

No. 685,642.

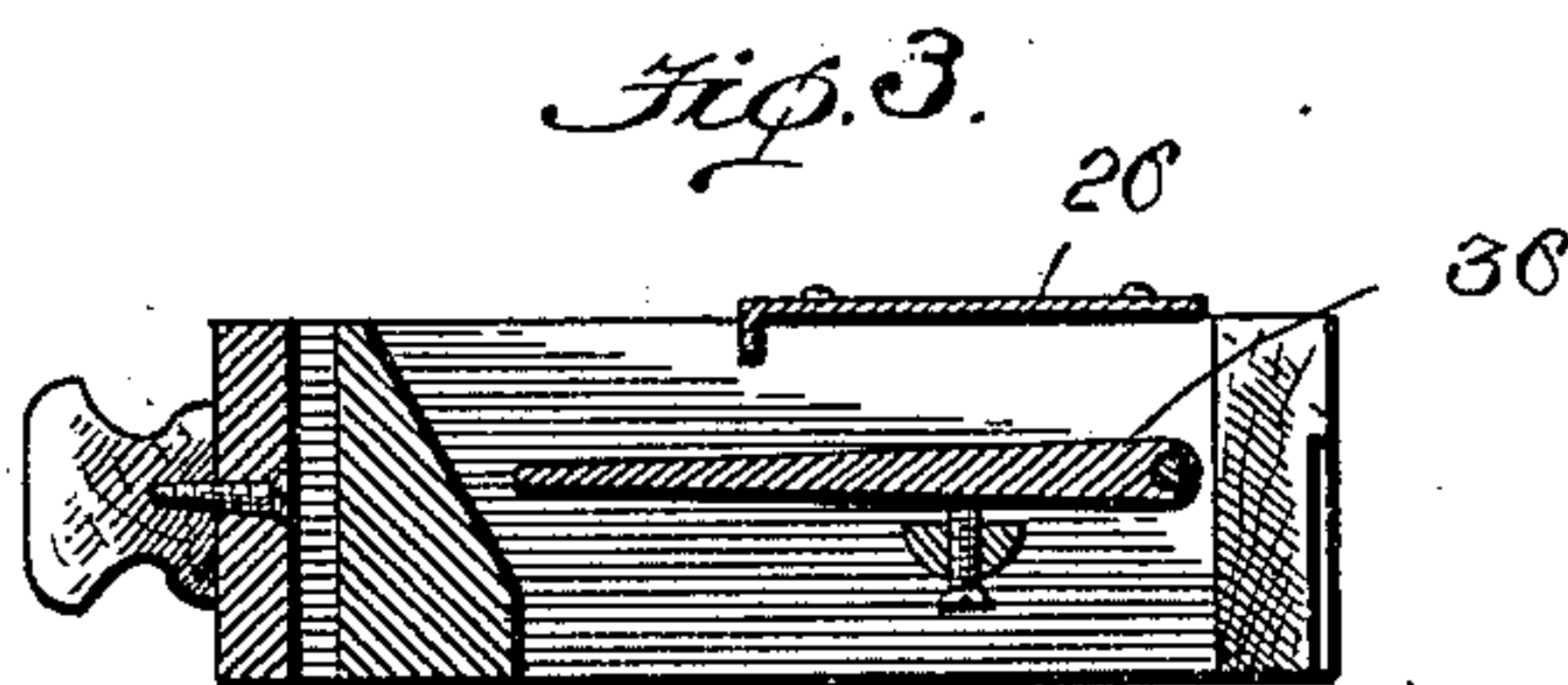
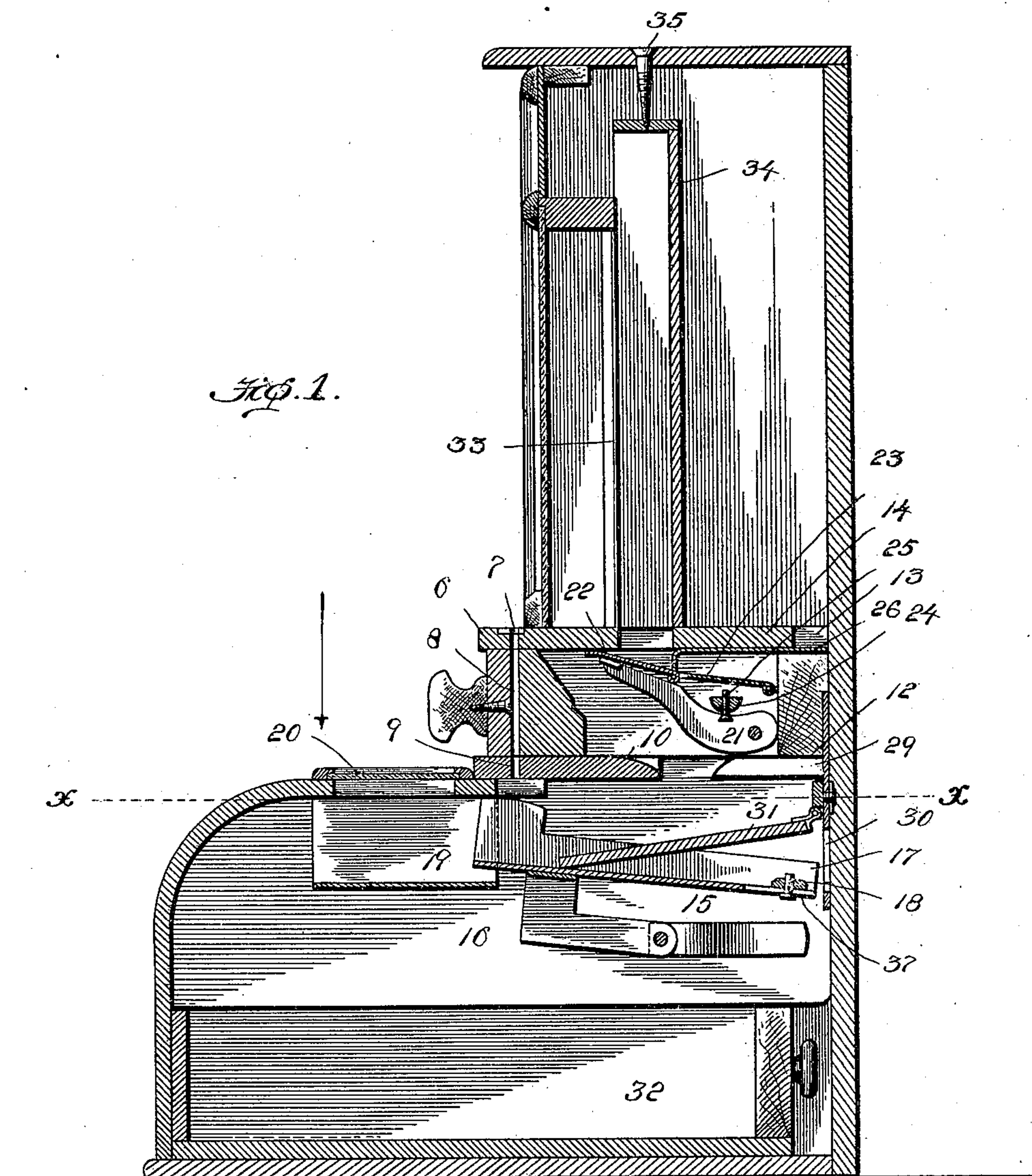
Patented Oct. 29, 1901.

W. F. M. RICKETTS.
COIN CONTROLLED APPARATUS.

(Application filed Oct. 4, 1900.)

(No Model.)

3 Sheets—Sheet 1.



Witnesses

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Fig. 2.

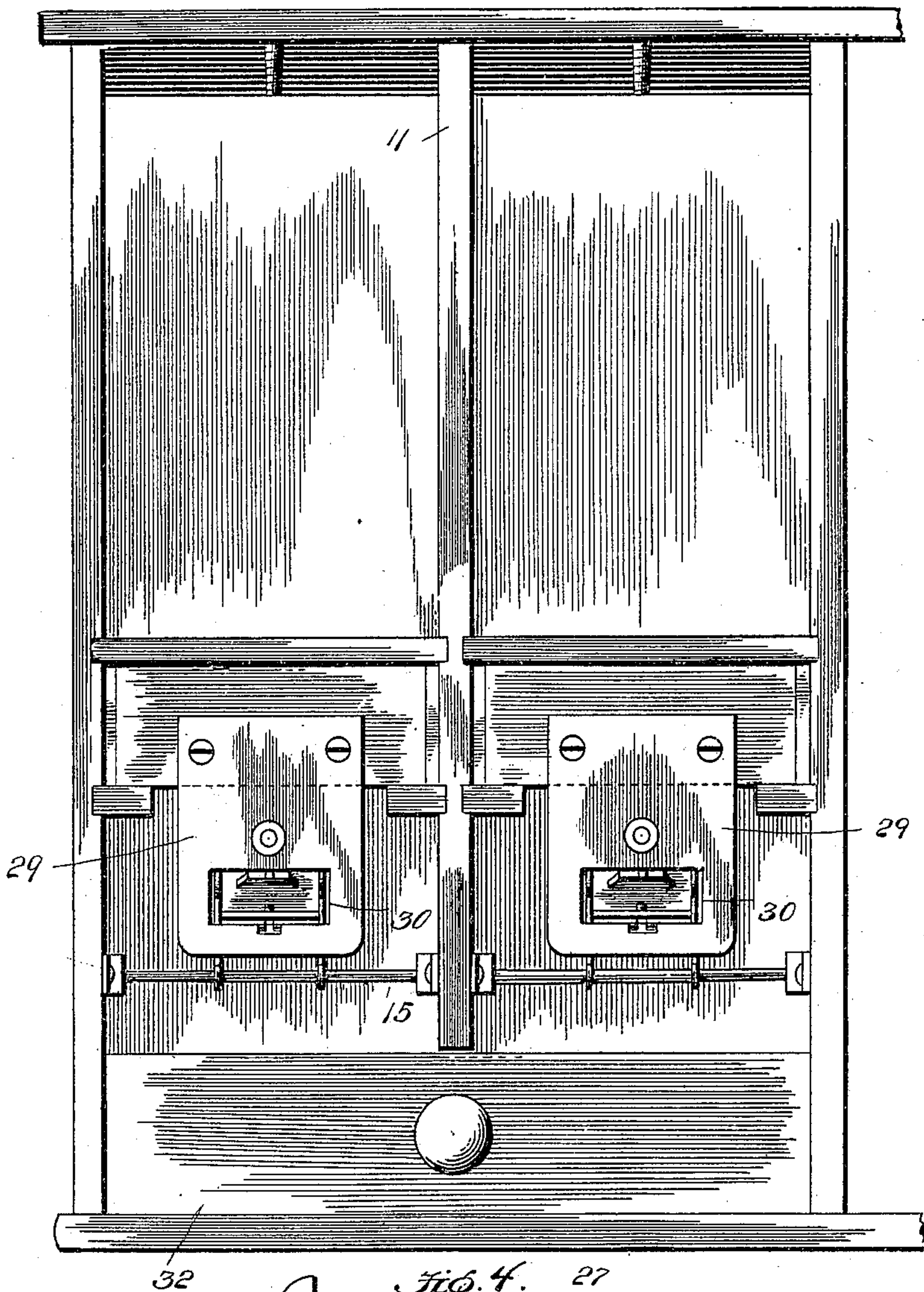
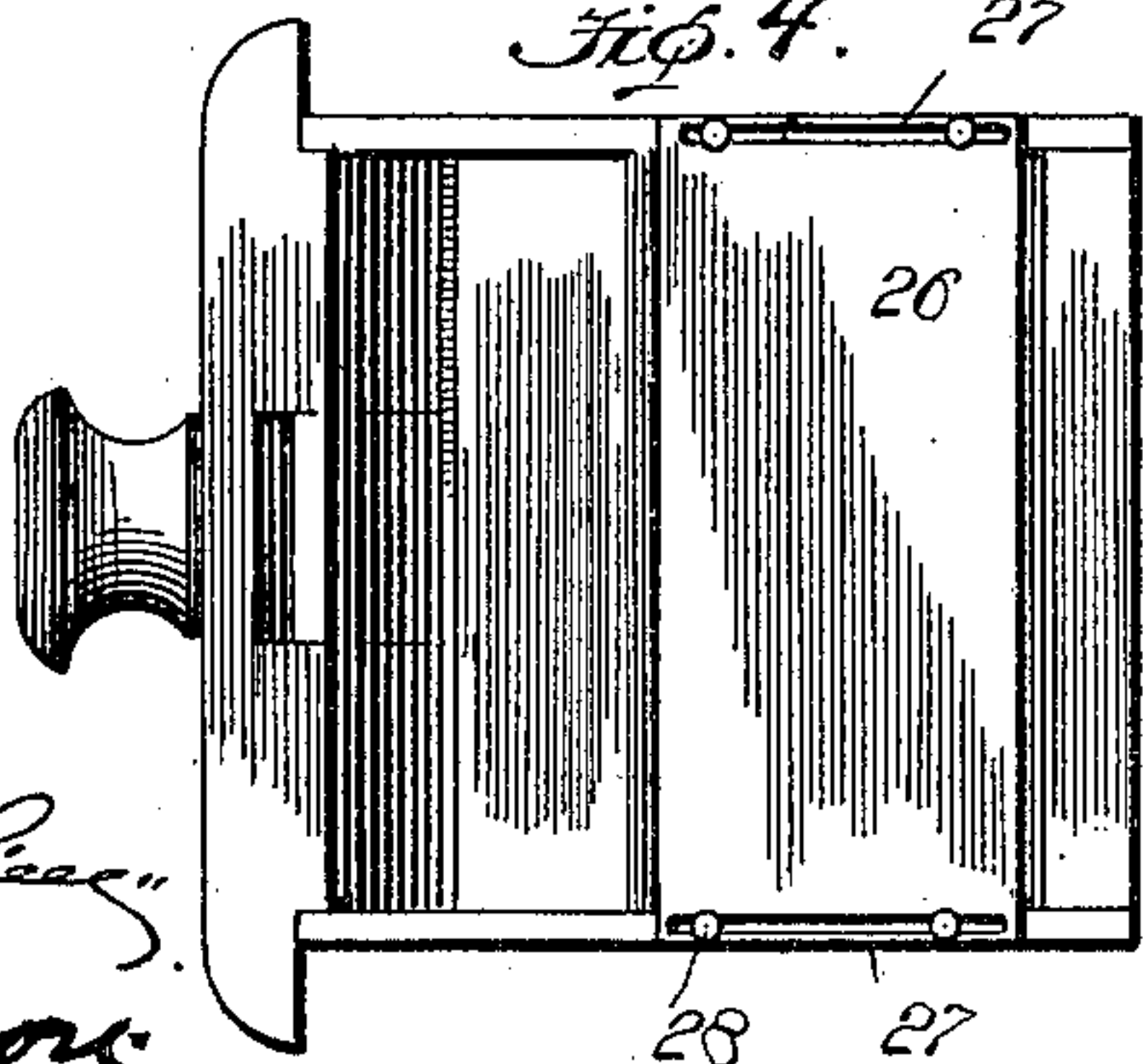


Fig. 4.



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Fig. 5.

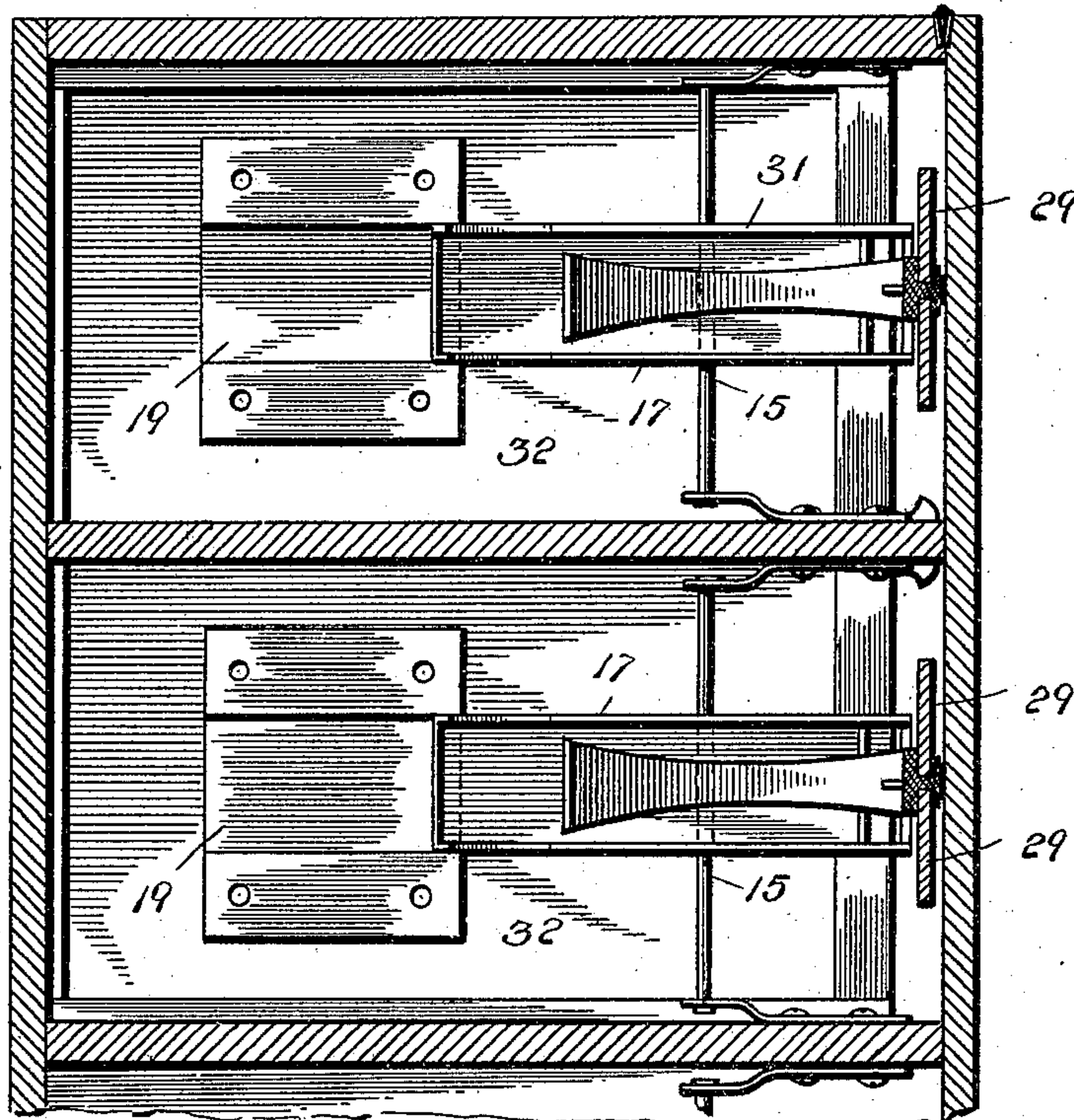
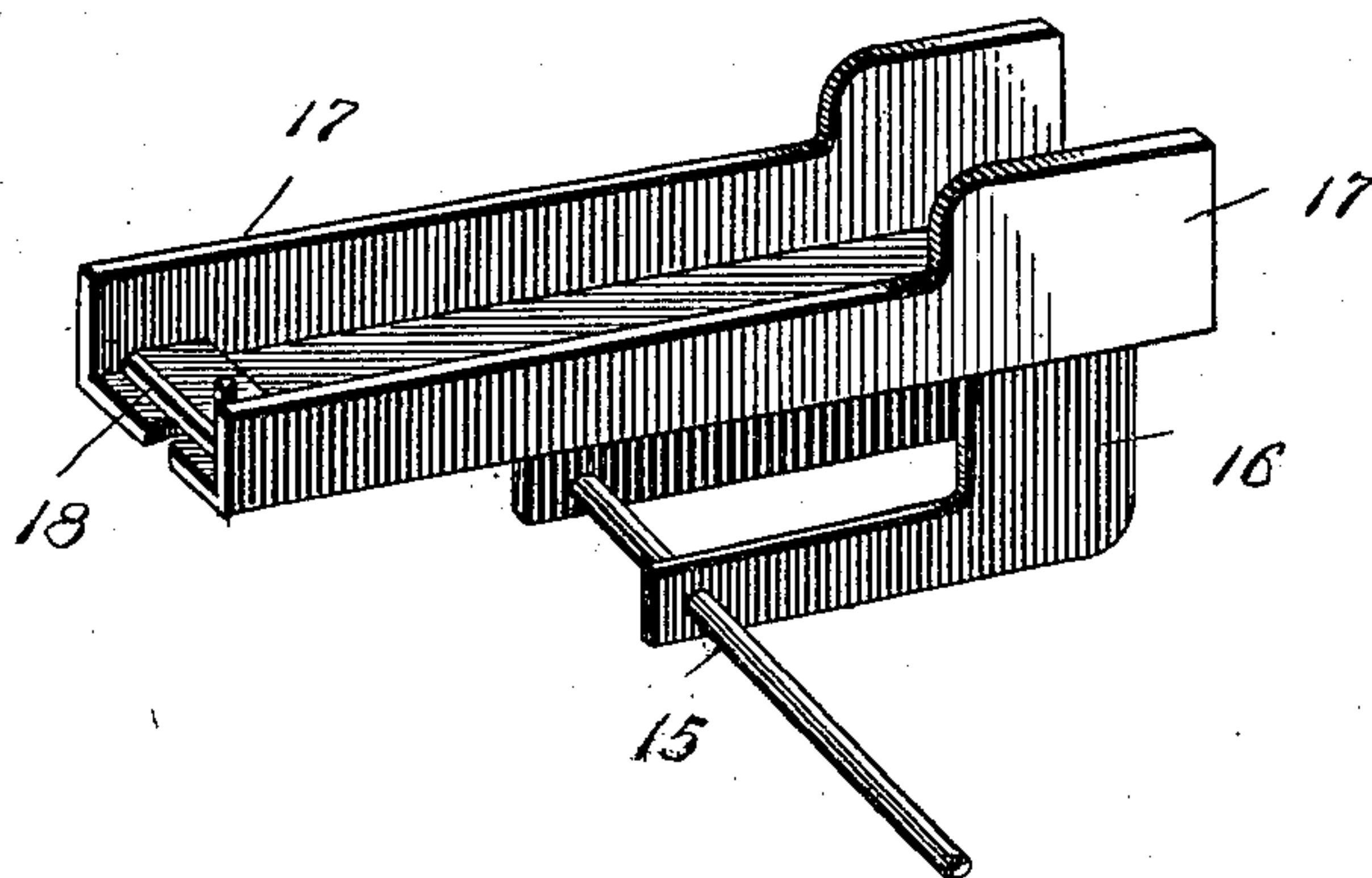


Fig. 6.



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UNITED STATES PATENT OFFICE.

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COIN-CONTROLLED APPARATUS.

SPECIFICATION forming part of Letters Patent No. 685,642, dated October 29, 1901.

Application filed October 4, 1900. Serial No. 32,032. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM F. M. RICKETTS, a citizen of the United States, residing at Pullman, in the county of Whitman and State of Washington, have invented new and useful Improvements in Coin-Controlled Apparatus, of which the following is a specification.

This invention relates to new and useful improvements in coin-controlled apparatus especially adapted for dispensing cigars, small packages of tobacco, &c., pencils, candy, &c.; and its primary object is to provide a device of this character having a drawer therein provided with mechanism of peculiar construction whereby when a coin of the proper denomination is supplied to the machine the drawer will be automatically unlocked and can be withdrawn from the device, carrying therewith the article or articles within the apparatus desired.

A further object is to so arrange the drawers within the apparatus as to prevent unlocking of the same by tampering.

Another object is to provide mechanism whereby the article delivered into the drawer will be thrown upward to a point adjacent to the upper edge thereof when said drawer is slid outward.

With these and other objects in view the invention consists in providing a casing having a horizontal partition therein which divides the upper or feed compartment from the lower compartment, containing the coin-receiving mechanism. The dispensing-drawer is arranged upon the partition, and a plate is secured to the rear thereof and extends downward therefrom. This plate is provided with a substantially rectangular opening which is adapted to receive the weighted end of a trough pivoted within the casing. The opposite end of the trough extends into a guide, which is arranged below a glass or other transparent material arranged within the casing at a point in front of the drawer. A tongue extends forward from the plate before referred to and normally rests upon the bottom of the trough. The front of the drawer when in closed position is arranged between the partition before referred to and a top strip hav-

ing a slot therein. A slot is also provided in the front of the drawer and within the partition which registers with the slot in the upper strip and permits a coin inserted thereinto to drop upon the forward and normally-raised end of the trough. The weight of this coin will cause the weighted end of this trough to swing upward out of engagement with the plate and into alinement with the opening in said plate. The drawer can then be drawn forward, causing the plate to slip over the trough, and as the tongue is carried therewith the coin within the trough will be pushed upon the guide before referred to and can be readily seen through the glass arranged in the front of the casing. Means are provided whereby articles of various sizes may be fed to the drawer. The drawer is provided with peculiar mechanism, which prevents the admission of more than a predetermined quantity thereto, and this mechanism is so constructed that when the drawer is pulled outward to its limit the article or articles contained therein will be raised to a point adjacent to the upper edge thereof, where they can be readily grasped and removed.

The invention also consists in the further novel construction and combination of parts hereinafter more fully described and claimed, and illustrated in the accompanying drawings, showing the preferred form of my invention, and in which—

Figure 1 is a vertical section therethrough. Fig. 2 is an elevation of a portion of the device with the door removed and showing the locking and releasing mechanism for the drawers. Fig. 3 is a longitudinal section through a modified form of drawer. Fig. 4 is a top plan view thereof. Fig. 5 is a section on line *xx*, Fig. 2; and Fig. 6 is a perspective of a trough.

Referring to the figures by numerals of reference, 1 is a substantially L-shaped casing comprising a base 2 and an upright portion 3, arranged thereon at the rear thereof. This casing is formed of any suitable material, and the upper edge of the base is preferably rounded, as shown, and may be provided with any suitable ornamentation. The rear of the

casing is closed in any suitable manner, as by means of a door 4, the front of the upright portion thereof being closed by glass panels which are equal in number to the number of columns of merchandise contained within the apparatus. These panels extend from the top of the casing to points above the top of the base 2, are arranged therebelow are the dispensing-drawers 5 of the apparatus. A strip 6 extends from the casing over the drawers when the same are in their closed position, and this strip is provided with slots 7 therein, which are equal in number to the number of drawers in the device. The front of each drawer 15 is slotted vertically, as at 8, and this slot is adapted to register with the slot 7 and with the short slot 9, extending downward through a partition 10, extending horizontally of the casing, substantially in alinement with the top 20 of the base 2. Vertical partitions 11 are arranged within the casing at points between the panels before referred to and serve to separate the various columns of merchandise arranged within the upright portion 3. The rear edge of the partition 10 is inclined downward, and arranged in rear thereof, at a point removed therefrom, are strips 12, the forward ends of which are inclined, said strips being secured to the vertical partitions and to the 30 sides of the casing in alinement with the partition 10. The partitions 11 are grooved, as at 13, in alinement with the strips 6, and these grooves receive sliding plates 14, which are adjustable from or toward the strip 6. A rod 35 15 is arranged horizontally within the base 2 of the apparatus at a point below the drawers, and pivotally mounted thereon is a bracket 16, which is secured to the bottom of a trough 17, extending from a point below the slot 9 backward toward the rearward end of the casing, 40 said trough being provided at its rear end with a weight 18. The forward end of this trough extends above the guide 19, which is secured to and depends from the top of the base 2, 45 said base being provided at a point above the guide with a glass panel 20, whereby a coin upon the guide may be readily seen.

As before stated, the drawers 5 are provided at the front with vertical slots adapted to receive a coin after the same has been fed into the slot 7. Each drawer also contains dogs 21, which are pivoted therein at opposite sides, the lower edges of which are curved and adapted to extend downward below the bottom of the drawers when the same are in lowered position. The forward ends of the dogs 21 are adapted to contact with the plate 22, hinged at its rear edge to a second plate 23, which is pivotally mounted within the 60 drawer at the rear end thereof. A stop 24 is arranged above the dog 21 to limit the downward movement of the plate 23. A screw 25 extends through the stop, and by adjusting the same therein the movement of said plate 65 23 may be readily regulated.

Extending over the top of each drawer is a

plate 26, provided adjacent to each end with slots 27, adapted to receive pins or screws 28, extending from the upper edge of the drawer and serving as guides for the plate. This 70 plate is curved downward at its forward edge, as shown, and serves to force the article from under the one directly above it. It will be seen that by this construction the plate 26 may be readily slid from or toward the front 75 of the drawer, and the opening in the top of said drawer can thus be readily regulated. Extending downward from each drawer, at the rear end thereof, is a plate 29, having a substantially rectangular opening 30 therein at 80 a point adjacent to its lower edge. This opening is adapted to receive the rear end of the trough 17 after the same has been lifted by the weight of a coin dropped upon the forward end thereof. A tongue 31 is hinged to 85 the inner face of plate 29 at a point above the opening 30 therein, and the forward end of this tongue normally rests upon the bottom of the trough. Suitable receptacles, as drawers 32, may be arranged within the base at 90 points below the guides 19 and troughs 17, and these are employed for receiving the coins after the same have been discharged from the guides.

Strips 33 of wire or other suitable material 95 are arranged vertically within the upright portion of the casing in alinement with the rear edge of the strip 6 and in rear of the glass panels before referred to. These strips serve to prevent material placed within the apparatus from coming into contact with the glass, and they also retain the same at a point directly above the aperture formed between the strips 6 and the slide 14. If cigars are to be 105 dispensed from the machine, a box 34, containing the same, is placed in position above the aperture between the strip 6 and slide 14 after one end and the top have been removed and is held in position by means of screws 35, arranged, preferably, within the top of the 110 casing. The machine is then in condition for use.

It is obvious that the drawers cannot be drawn outward until the rear end of the trough 17 has been lifted so as to lie at a 115 point in alinement with the aperture 30, formed within plate 29. By inserting a coin in the slot 7 it will pass through the front of the drawer and fall upon the front end of the trough, causing said end to swing downward 120 into contact with the guide 19. When in this position, the rear end of the trough is in alinement with the opening within the plate 29, and the drawer 5 can then be drawn forward, said plate slipping over the trough. As the 125 drawer comes forward, carrying the plate 29 therewith, the tongue 31 will slide the coin from the trough onto the guide 19 and the same will then be visible through the glass 20. As the drawer starts forward in its move- 130 ment the dogs 21 will swing downward upon their pivots as they pass the inclined ends of

the strips 12, and will thus permit a cigar to slide forward below the strip 6 and upon the plate 22, said cigar being carried forward by the downwardly-inclined edge of the adjustable slide 26, said slide also serving to prevent the downward passage of more than one cigar at a time. The downward movement of the plate 23 will be limited by the stop 25; but the hinged plate 22 will swing downward until the dogs 21 reach the limits of their movement. This inclined plate 22 will cause the cigar resting thereon to roll upward to the front end of the drawer. As the drawer continues to slide open the dogs 21 will contact with the inclined edge of the partition 10 and swing upward at the moment when the drawer reaches the limit of its movement. This upward movement of the dogs will cause the plate 22 to swing upward, carrying the cigar therewith, to a point adjacent to the top of the drawer, and the same can then be readily grasped and removed. When the drawer is in this position, the cigars are kept in their boxes 34 by the sliding plate 26, secured to the top of the drawer. After the cigar has been removed the drawer is slid inward, and as soon as the plate 29 escapes the end of the trough 17 said end will drop, and it is then necessary to repeat the operation before described before the drawer can be again opened. It will be seen that the coins will drop from the guide 19 to the receptacle 32.

While I have described and illustrated the device as used for dispensing cigars, it is understood that I do not restrict myself to such use, as, if desired, small packages of tobacco or candy, pencils, &c., may be placed within the upright portion of the casing, and by sliding the strip 14 and the slide 26 backward the size of the inlet to the drawer may be made sufficiently large to admit the same thereto. It will be seen that by this construction it is impossible to tamper with the trough through the slots 7, as any tool inserted therein for the purpose of depressing the trough would lock and prevent the opening of the drawer. Where more than one article is to be dispensed at a time, I preferably employ a drawer such as shown in Fig. 4. In said figure I have shown the drawer provided with a hinged bottom 36, and it will be seen that when the drawer is in its closed position articles will drop thereinto until that portion thereof in advance of the front edge of sliding plate 26 is filled. The drawer can then be slid outward after the same has been unlocked, as above described, and the articles can be readily removed therefrom. When this drawer is in open position, the plate 26 will prevent additional articles from passing thereinto until the drawer is closed.

It is of course understood that any desired number of drawers may be employed in one casing and each may be employed for dispensing a particular article. It will also be

seen that by adjusting the weight 18 back and forth in the slot 37, formed in the bottom of the trough, the mechanism can be set to operate upon the insertion of any desired coin.

In the foregoing description I have shown the preferred form of my invention; but I do not limit myself thereto, as I am aware that modifications may be made therein without departing from the spirit or sacrificing the advantages thereof, and I therefore reserve the right to make such changes and alterations as fairly fall within the scope of my invention.

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

1. In a coin-controlled apparatus, the combination with a drawer having a slot, of a plate secured to the drawer and having an aperture therein, a trough pivoted below the drawer and the rear end thereof normally engaging the plate and preventing forward movement thereof, and a slotted strip above the drawer, the slot therein registering with the slot within the drawer, said slots permitting the discharge of a coin upon the trough.

2. In a coin-controlled apparatus, the combination with a drawer having a vertical slot in the front thereof, of a strip above the drawer having a slot therein adapted to register with the slot within the drawer, a plate secured to the drawer and having an aperture therein, a trough pivoted below the drawer and the rear end thereof normally lying in the path of the plate, and a guide extending from and inclosing the normally-raised end of the trough, said end lying below the slot in the drawer.

3. The combination with a drawer having a vertical slot in the front thereof, of a strip above the drawer having a slot adapted to register with the slot in the drawer, a plate extending downward from the drawer and having an aperture therein, a trough pivoted below the drawer and having its rear end normally in the path of the plate, and a tongue hinged to the plate and slidably mounted at its opposite end upon the trough.

4. In a coin-controlled apparatus, the combination with a drawer having a slot in the front thereof, of a strip above the drawer having a slot therein adapted to register with the slot in the drawer, a plate extending downward from the drawer having an aperture therein, a trough pivoted below the drawer, and a weighted end thereto normally in the path of the plate, the forward end of said trough lying below the slots and adapted to be depressed by a coin dropping thereon thereby raising the weighted end out of the path of the plate.

5. In a coin-controlled apparatus, the combination with a drawer having a slot in the front thereof, of a strip above the drawer having a slot therein registering with the slot

in the drawer, a plate secured to the drawer
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within the slot and adapted to hold the trough
normally in the path of the plate, the forward
end of said trough lying at a point below the

slots, and a tongue hinged to the plate and
resting at its opposite end upon the trough. 10

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

WILLIAM F. M. RICKETTS.

Witnesses:

JOHN SQUIRES,
W. D. HENRY.