

No. 686,997.

Patented Nov. 19, 1901.

H. U. WHEELER.
VENDING MACHINE.

(Application filed May 8, 1901.)

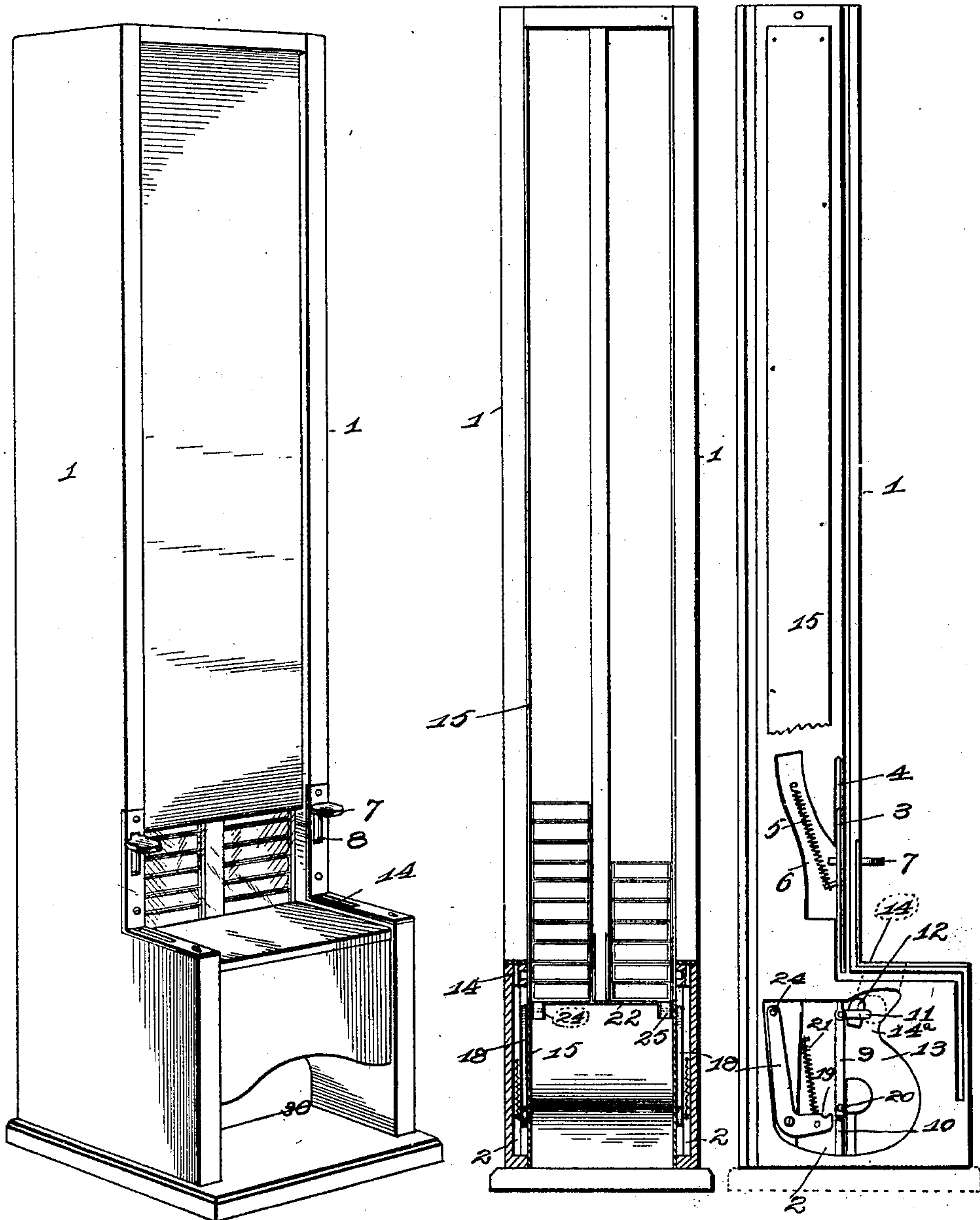
(No Model.)

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Fig. 1.

Fig. 2.

Fig. 3.



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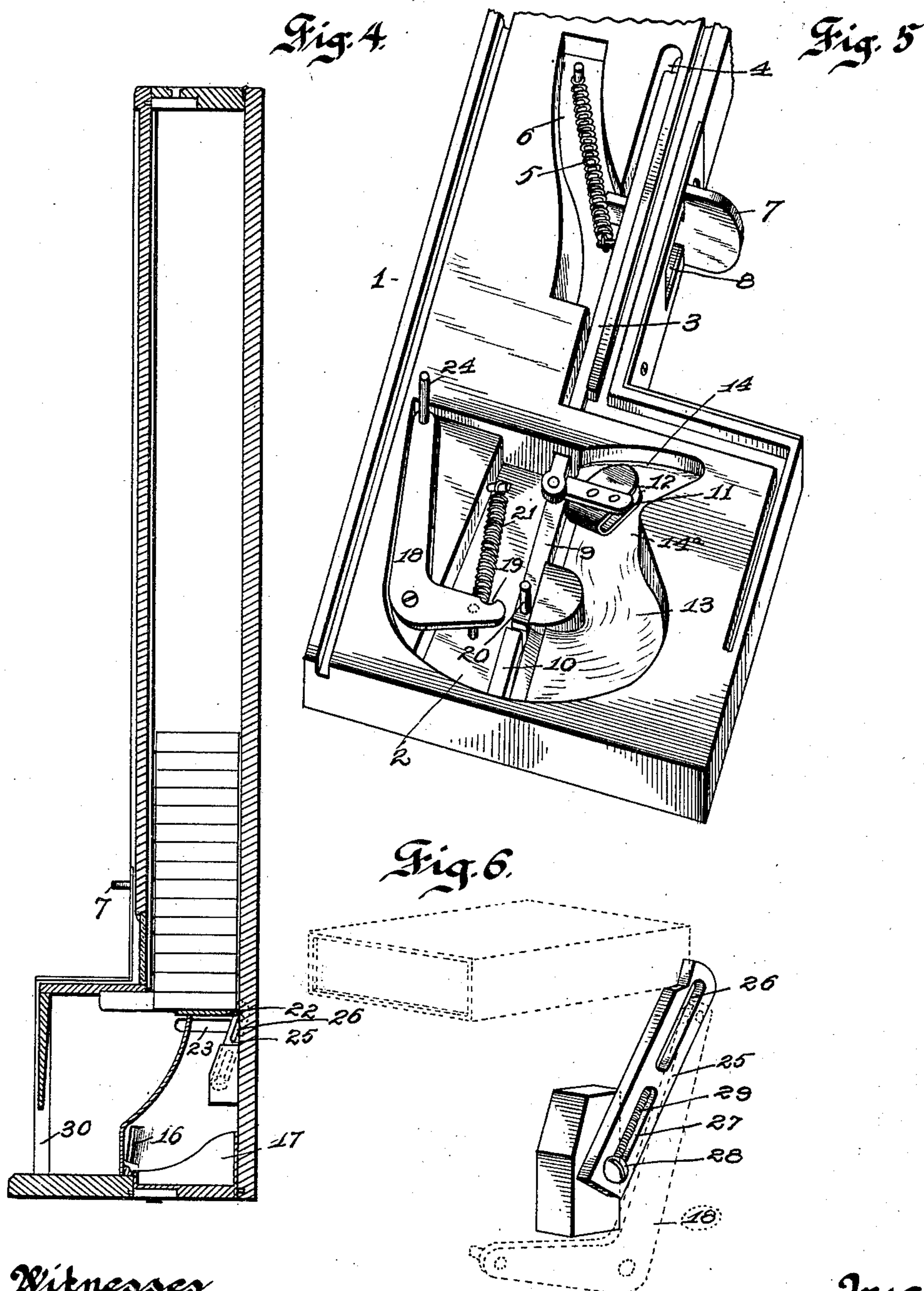
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UNITED STATES PATENT OFFICE.

HENRY U. WHEELER, OF ST. LOUIS, MISSOURI.

VENDING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 686,997, dated November 19, 1901.

Application filed May 8, 1901. Serial No. 59,225. (No model.)

To all whom it may concern:

Be it known that I, HENRY U. WHEELER, of the city of St. Louis, State of Missouri, have invented certain new and useful Improvements in Vending-Machines, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

This invention relates to vending-machines; and it consists of the novel construction, combination, and arrangement of parts hereinafter shown, described, and claimed.

Figure 1 is a front perspective view of the complete machine. Fig. 2 is a front view with the base shown in section. Fig. 3 is a view showing the inner face of one of the side members. Fig. 4 is a vertical section of the entire machine. Fig. 5 is a perspective view of the lower end of one of the side members and shows the coin-controlled apparatus carried thereby. Fig. 6 is a perspective view of a part of the mechanism whereby the articles are removed from the machine.

1 indicates the vertical side members of the rectangular case within which a number of articles is contained. Near the lower ends of each of the side members 1 is formed a recess 2, within which is contained a portion of the mechanism which releases the articles contained in the machine. A vertical slide 3 operates within a groove 4 in each of the side members, and its lower end projects into the recess 2. A spring 5 is connected to the said slide 3 and to the adjacent side 1, and thereby normally upholds the slide, as shown in Fig. 5. The said spring rests within a groove or depression 6, formed in the side members, so that it will not obstruct the interior of the case. A projection 7 is connected to the slide 3 and extends through a slot 8, formed in the front of the side member 1 and affords means whereby the said slide may be moved vertically when it is desired to remove any of the articles within the case. A vertical arm 9 is pivoted to the lower end of each of the slides 3, and its lower end is adjacent to a vertical post 10, located at the lower side of the recess 2. It is evident that this will prevent the downward movement of the slide 3, except when the lower end of the arm 9 is removed from above the post 10. The manner in which this is done will hereinafter appear. A horizontal

bifurcated arm 11 is rigid with the upper end of each of the arms 9, and a U-shaped member 12 is supported by the said arm 11. The said arm 11 extends into an S-shaped groove 13, formed in the side member 1, and the said groove 13 is connected to the outer side of side member 1 by a passage-way or slot 14 of sufficient size to permit the passage of a coin in the said groove 13. The corner or extension 14^a serves to hold the coin between the sides of the U-shaped member 12 until the slide 3 is moved downwardly to bring the coin below the said projection 14^a. When the coin is passed into the groove 13, as described, its weight raises or moves the lower end of the arm 9 out of alinement with the post 10, and thereby permits the slide 3 to be moved downwardly and to remove one of the articles from the case at each operation. As shown in Fig. 5, the groove 13 is of less depth at its lower end.

A lining 15 of tin-plate or other desirable material covers the inner side of each of the side members 1, and thereby protects and shields the mechanism just described. An opening 16 is formed near the lower end of each of the linings 15 and communicates with the lower end of the groove 13, thereby permitting the coin to pass from the groove 13 through the opening 16 into the drawer or receptacle 17, formed underneath the case containing the articles.

Pivotally supported within each of the recesses 2 is an angled lever 18, one portion of which is in substantially a vertical position, and the other member extends in a horizontal position and terminates adjacent to the lower end of the arm 9, which is normally held out of contact therewith by gravity. A notch 19 is formed in the horizontal portion of the said lever 18 and a pin 20 is rigid with the lower end of the said arm 9. When the coin is passed into the groove 13 through the opening 14, as above described, and the lower end of the arm 9 is moved rearwardly, the pin 20 is brought into the notch 19. As the slide 3 is lowered the pin 20, being within the notch 19, will oscillate the lever 18, bringing its upper end toward the front of the machine, and thereby operating the devices whereby the articles are removed. The spring 21 is connected to the horizontal arm of the lever

18 and to the side 1 of the case, and thereby holds the said lever in its normal position.

22 indicates the bottom of the case, which supports the articles contained therein. A slot 23 is formed in each of the linings 15 immediately below the bottom 22, and pins 24, rigid with the upper ends of the levers 18, project toward the center of the machine through the slots 23. An arm 25 is pivotally supported adjacent to each side of the machine and is provided with a slot 26, through which the pins 24, carried by the lever 18 adjacent thereto, operate. The said arm 25 has a slot 27 near its lower end, through which the pivot-pin 28 extends, and the spring 29 bears upon the pivot-pin 28 and against the upper end of the slot 27, and thereby holds the arm 25 in an elevated position, but permits it to yield as it is moved by the operation of the lever 18. The bottom 22 is supported a suitable distance from the front of the case, so that when any article is moved forwardly it will pass between the said bottom 22 and the front of the case, and thereby be removed from the machine.

The operation is as follows: The machine is constructed to be supported in a vertical position in which the arms 9 will have their lower ends immediately above the post 10, and thereby prevent the slides 3 from being operated to remove any of the articles from the interior of the machine. Whenever a coin is passed through either of the passages 14 and is supported by the U-shaped members 12, as above described, the lower end of the arm 9 connected thereto will be moved out of alignment with its post and bring the pin 20 into the notch 19 of the lever 18. This permits the slide 3 to be moved by operating the handle 7. The slide is moved in opposition to the tension of the spring 5 and its operation also moves the lever 18 in opposition to the spring 21. The pin 24 being connected to the arm 25 moves the same on its pivot, bringing its upper end forwardly. The upper ends of the said arms 25 extend through the slots or openings formed in the bottom 22 of the case and project a suitable distance therethrough in order to engage with the lowermost articles contained in the machine. As the upper end of the said arm 25 is moved forwardly the article in engagement there-

with will be moved from upon the bottom 22 and permitted to drop and be removed from the case through the opening 30. When the handle 7 is released, the parts will then be returned to their normal positions by the springs 5 and 21. The coin is released from the member 12 when the slide 3 is lowered and, as above described, passes through the groove 13 and through the opening 16 into the drawer 17, supported underneath the machine.

I claim—

1. A vending-machine, consisting of a case having a recess formed in its side, a spring-held ejecting-arm pivotally supported in said recess, a slide supported within a groove in the side of the case, a bell-crank pivotally carried by said slide and normally held out of contact with the ejecting-arm by gravity, a coin-support carried by said bell-crank and adapted to receive coins by the weight of which the said bell-crank will be moved into position to engage with the ejecting-arm, a stop below the bell-crank to hold it against accidental movement when no coin is in the coin-support, a passage leading to the coin-support, and a spring for restoring the slide to its normal position after it has been operated, substantially as specified.

2. A vending-machine, consisting of a suitable case having a groove formed in its side, a slide mounted in said groove, a bell-crank pivoted to the said slide, a coin-support carried by said bell-crank, a coin-slot leading to said support, a stop located below said bell-crank to hold it against movement when no coin is supported by the coin-support, the said bell-crank being normally held over the said stop by gravity, an ejecting-arm pivotally mounted adjacent to said bell-crank, the said bell-crank being automatically connected thereto by the weight of the coin, means whereby the said devices may be operated to eject articles from the case, and means for automatically restoring the devices to their normal position, substantially as specified.

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

HENRY U. WHEELER.

Witnesses:

JOHN D. RIPPEY,
ALFRED A. EICKS.