In the drawings,

Figure 1 is a longitudinal view in cross-section through the lower portion of a machine provided with my improved mechanism, the parts being shown in normal position.

Fig. 2 is a top plan view on line 2-2 of Fig. 1, showing a portion of the coin-controlled mechanism.

Fig. 3 is a view similar to Fig. 1, showing the parts in fully operated position.

Fig. 4 is a fragmentary detail view showing how the coin-testing finger of my invention enters the opening of a perforated token in the coin-carrier.

Fig. 5 is a plan view of a modified form of my invention, the parts being shown in normal position.

Fig. 6 is a cross-section on line 6-6 of Fig. 5.

Fig. 7 is a view similar to Fig. 6, showing the parts in initially operated position, with the ejector-controlling member positioned through the medium of the coin into an operative path of movement.

Fig. 8 is a fragmentary detail view on line 8-8 of Fig. 6, showing certain details of construction.

Fig. 9 is a front view of a still further modification of my coin-controlled mechanism, the parts being shown in normal position.

Fig. 10 is a cross-section on line 10-10 of Fig. 9, looking in the direction of the arrows.

Fig. 11 is a top plan view of the mechanism shown in Figs. 9 and 10; and

Fig. 12 is a cross-section on line 12-12 of Fig. 10.

I will first describe the form shown in Figs. 1 to 4, inclusive. In the drawings, I have shown only the lower part of the casing in which the ejecting mechanism is housed. The various parts of this mechanism are mounted on a metallic framework indicated as a whole by F; which is insertible into and removable from the casing as a unit. This framework comprises side walls 1 and a rear wall or plate 2. If desired, the front ends of the side walls may be braced by cross pieces 3 and 4 which are spaced to receive a cylindrical extension 5 of the front plate 6. The cylindrical extension 5 forms a circular opening through which the plunger 7 is operated by hand. The front plate 6 is removably secured to the casing in any suitable manner, as by means of the hook or hinge piece 8 extending through an opening 9 in the base plate of the casing. The front plate 6 is locked by the top plate 10 which has a downwardly extending flange 11 overlapping the top edge of the plate 6. The top plate 10 slides in guide pieces 12 and is held locked by the extensions 13 at the bottom of the front

panel 14, which covers the magazine section of the casing. This panel 14 rests on lugs 15 and is locked in place by any suitable lock. The top plate 10 extends to the bottom of the goods magazine 16 and in that way forms a guiding chute for the ejected package. The magazine 16 is at its lower end provided with a rear opening 17 and with a front delivery opening 18. The packages of goods in the magazine are indicated at P.

When it is necessary to open the front plate 6, the operator first unlocks and removes the front panel 14, and then he slides out the top plate 10 whereupon the front plate 6 may be swung open and removed. The hand-operable push-plunger 7 extends through an opening in the partition 19 arranged between the sides of the framework F and has secured thereto at its inner end an angle piece 20 which is connected with the pin 21 carried by the lever 22. This lever is pivoted on the stud or rock shaft 23 mounted between the sides of the framework F. A contractile spring 24, connected at one end to the lower end of the lever and at its other end to the framework F, normally holds the lever 22 in the position shown in Fig. 1. In the particular construction shown in the drawings, the lever 22 really consists of a pair of spaced members, as indicated in Fig. 2. This, however, is merely a matter of mechanical preference, and for the sake of brevity and clearness, I will refer to those two spaced members as the lever 22.

The lever 22 is provided with a pair of extensions 25 and 26. The extension 25 has a curved slot 27, while the extension 26 is provided with a curved slot 28. The curve of these slots is formed from the pivot point 23 of the lever as the center. On the extension 25 of the hand lever 22 is mounted an arm 29 by means of the pin or stud 30 engaging the slot 27. The arm 29 is at its free end provided with a cam extension 31 arranged to engage the roller 32 mounted on the stud 33 of the lever 22. The arm 29 is normally held in the position shown in Fig. 1 by the roller 32 against the action of the contractile springs 34, which are secured at their front ends to the framework F and the other ends to the upstanding arms 35 secured to the ends of the stud shaft or pin 30. The action of the springs 34 is such as to throw the cam extension 31 upwardly. The frame F has a fixed stop 30^a adapted to engage the stud 30 for limiting the forward or return movement of the arm 29, whereby the stud 30 is normally held at the rear end of the slot 27.

On the pin 36 of the arm 29 is pivoted the coin-testing finger 37 which is adapted to be brought into engagement with the deposited coin. A coiled spring 38, mounted on the stud shaft 30, bears at its free end against the coin-testing finger 37 and holds the lug

39 thereof against the stop 40 on the arm 29. In this way the finger 37 is normally held in the position shown in Fig. 1.

On the extension 26 of the lever 22 is pivoted the member 41 by means of the pin or stud 42 engaging in the slot 28. For convenience of mechanical construction, the member 41, like the lever 22, consists of a pair of spaced arms or limbs, as indicated in Fig. 2. This particular construction, however, is not necessary, so for the sake of clearness I will refer to the arms comprising the part 41 as a single member, especially since it so appears in Fig. 1. The front end of the member 41 is provided with a coin-carrier 43, while the rear end is provided with an extension 44 adapted to engage the lower end of the goods ejector 45. Although I have shown the ejector-actuating element 44 and the coin-carrier 43 as mounted upon the same member or support 41, I do not confine myself to this exact construction. Also, it is not necessary that the extension 44 engage a separate ejecting member like the lever 45, as it is obvious that the part 44 might be so constructed and arranged as to engage the goods directly. For the sake of convenience and clearness I will refer to the member 41 as the ejector-controlling member.

The member 41 is provided with a downwardly extending projection *a* which normally rests against the rearward extension 46 carried by the partition 19, whereby the movement of the lever 22 under the action of the spring 24 is limited.

The coin-carrier 43 may be of any suitable construction and is shown in the drawings as consisting of a pair of grooved or channeled members *b* between which the deposited coin is received and retained. The position of a proper coin in the coin-carrier is indicated at C in Fig. 1. The coin-carrier 43 is provided with any suitable means—such as the pins *c* for arresting the movement of the coin as it slides into the coin-carrier and thereby insuring its proper position within the carrier. The coin-carrier 43 is normally held in the position shown in Fig. 1 by means of the contractile spring 47 which is at one end connected to the stud 48 of the member 41 and at the other end to the pin 21 on the lever 22.

The ejecting lever 45 is pivoted to the framework F at 49 and is at its upper end provided with an ejecting finger 50. This finger is pivoted to the upper end of the lever 45 at 51 and is normally held in the position shown in Fig. 1 by the spring 52 coiled about the pin 51. When the lever 45 is rocked forwardly, the finger 50 forces the bottom package P through the delivery opening 18 on to the top plate 10, whence it is removed by the purchaser. As soon as the bottom piece is rejected, the column of goods bears down on the finger 50 which, however, yields under the pressure and thereby enables

the lever 45 to be returned to normal position under the action of the spring 53 arranged in any suitable manner, as by being coiled around the pivot shaft 49 of the lever 45.

The operation of the coin-controlled mechanism as so far described will now be understood and may be briefly stated as follows: When the hand plunger 7 is pushed in without the insertion of a coin, the lever 22 will be rocked rearwardly and carry with it the coin-carrier 43 and the ejector-controlling member 41. During the initial movement of the lever 22 there is no bodily movement of the arm 29 and the member 41, owing to the fact that the studs 30 and 42 engage in the arcuate slots 27 and 28, respectively. There is, however, a downwardly rocking movement of the arm 29 as soon as the lever 22 is moved, owing to the fact that the roller 32 rides over the cam extension 31. Therefore, as soon as the plunger 7 is pushed in, the arm 29 is depressed and the coin-testing finger 37 is carried toward the coin-carrier. It will be understood that this finger is arranged centrally, or approximately so, of the coin-carrier. Now, if there is no coin in the coin-carrier, the finger 37 will simply pass between the spaced supporting pieces 6 of the coin-carrier 43, and as soon as the pivoted studs 30 and 42 engage the front ends of the slots in which they work, continued rearward movement of the lever 22 will bodily carry the arm 29 and member 41 rearwardly. However, the member 41 will remain in its inoperative position—that is to say, it will move rearwardly without the extension 44 engaging the lever 45. The result is that no goods will be delivered.

However, when there is a proper coin in the coin-carrier, as indicated at C in Fig. 1, the initial movement of the lever 22 brings the coin-testing finger 37 against the upper face of the coin, and by bearing down on the coin the finger rocks the member 41 about its pivot 42 thereby throwing the extension 44 upwardly into a path of travel including the lower end of the lever 45. This operative path of travel of the member 41 is shown in Fig. 3, where the ejecting lever 45 has been rocked by the extension 44 into ejecting position. The ejected package is indicated at P'.

It is, of course, necessary that the coin be ejected from the coin-carrier at every operation of the machine, so that only one piece of goods may be secured for one coin. In the path of the coin-carrier 43 is arranged a fixed pin or lug 54 mounted on a suitable support, such as the bracket 55 extending from one wall of the framework F. The pin or lug 54 is arranged substantially midway of the spaced supporting members which form the coin-carrier 43.

As the coin is carried toward the pin 54, the latter engages the coin at the rear edge and gradually forces the same forwardly out of the coin-carrier. Fig. 3 shows the ejected coin at C'. The discharged coin 70 falls into the money box B at the bottom of the casing. During the ejection of the coin, the finger 37 will rock clockwise (as viewed in Figs. 1 and 3) and not interfere with the discharge of the coin. From Fig. 3 it will be seen that the ejection of the coin takes place at about the same time as the ejection of the goods, although this precise timing of the two parts is not necessary. All that is necessary is that the coin shall not be discharged until after ejection of the goods is assured.

In order to compel full inward movement of the lever 22, I provide the usual full-stroke device which is common in machines of this class. To the sides of the framework F are secured racks 56 with which the extension 44 on the member 41 is adapted to engage. When the plunger is pushed in without the deposit of a coin, the extension 44 rides beneath the teeth of the racks 56. However, when the member 41 is elevated through the medium of the coin in the coin-carrier, as above described, the extension 44 is raised into engagement with the teeth of the racks, so that return movement of the member 41 (and consequently of the lever 22) is prevented until the extension 44 is clear of the teeth of the racks 56.

The top plate 10 of the casing is provided with a coin-entrance slot 57 from which the coin passes into the coin-chute indicated as a whole by S. When the parts are in normal position, as indicated in Fig. 1, the lower end of the coin-chute is in alignment with the coin-carrier 43 and thus safely guides the deposited coin into the coin-carrier. The coin-chute S is hinged at 58 in the framework F. This pivotal mounting of the coin-chute may be carried out in any convenient manner—as by means of bracket pieces 59 secured to the side walls of the coin-chute and mounted upon the supporting pin or stud 58 which is carried by ears or lugs 60 on the framework F. A spring 61, coiled about the pin 58 and bearing at its free end against the coin-chute S, normally tends to rock the coin-chute into the position shown in Fig. 3. Downward movement of the coin-chute is limited by a suitable fixed stop—such as the cross-piece 3. The coin-chute is normally held in the position shown in Fig. 1 by means connected with the lever 22, so that, as long as the lever is in normal position, the coin-chute will be in position to guide the deposited coin into the coin-carrier 43. This controlling means for the coin-chute S, in the specific construction shown in the drawings, comprises a bifurcated extension 62 carried

at the upper end of the lever 22. At its front ends, the bifurcation 62 engages the extending ends of the plate 63 carried by the coin-chute, as clearly shown in Figs. 1 and 2. Any suitable connection may be used for holding the coin-chute in coin-guiding position as long as the hand-operable lever 22 is in normal position. The bottom of the coin-chute is provided with an opening 64 which is slightly narrower than the diameter of a proper coin required to operate the machine, so that a smaller coin will drop through the opening 64 into the refunding chute or chamber 65.

It will be seen from the foregoing that a slight inward movement of the plunger 7 removes the restraining action of the lever 22 on the coin-chute and allows the spring 61 to tilt the coin-chute downwardly into a coin-refunding position. So that, should a person through carelessness or otherwise push in the plunger before depositing a coin, the latter will be returned to the intending purchaser through the refunding chute or chamber 65. The same thing would happen if the plunger should for some reason or other not return to its normal position. In other words, unless the coin-carrier 43 is in proper coin-receiving position, the deposited coin is automatically refunded. It will be noted that the coin-refunding operation as above described takes place independently of the ejecting or delivery mechanism of the machine. In order to prevent the loss of a coin when the delivery mechanism is not in proper position (as by being out of normal position), I provide a slot-closing device controlled by the ejecting lever 45. This device, in the particular form of construction illustrated in the drawings, merely consists of a plate 66 connected at its rear end with the lever 45 by means of the pin 67. The forward end of the plate 66 is supported or guided by the pin 68 carried by the framework F. When the lever 45 is in normal position, the forward end of the plate 66 leaves the coin-entrance slot 57 open. However, as soon as the lever 45 moves out of normal position, as during its ejecting operation, the plate 66 slides across the coin-entrance slot and closes the same, as illustrated in Fig. 3. Should the lever 45 for any reason fail to return to its normal position, the coin-entrance slot 57 remains closed. I utilize this slot-closing function of the lever 45 to keep the slot closed when the supply of goods is exhausted. For this purpose I have provided means to prevent return of the lever 45 to normal position when the magazine is empty. The weight W in the magazine is provided with a slidable pin 69 which is adapted to enter the opening 70 in the ejecting piece 50 of the lever 45, thereby locking the latter against return movement. In order to prevent mag-

netic disks of the size of a proper coin from reaching the coin-carrier 45, I arrange a fixed magnet M so that its polar ends extend into the coin-chute in close proximity to the path of travel of the deposited disk. The magnet is secured in place by any suitable means, such as the screw 71 which is secured to the side of the framework F. The coin-chute S is provided with a cross pin 72 arranged to lie normally between the poles of the magnet, as shown in Fig. 1. When a magnetic disk is deposited it will be caught by the magnet and held against the poles thereof. When the plunger 7 is pushed in, the coin-chute S will be rocked downwardly, as above explained. During this movement of the coin-chute, the pin 72 will strip the caught magnetic disk from the magnet and allow the same to drop into the refunding recess or chamber 65.

Instead of mounting the coin-carrier and associated parts on a swinging lever 22, I may provide a slidable support for those parts. This modification is illustrated in Figs. 5 to 8, inclusive, which I will now describe. The framework F', which is adapted to be inserted into the casing of the machine, similarly to the framework F, is provided with a pair of cross pins 72 and 73, by means of which the slide or carriage, indicated as a whole by R, is slidably mounted. This slide consists of a pair of members 74 which are connected at the front by the cross-piece 75 and at the rear by the cross-piece 76. The plunger 7' is rigidly connected to the slide or carriage R in any suitable way—as by a screw 77 passing through the cross-piece 75. The front wall 78 of the framework F' is provided with an opening to accommodate the plunger 7'. The slide or carriage R is provided with slots 79 and 80 through which the cross-rods 72 and 73 extend. The length of the slots 79 and 80 limits the movements of the slide R.

At its upper end the slide R is provided with a slot 27' and below that is a slot 28'. These two slots correspond with the slots 27 and 28, respectively, of the lever 22 in the construction shown in Figs. 1 and 4. Since the coin-testing finger, coin-carrier and ejector-controlling member of Figs. 5 to 8 inclusive, are practically identical in construction with the corresponding parts of the embodiment in Figs. 1 to 4, inclusive, and operate in exactly the same way, I do not deem it necessary to repeat in detail the construction and operation of the parts shown in Figs. 5 to 8, inclusive, as such repetition would be useless duplication of previous portions of the specification. I will merely explain that in Figs. 5 to 8 inclusive, I have used the same reference numerals that I used in Figs. 1 to 4, inclusive, to indicate corresponding parts, except that I have added to the numerals a prime mark. In

the form shown in Figs. 5 to 8, inclusive, the parts are returned to normal position by the spring 82 which is at its front end secured to the framework F' and at its other end to the pin or stud 83 carried by the extension a' of the member 41'. The spring 82 also serves to normally hold the member 41' and the coin-carrier 43' in the position shown in Fig. 6, the pin 72 acting as a stop for the downward movement of the member 41'. In Figs. 5, 6 and 7 the deposited coin is indicated at C and is in proper position in the coin-carrier. The coin-ejector 54' is constructed and arranged similarly to the coin-ejector of Figs. 1 to 4, inclusive, except that the upstanding pin or lug 54 is not present. The precise form of the coin-ejector is, of course, immaterial.

It will be understood that the slot-closing, coin-refunding and magnetic attachments shown in Figs. 1 to 4, inclusive, can be used in conjunction with the mechanism of Figs. 5 to 8, inclusive. The modification shown in Figs. 5 to 8, inclusive, is in some ways preferable to that shown in the previous figures. One of the advantages of the modification of Figs. 5 to 8, is economy of space, for it will be seen that the mechanism is more compact and requires much less room than the embodiment shown in Figs. 1 to 4.

In Figs. 9 to 12, inclusive, I have shown a third mechanical embodiment of my invention. In these figures the plunger 7^a is pivotally connected at 84 to the lever 85 which is pivotally mounted on the shaft 86 carried by the framework F^a. The lever 85 is preferably formed of two members, as indicated in Fig. 9, but for the sake of brevity I will refer to these connected members as a single lever which in effect they are. The lever 85 is at its lower end provided with a cross pin 87 to which one end of the return spring 88 is connected. The other end of this spring is secured to the fixed framework 7^a, so that the normal tendency of the spring will be to maintain the plunger 7^a and the lever 85, and all connected parts, in normal position. The forward movement of the lever 85 under the action of the spring 88 is limited by the fixed stop pin or pair of stop pins 85^a provided at a suitable point in the framework F^a. On the shaft 86 is pivoted the arm 89 which, for the sake of mechanical convenience, like the lever 85, is built of two similar members. The arm 89 carries at its upper end a pin 90 on which is pivoted the arm 91. A spring 92, coiled about the pin 90 and bearing at its free end against the arm 91, normally tends to throw the latter upwardly. The arm 91, as seen from Fig. 10, is formed with a cam surface 93 over which rides the roller 94 mounted on the pin or rod 95 carried at the upper end of the lever 85. The pivoted arm 91 corresponds to the arm

29 of Fig. 1, while the roller 94 corresponds to the roller 32 of Fig. 1.

On the pin or stud 96 of the arm 91 is pivoted the coin-testing finger 37^a which is normally held by the spring 38^a against the stop 40^a, so that the normal position of the coin-testing finger is as shown in Fig. 10. In the two sections of the arm 89 is pivotally mounted a square shaft 97. Fixed upon this shaft are the spaced members 98 which are provided at their upper ends with coin-receiving grooves or channels 99. The members 98 with their coin-receiving channels constitute the coin-carrier which may conveniently be referred to as a whole by the reference letter K. This coin-carrier K is provided with a pin c' for properly positioning the coin.

Also mounted upon the square shaft 97 is the member 41^a which is at its upper or free end provided with an extension 44^a adapted to engage the lower end of the lever 45^a, which is similar to the lever 45 in the construction shown in Figs. 1 to 4, inclusive. The member 41^a is provided with an extension a'' which is normally held against the stop 100 on the lever 89 by the contractile spring 101. One end of this spring is connected to the shaft 86 and the other to the pin or stud 102 on the member 41^a. Since the coin-carrier K and the member 41^a move in unison through the connecting shaft 97, the spring 101 also holds the coin-carrier normally in the position shown in Fig. 10. Also, the action of the spring 101 is to hold the arm 89 normally against the fixed stop or pair of stops 103.

The operation of the modification shown in Figs. 9 to 12, inclusive, is similar to the operation of the two forms of construction previously described and may be briefly stated as follows: When the rod 7^a is pushed in without a coin having been previously deposited, it will rock the lever 85 and carry the roller 94 over the cam surface 93 of the arm 91, thereby depressing this arm and bringing the lateral lug 104 of the arm 91 into engagement with the member 41^a at approximately the point 105. Continued rearward movement of the lever 85 will carry the member 41^a and all connected parts along with it, so that the entire mechanism moves rearwardly toward the ejecting member. However, the extension 44^a of the member 41^a rides beneath the lever 45^a, thus causing no ejection of the goods.

However, when a proper coin is deposited and the plunger 7^a pushed in, the depressing of the arm 91 carries the coin-testing finger 37^a against the top surface of the coin in the coin-carrier K, with the result that the coin-carrier is pushed downwardly and the rear end of the member 41^a thrown upwardly into a path of travel including the ejecting member 45^a.

Should the deposited check be a washer or other perforated token, as indicated at W in Figs. 10 and 11, the point of the coin-testing finger 37^a will enter the opening of the washer and thereby fail to throw the rear end of the member 41^a into operative position. The deposited token, whether a proper coin or a perforated disk, is ejected from the coin-carrier toward the end of the forward movement of the parts by the fixed pin or extension 106 carried at the free end of a suitable bracket 107 which is mounted in the front wall 108 of the framework F^a. During the ejection of the coin or washer, the finger 37^a is rocked forwardly and, by thus yielding, it permits discharge of the deposited check.

It will, of course, be understood that a machine with the form of coin-controlled mechanism shown in Figs. 9 to 12, inclusive, may be provided with a coin-refunding, slot-closing, and magnetic attachments shown in Figs. 1 to 4, inclusive.

Although I have herein shown three particular mechanical embodiments of the various features of my invention, I will have it understood that I do not intend to be limited to the structural details herein set forth, as it is obvious that my invention may be mechanically carried out in other ways than those shown and described by way of illustration.

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

1. In a coin-controlled vending machine, a movable support, a pivoted coin-carrier mounted on said support and adapted to receive the deposited coin or check, a member pivotally mounted on said support, a coin-testing finger pivoted on said member and adapted to engage the coin or check in said coin-carrier at or near the center thereof and thereby rock said coin-carrier, said finger being adapted to enter the opening of a washer on said coin-carrier and thereby prevent rocking of said coin-carrier into operative position, normally inoperative ejecting means controlled by said coin-carrier and adapted to be moved into ejecting position when said coin-carrier is rocked through the medium of the coin therein, and means for manually operating said support.

2. In a coin-controlled vending machine, a movable support, a coin-carrier pivotally mounted on said support, a pivoted member carried by said support, a coin-testing finger pivoted on said member and adapted to engage the coin or check in said carrier, whereby said coin-carrier is rocked, and a fixed member for ejecting the coin or check from said coin-carrier, said finger swinging about its pivot to permit the ejection of the coin or check, whether said coin or check be a solid disk or a washer.

3. In a coin-controlled vending machine, a movable support, a coin-carrier and a coin-testing finger both pivotally mounted on said support, said finger being arranged to test the deposited check in said coin-carrier by engaging said check at or near the center thereof, and a fixed member for ejecting the coin or check from said coin-carrier, said finger being adapted to swing about its pivot to permit the ejection of said coin or token, whether the same be a solid disk or a washer.

4. In a coin-controlled vending machine, a rearwardly movable support, a pivoted coin-carrier adapted to receive the deposited coin or check, a member movably mounted on said support, a coin-testing finger pivoted on said member and adapted to engage the coin or check in said coin-carrier at or near the center thereof, and means for ejecting the coin or check from said coin-carrier during the rearward movement thereof, said finger being adapted to swing forwardly to permit the ejection of said coin or check, whether the same is a solid disk or a washer.

5. In a coin-controlled vending machine, movable means for receiving and supporting the deposited coin, a movable support, a member pivoted on said support, a coin-testing finger pivoted on said member and adapted to engage a coin on said supporting means, said finger being adapted to enter the hole of a deposited washer, and means to eject the deposited token from said supporting means, said finger swinging on its pivot to permit removal of said token, whether the same be a solid or a perforated disk.

6. In a coin-controlled vending machine, a coin-carrier, a pivoted member, a finger pivoted on said member and adapted to enter the hole of a washer in said coin-carrier, and means for ejecting the deposited token from said coin-carrier, said finger being adapted to swing about its pivot to permit ejection of said token, whether the same is a solid or a perforated disk.

7. In a coin-controlled vending machine, a movable support, an actuating member and a coin-carrier both movably mounted on said support and bodily movable therewith, said member being controlled by said coin-carrier and having a normally inoperative path of travel, an arm also movably mounted on said support, a finger pivoted on said arm and adapted to engage the token in said coin-carrier at or near the center thereof, hand-operable means engaging said arm to move the same toward said coin-carrier, whereby the latter is rocked through the medium of the coin therein to position said member into an operative path of travel, said finger being adapted to enter the hole of a washer in said coin-carrier and thereby prevent operative movement thereof, and fixed means to eject the de-

posited token from said coin-carrier, said finger swinging about its pivot to permit ejection of said token, whether the same be a solid or a perforated disk.

8. In a coin-controlled vending machine, a hand-operable support, an actuating member and a coin-carrier both movably mounted on said support and bodily movable therewith, said member being controlled by said coin-carrier and having a normally inoperative path of travel, an arm also movably mounted on said support, a finger pivoted on said arm and adapted to engage the token in said coin-carrier at or near the center thereof, means on said support for engaging said arm to move the same toward said coin-carrier, whereby the latter is rocked through the medium of the coin therein to position said member into an operative path of travel, said finger being adapted to enter the hole of a washer in said coin-carrier and thereby prevent operative movement thereof, and fixed means to eject the deposited token from said coin-carrier, said finger swinging about its pivot to permit ejection of said token, whether the same be a solid or a perforated disk.

9. In a coin-controlled vending machine, a hand-operable slidable carriage, an actuating member and a coin-carrier both movably mounted on said carriage and bodily movable therewith, said member being controlled by said coin-carrier and having a normally inoperative path of travel, an arm also movably mounted on said carriage, a finger pivoted on said arm and adapted to engage the token in said coin-carrier at or near the center thereof, means on said carriage for engaging said arm to move the same toward said coin-carrier, whereby the latter is rocked through the medium of the coin therein to position said member into an operative path of travel, said finger being adapted to enter the hole of a washer in said coin-carrier and thereby prevent operative movement thereof, and fixed means to eject the deposited token from said coin-carrier, said finger swinging about its pivot to permit ejection of said token, whether the same be a solid or a perforated disk.

10. In a coin-controlled vending machine, a movable support, an actuating member and a coin-carrier both pivotally and slidably mounted on said support, said member being controlled by said coin-carrier and having a normally inoperative path of travel, an arm also pivotally and slidably mounted on said support, a finger pivoted on said arm and adapted to engage the token in said coin-carrier at or near the center thereof, means on said support for engaging said arm to move the same toward said coin-carrier, whereby the latter is rocked through the medium of the coin therein to position said member into an operative path of

travel, said finger being adapted to enter the hole of a washer in said coin-carrier and thereby prevent operative movement thereof, and fixed means to eject the deposited token from said coin-carrier, said finger swinging about its pivot to permit ejection of said token, whether the same be a solid or a perforated disk.

11. In a coin-controlled vending machine, a slidable carriage, an actuating member and a coin-carrier both pivotally and slidably mounted on said carriage, said member being controlled by said coin-carrier and having a normally inoperative path of travel, an arm also pivotally and slidably mounted on said carriage, a finger pivoted on said arm and adapted to engage the token in said coin-carrier at or near the center thereof, means on said slidable carriage for engaging said arm to move the same toward said coin-carrier, whereby the latter is rocked through the medium of the coin therein to position said member into an operative path of travel, said finger being adapted to enter the hole of a washer in said coin-carrier and thereby prevent operative movement thereof, and fixed means to eject the deposited token from said coin-carrier, said finger swinging about its pivot to permit ejection of said token, whether the same be a solid or a perforated disk.

12. In a coin-controlled vending machine, a hand-operable support, an actuating device pivotally and slidably mounted on said support and normally held in an inoperative path of movement, a member pivotally and slidably mounted on said support, a coin-testing finger pivoted on said member, means actuated by said finger through the medium of the deposited coin to position said device into an operative path of travel, said finger being adapted to enter the hole of a washer and thereby prevent operation of said positioning means, and means for removing the deposited coin or check from between said finger and said positioning means, said finger swinging about its pivot to permit removal of said coin or check, whether the same is a solid or a perforated disk.

13. In a coin-controlled vending machine, a slidable carriage adapted to be operated by hand from the outside of the machine, an actuating device pivotally and slidably mounted on said carriage and normally held in an inoperative path of movement, a member pivotally and slidably mounted on said carriage, a coin-testing finger pivoted on said member, means actuated by said finger through the medium of the deposited coin to position said device into an operative path of travel, said finger being adapted to enter the hole of a washer and thereby prevent operation of said positioning means, and means for removing the deposited coin or check from between said finger and said

positioning means, said finger swinging about its pivot to permit removal of said coin or check, whether the same is a solid or a perforated disk.

- 5 14. In a coin-controlled vending machine, a movable support, a pivoted coin-carrier and a pivoted member both mounted on said support, a coin-testing finger pivoted on said member, means for rocking said member and
10 thereby moving said finger against the coin in said coin-carrier whereby motion is transmitted to said coin-carrier, said finger being adapted to enter the hole of a washer and thereby prevent operative movement of said
15 coin-carrier, and means for ejecting the deposited token from said coin-carrier, said finger being adapted to swing out of the way during the ejection of said token.
- 15 15. In a coin-controlled vending machine, a hand-operable support, a coin-carrier mounted thereon, and a coin-testing finger pivotally and slidably mounted on said support and adapted to engage the coin in said coin-carrier.
- 20 16. In a coin-controlled vending machine, a slidable carriage adapted to be operated by hand from the outside of the machine, a coin-carrier pivotally and slidably mounted on said carriage, and a coin-testing finger
25 also pivotally and slidably mounted on said carriage and adapted to engage the coin in said coin-carrier.
- 30 17. In a coin-controlled vending machine, a hand-operable support, an actuating member pivotally and slidably mounted on said support, a coin-carrier also pivotally and slidably mounted on said support and adapted to control said member, and means for actuating said coin-carrier on said support
35 through the medium of the deposited coin to position said member into an operative path.
- 40 18. In a coin-controlled vending machine, a hand-operable support, an actuating member pivotally and slidably mounted on said support, a coin-carrier also pivotally and slidably mounted on said support and adapted to control said member, and a pivoted coin-engaging finger for actuating said coin-carrier on said support through the medium
45 of the deposited coin to position said member into an operative path.
- 50 19. In a coin-controlled vending machine, a coin-support, a hand-operable member, a spring-pressed finger pivoted on said member and arranged to engage the coin on said support, said finger being adapted to enter the hole of a washer on said coin-support, and means independent of said finger for
55 removing a washer from said coin-support, said finger being rocked into unobstructing position by the coin or washer during its removal from said support.
- 60 20. In a coin-controlled vending machine, a casing having a coin-entrance slot, a pivot-

ed ejecting lever, hand-operable coin-controlled mechanism for actuating said lever through the medium of the deposited coin, said lever being mounted separately from and independently of said mechanism, means for locking said lever in actuated position when the supply of goods is exhausted, said locking means permitting said mechanism to return to normal position, and a slot-closing member connected with
70 said lever for automatically closing said coin-entrance slot when said lever is in actuated position, said member being in unobstructing position when said lever is in normal position.

21. In a coin-controlled vending machine, a casing having a coin-entrance slot, a pivoted ejecting lever, hand-operable coin-controlled mechanism for actuating said lever through the medium of the deposited
75 coin, said lever being mounted separately from and independently of said mechanism, and a slot-closing member connected with said lever for automatically closing said coin-entrance slot when said lever is out
80 of normal position and irrespective of the position of said mechanism, said member being in unobstructing position when said lever is in normal position.

22. In a coin-controlled vending machine, a casing having a coin-entrance slot and a refunding passage, means for receiving and supporting the deposited coin in operative position, an ejecting member, hand-operable mechanism for actuating said member
85 through the medium of the deposited coin, a movable coin-chute at all times in register with said coin-entrance slot, and means whereby said coin-chute is held in a position to receive and guide the coin from said
90 slot to said coin-supporting means when said mechanism is in normal position, said coin-chute being automatically moved into a position to receive and guide the deposited coin into said refunding passage when said
95 mechanism is out of normal position.

23. In a coin-controlled vending machine, a casing having a coin-entrance slot and a refunding passage, means for receiving and supporting the deposited coin in operative
100 position, an ejecting member, hand-operable mechanism for actuating said member through the medium of the deposited coin, a movable coin-chute at all times in register with said coin-entrance slot, and means carried
105 by said mechanism for holding said coin-chute in a position to receive and guide the coin from said slot to said coin-supporting means when said mechanism is in normal position, said coin-chute being auto-
110 matically moved into a position to receive and guide the deposited coin into said refunding passage when said mechanism is out of normal position.

24. In a coin-controlled vending machine, 115

a casing having a coin-entrance slot and a refunding passage, means for receiving and supporting the deposited coin in operative position, an ejecting member, hand-operable mechanism for actuating said member through the medium of the deposited coin, a spring-pressed pivoted coin-chute at all times in register with said coin-entrance slot, and means whereby said coin-chute is held in a position to receive and guide the coin from said slot to said supporting means when said mechanism is in normal position, said coin-chute being automatically tilted into a position to receive and guide the deposited coin into said refunding passage when said mechanism is out of normal position.

25. In a coin-controlled vending machine, a casing having a coin-entrance slot and a refunding passage, an adjustable coin-chute at all times in register with said coin-entrance slot and normally in a position to receive and guide the deposited coin from said slot into operative position, and hand-operable mechanism normally adapted to hold said coin-chute in normal position, but causing it to move into position to receive and guide the deposited coin into said refunding passage when said mechanism is moved out of normal position.

26. In a coin-controlled vending machine, a casing having a coin-entrance slot and a coin-refunding passage, hand-operable mechanism to eject the goods through the medium of a deposited coin, and movable means controlled by said mechanism for receiving and guiding the deposited coin into said refunding passage when said mechanism is moved out of normal position, said movable means guiding the coin into operative position when said mechanism is in normal position.

27. In a coin-controlled vending machine, a casing having a coin-entrance slot and a refunding passage, hand-operable mechanism to eject the goods through the medium of a deposited coin, and a swinging coin-chute at all times in register with said coin-

entrance slot for receiving and guiding the deposited coin into said refunding passage when said mechanism is moved out of normal position, said coin-chute guiding the deposited coin into operative position when said mechanism is in normal position.

28. In a coin-controlled vending machine, hand-operable coin-controlled actuating mechanism, a swinging coin-chute mounted independently of said mechanism, a fixed magnet mounted independently of said mechanism and having its poles extending in close proximity to the path of the deposited check through said coin-chute, means controlled by said mechanism for rocking said coin-chute away from the poles of said magnet, and means carried by said coin-chute for positively stripping a magnetic check from the poles of said magnet.

29. In a coin-controlled vending machine, hand-operable coin-controlled actuating mechanism, a swinging coin-chute mounted independently of said mechanism, a fixed magnet mounted independently of said mechanism and having its poles extending in close proximity to the path of the deposited check through said coin-chute, means controlled by said mechanism for rocking said coin-chute away from the poles of said magnet, and a pin or lug on said coin-chute between the poles of said magnet for positively stripping a magnetic check from said poles.

30. In a coin-controlled vending machine, a casing having a coin-entrance slot and coin refunding passage, a hand-operable coin-carrier, and movable means for receiving and guiding the deposited coin into said coin-carrier when the latter is in normal position, said means being automatically moved into position to receive and guide the deposited coin into said refunding passage when said coin-carrier is out of normal position.

In witness whereof, I hereunto subscribe my name this 2nd day of Aug., 1916.

ALBERT D. GROVER.