

H. G. HOWER, W. D. MULL & A. C. COOPER.

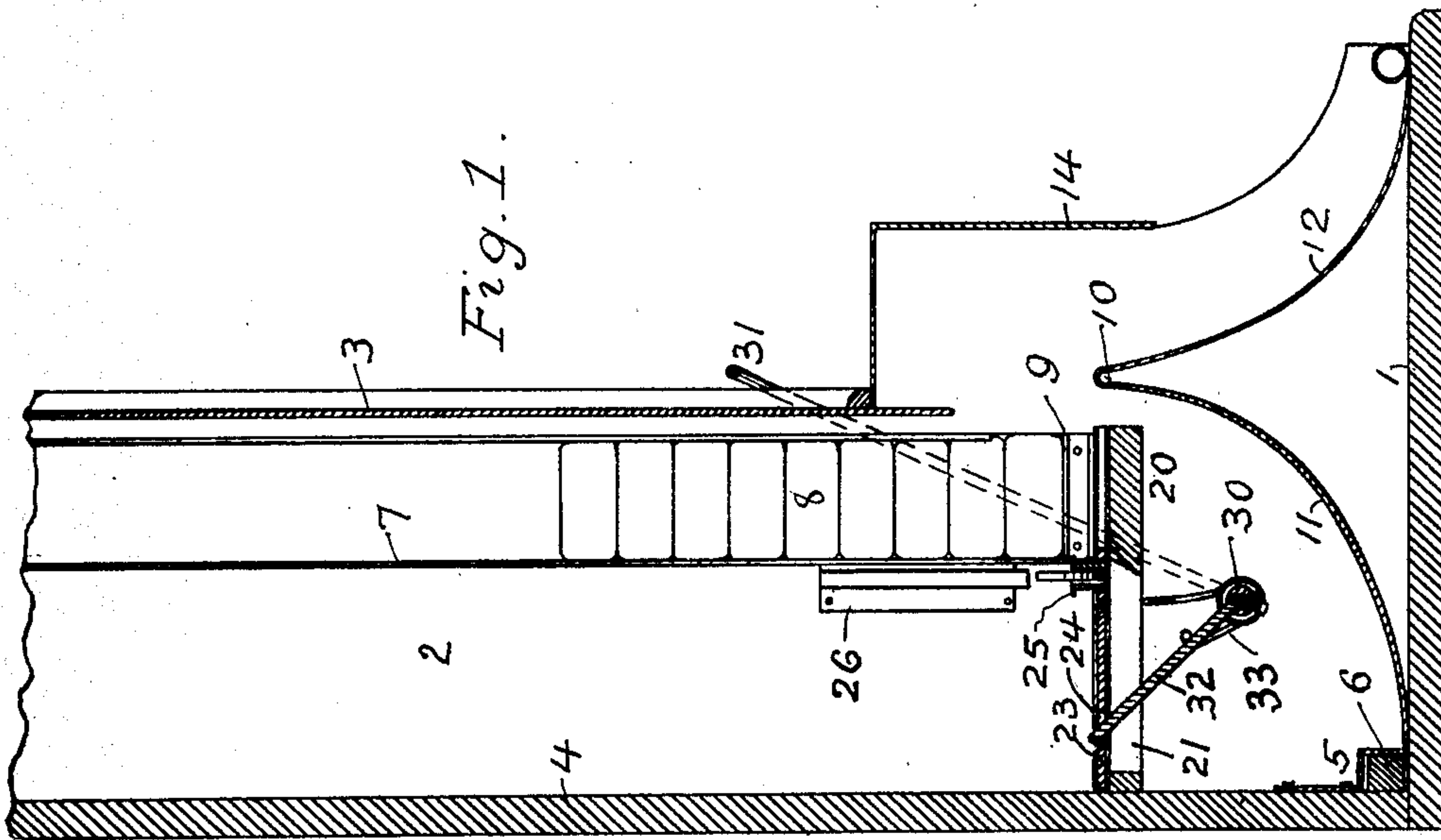
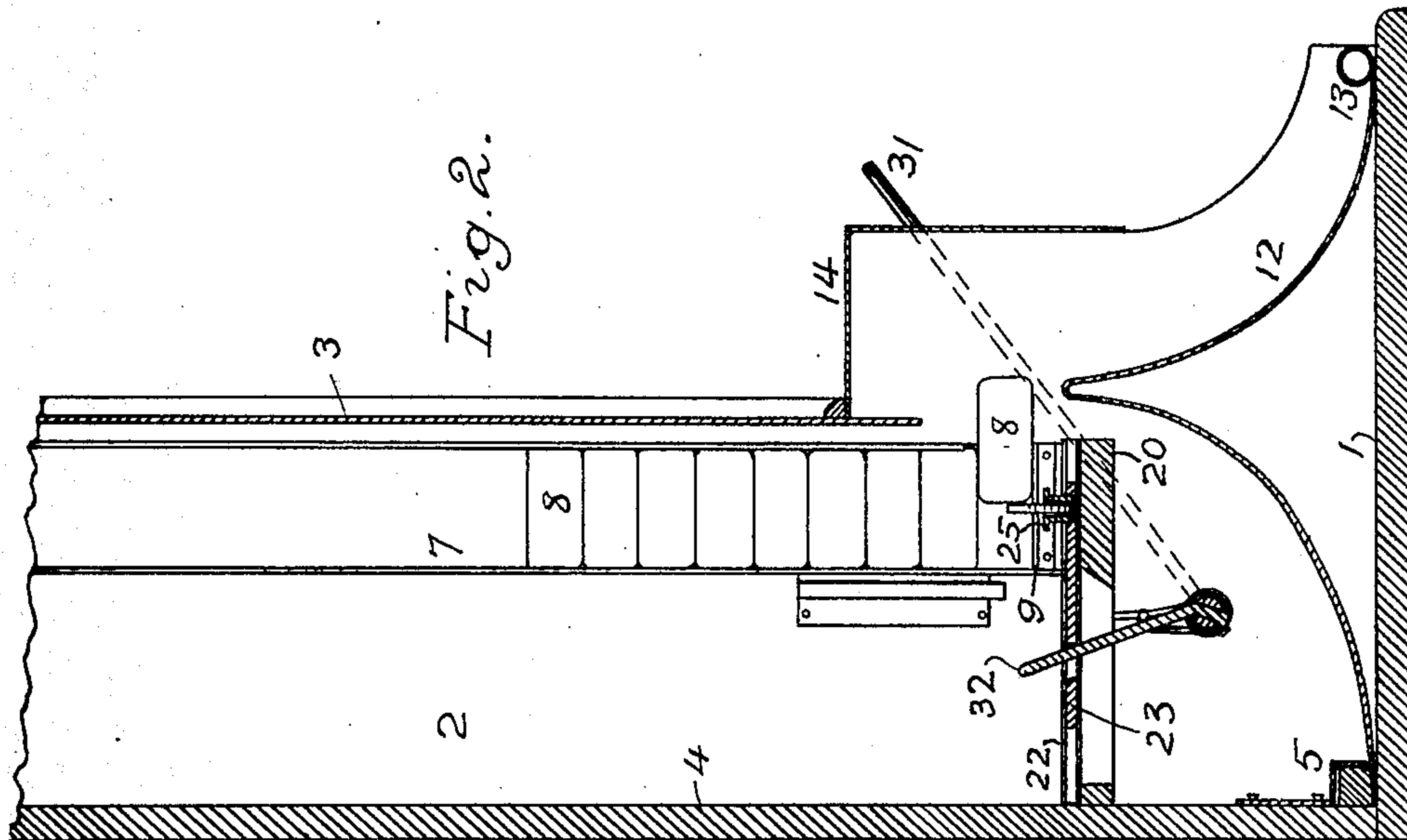
VENDING APPARATUS.

APPLICATION FILED DEC. 2, 1907.

916,557.

Patented Mar. 30, 1909.

2 SHEETS—SHEET 1.



Witnesses
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Fig. 3.

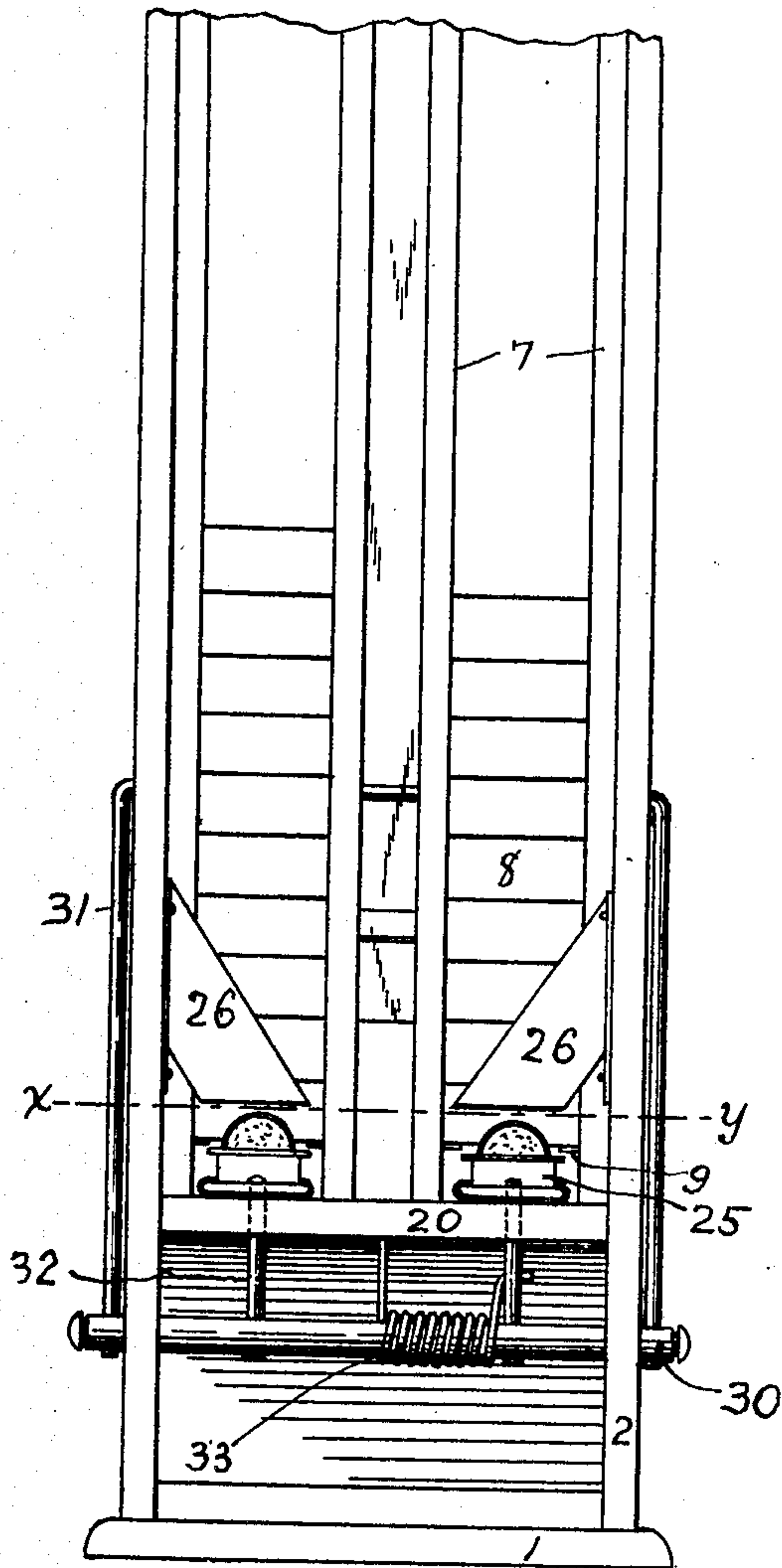
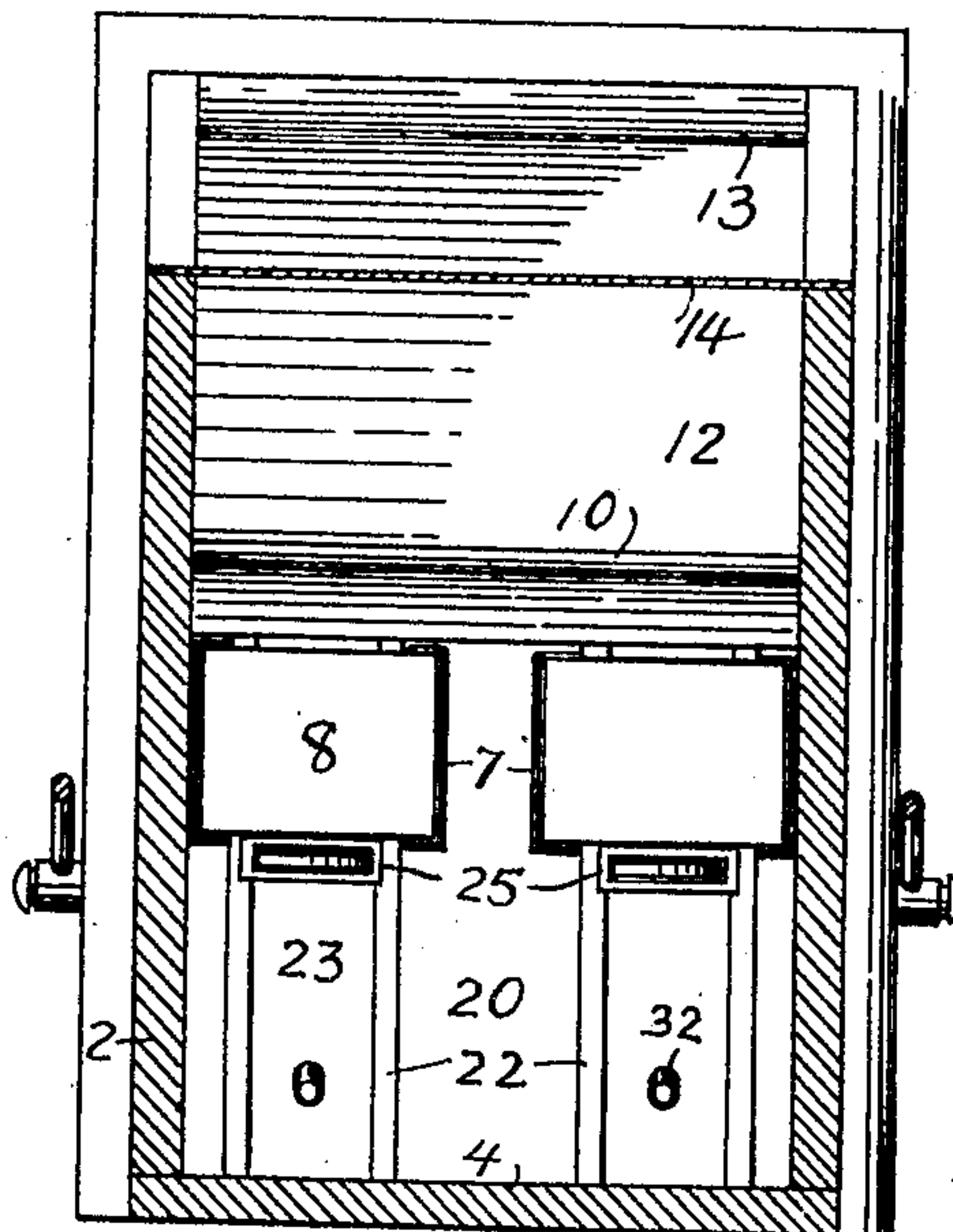


Fig. 4.



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UNITED STATES PATENT OFFICE.

HENRY G. HOWER, WALTER D. MULL, AND ARCHIE C. COOPER, OF CLINTON, ILLINOIS.

VENDING APPARATUS.

No. 916,557.

Specification of Letters Patent.

Patented March 30, 1909.

Application filed December 2, 1907. Serial No. 404,881.

To all whom it may concern:

Be it known that we, HENRY G. HOWER, WALTER D. MULL, and ARCHIE C. COOPER, citizens of the United States, and residents of Clinton, in the county of Dewitt and State of Illinois, have invented certain new and useful Improvements in Vending Apparatuses; and our preferred manner of carrying out the invention is set forth in the following full, clear, and exact description, terminating with a claim particularly specifying the novelty.

This invention relates to check controlled apparatus of that class having a magazine intended to contain the articles to be vended, and more especially to the article delivery mechanism, and the object of the same is to simplify and improve such a machine.

To this end the invention consists broadly in the use of a sliding pusher for carrying the check or coin to its receptacle and causing it in its movement to strike the article and deliver the latter out of the machine.

The invention also consists specifically in the details by which this broad idea is carried out, all as set forth below and as shown in the drawings in which—

Figures 1 and 2 are central vertical sections through one magazine of this machine, showing the parts respectively in the positions which they occupy as the coin is dropped in and during the delivery movement. Fig. 3 is an elevation from the rear, with the back board removed. Fig. 4 is a horizontal section on the line $x-y$ of Fig. 3.

The casing of this machine comprises a bottom 1, upright sides 2, a front 3 which may be of glass, and a removable back board 4. The latter may be attached in any suitable way, but we have shown its lower end provided with a hook 5 engaging over a strip 6 which is fast to the bottom and it is to be understood that the top of this back board will be held in place by a suitable lock not shown. The purpose is to permit said board to be removed in order to withdraw accumulated coins and fill the magazines. In the present instance we have shown two magazines which may be upright guides 7 between which a stack of the articles (such as match boxes, for instance) 8 are guided, and the lower ends of the strips are turned in as at 9 to form supports for the lowermost article. Upon the bottom of the body is rigidly se-

cured a plate which is raised and bent at its center in an apex 10 that stands just forward of the lower ends of the magazines, and from said apex the sides of this plate are inclined to the rear to form a till 11 for the coins and forward as at 12 to a stop 13 to form a delivery mouth for the articles. Over this mouth is secured a shield 14 to prevent any one from manually withdrawing the articles from the stack.

Within and across the body is secured a board 20 which extends from below and in front of the magazines to the rear and may be slotted as at 21. On this board for each magazine is mounted a pair of guides 22 between which moves the pusher bar 23 having a hole 24 and carrying the coin cup 25 near its front end. The position of this cup is such that when the pusher bar is at the rear as seen in Fig. 1 the bottom of the cup is closed by the board and the top of the cup is directly under the mouth of the coin chute 26; and it will be obvious that as the pusher moves forward the coin in the cup will strike and move the lowermost article out of the magazine as shown in Fig. 2, and as the pusher reaches its extreme forward position it strikes the apex 10, the coin drops through the cup into the till and the article falls over the apex into the delivery mouth. Thus it will be seen that the reciprocating coin mover performs also the function of delivering the article, yet if there be no coin in the cup the latter will pass beneath the lower article and nothing will be delivered.

Any suitable means may be provided for reciprocating the pusher, but as the simplest we prefer that shown herein. Journaled across the body is a rod 30 having the handle 31 here shown as a bail connected to both ends of the rod and passing around the front of the body. Secured to and projecting upward from the rod for each magazine, is a pin 32 which extends through the slot in the board and the hole in the pusher. The free end of this pin rises when the rod 30 is turned, as seen in Fig. 2, and by striking the rear edge of the board 20 it prevents the pusher from being moved too far forward or from being accidentally or maliciously withdrawn from the machine until the pin itself is removed from the rod, which can be done by the attendant who gains access through the space occupied by the back

board 4. A spring 33 is provided for holding the handle, the rod, and the pins and hence the pushers in their normal positions as shown in Fig. 1. In the present embodiment of our invention we have shown two magazines and a coin chute for each, but it is obvious that a larger number could be used in one machine although that might necessitate a different arrangement of the coin chutes.

In use, the purchaser selects the coin chute leading to the stack of articles of which he desires to purchase one, and inserts his coin as per printed instructions, and it falls into the coin cup as shown. He then depresses the handle, and the coin delivers the article and drops into the till as above explained. He then releases the handle and the parts will resume their proper position. Suitable provision may be made for preventing the insertion of a larger coin or handing back a smaller coin than the one required, or for preventing fraudulent use of other articles than coin, or for permitting the operation of the machine by a check rather than a coin, but all these features form no part of the present invention and are not illustrated.

What is claimed as new is:

In a vending apparatus, the combination with a casing containing the article-magazine, a coin chute in rear thereof, a board beneath the magazine, and a bent plate resting on the bottom of the casing and whose apex stands forward of and slightly above the board with its sides inclining to the rear beneath the board to form a till and to the front to form a delivery mouth; of a pusher moving over the board, a coin cup located thereon in position to stand normally under the chute, and means for moving the pusher so that the cup shall travel across the board and drop the coin into the till when the pusher strikes said apex, and meanwhile the coin will strike the lowermost article and eject it over said apex into the delivery mouth.

In testimony whereof we sign our names in the presence of two subscribing witnesses, this, the twentieth day of November, 1907.

HENRY G. HOWER.
WALTER D. MULL.
ARCHIE C. COOPER.

Witnesses:

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