

No. 862,519.

PATENTED AUG. 6, 1907.

E. F. SPAULDING.
COIN CONTROLLED VENDING MACHINE.

APPLICATION FILED JUNE 1, 1906.

3 SHEETS—SHEET 1.

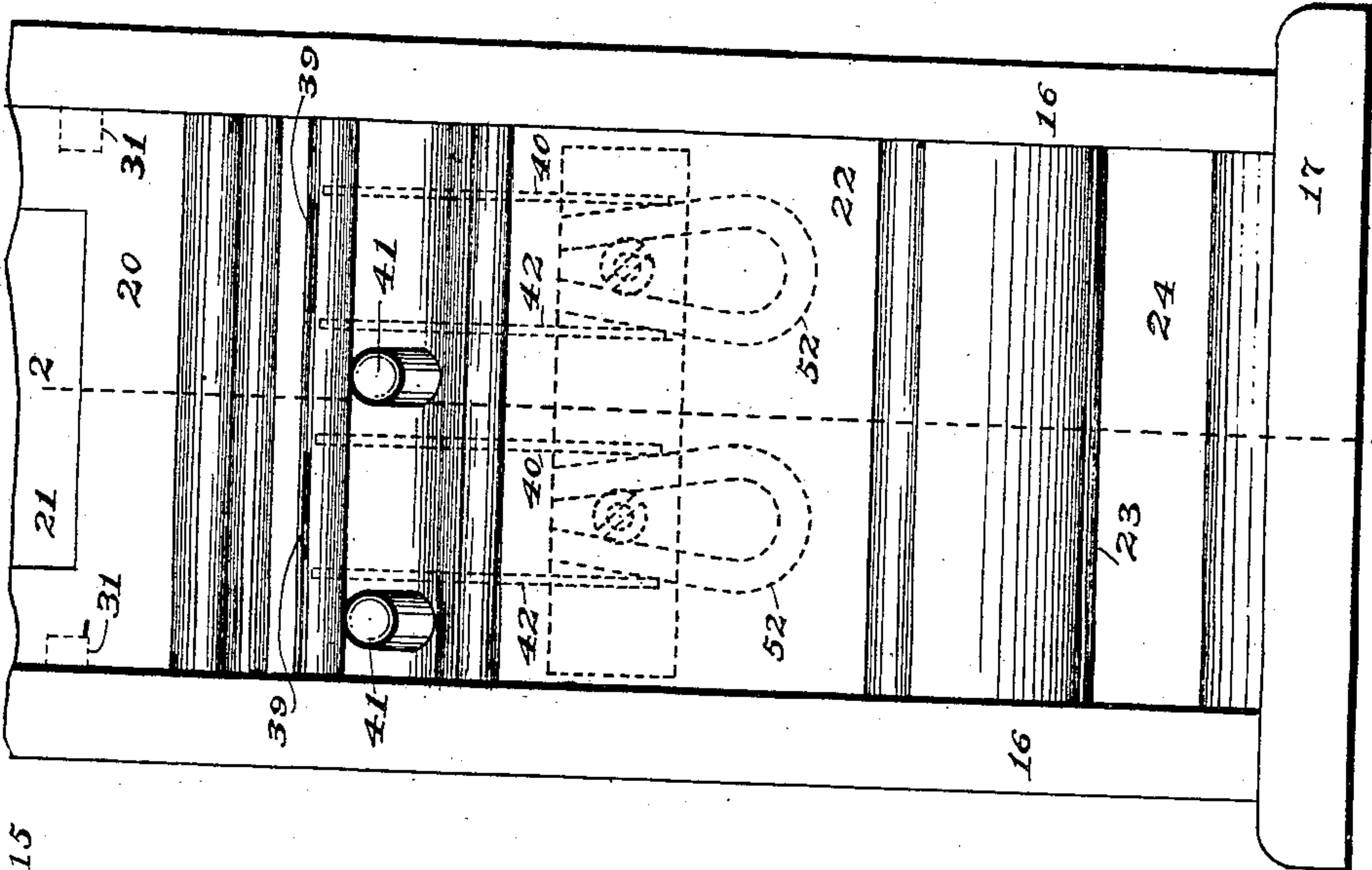


Fig. 1.

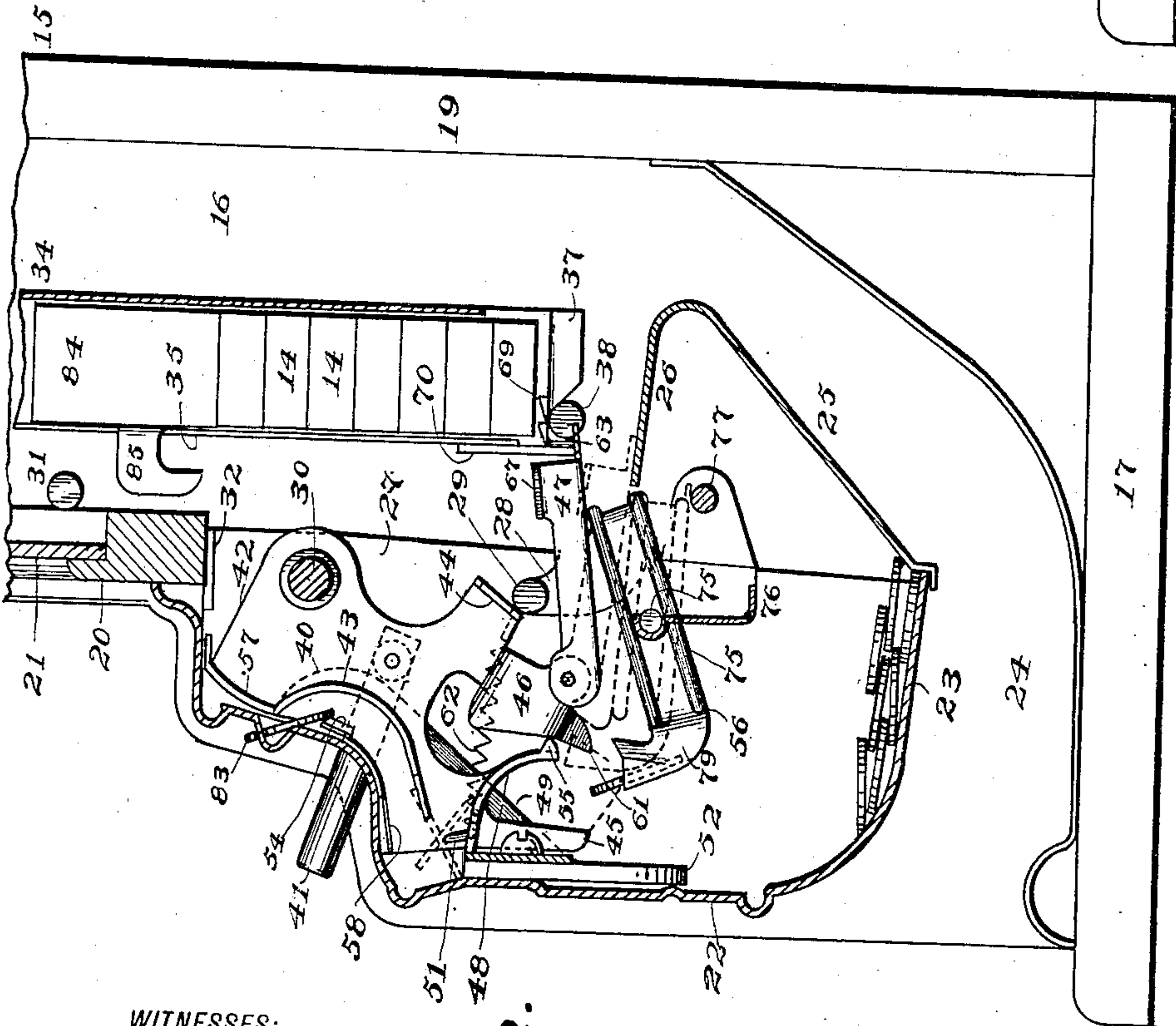


Fig. 2.

WITNESSES:

Arthur Marion.
Herman Gustow

INVENTOR
Elijah F. Spaulding
BY
Chas. C. Gill
ATTORNEY

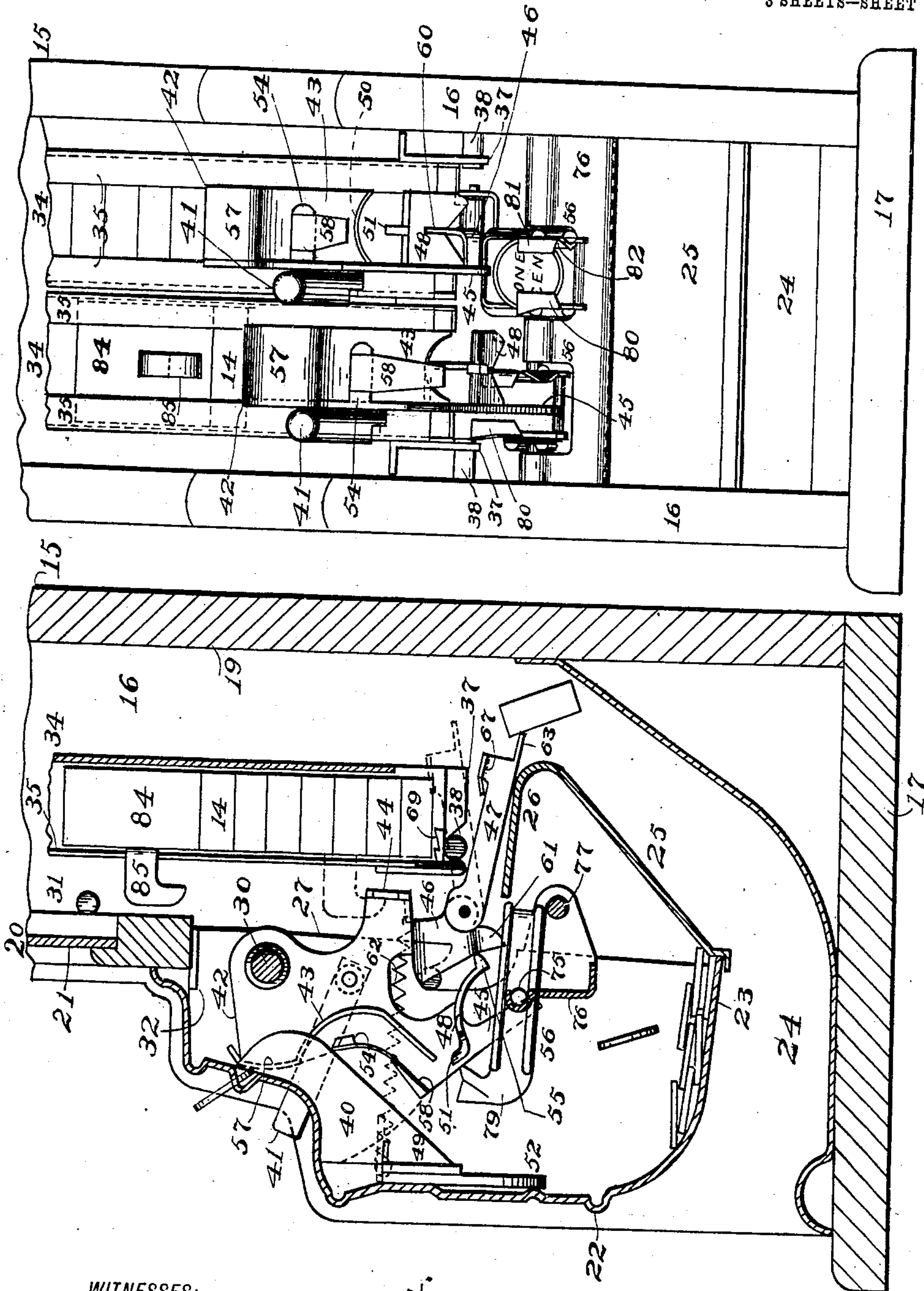
No. 862,519.

PATENTED AUG. 6, 1907.

E. F. SPAULDING.
COIN CONTROLLED VENDING MACHINE.

APPLICATION FILED JUNE 1, 1908.

3 SHEETS—SHEET 2.



WITNESSES:
Arthur Marion.
Herman Gustow.

INVENTOR
Elijah F. Spaulding
BY
Chas. O. Gill
ATTORNEY

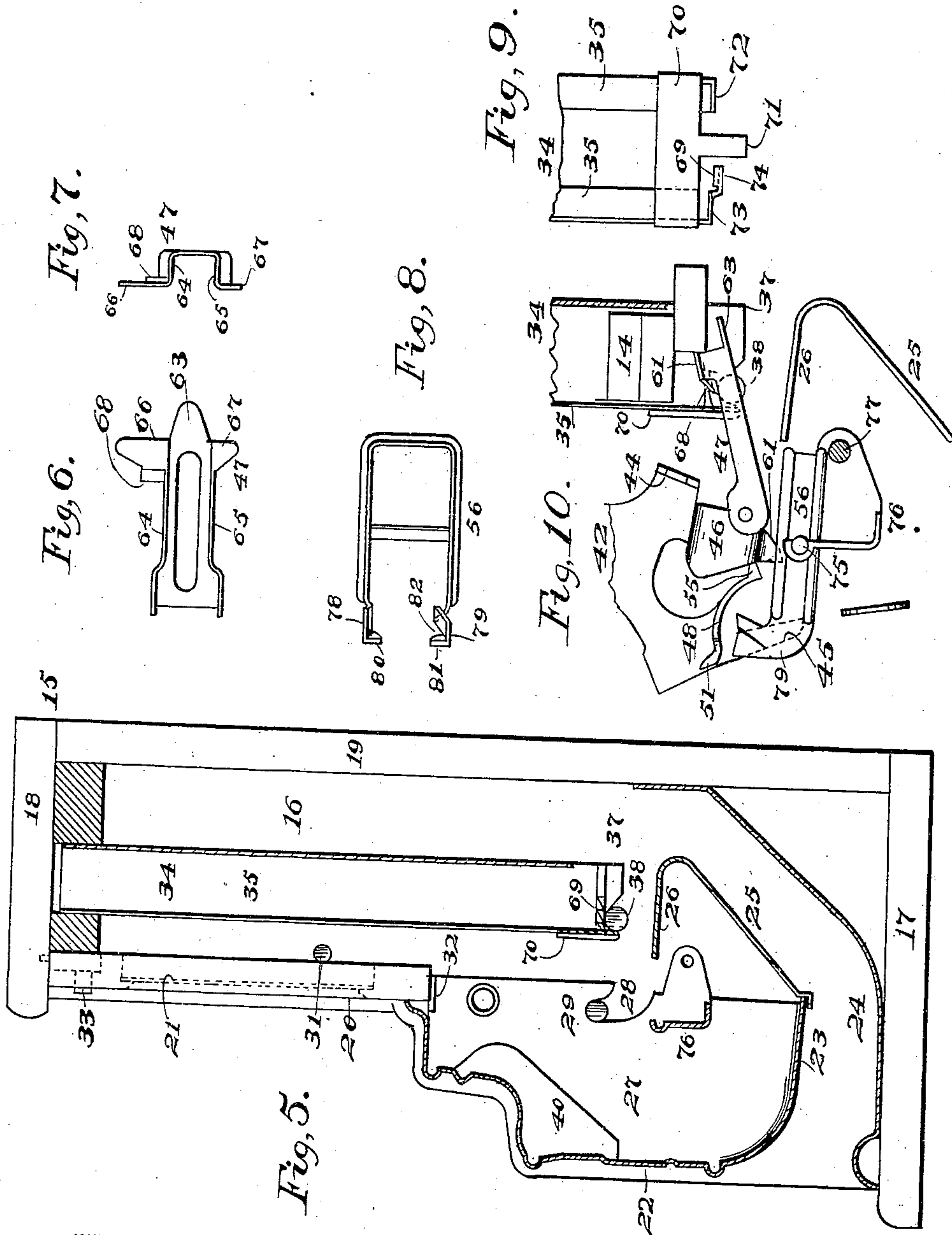
No. 862,519.

PATENTED AUG. 6, 1907.

E. F. SPAULDING.
COIN CONTROLLED VENDING MACHINE.

APPLICATION FILED JUNE 1, 1906.

3 SHEETS—SHEET 3.



WITNESSES:
Arthur Marion
Herman Gustow

INVENTOR
Elijah F. Spaulding
BY
Chas. C. Gill
ATTORNEY

UNITED STATES PATENT OFFICE.

ELIJAH F. SPAULDING, OF BROOKLYN, NEW YORK, ASSIGNOR TO RUDOLPH F. EMMERICH,
OF BROOKLYN, NEW YORK.

COIN-CONTROLLED VENDING-MACHINE.

No. 862,519.

Specification of Letters Patent.

Patented Aug. 6, 1907.

Application filed June 1, 1906. Serial No. 319,689.

To all whom it may concern:

Be it known that I, ELIJAH F. SPAULDING, a citizen of the United States, and a resident of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Coin-Controlled Vending-Machines, of which the following is a specification.

The invention relates to improvements in coin controlled vending machines, and consists in the novel features, arrangements and combinations of parts hereinafter described, and particularly pointed out in the claims.

The invention made the subject of this application comprises certain improvements on the vending machine disclosed in Letters Patent No. 810,576 granted to me January 23, 1906.

The object of the present invention is to simplify and render more efficient, durable and desirable the machine shown and described in the aforesaid Letters Patent.

My present invention pertains more particularly to a novel construction and arrangement of the pivoted coin chute frame, the pivotally mounted ejector carried thereby, and the pivotally mounted coin receiver whose movement, when a coin is introduced thereto, tilts the said ejector into position for dislodging the article sold.

The invention will be fully understood from the detailed description hereinafter presented, reference being had to the accompanying drawings, in which:

Figure 1 is a front view, partly broken away, of a vending machine constructed in accordance with and embodying the invention; Fig. 2 is a side elevation, partly in section, of same, the side of the casing having been removed and a portion of the machine being in section on the dotted line 2—2 of Fig. 1, Fig. 2 illustrating by dotted lines the initial positions of the coin-receiver and goods-ejector prior to the entrance of a proper coin into said receiver and by full lines showing the positions to which the coin-receiver and goods-ejector are moved, due to the entrance of a proper coin to the receiver, preparatory to the movement of the operating mechanism for ejecting the article sold; Fig. 3 is a front elevation, partly broken away, of the machine, with the front of the casing removed to disclose the interior mechanism and with one coin-receiver in the position in which it is shown in Fig. 2; the left half of Fig. 3 corresponds with Fig. 4; Fig. 4 is a view corresponding with Fig. 2 but illustrating the goods-ejector as having been pushed inwardly to dislodge the article sold and the coin as having been dislodged from the coin-receiver, the latter having been relieved of the coin having automatically returned to its initial position, as shown by full lines in Fig. 4 and by dotted lines in Fig. 2; Fig. 5 is a view corresponding with Fig. 2, with

the full height of the machine shown and the interior operative mechanism omitted; Fig. 6 is a detached top view of the goods-ejector; Fig. 7 is an end projection of same, taken from the right hand end of Fig. 6; Fig. 8 is a detached top view of the coin-receiver; Fig. 9 is a detached front view of the lower end of one of the stack-holders for the articles to be sold, and illustrates the frame carried by the lower end of the holder for cooperation with the inner end of the ejector, and Fig. 10 is an enlarged vertical section through a portion of the machine and is presented to illustrate more clearly the construction and operation of the ejector and the relation of same with respect to the lower end of the holder for the stack of confections during the operation of ejecting the lower piece from said stack.

In the drawings, 15 designates the general cabinet or casing of the machine, this casing comprising sides 16, a bottom 17, a top 18, a back 19, a removable front 20 having a glass panel 21 and a lower metallic front section 22 having at its lower end an inwardly turned portion or member 23 upon which the coins are finally received and below which is formed a passage 24 through which the purchased pieces of chocolate or other material may be removed in the customary manner. The inner edge of the member 23 of the front section 22 normally engages the lower edge of a rigid transverse metal frame 25 which prevents the lower end of the section 22 from being pressed inwardly and also prevents access to the receiving chamber formed above said portion 23. The upper portion of the frame 25 extends frontwardly and forms a flange or shelf 26 upon which the goods-ejectors hereinafter described may rest, more especially when said ejectors are in their initial position shown by dotted lines in Fig. 1 and when after said ejectors have been actuated, they are to return or are returning to their initial position, as shown by full lines in Fig. 4.

The upper edge of the casing 22 engages the lower face portion of the front 20, and the said front 20 rests upon lips 32 which are turned inwardly from the metal sides 27 of said casing 22. The sides 27 of the section 22 are formed with bearing slots 28 (Fig. 5) to pass upon studs 29 extending inwardly from the main sides 16 and by which the casing 22 is pivotally hung. In the sides 27 of the casing 22 is mounted a shaft 30 upon which the coin-chute frames, hereinafter described, are pivotally hung.

The front 20 is supported at its lower end upon the aforesaid lips 32, and the upper end of said front is provided with a suitable lock 33 (Fig. 5) by which it may be secured to the top 18. At a suitable distance above its lower end the front 20, at its inner side, bears against studs 31, which prevent the lower portion of said front from being pushed inwardly, said studs being rigid with the machine sides 16.

The holders 34 for the stacks of chocolates or other articles comprise a back, sides and inwardly extending front flanges 35 which will embrace the ends of the pieces of chocolate 14. The holders 34 are provided with lower recessed end plates 37 adapted to engage studs 38 extending inwardly from the machine sides 16 and which support said holders. The holders 34 are of tin or other suitable metal and will preferably be soldered together at their facing sides so that all of the holders may be handled as one integral frame and lifted from the machine when the front 20 is removed.

The front section 22 is formed near its upper end with the coin admission slots 39 (Fig. 1) and at the inner side of its face with vertical inwardly extending walls or partitions 40 (Figs. 4 and 5), while in its front face said section 22 is provided with apertures to receive the actuating handles or rods 41 by which the operative mechanism of the machine may be set in motion to dislodge the articles sold.

In the present instance I present a machine having two holders 34 for the stacks of condiments and two operating handle rods 41 for coöperation with said holders, one rod 41 being provided for each holder, but in practice the machine may have as many holders 34 and as many operating rods 41 as may be required. Each rod 41 with its coöperating parts is a duplicate of every other rod 41 and its coöperating parts, and hence a description of the construction and operation of one rod 41 with its coöperating parts will be sufficient for the purpose of this case.

The rod 41 projects frontwardly through an aperture in the front section 22 and is pivotally connected at its inner end with a pivoted coin-chute frame 42 which is freely hung upon the shaft 30 and is in the form of a vertical plate having on one side face a runway or chute 43 (Figs. 2, 3 and 4) for coins and embodying a rear stop arm 44, a downwardly and inwardly inclined coin-ejector finger 45 and a downwardly extending arm 46, to which is pivotally secured the ejector 47 for the goods sold. The handle rod 41 is pivotally secured to the frame 42 at a point below the shaft 30, which represents the pivotal support for said frame. The frame 42 also embodies, at a point below the lower end of the chute 43, a transverse plate or table 48 upon which the coins finally fall and which inclines inwardly and downwardly and the purpose of which is to tilt the coins backwardly therefrom to the coin-receiver 56, hereinafter described, which is not connected with either the frame 42 or goods-ejector 47. The frame 42 presents a coin chute adapted to receive the coins from the slot 39 and direct the same downwardly and toward the front of the machine to the plate 48, whence the coins are tilted or fall backwardly into the coin-receiver 56, which, due to the weight of the coin entering it, will have its rear end tilted upwardly against the goods-ejector 47 and move said ejector into operative position, shown in Fig. 2, for dislodging the article sold upon the operation of the handle rod 41. One side of the coin passage through the frame 42 is closed by the main vertical plate of said frame and the other side of said passage is closed, when the frame 42 is in its initial position, by the partition 40, which extends downwardly, as at 49, along the edge of the plate 48, as shown in Fig. 2, so as to confine the falling coins to the plate 48 and enable the latter to conveniently perform its

functions. The plate 48 is directly below the lower end of the chute 43 and the latter, as shown in Fig. 3, is cut away, as at 50, to permit the descending coins as they fall from the chute to tilt backwardly upon the plate 48 and pass thence to the coin receiver 56. The plate 48 is formed at its upper outer edge with a pin 51 over which the coins leaving the chute 43 must tilt backwardly, as indicated by dotted lines in Fig. 2, and which will enter the hole in a washer, should one be fed to the machine, and temporarily retain the same instead of permitting it to pass from the plate 48 to the coin-receiver 56.

Upon the inner front face of the casing 22 I secure a magnet 52 below each coin slot 39 and with its poles in such relation to the lower end of the coin chute that a coin or disk fed to the machine will pass to the magnet and then if not acted upon by the magnet or by the pin 51, tilt rearwardly and slide down the plate 48 on its passage to the coin-receiver 56. The upper ends of the magnets 52 and upper edge of the plate securing them to the casing 22 form a shelf upon which the coins pass from the chute 43, as shown in Fig. 2. If an iron or steel disk should be fed to the machine the magnet would hold the same and prevent it from passing to the coin-receiver, and if a washer should be fed to the machine the pin 51 on the plate 56 will enter the hole therein and prevent the same from passing to the coin-receiver, and in either case upon the subsequent operation of the handle-rod 41 the iron disk or the washer will be dislodged and fall into the general chamber for coins without actuating the coin-receiver 56 to position the goods-ejector 57. The coin-chute 43 curves rearwardly, commencing at a point below the upper end of the frame 42, as shown in Fig. 2, and at a point below the coin-slot 39 the frame 42 is provided with a transverse bar 54 between which and the upper edge of the chute 43 is formed an opening for the entrance of the coin to the said chute, this opening being carried away, however, from operative relation with the coin-slot 39 when the frame 42 is moved inwardly from its initial position, at which time a solid portion 57 of the frame 42 closes said coin slot 39. Upon the transverse bar 54 is secured a finger 58, preferably of light spring metal, which when the frame 42 is pushed inwardly will brush from the magnet any iron or steel disk that may be caught by the same.

The plate or table 48 has at its inner right hand corner, looking at the front of the machine, a small upwardly turned oblique lip 55 (Fig. 2) to deflect the coins passing over said table or plate toward the left so that they may fall into the coin-receiver 56 which is located slightly to the left of a central line through said plate 48, as indicated in Fig. 3. The plate 48 is also formed with a central slot 60 into which a thread may pass should an attempt be made to cheat the machine by fastening the coin to a string or piece of thread so as to withdraw the coin from the machine after the goods have been ejected.

If a coin fastened to a thread is fed to the present machine and passes to the coin receiver 56 the thread will pass into the slot 60 and thereafter upon any attempt to withdraw the coin by means of the thread, the coin will pass below the plate 48 and the string will extend up through the slot 60 and under such condition it will be impossible to withdraw the coin. I

locate the coin receiver 56 to one side of a central line through the plate 48 so that if a coin tied to a string is fed to the machine the string will naturally be led into the slot 60.

The arm 46 forming a part of the tilting frame 42 extends laterally from the side of the main vertical plate of said frame and thence downwardly in line with the center of the plate 48, and the front edge of this arm 46 compels the coin to remain on and follow the direction of the plate 48, there being a limited space between said edge of said arm 46 and the upper surface of said plate.

The arm 46 of the frame 42 is also formed with a downwardly extending finger 61 which stands at about a central line with the coin receiver 56 and aids in directing the coins as fed to the machine into said receiver. The coins will enter the receiver without regard to the finger 61 but said finger aids in compelling the coins to take the flat position in said receiver in which they are shown in Figs. 2 and 3. The frame 42 is actuated manually by the purchaser pressing inwardly upon the rod 41 for effecting the dislodgment of the articles sold, and said frame is returned to its initial position by means of a coiled spring 62 connected at one end with said frame and at the other end with the front section 22.

The goods-ejector 47 is pivotally secured to the arm 46 of the frame 42, and this ejector 47 is a light metal frame having at its inner or rear end a lip 63 (Fig. 6) adapted to rest upon the upper shelf-portion 26 of the frame 25 when the frame 42 is in its initial at rest position, as shown by dotted lines in Fig. 2. The ejector 47 is formed with opposite sides 64, 65 from which extend, in a lateral direction, flanges 66, 67, which during the operation of the machine engage the lower article of the stack and push the same from the holder 34, so that the same may descend to the discharge passage 24. The flange 67 is a plain lip as shown in Figs. 2, 6 and 7, and the flange 66 is likewise a simple plain lip but is formed with a depressed edge portion forming a tooth or pawl 68 which coöperates with teeth 69 provided on the stack holder to compel a full movement of the ejector 47 before it can return to its initial position.

Upon the lower end of the stack-holder 34 is provided a plate or frame 70 (Fig. 9) having a depending finger 71 and inwardly turned flanges 72, 73 which are below the lower edge of the plate 70 and upon which the lower article in the stack of condiments rests, a portion of the same being exposed between the upper surface of the flanges 72, 73 and the main lower edge of the plate 70.

When the ejector 47 is tilted upwardly to its operative position by the entrance of a proper coin to the coin-receiver, as hereinafter explained, said ejector will take the position shown in Fig. 2 by solid lines, the lip 63 of the ejector becoming arrested by the finger 71 of the plate 70 upon the lips 66, 67 of said ejector coming into the line with the space directly above the flanges 72, 73 of said plate 70, under which condition an inward movement of the handle-rod 41 actuating the frame 42, will result in the ejector being driven inwardly and its flanges 66, 67 passing above the flanges 72, 73 and against the lower article in the holder 34, the continued inward movement of the ejector pushing

said lower article from the stack. When the ejector 47 has completed its full inward movement its lips 66, 67 will pass beyond the flanges 72, 73 of the stack holder and said ejector will then turn downwardly of its own weight to the position in which it is shown by full lines in Fig. 4, then resting upon the shelf 26. During the movement of the ejector 47 inwardly its tooth 68 will slide over the teeth 69, which are formed on a lip 74 of the flange 73 (Fig. 9), but said teeth 69 will prevent the return of the ejector while its lips 66, 67 are above the flanges 72, 73 by reason of the fact that the tooth 68 upon any such return movement would engage and lock upon the teeth 69. The ejector 47 is therefore compelled when once placed in its operative position and pushed inwardly against the lower article of the stack, to continue its movement until the lips 66, 67 pass beyond the flange 72, 73 and the ejector is allowed to descend below said flanges 72, 73, at which time it may readily return to its initial position below said flanges. The lips 66, 67 therefore operate as the means for pushing the lower article from the stack and the lip 63 coöperating with the finger 71 serves to arrest the inner end of the ejector after the latter has reached its predetermined operative position, said lip 63 also serving to engage the flange 26 which supports the ejector when the latter is in its initial position.

The coin-receiver 56 is made from a piece of light metal and is in the form of a three-sided frame held at its opposite sides by pins 75 carried at the upper edge of a transverse plate 76. The pins 75 pivotally support the coin-receiver and are slightly to the front of the center of gravity of the receiver. The coin-receiver normally rests at its rear edge upon a transverse rod 77 and at its front end is adapted to receive a coin, the weight of which will tilt the rear end of said receiver upwardly, as shown in Fig. 2, against the ejector 47 to turn it upwardly into its predetermined operative position. At the front end of the coin receiver 56 the latter is formed with upwardly extending arms 78, 79, which flare outwardly to a slight extent at their upper portions and have inwardly extending flanges 80, 81 respectively, as shown in Figs. 3 and 8, which incline slightly downwardly and rearwardly and form a support against which the coin may rest, as shown in Fig. 3. The arm 79 is creased inwardly to form a groove 82 (Fig. 8) into which the edge of the coin will pass upon entering the receiver, which groove lies between the inner face of the flange 81 and the front wall of said crease. The arms 78, 79 are just sufficiently separated from each other to hold a proper coin without letting the latter slip downwardly between them, but a coin deficient in diameter is permitted to slip down between the arms 78, 79 without overbalancing the front end of the receiver frame. If a coin or disk deficient in weight should be fed to the coin receiver it will not overbalance the front end of said receiver and hence will not place the ejector 47 into its predetermined operative position.

I am also enabled to test a coin as to its thickness, and this is rendered possible by the presence of the groove 82 whose walls are at such angle that when a proper coin is delivered to the receiver its outer face will engage the flanges 80, 81 and one of its edges will be engaged by the arm 78 while the rear corner of its other edge will be engaged by the inner wall of the groove 82 at a point near the transverse center of the coin. If

the coin should be deficient in thickness the inner wall of the groove 82 will not engage the same and said coin will slip downwardly between the arms 78, 79. The coin receiver 56 is thus enabled to test the coin as to its weight, diameter and thickness and will fail to operate the ejector if a coin fed to the machine is deficient in either weight, diameter or thickness.

The operation of the machine will be largely understood from the detailed description hereinbefore presented.

In Fig. 2 I show the tilting or oscillatory frame 42 in its initial position receiving a coin, which I number 83, and in the said figure the initial positions of the ejector 47 and coin receiver 56 are shown by dotted lines. The coin 83 will slide down the coin chute 43 and strike the front casing 22 and then tilt backwardly over the pin 51 and fall upon the inwardly and downwardly inclined table or plate 48, down which it will pass and be by its contact with the lip 55 on said table deflected toward the left, the coin passing from said plate 48 into the coin receiver 56, where I have shown said coin in Fig. 2. The weight of the coin in the receiver 56 overbalances the rear end of the receiver and causes said end to turn upwardly, as shown by full lines in Fig. 2, against the lower side of the goods-ejector 47, the pressure of the coin-receiver against said ejector turning the latter upwardly into its predetermined operative position or until the lip 63 thereof becomes arrested by the finger 71 of the stack holder 34.

When the coin-receiver and goods-ejector are in the positions in which they are shown in Fig. 2, the purchaser will press inwardly upon the handle-rod 41 so as to turn the frame 42 inwardly to the position in which it is shown in Fig. 4. During this inward movement of the frame 42 the ejector 47 is caused to dislodge the article sold, and the finger 45 of said frame passing inwardly on the path of the dotted line shown in Fig. 2, leading from its lower end, meets the coin then in the coin-receiver and dislodges the same, the dislodged coin falling downwardly between the sides of the coin-receiver frame and said frame then automatically returning to its initial position shown by full lines in Fig. 4. After the rod 41 has been pushed fully inwardly and the article sold has fallen to the runway 24, said handle-rod is released and the spring 62 restores the frame 42 and parts carried thereby to their initial position.

I have hereinbefore explained, in detail, the construction and operation of the ejector 47 and also the means provided for testing coins and for preventing the repeated use of a coin to which a thread might be tied, and the same need not be further referred to at this place.

Upon the upper end of the stack of confections I provide a weight 84 carrying a hook 85 which when the frame 42 is pushed inwardly to dislodge the last article in the stack to be sold, will pass upon and engage the arm 44 of said frame, as shown in Fig. 4 by dotted lines, and lock said frame at its inward position, thus preventing the machine, in respect of the frame locked, from being operated by a purchaser, and said frame 42 when thus locked inwardly closes the coin slot 39 so as to prevent coins from being fed to the then inoperative part of the machine, as shown in Fig. 4, in which I illustrate the plate 57 as preventing the entrance of a coin to the machine.

It has been found that persons at times introduce such material to the coin slots 39 as to choke the runways for the coins, and to prevent the choking of the coin chute in the present machine is one of the objects of my invention. It will be seen on reference to Fig. 2 that the coin chute is closed at one side by the main plate of the frame 42 and at its opposite side by the partition 40 and that when the frame 42 is actuated, as shown in Fig. 4, the chute 43 leaves the partition 40 and is not only open at its lower end but also at its front and at one side, thereby allowing anything within the frame 42 to freely pass therefrom. The form of the chute 43 is such that when the frame 42 is actuated, as shown in Fig. 4, it will be substantially impossible for anything to remain upon the same.

In the machine described in my aforesaid Letters Patent dated January 23, 1906 the frame carrying the coin chute is operated by a handle rigid with the frame and requiring for its movement the provision of an elongated slot in the front casing of the machine; one of the purposes accomplished by the present invention is the elimination of the said slot and the securing of a more efficient structure and a more desirable movement by providing means for hanging the frame 42 from its upper portion and equipping said frame with a pivoted handle rod 41 extending through a simple aperture in the front casing and connected with the frame 42 at a point below the pivotal support of the latter.

The fraud preventive devices shown and described in this application are not separately claimed herein because of the requirement that they be made the subject of a separate application, which will be filed to protect said devices.

What I claim as my invention and desire to secure by Letters-Patent, is:—

1. In a vending machine, a holder for the articles to be sold, a pivotally mounted frame affording a coin-chute and having an exposed handle, and a goods-ejector pivotally secured to and carried by said frame, combined with a pivotally mounted coin-receiver below said ejector and independent of said frame and adapted upon receiving a coin to tilt against said ejector and position the same for action, said frame also carrying a coin-ejector adapted upon the operation of said frame to dislodge the coin from said receiver; substantially as set forth.

2. In a vending machine, a holder for the articles to be sold, a pivotally mounted frame having an exposed handle and affording a downwardly and frontwardly inclined coin-chute, a downwardly and rearwardly inclined table below said chute over which the coins leaving said chute tilt and pass rearwardly, and a goods ejector pivotally secured to and carried by said frame, combined with a pivotally mounted coin-receiver below said ejector and independent of said frame and adapted upon receiving a coin to tilt against said ejector and position the same for action, said frame also carrying a coin-ejector adapted upon the operation of said frame to dislodge the coin from said receiver; substantially as set forth.

3. In a vending machine, a holder for the articles to be sold, a pivotally mounted frame having an exposed handle and affording a downwardly and frontwardly inclined coin-chute, a downwardly and rearwardly inclined table below said chute over which the coins leaving said chute pass rearwardly, and a goods ejector pivotally secured to and carried by said frame, combined with a pivotally mounted coin-receiver below said ejector and independent of said frame and adapted upon receiving a coin to tilt against said ejector and position the same for action, said frame also having a finger normally disposed to compel the coin to take a flat position in said receiver and another finger which acts to dislodge the coin from the receiver when said frame is operated; substantially as set forth.

4. In a vending machine, a holder for the articles to be sold, a pivotally mounted frame affording a coin-chute and having an exposed handle, and a goods-ejector pivotally secured to and carried by said frame, said handle being pivotally secured to said frame below the pivot-point of the latter and extending frontwardly through an aperture in the front casing of the machine, combined with a pivotally mounted coin-receiver adapted upon receiving a coin to position said ejector for action, said frame also carrying a coin-ejector adapted upon the operation of said frame to dislodge the coin from said receiver; substantially as set forth.

5. In a vending machine, a holder for the articles to be sold, a pivotally mounted frame having an exposed handle and affording a downwardly and frontwardly inclined coin-chute, a downwardly and rearwardly inclined table below said chute over which the coins leaving said chute pass rearwardly, and a goods ejector pivotally secured to and carried by said frame, combined with a pivotally mounted coin-receiver below said ejector and independent of said frame and adapted upon receiving a coin to tilt against said ejector and position the same for action, said frame also having an arm in rear of said table and sufficiently near the same to confine the coin to said table during its passage over the same, a finger normally disposed to compel the coin to take a flat position in said receiver and another finger which acts to dislodge the coin from the receiver when said frame is operated; substantially as set forth.

6. In a vending machine, a holder for the articles to be sold, a pivotally mounted frame having an exposed handle and affording a downwardly and frontwardly inclined coin-chute, a downwardly and rearwardly inclined table below said chute over which the coins leaving said chute pass rearwardly, and a goods ejector pivotally secured to and carried by said frame, said table at one side having a lip to deflect the coins while passing over it, in a lateral direction, combined with a pivotally mounted coin-receiver disposed to one side of the longitudinal center of said table and adapted upon receiving a coin therefrom to position said ejector for action, said frame also having a coin-ejector adapted upon the operation of said frame to dislodge the coin from said receiver; substantially as set forth.

7. In a vending machine, a holder for the articles to be sold, a pivotally mounted frame having an exposed handle and affording a downwardly and frontwardly inclined coin-chute and a downwardly and rearwardly inclined table below said chute over which the coins leaving said chute

pass rearwardly, and a goods ejector pivotally secured to and carried by said frame, said table at one side having a lip to deflect the coins while passing over it, in a lateral direction, combined with a pivotally mounted coin-receiver disposed to one side of the longitudinal center of said table and below said ejector and adapted upon receiving a coin therefrom to tilt upwardly against and position said ejector for action, said frame also having a coin-ejector adapted upon the operation of said frame to dislodge the coin from said receiver, and said holder and ejector having parts to contact with each other when said ejector is moved upwardly to arrest the same in a predetermined position; substantially as set forth.

8. In a vending machine, a holder for the stack of articles to be sold, a pivotally mounted frame carrying a chute to receive the coins from the coin-slot, a handle for operating said frame, a coin receiver to receive and temporarily hold the coins fed to the machine, and a goods-ejector carried by said frame and adapted to be positioned for action by the weight of a coin in said receiver, said frame having a finger for dislodging the coin from said receiver and also a stop-arm 44, combined with a follower 84 mounted upon the stack in said holder and having a hook 85 which upon the inward movement of said frame at a time when said holder should be replenished, will descend upon and hook over said arm 44 and lock said frame at its inward position, said frame having a part adapted when the frame is thus locked to exclude coins at said coin slot; substantially as set forth.

9. In a vending machine, a holder for the stack of articles to be sold, a pivotally mounted frame carrying a frontwardly inclined coin-chute and an operating handle, a rearwardly inclined table below the coin-chute to direct the coins inwardly, a goods-ejector pivotally secured to and carried by said frame, and a pivotally mounted coin receiver adapted upon receiving a coin to position said ejector for action, combined with means for automatically returning said frame and ejector to their initial position after they have been manually operated, and means for preventing said frame and ejector from returning to their initial position, after they have been started into operation, until they have made a complete movement from such position; substantially as set forth.

Signed at New York city, in the county of New York and State of New York, this 30th day of May, A. D. 1906.

ELIJAH F. SPAULDING.

Witnesses:

CHAS. C. GILL,
ARTHUR MARION.