

H. A. THEXTON.
VENDING MACHINE.
APPLICATION FILED DEC. 28, 1907.

914,993.

Patented Mar. 9, 1909.

3 SHEETS—SHEET 1.

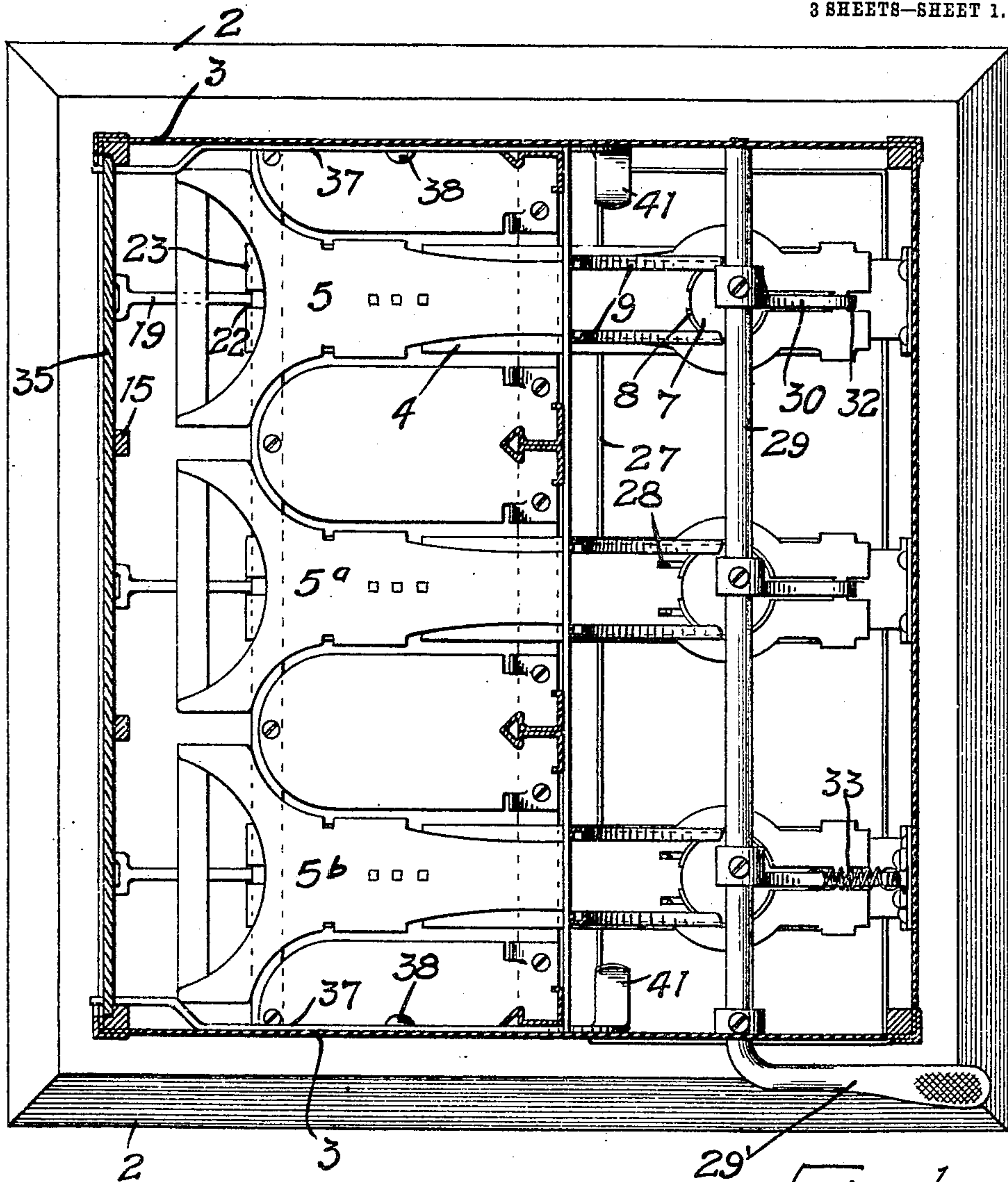


Fig 1. x-x

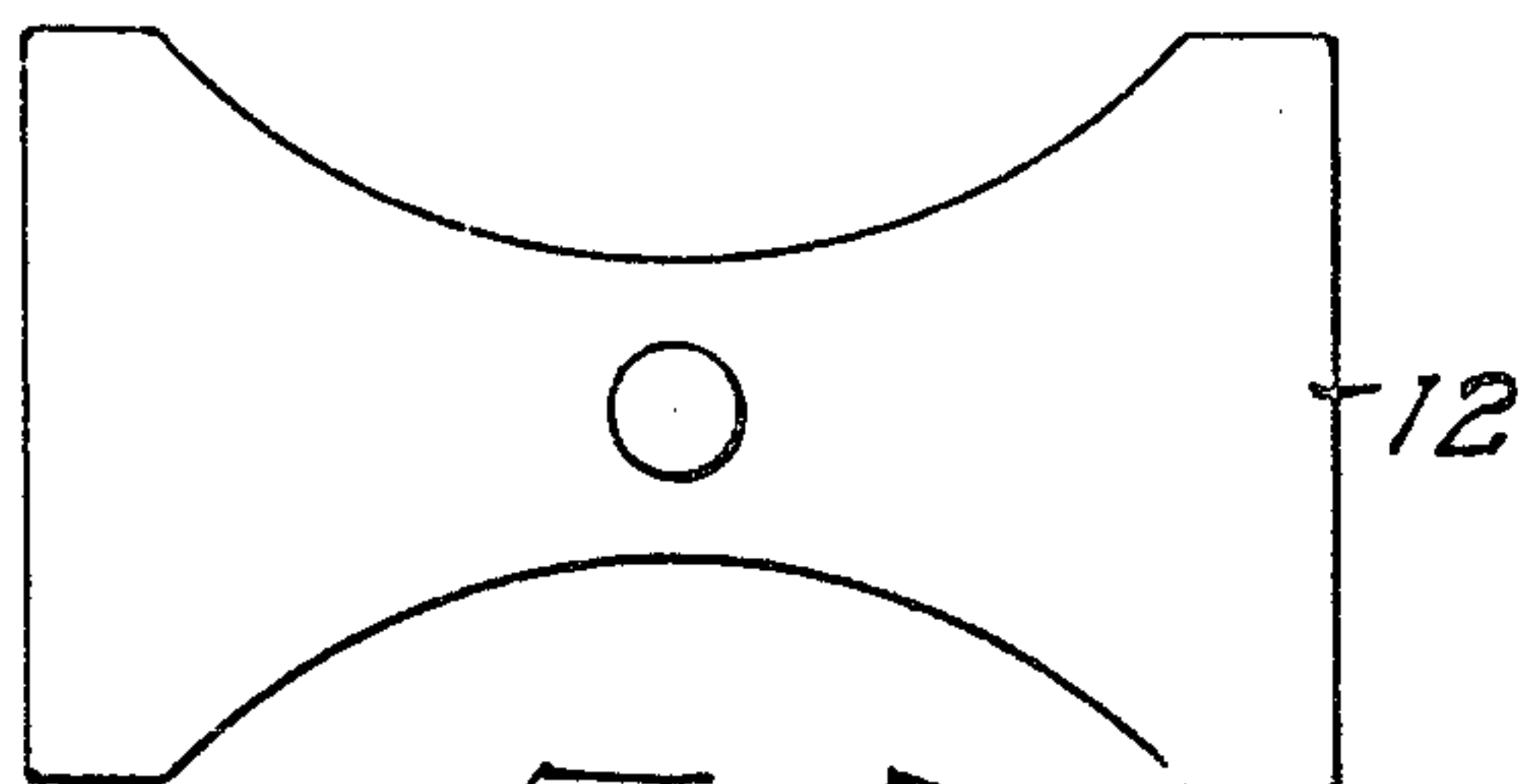


Fig 7.

WITNESSES
M. Walstrom
J. B. Byington

INVENTOR
HENRY A. THEXTON
BY *Paul Paul*
HIS ATTORNEYS

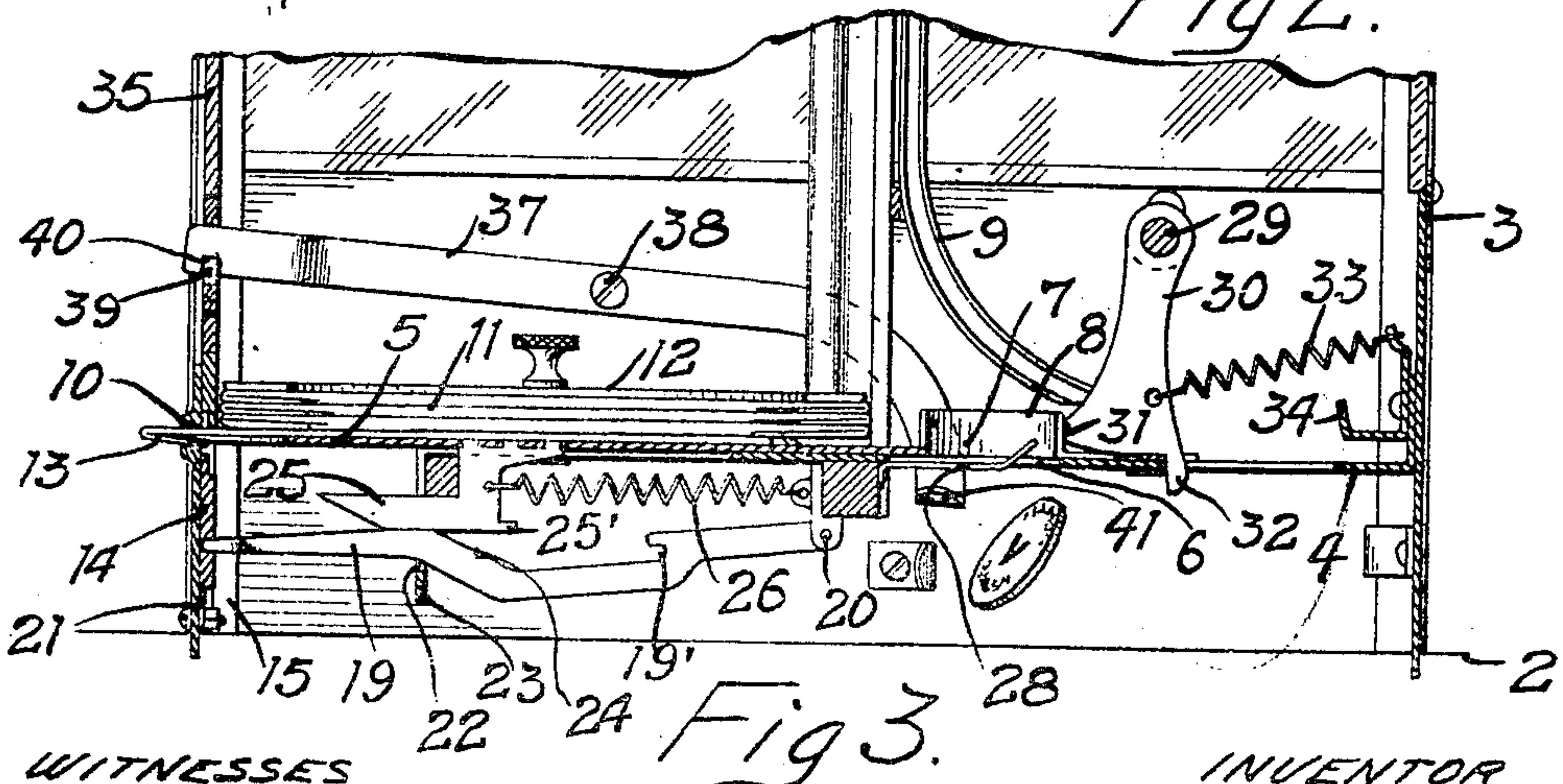
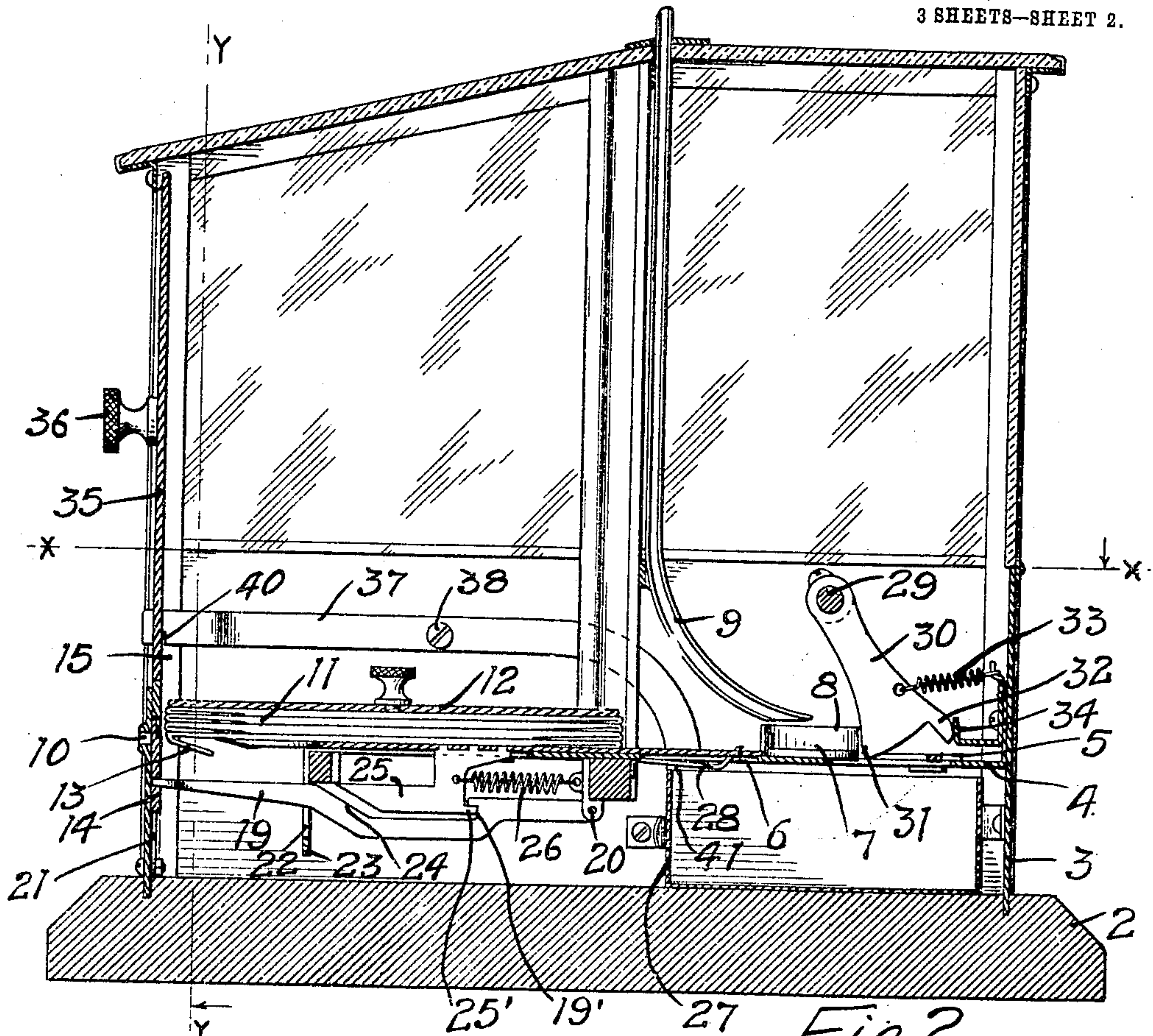
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W. H. H. H. H.
J. B. Byington

INVENTOR
HENRY A. THEXTON
BY *Paul Paul*
HIS ATTORNEYS

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3 SHEETS—SHEET 3.

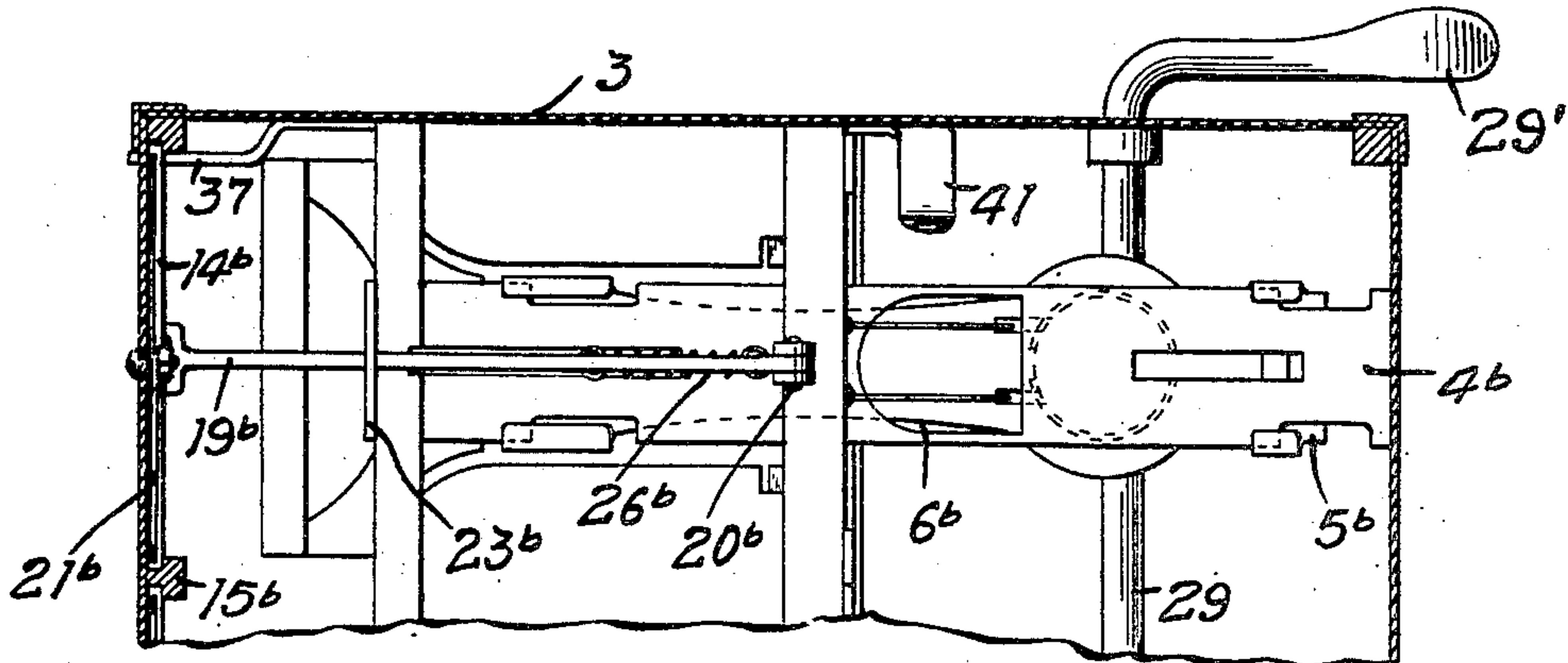


Fig 4.

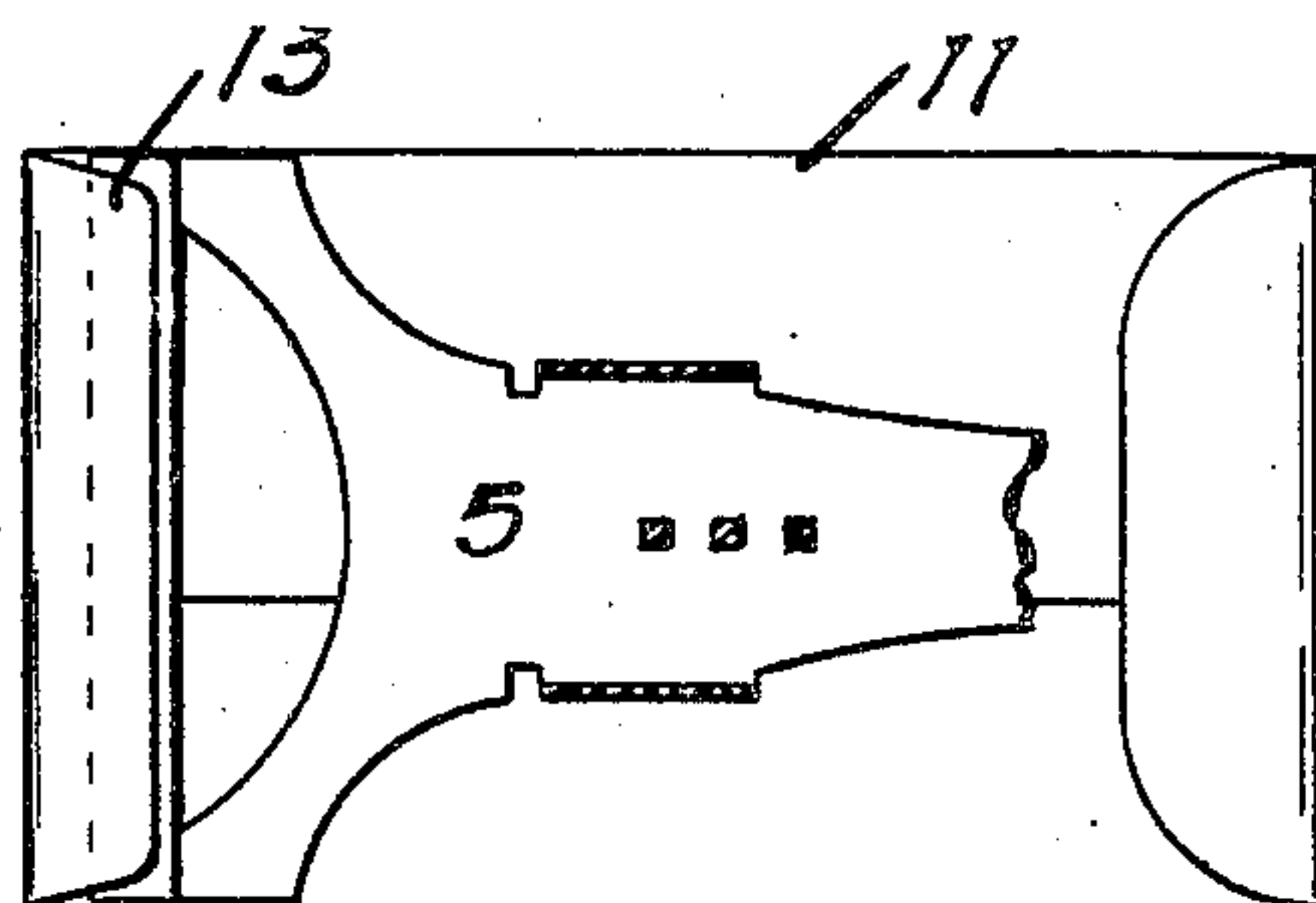


Fig 6.

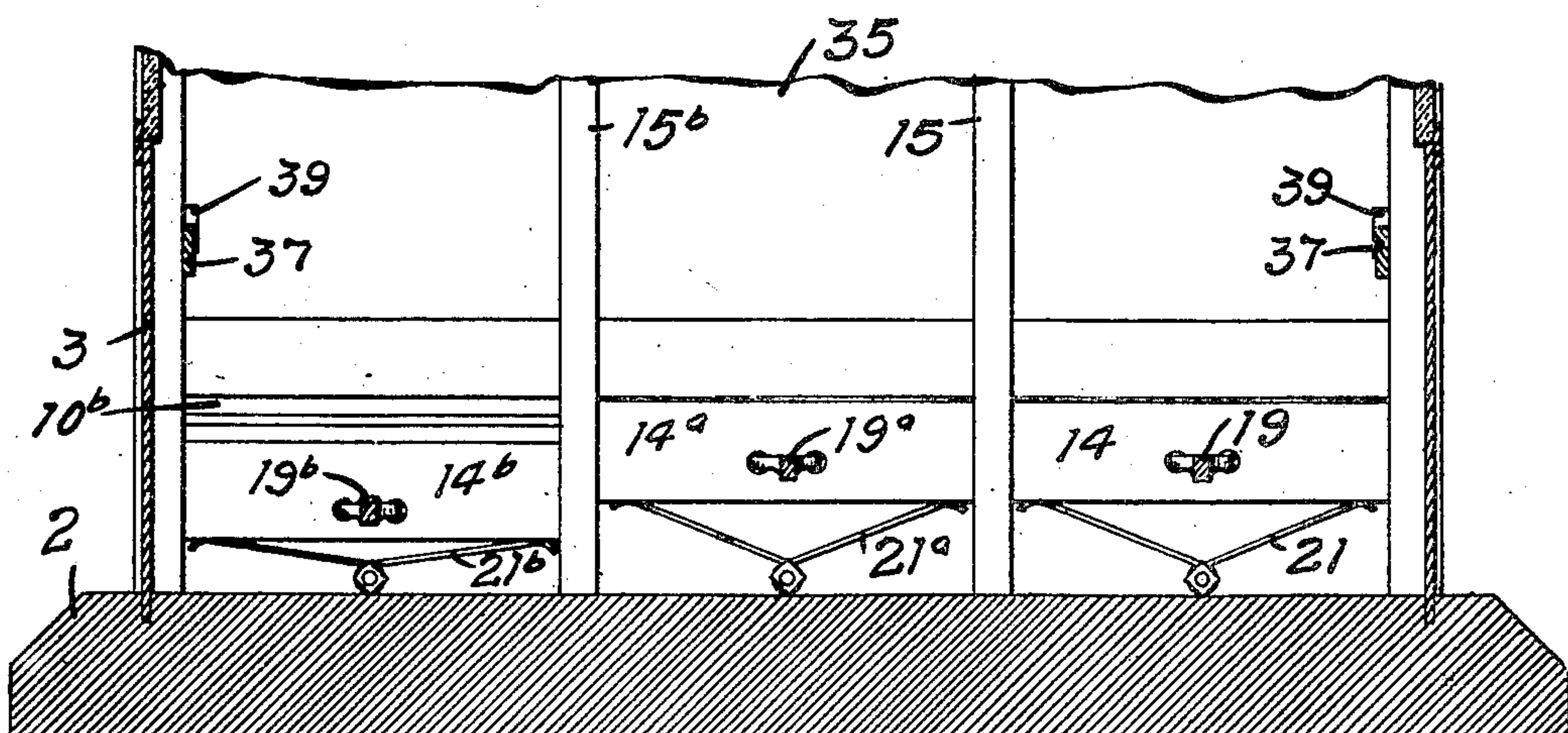


Fig 5. Y-Y

WITNESSES
M. Walston
J. B. Byington

INVENTOR
HENRY A. THEXTON
BY Paul & Paul
HIS ATTORNEYS

UNITED STATES PATENT OFFICE.

HENRY A. THEXTON, OF MINNEAPOLIS, MINNESOTA, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO THEXTON STAMP-VENDING MACHINE COMPANY, OF MINNEAPOLIS, MINNESOTA, A CORPORATION OF MINNESOTA.

VENDING-MACHINE.

No. 914,993.

Specification of Letters Patent.

Patented March 9, 1909.

Original application filed June 3, 1907, Serial No. 377,060. Divided and this application filed December 28, 1907, Serial No. 408,420.

To all whom it may concern:

Be it known that I, HENRY A. THEXTON, of Minneapolis, Hennepin county, Minnesota, have invented certain new and useful Improvements in Vending-Machines, of which the following is a specification.

The object of my invention is to provide a machine adapted for vending merchandise of various kinds, but designed particularly for delivering postage stamps contained within a suitable inclosure.

The subject matter of this invention is illustrated and described in a certain pending application filed by me June 3, 1907, No. 377,060, this being a divisional application thereof.

The object of my invention is to provide a machine from which postage stamps of various denominations can be obtained without delay and without the attention of a clerk, upon the deposit of a suitable coin in the machine.

A further object is to provide a stamp vending machine in which the envelop or other inclosure for the stamps may be utilized for advertising purposes.

The invention consists generally in various constructions and combinations all as hereinafter described and particularly pointed out in the claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a horizontal sectional view of a vending machine embodying my invention, taken on the section line $x-x$ of Fig. 2. Fig. 2 is a vertical sectional view illustrating the operating mechanism of the machine and showing the parts in their normal position. Fig. 3 is a similar view illustrating the position of the parts in the act of delivering an envelop after the deposit of the coin. Fig. 4 is a horizontal sectional view of one end of the machine showing the bottom of the operating mechanism in its normal position. Fig. 5 is a sectional view on the line $y-y$ of Fig. 2. Fig. 6 illustrates the plunger mechanism for projecting an envelop from beneath the pile in the machine. Fig. 7 is a detail of the plate that is adapted to rest upon the pile of envelops.

In the drawing, 2 represents a suitable base supporting a casing 3. This casing prefer-

ably has glass panels in its upper portion through which the operation of the mechanism may be followed.

I have illustrated in Fig. 1 three independent vending devices adapted for delivering stamps of different denominations placed separately in the envelops or with several stamps of different denominations placed in the same envelop to correspond to the value of a coin deposited in the machine. For instance, in one series of envelops two two-cent stamps and one one-cent stamp may be placed and delivered upon the deposit of a five-cent coin. In another series of envelops five two-cent stamps may be placed to be obtained upon the deposit of a dime. In still another series of envelops five-cent stamps may be provided, or if preferred, a quarter's worth in various denominations to be obtained upon the deposit of a coin of that value in the machine. The coin-chute leading to the different coin-controlled mechanisms will be suitably placarded so that the purchaser can determine at a glance in which chute to deposit the coin to obtain the desired envelop of stamps. The vending mechanism by means of which the envelops are delivered one at a time from the machine, is the same for each denomination of stamp, and it will be sufficient therefore, to describe one of these mechanisms in detail, the others being indicated by the same reference numeral with the addition of the exponents "a" and "b."

Within the casing is a horizontal support 4 on which a reciprocating plunger plate 5 is adapted to slide. The support has an opening 6 that is adapted to register with a similar opening 7 in the plunger plate when the said plate is projected to deliver the envelop. Normally the holes are out of register with one another. A flange 8 surrounds the hole in the plunger plate and when retracted said hole is beneath the discharge end of a coin chute 9, so that when the coin is deposited in the chute it will slide down and drop upon the support 4 within the opening in the plunger plate, as indicated in Fig. 2. The front of the casing has a discharge slot 10 that is in line with the lower envelop of the series, the envelops 11 being placed one above another on the plunger plate 5, and held thereon by

the plate 12. Other suitable means may be provided for this purpose if preferred. Each envelop has a flap 13 that normally hangs down in the path of the reciprocating plunger

5 plate so that when the said plate is driven forward it will engage the bend in the flap at the end of the envelop and push the envelop out from beneath the pile until it protrudes through the slot in the front of the casing

10 where it can be grasped by the fingers and drawn out of the machine. Normally the slot is covered by a sliding plate 14 that is movable between vertical guides 15 and has a pivotal connection with a bar 19. The inner

15 end of this bar is pivoted at 20 and its outer end is normally held in a raised position with the slide closing the delivery slot by means of a spring 21. The bar projects through an opening 22 in a hanger 23 that

20 depends from the under side of the support 4, said hanger serving as a guide for the bar, and the opening therein being of sufficient size to allow vertical movement of the bar to open and close the slide. The bar 19 has a

25 cam surface 24 in the path of a corresponding surface on a bracket 25 that is secured to the reciprocating plunger, said bracket and plunger being normally held in a retracted position by the spring 26. When the plunger is

30 projected the bracket 25 will engage the bar 19 and force it downwardly against the tension of its spring and open the slide to expose the delivery slot and permit the discharge of the envelop therethrough. A coin receptacle

35 26 is provided beneath the discharge opening in the support, and wires 28 are arranged to extend into said opening and cause the coin to tilt and be directed into the coin receptacle. A recess 19' is formed in the bar

40 19 in position to receive a lug 25' on the rear end of the bracket 25, whereby the bar 19 will be locked against downward movement when the operating mechanism is in its normal position.

45 A shaft 29 having an operating handle 29' is mounted above the coin receptacle and carries an arm 30. The forward edge of the lower end of this arm has a notch 31 that is adapted to engage the edge of the coin as it

50 lies upon the support within the opening in the plunger, and the pressure of the arm on the coin transmitted to the plunger will move it forward to eject the envelop of stamps. The rear edge of the lower end of the arm has

55 a lug 32 which engages the rear end of the plunger and continues its movement to eject the envelop after the forward edge has passed out of engagement with the edge of the coin, as indicated in Fig. 3. As here shown, the

60 arm swinging on the arc of a circle has moved the plunger forward through the engagement of the arm with the coin, and when the coin reaches the point where it is allowed to drop into the coin receptacle beneath, and the forward

65 edge of the arm through the arc of its

travel moves out of contact with the coin, the lug 32 moves into position to force the plunger forward and complete its stroke during the discharge of the coin. A spring 33 tends to return the arm to its normal position

70 against the stop 34. This mechanism forms the subject matter of my companion application above referred to and is not claimed in this case.

A removable plate 35 is provided in the

75 front of the casing having a suitable handle 36, and said plate is locked in position by means of two levers 37 pivoted at 38 on the end walls of the casing and having their outer

ends projecting through openings 39 in the

80 plate 35 and provided with notches 40 to receive the lower edge of the openings. The inner ends of the levers are downwardly turned and provided with extensions 41

which project into the path of the money

85 drawer 27. When this drawer is pushed into the casing its end walls engage the extensions 41 and swing the levers 37 until the notches therein engage the edges of the openings 39, thereby locking the plate 35

90 in place. Access to the interior of the casing can be obtained upon unlocking the money drawer and removing it, whereupon the plate 35 may be taken out and a fresh supply of

95 envelops placed in the machine. It will be noted that a space is provided between the forward edge of the support 4 and the front wall of the casing, and the ends of the envelops overhang this space, and as they are

100 placed in the machine one upon another the flaps will drop down sufficiently to allow the plunger to pass between them and the body of the envelop so that when the discharge slot is uncovered the forward end of the bottom envelop may be projected therethrough

105 to a point where it can be grasped and pulled out of the machine.

I claim as my invention:

1. A vending machine comprising a casing adapted to contain a series of envelops open

110 at one end and provided with flaps for closing said ends, said casing having a discharge opening in its wall and a support provided within said casing in the rear of said opening,

115 a plunger arranged to reciprocate on said support opposite said opening, the envelops being placed one above another with their open ends contiguous to said opening and the flap of the bottom envelop depending

120 into the path of said plunger, mechanism for projecting said plunger to feed said envelops forward one at a time to said discharge opening and a shutter arranged to close said opening and be withdrawn upon the forward

125 movement of said plunger.

2. A vending machine comprising a casing having a discharge opening in its wall and a support within said casing in the rear of said opening, a plunger operating on said support

130 opposite said opening, said casing being

adapted to contain a series of envelops having open ends and flaps therefor placed one above another, the flap of the lower envelop depending into the path of said plunger to be engaged thereby, means closing said discharge opening and preventing the withdrawal of an envelop therethrough until said plunger is operated, and means actuated by the forward movement of the plunger for withdrawing said closing means and exposing said opening.

3. A vending machine comprising a casing adapted to contain a series of envelops placed one above another therein, said casing having a discharge opening in its wall, a plunger operating within said casing to engage the envelops and project them through said opening one at a time, means for closing said discharge opening, a pivoted bar connected with said closing means and having an inclined surface, a bracket carried by said plunger and having a corresponding surface to engage the surface of said bar, whereby the forward movement of said plunger will actuate said bar to withdraw said closing means and expose said discharge opening.

4. In a vending machine, the combination, with a casing having a delivery opening and means for closing said opening, of a pivoted bar connected with said closing means, a reciprocating plunger, a bracket mounted thereon and arranged to engage said bar to operate said closing means and said bracket having means interlocking with said bar whereby the latter is locked against pre-

ture movement when said plunger is in its normal position.

5. In a vending machine, the combination, with a casing having a delivery opening, of a reciprocating plunger, a slide arranged to close said delivery opening, a pivoted bar connected with said slide, a bracket mounted on said plunger and arranged to engage said bar to depress the same and said slide when said plunger is moved forward, and a spring device connected with said bracket for holding said plunger and bracket in a retracted position.

6. In a vending machine, the combination, with a casing having a removable panel, levers pivoted in said casing and having notched ends arranged to project through openings in said panel, a money drawer adapted to be inserted into said casing and said levers having ends projecting into the path of said drawer whereby said notched ends will be tilted to engage the edges of the openings in said panel and lock the same in said casing.

7. In a vending machine, the combination, with a casing having a removable panel, of a money drawer, and means actuated by the closing of said money drawer for locking the said panel.

In witness whereof, I have hereunto set my hand.

HENRY A. THEXTON.

Witnesses:

J. B. BYINGTON,
J. H. BALDWIN.