

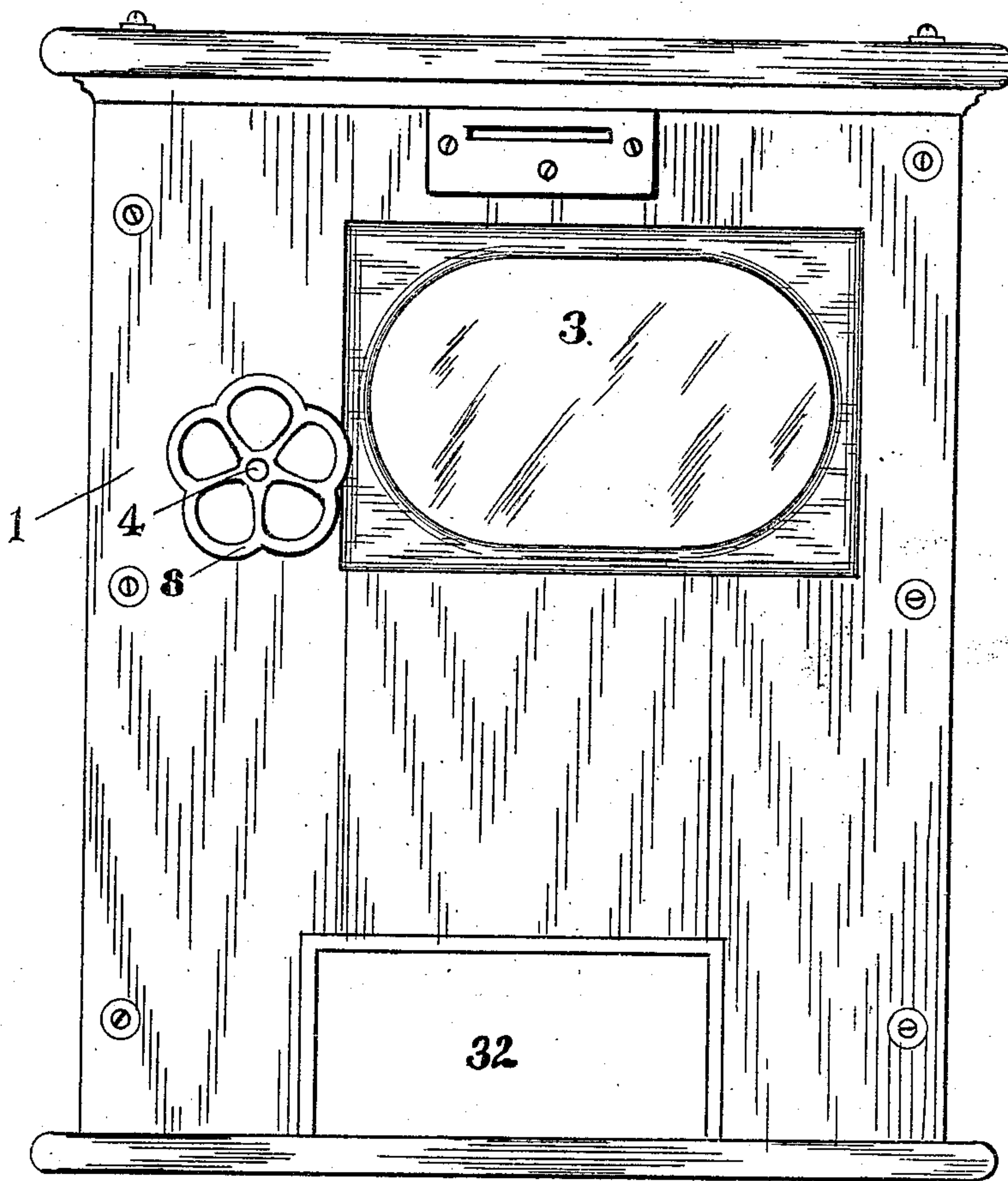
F. W. KALSOW.
CARD VENDING MACHINE.
APPLICATION FILED NOV. 18, 1908.

928,979.

Patented July 27, 1909.

3 SHEETS—SHEET 1.

Fig. 1



Witnesses—

L. P. Hicks
Harry Opsahl

Inventor—

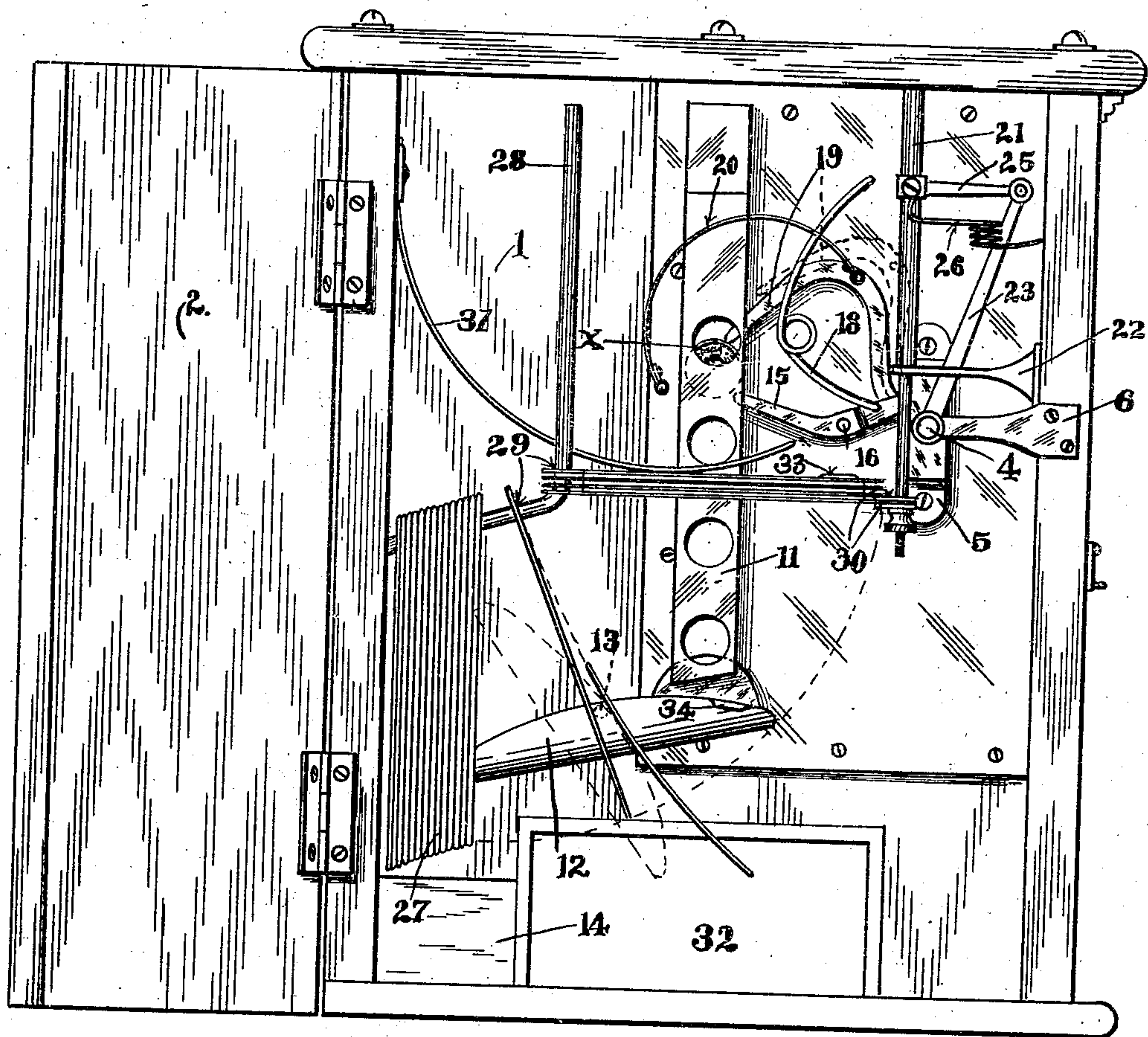
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3 SHEETS—SHEET 2.

Fig. 2



Witnesses—

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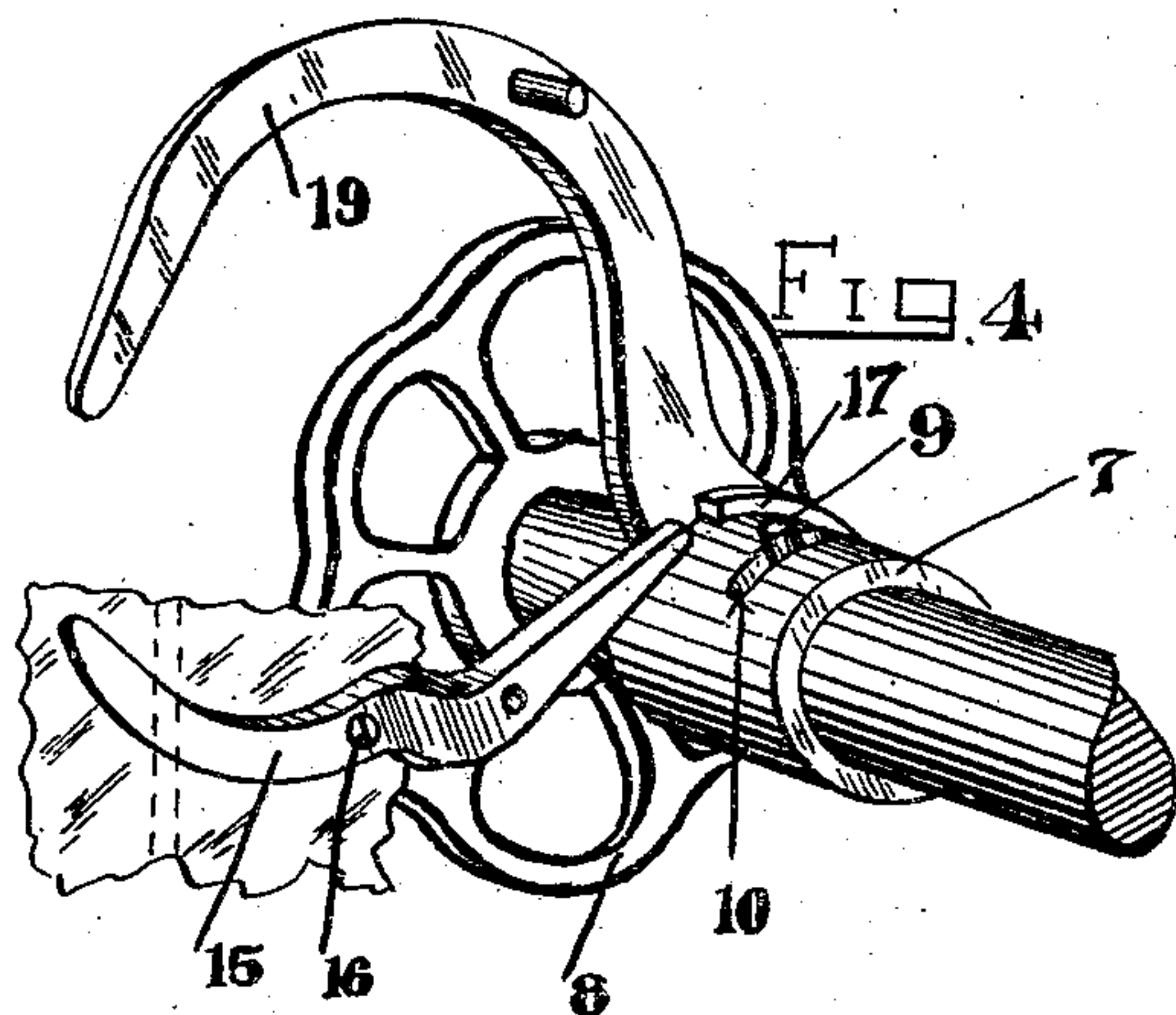
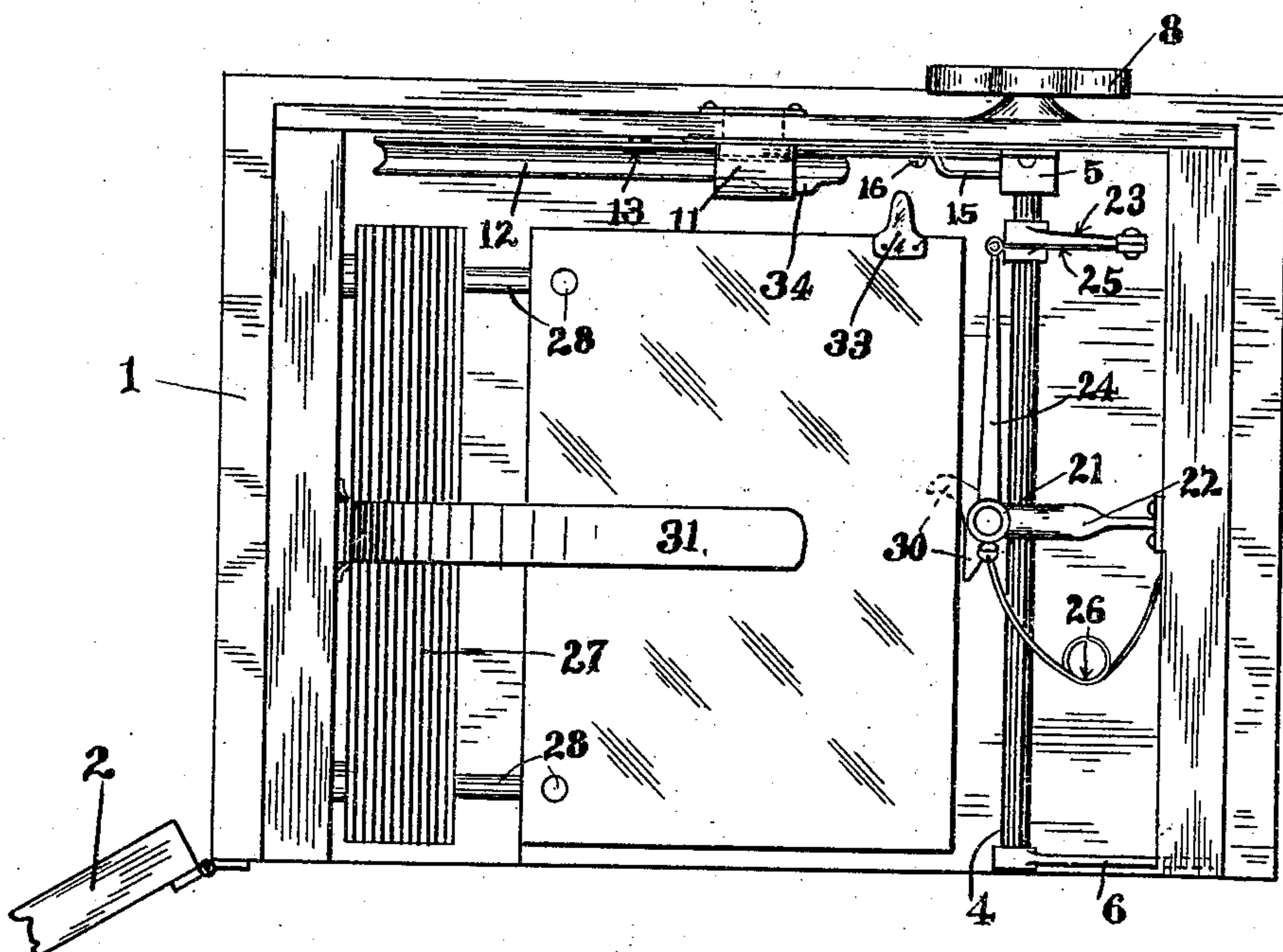
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3 SHEETS—SHEET 3.

FIG 3



WITNESSES—

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UNITED STATES PATENT OFFICE.

FREDRICK W. KALSOW, OF MANSON, IOWA.

CARD-VENDING MACHINE.

No. 928,979.

Specification of Letters Patent.

Patented July 27, 1909.

Application filed November 18, 1908. Serial No. 463,193.

To all whom it may concern:

Be it known that I, FREDRICK W. KALSOW, a citizen of the United States, residing at Manson, in the county of Calhoun and State of Iowa, have invented certain new and useful Improvements in Card-Vending Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to coin controlled vending mechanisms, and has for its especial object to provide improved mechanism, for effecting the delivery of postal cards and similar articles, from an inclosed cabinet containing the same.

To the above ends, the invention consists of the novel devices and combinations of devices hereinafter described and defined in the claims.

The invention is illustrated in the accompanying drawings, wherein like characters indicate like parts throughout the several views.

Referring to the drawings: Figure 1 is a view in front elevation, showing a vending machine embodying my invention; Fig. 2 is a rear elevation of the machine, showing the door of the cabinet open, so as to expose a portion of the coin controlled mechanism; Fig. 3 is a plan view with the top of the cabinet removed, and with other parts broken away; and Fig. 4 is a detail view in perspective.

The numeral 1 indicates a case or cabinet, the rear portion of which is provided with a hinged door 2, to afford access to the interior of the cabinet 1. The front of the cabinet 1, is provided with a glass covered side opening 3, for the purpose of exposing to view, a sample of the article contained within the cabinet 1. A horizontal rock shaft 4 is mounted in suitable bearings 5 and 6, secured within the cabinet 1. Mounted on the forward end of the rock shaft 4, is a sleeve 7 having a reduced end portion that projects through the front of the cabinet 1 and is provided with a hand wheel 8. A projecting pin 9 is rigidly secured to the rock shaft 4 and works through an elongated slot 10 cut in the sleeve 7. This pin 9 and slot 10 limit the rotary movement of the sleeve 7

with respect to the rock shaft 4. Opening through the front of the cabinet 1, and extending vertically downward on the inside thereof, is a coin delivery spout 11 that delivers to a deflecting trough 12, pivotally connected to the cabinet 1 at 13. The said trough 12 is held in its normal position, by frictional engagement between the lower end of the spout 11 and the cabinet 1. Normally the trough 12 delivers to a coin drawer or receptacle 14.

A lock lever 15 is intermediately pivoted at 16 to the cabinet 1 between the spout 11 and the rock shaft 4. One end of the lock lever 15 normally projects within the spout 11, to intercept a deposited coin, and the other end of said lock lever 15 normally projects in the path of a stop 17 on the sleeve 7, to intercept the limited rotary movement of said sleeve 7. A spring 18 normally holds the lock lever 15 in its operative or normal position. Carried by the sleeve 7, is a push lever 19, which lever is held in a retracted position by a spring 20. The push lever 19 is arranged to move into and out of the coin delivery spout without engaging the lock lever 15, but will operate through a deposited coin held by the lock lever 15, to move said lock lever out of the path of the stop 17 on the sleeve 7 and to release the intercepted coin X, as shown in Fig. 2. A second rock shaft 21 extends in a vertical direction and at right angles to the rock shaft 4, and has its upper end seated in the top of the cabinet 1, and its lower end reduced and mounted in a suitable bearing bracket 22 secured to one side of the cabinet 1. The rock shaft 4 is provided with an upwardly projecting arm 23, and the rock shaft 21 is provided with a horizontal arm 24. The free ends of the arms 23 and 24, are pivotally connected together by a horizontal link 25. A spring 26, one end of which is secured to the cabinet 1, and the other end of which is secured to the arm 24, normally holds the rock shafts 4 and 21 in retracted positions through the arms 23 and 24 and the link 25.

For holding the postal cards or similar articles to be vended, I provide a series of thin metal plates 27 mounted, for sliding and swinging movements on a pair of approximately L-shaped hooks 28 secured to the cabinet 1. The plates 27 are secured to the

hooks 28 by holes 29 punched near one end of said plates, and through which the hooks project. When the plates 27 are in their normal or horizontal positions, they are supported at their sides adjacent to the holes 29 by the approximately horizontal portion of the hooks 28, and at their free or outer ends by an escapement, comprising a pair of fingers 30, which fingers are secured to the lower depending end of the rock shaft 21, one slightly above the other and set at an angle to each other. The lower-most finger 30 normally supports the plates 27, but when the rock shaft 21 is rotated to release one of said plates, the upper-most finger 30 is moved between the two lower-most plates at the same time the lower-most finger releases the bottom plate. The articles to be vended are placed one or more between each pair of horizontal plates 27 and are indicated by the letter Y. A long leaf spring 31 is secured at one end to the cabinet 1, and the free end yieldingly presses the articles Y and plates 27 one upon the other. When a coin is deposited in the spout 11, and the machine operated, the lower-most plate 27 will be released together with the article Y held thereby. The released plate 27 will swing from its horizontal position to a vertical or idle position, and remain in said idle position until the machine is again filled. The Y just released will fall to the bottom of the cabinet 1, where it may be reached by the purchaser through the hand opening 32, formed in the front of the cabinet 1. To prevent an intended purchaser from being cheated when the machine is empty, the upper-most plate 27 is provided near its free edge, with a projecting finger 33, arranged to strike a projection 34 on the deflecting trough 12, while the plate 27 is moving from its horizontal to its vertical position, and thereby tripping the deflecting trough 12 into the position indicated by dotted lines in Fig. 2, in which position, said deflecting trough will deliver said deposited coin to the bottom of the cabinet 1 where it may be reached by the person who deposited the same.

The operation is probably obvious from the foregoing description, but may be briefly summarized as follows: The purchaser first deposits a coin in the upper end of the spout 11, which coin will be intercepted and held by the lock lever 15. Then by turning the hand wheel 8, the sleeve 7 will be rotated and will carry with it the push lever 19, from its retracted position shown by dotted lines in Fig. 2, into the position indicated by full lines in the same figure, in which latter position, the free end of the push lever 19 engages the coin X. By a continued movement of the push lever 19 against the said coin, the lock lever 15 will be moved against the tension of the springs 18 and out of the path of the coin, thereby releasing said coin, and at the same

time, said lever moves out of the path of the stop 17 on the sleeve 7. By a still further movement of the hand wheel 8, the sleeve 7 will engage the pin 9, and thereby rotate the rock shaft 4, and said shaft 4 will rotate the rock shaft 21 against the tension of the spring 26 through the arms 23 and 24 and link 25, and thereby operate the escapement to release the plates 27 and articles held thereby.

What I claim is:

1. In a vending machine, the combination with a coin delivery device, of a shaft, a sleeve mounted on said shaft for a limited rotary movement, means for rotating said sleeve, a lock normally intercepting the limited movement of said sleeve and for intercepting a deposited coin, and a push lever carried by said sleeve and arranged to move without engaging said lock, but operative through a deposited coin to release said lock and permit the sleeve to rotate said shaft and to thereby release the article to be vended, substantially as described.

2. In a vending machine, the combination with a coin delivery spout, of a shaft, a sleeve mounted on said shaft for a limited rotary movement, means for rotating said sleeve, a stop and a push lever on said sleeve, and a lock lever, one end of which normally projects within said spout and the other end of which normally stands in position to be engaged by the stop of said sleeve, and the free end of which push lever is arranged to work within said spout and to move without engaging said lock lever, but is operative through a deposited coin, to move said lock lever out of the path of said stop and permit the sleeve to rotate said shaft and to thereby release the article to be vended, substantially as described.

3. In a vending machine, the combination with a coin delivery spout, of a spring retracted shaft, a spring retracted sleeve mounted on said shaft, for a limited rotary movement, means for rotating said sleeve, a stop and a push lever on said sleeve, and a spring held lock lever, one end of which normally projects within said spout and the other end of which normally stands in position to be engaged by the stop of said sleeve, and the free end of which push lever is arranged to work within said spout and to move without engaging said lock lever, but is operative through a deposited coin, to move said lock lever out of the path of said stop and permit the sleeve to rotate said shaft, and to thereby release the article to be vended, substantially as described.

4. In a vending machine, the combination with a series of holders, of a coin delivery device, a shaft, a sleeve mounted on said shaft for a limited rotary movement, means for rotating said sleeve, a lock normally intercepting the limited movement of said sleeve

and for intercepting a deposited coin, and a push lever carried by said sleeve and arranged to move without engaging said lock, but operative through a deposited coin to
5 release said lock and permit the sleeve to rotate said shaft and to thereby release the said holders, substantially as described.

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

FREDRICK W. KALSOW.

Witnesses:

A. F. VOLBERDING,
M. W. FITZ.