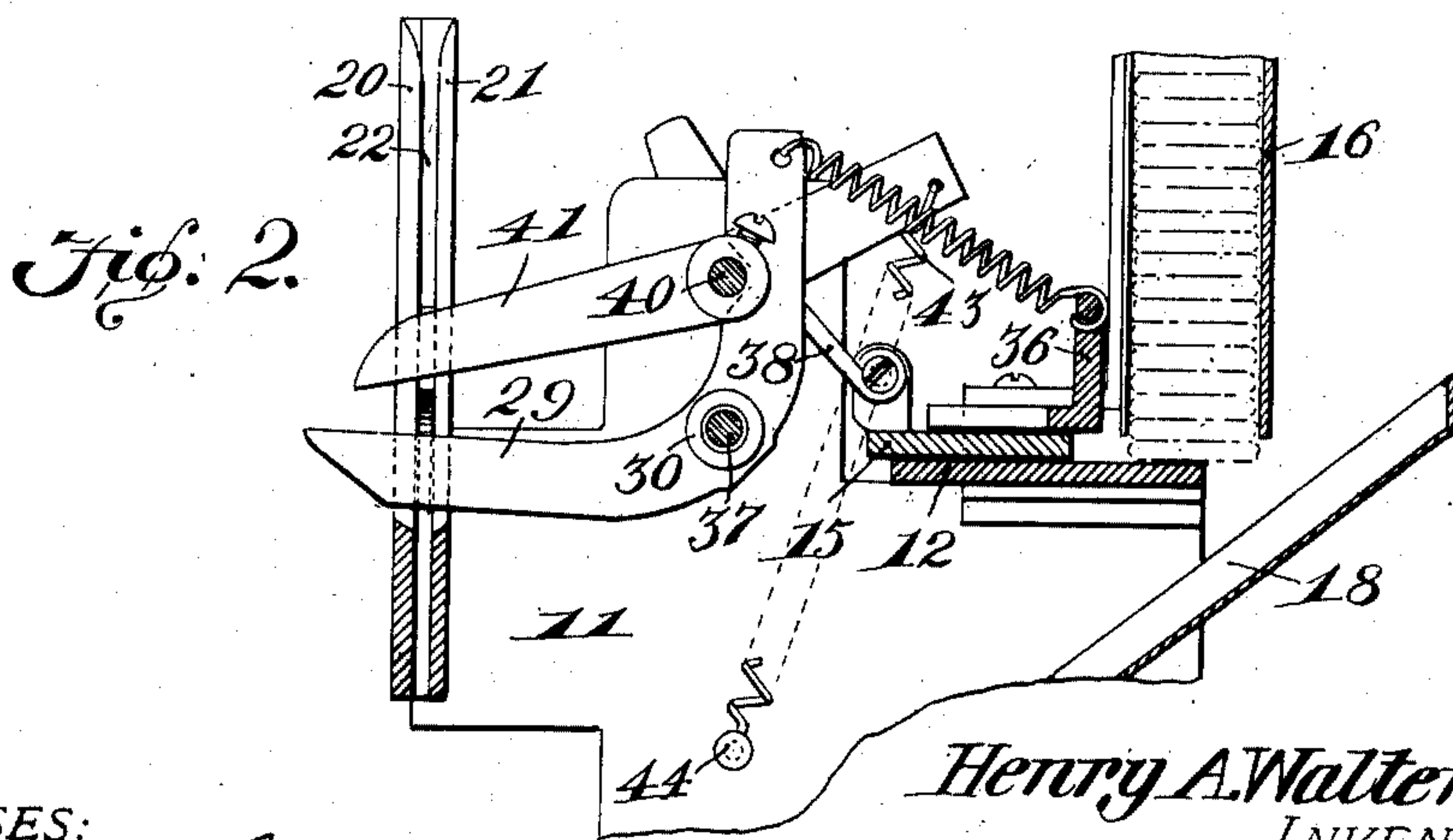
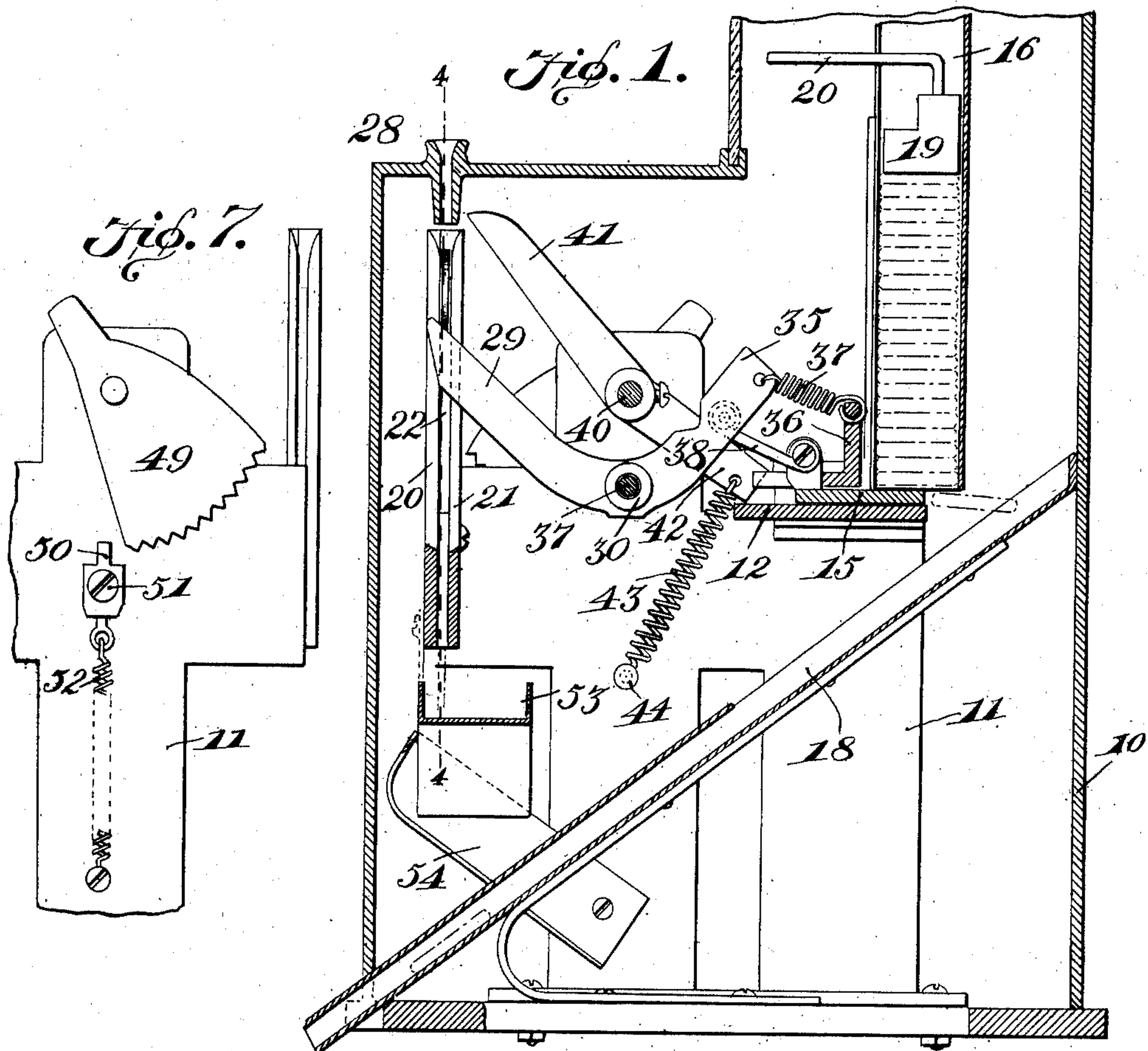


No. 864,815.

PATENTED SEPT. 3, 1907.

H. A. WALTERS.
VENDING MACHINE.
APPLICATION FILED APR. 13, 1906.

2 SHEETS—SHEET 1.



WITNESSES:

E. H. Carter
John E. Carter

Henry A. Walters,
INVENTOR.

By *C. A. Snow & Co.*
ATTORNEYS

No. 864,815.

PATENTED SEPT. 3, 1907.

H. A. WALTERS.
VENDING MACHINE.

APPLICATION FILED APR. 13, 1906.

2 SHEETS—SHEET 2.

Fig. 3.

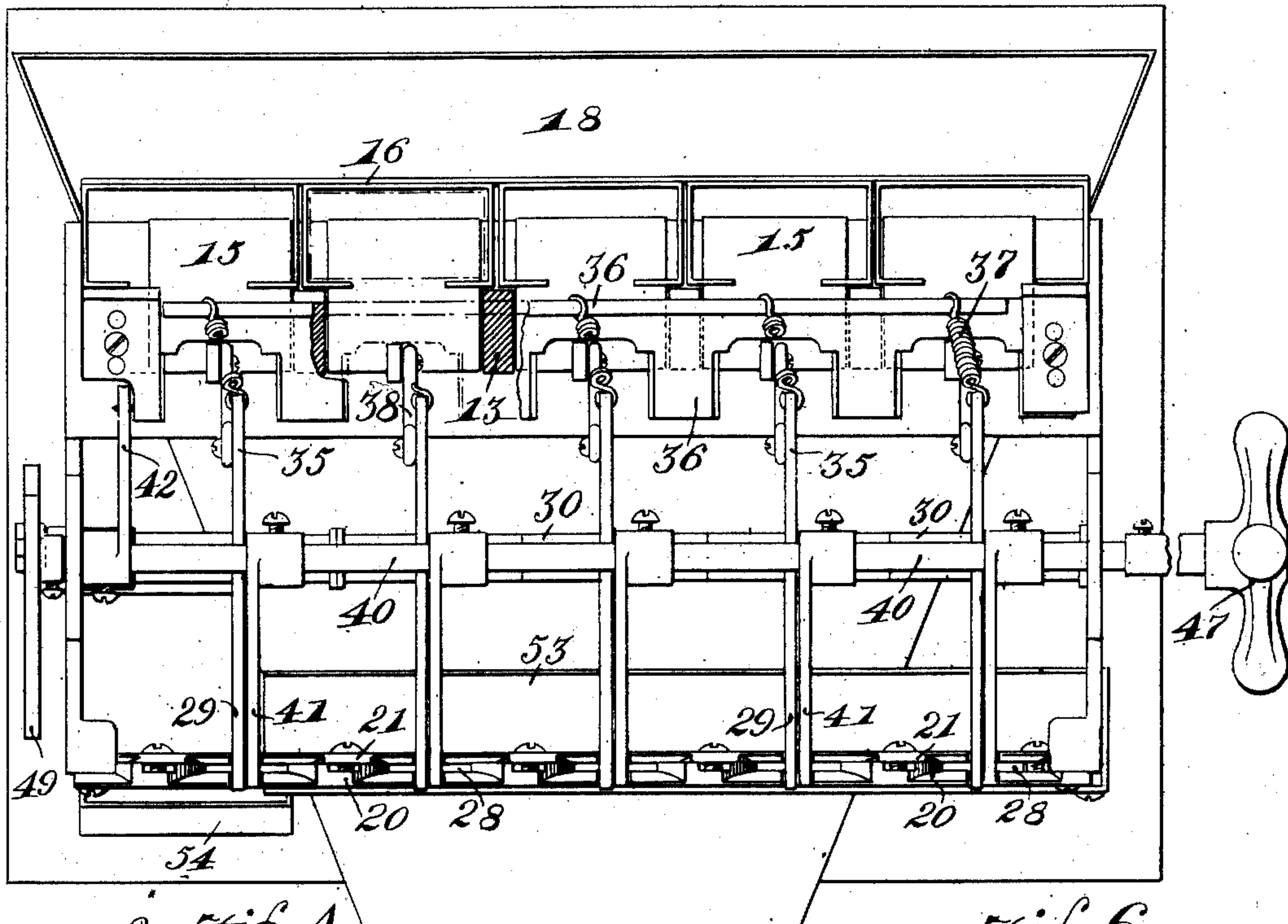


Fig. 4.

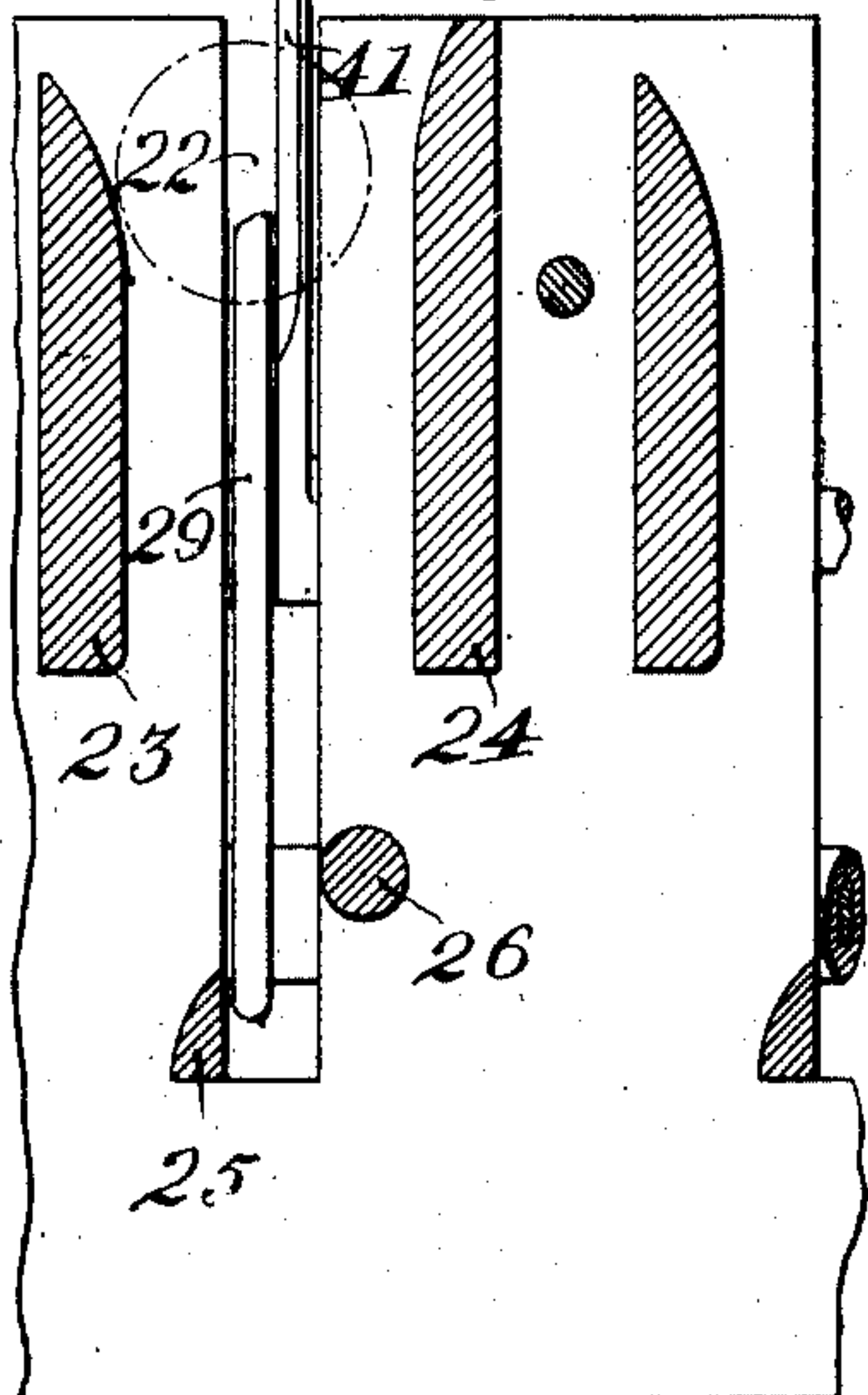


Fig. 6.

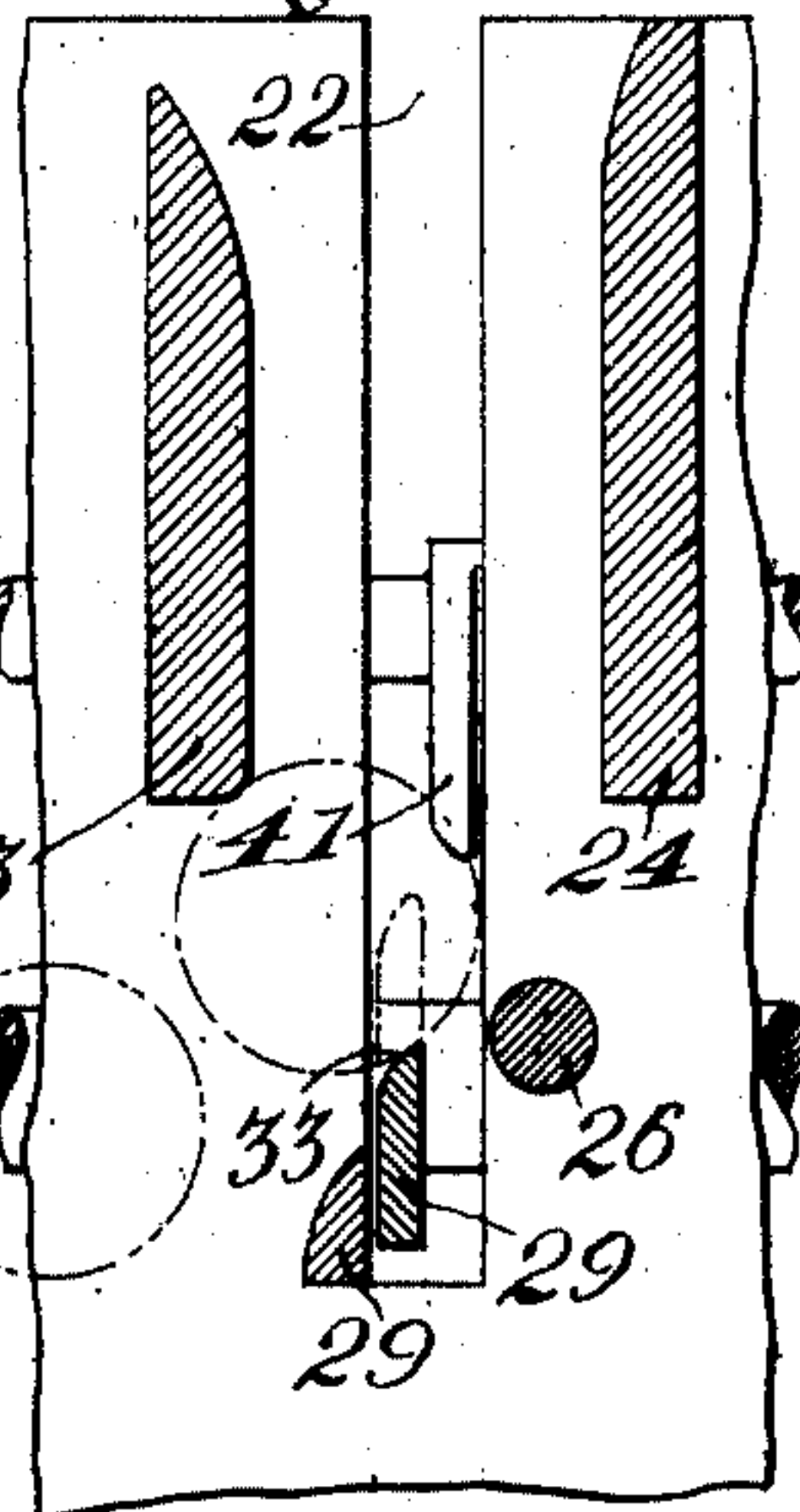
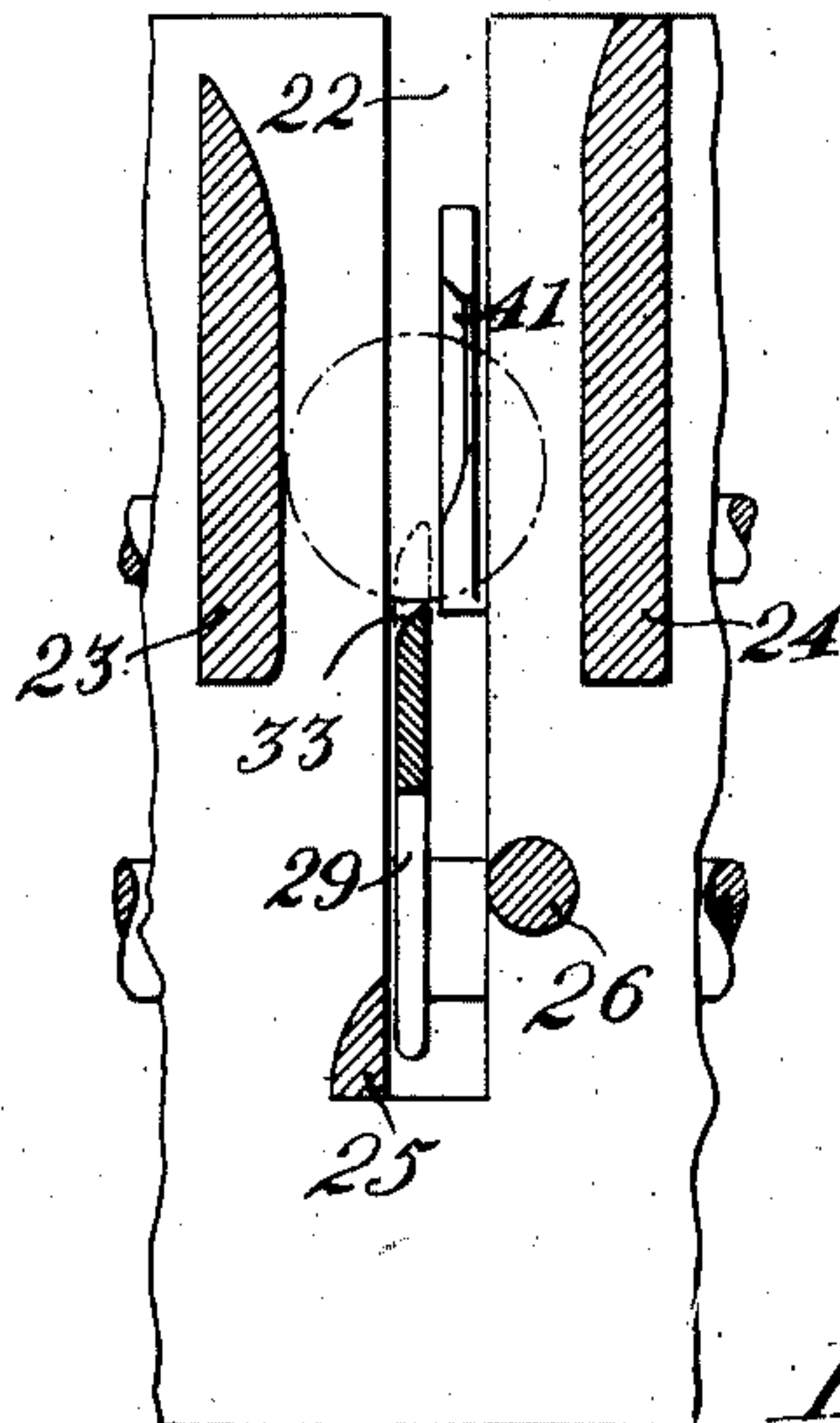


Fig. 5.



Henry A. Walters,
INVENTOR.

WITNESSES:

E. H. Bennett
John E. Parker

By

C. A. Snow & Co.

ATTORNEYS

UNITED STATES PATENT OFFICE.

HENRY A. WALTERS, OF LINTON, INDIANA.

VENDING-MACHINE.

No. 864,815.

Specification of Letters Patent.

Patented Sept. 3, 1907.

Application filed April 13, 1906. Serial No. 311,583.

To all whom it may concern:

Be it known that I, HENRY A. WALTERS, a citizen of the United States, residing at Linton, in the county of Greene and State of Indiana, have invented a new and useful Vending-Machine, of which the following is a specification.

This invention relates to coin controlled mechanism, and particularly to mechanism of that class employed in connection with vending and other machines.

10 The principal object of the invention is to provide an apparatus of simple construction, whereby movement is transmitted through the coin to the delivery slide, the coin engaging members being of such construction as to insure positive discharge of the coin after
15 a single operation.

A further object of the invention is to provide a machine of this type in which a large number of coin controlled mechanisms may be connected to a single operating handle or like member, to which movement is
20 imparted by the operator after the insertion of a coin, and operative movement transmitted to any or all of the coin controlled mechanism in which coins have been inserted.

A still further object of the invention is to provide a
25 machine of this type in which provision is made for insuring full stroke of the mechanism in both directions, so that it will be impossible to secure more than a single article after the insertion of a single coin.

With these and other objects in view, as will more
30 fully hereinafter appear, the invention consists in certain novel features of construction and arrangement of parts, hereinafter fully described, illustrated in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that various
35 changes in the form, proportions, size and minor details of the structure may be made without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings:—Figure 1 is a sectional elevation of a coin controlled mechanism constructed in accordance with the invention, showing the position of the parts immediately after the insertion of a coin. Fig. 2 is a similar view of the lower portion of the same, showing the position assumed while the coin
40 is being discharged. Fig. 3 is a plan view of the machine with the outer casing removed. Fig. 4 is a detail sectional view on the line 4—4 of Fig. 1, drawn to a slightly enlarged scale, a coin being shown in dotted lines in the position assumed immediately before the
45 coin engaging members are operated. Fig. 5 is a similar view, partly in section, showing the coin operated member partly depressed. Fig. 6 is a view similar to Fig. 4, showing the coin being discharged. Fig. 7 is an elevation of the full stroke mechanism.

Similar numerals of reference are employed to indicate corresponding parts throughout the several figures of the drawings.

The working parts of the machine are arranged within a suitable casing 10, which may be formed of any suitable material, and the coin actuated means are disposed within the lower portion of said casing.

The main frame 11 supports a horizontally disposed table 12, that is provided at intervals with blocks 13 which form spacing guides for delivery slides 15, there being five of such slides shown in the present instance, although the number may be increased or decreased at pleasure. Above the delivery slides are magazines 16 in which packages of chewing gum or other articles may be placed. These articles rest on top of the delivery slides, and when a slide is withdrawn to the position shown in Fig. 2, the lowermost article will drop until it rests on the table 12, and on the rearward movement of the slide to the position shown in Fig. 1, the article will be ejected and will travel by gravity through a delivery chute 18 to the front or side of the machine. On the column of articles in each magazine is arranged a weighted block 19 from which projects a pointer 20 that extends close to the front of the casing, and at this point a transparent panel is placed, so that the quantity of goods in the magazine may be readily
55 60 65 70 75 80 ascertained.

Near the front of the machine are arranged two cast metal plates 20 and 21 that are provided with vertical slots 22 of a number equal to the number of magazines. The plates are held in spaced relation by ribs or similar members 23, 24, 25 and 26, which are so arranged as to form coin slots between said plates, and any coin inserted in a casing slot 28 will be directed between two of the ribs 23—24 and will fall by gravity on top of the outer arm of a coin actuated lever 29. Each of the levers 29 has an independent sleeve or hub 30 of considerable length, the several sleeves or hubs being mounted on a rigid spindle 37 that extends horizontally across the frame and as the ends of said sleeves or hubs abut, they will all be maintained in proper relative position. The outer arm 29 of each of these levers has an inclined upper edge 33, as will appear on reference to Figs. 5 and 6, and the coin will first rest on a comparatively sharp edge of the slide, and will continue to remain in engagement with such edge until the arm is fully depressed. The rear arm 35 of the lever is connected at the upper edge of an angle bar 36 that extends transversely across the frame immediately in front of the magazines by means of a spring 37 that tends normally to hold the lever in the position shown in Fig. 1. This rear arm 35 is connected by a link 38 to a pivot pin carried by lugs projecting upward from the front of the slide, and said lugs will engage with the
85 90 95 100 105

recessed front edge of the bar 36 in order to limit the discharge movement of the slides.

Extending transversely across the machine and adapted to bearings in the frame, is a rock shaft 40 on which are secured coin engaging fingers 41 of a number equal to the number of magazines. This rock shaft carries at one end an arm 42 that is connected by a tension spring 43 to a fixed stop or pin 44, the spring tending to maintain the several rocker arms 41 in the position shown in Fig. 1, so that a coin may readily be introduced into any one of the coin slots. The arm 42 further serves to engage with the table 12 which forms a stop for limiting movement of the coin engaging arms under the influence of the tension spring.

One end of the shaft extends for some distance outside the casing and carries an operating handle 47 which is turned by the operator after a coin has been inserted, and at the opposite end of said rock shaft is secured a toothed segment 49 which is engaged by a pawl 50 pivoted on a slide 51 and held in operative position by a spring 52. The pawl engages with the toothed segment in both directions of movement of the latter, and during both movements will act to prevent the turning of the segment in reverse direction, it being necessary to make a complete stroke in both directions before the pawl is clear of the segment and can turn to allow movement in the opposite direction.

Any one, or all of the delivery slides may be actuated by a single movement of the handle 47. When a coin is inserted in the slot between the two plates 20 and 21, it falls to the position shown in Figs. 1 and 4, resting on the sharpened upper edge of the arm 29. The handle 47 is then turned, and all of the coin engaging arms 41 will move downward with the shaft 40, those under which no coin has been inserted moving idly in the slots 22. When a coin has been inserted, the arm 41 will engage the top of the coin, and as the return movement continues, the coin will be gradually forced down, assuming during this movement the position shown in Fig. 5, and as the movement continues still further, the coin being forced to the left by the inclined edge of the arm 41, will start to ride under the rib 23. At this time the spring 37 of the coin actuated lever is under sufficient stress to pull the arm 29 upward and as the coin was then in a position between the arm 29 and the arm 41, and is engaged by the inclined edge of both of said arms, its edges will act as cams, and the coin will be moved quickly and forcibly to the left, and thence downward into a chute 53 from whence it is directed from a chute 54 to the bottom of the casing, or a suitable coin receptacle. During the downward movement of the arm 29, the delivery slide is pulled outward from the position shown in Fig. 1 to the position shown in Fig. 2, but when it reaches this position, the lowermost article in the magazine will fall on to the table 12, and then as the coin actuated lever is suddenly thrown to the rear, the slide will be forced rearward and will throw the said lowermost article from the table and out of the

lower end of the magazine, from whence it falls to the delivery chute 18.

It will be seen that the machine is of very simple and economical construction, comprising but few parts, and will permit of the delivery of articles from all of the magazines at a single operation, provided coins are previously inserted in the proper chutes. It is impossible for a coin to remain within the chute and thus stop the operation, for if a coin moves too far to the right, it will strike against the member 26 and will be thrown to the left, and over the edge of the arm 29.

I claim:—

1. In a mechanism of the class described, a coin chute having walls contiguous to the faces of an inserted coin, slotted in the direction of their length; an arm extending through said slots and movable along the same in the plane of travel of and by the inserted coin, in a plane at right angles to the width of the coin; another arm normally exterior to said slots and movable into and along the same in a plane parallel with but displaced with relation to the plane of movement of the first-named arm, said second arm moving the first-named arm through the intermediary of an inserted coin, the said two arms coacting to move the coin along the length of the chute and then to propel it toward a suitable receptacle; means for returning the second arm to its initial position when released from the coin, and a delivery mechanism connected to the second arm and rendered active by the return movement of the said second arm.

2. In a mechanism of the class described, a delivery mechanism; an arm connected therewith; means tending to maintain said arm in a normally inactive position; a coin chute through which said arm extends; another arm normally exterior to the coin chute and having a plane of movement displaced from but parallel with the plane of movement of the first arm, and adapted to enter the coin chute and operate the first arm through the intermediary of an inserted coin, and means for causing the discharge of the inserted coin from between said arms at the completion of the movement thereof in one direction, and thereby permitting the first arm to return to its initial position past the second arm and thus actuate the vending mechanism.

3. In a mechanism of the class described, a coin chute having the walls contiguous to the faces of an inserted coin, slotted in the direction of their length; an arm normally extending through said slots and movable along the same in the plane of travel of and by the inserted coin and at right angles to the width of said coin and also having its upper edge beveled to receive and support the coin; another arm normally exterior to said slots and movable into and across the same in a plane parallel with the movement of the first arm but displaced with relation thereto, and also having a beveled edge to engage the coin, the second arm acting through the intermediary of an inserted coin to propel the first arm and the beveled edges of the two arms coacting to propel the coin laterally from the chute at the completion of the stroke of the arms; means for returning the second arm to its normal position when released from the coin, and a delivery mechanism connected to the second arm and rendered active by the return movement of the latter.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

HENRY A. WALTERS.

Witnesses:

DAVID D. TERHUNE.

JAMES N. WAGGONER.