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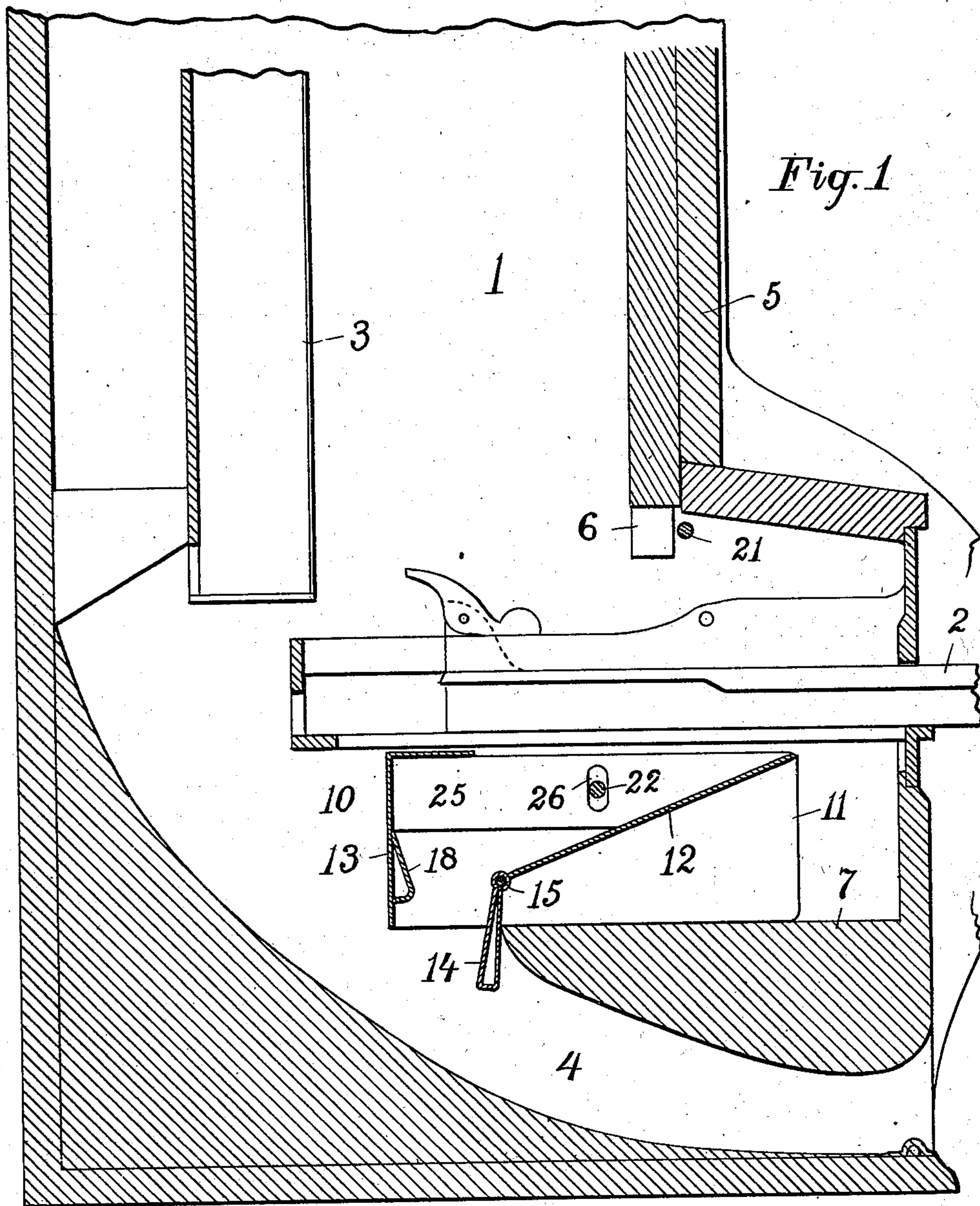
C. L. HURD.

COIN DRAWER FOR VENDING MACHINES.

APPLICATION FILED JULY 21, 1902.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses;

Frank A. Smith

E. R. Scott.

Inventor,

Charles L. Hurd;

By

By A. B. Upham,
His Attorney.

His Attorney.

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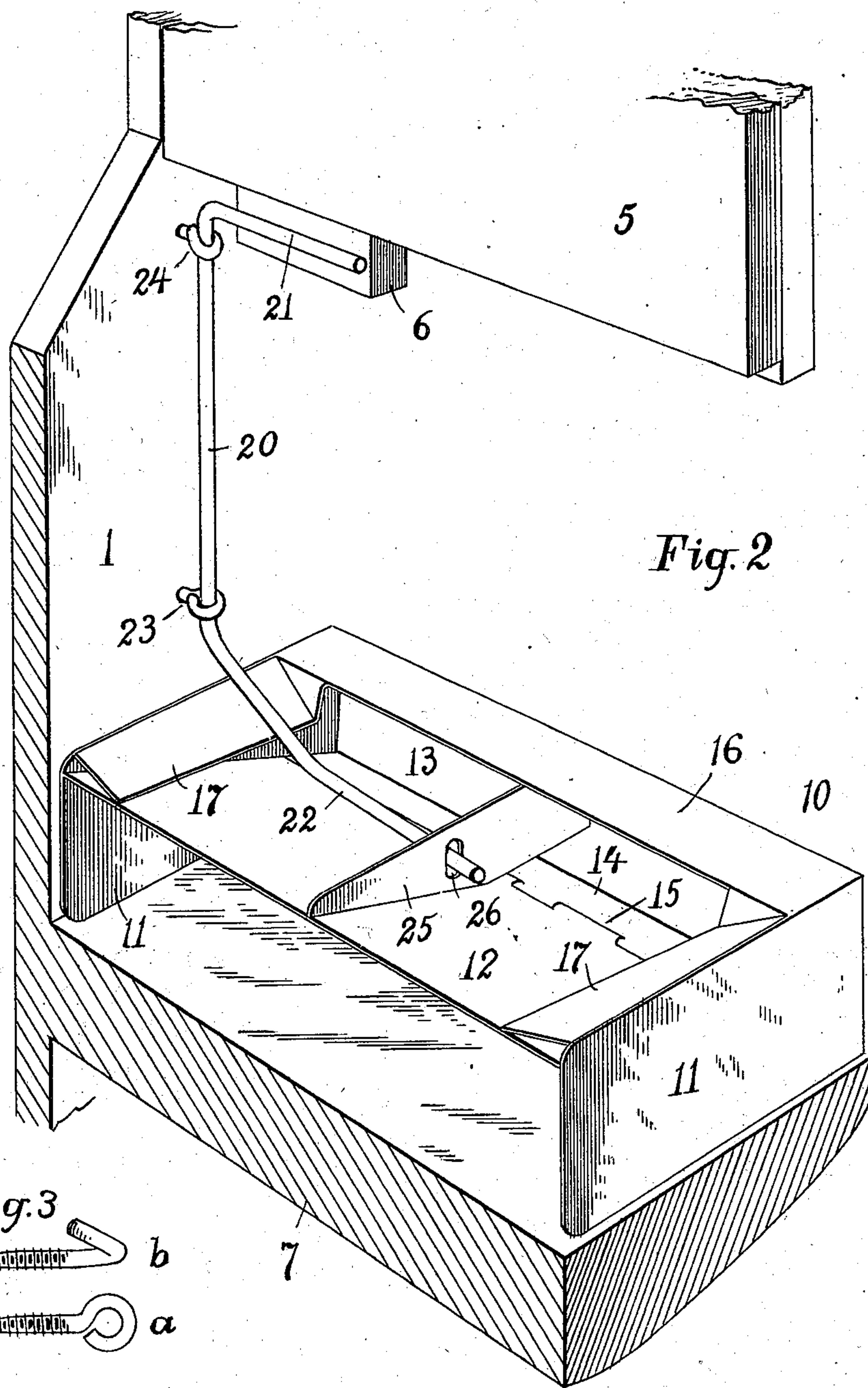


Fig. 3

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UNITED STATES PATENT OFFICE.

CHARLES L. HURD, OF CHELSEA, MASSACHUSETTS, ASSIGNOR OF ONE-HALF
TO NELLIE F. SMITH, OF CHELSEA, MASSACHUSETTS.

COIN-DRAWER FOR VENDING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 723,776, dated March 24, 1903.

Application filed July 21, 1902. Serial No. 116,327. (No model.)

To all whom it may concern:

Be it known that I, CHARLES L. HURD, a citizen of the United States, and a resident of Chelsea, in the county of Suffolk, State of Massachusetts, have invented certain new and useful Improvements in Coin-Drawers for Vending-Machines, of which the following is a full, clear, and exact description.

The object of this invention is the construction of a coin-receiver for coin-operated machines which shall be incapable of being relieved of its contents except after the removal of the door by which the machine is resupplied with the articles which it is designed to vend.

Referring to the drawings forming part of this specification, Figure 1 is a side sectional elevation of a vending-machine supplied with my invention, the latter being shown as discharging its contents. Fig. 2 is a perspective view of my coin-drawer, showing certain parts of the vending-machine relating thereto. Fig. 3 represents plan and side views of a screw-eye used therein.

The vending-machine case to which my invention is applied is designated by the reference-numeral 1.

2 is the slide which receives the designated coin, carries it within the case, and simultaneously discharges the article purchased. The articles are contained in the chutes 3 and are one by one discharged into the delivery-passage 4, down whose inclined bottom they slide to its open outer end, where they can be grasped by the purchaser. As shown in Fig. 1, the roof of the lower part of said passage is made to compose a shelf 7, upon which I locate my coin-drawer, the arrangement of said shelf and the dimensions of the drawer being such that the latter is located closely beneath the slides 2, and so adapted to receive the coins therefrom as each slide is operated. The bottom is not placed at the lower edges of the sides 11, but extends obliquely from their front upper corners to their rear lower corners, such bottom 12 terminating in a trap-door 14, constructed to swing freely down when not supported upon the shelf 7. The sides of this drawer being preferably formed from sheet metal, as tin, I thicken the free edge of the trap-door 14 by folding the metal

over upon itself, so that it is somewhat triangular in cross-section. In this manner the upper surface of the trap-door is raised above the lower edge of the drawer rear wall 13 sufficiently to insure that no coin shall slip between said parts, and so be lost from the drawer. This safety of the coins is still further insured by means of the L-shaped strip of metal 18, soldered to the inner face of the rear wall 13 to constitute a shoulder or bead overhanging the edge of the trap-door, whereby no coin is permitted to slip vertically down between said wall and edge. Midway of the width of the drawer is secured a strip 25, containing an opening or slot 26, designed to receive the end of the arm 22. This arm is a part of the wire rod 20, rotatable in bearings 23 24 and actuated by the shorter arm 21 at its upper end. By removing the case-door 5 and pressing the short arm 21 inward the longer arm throws the coin-drawer back until its trap-door 14 is beyond the rear edge of the shelf 7. Consequently the said trap-door instantly opens and the contents of the drawer fall into the passage 4, where they roll and slide down and forward to the open mouth of said passage and can be easily removed therefrom. The coin-drawer being thus emptied, the short arm is drawn forward and the drawer thereby brought wholly back upon the shelf 7, this action closing the trap-door and putting the drawer again into condition to retain the coins entering it from the slides.

To prevent the coin-drawer from being jarred backward in any way, and so deliver its contents to unwarranted persons, or from being in any other way unlawfully opened, as by a bent wire introduced through the passage 4 or tipping the case backward, I fix a block 6 to the under edge of the door 5 or of a board forming part thereof, which block is arranged to come directly behind the short arm 21 when the coin-drawer is in its normal position. Hence when the proper person comes to refill the chutes of the vending-machine and removes the door 5 for this purpose the coin-drawer is thereby rendered capable of being opened, and the act of opening the same is nothing but a slight push upon the short arm 21. When he returns the door 5 to its place after having filled the chutes, in case

he has forgotten to bring the coin-drawer back to its normal position the arm 21 interferes with the block 6, and so prevents the door's return until after the drawer is in place.

5 I prefer to provide the upper edges of the rear and sides of the drawer with overhanging edge strips 16 17 for the purpose of preventing the contents of the drawer from being discharged by tipping the vending-machine upon its back or side. I prefer also to
10 use screw-eyes for the bearings of the rod 20 and have the upper one 24 partially open for the purpose of enabling the parts to be easily put in place without subsequent bending of the wire rod. In doing this I first locate the
15 coin-drawer upon the shelf 7, the slide mechanism being out of the way, and then put the long arm 22 through the screw-eye 23, the coin-drawer being slid back for the purpose. The extremity of said arm being inserted in
20 the opening 26, the vertical part of the wire rod is brought up into engagement with the screw-eye 24. To thus have the upper screw-eye partially open and yet capable of securely retaining the rod 20, I construct it as shown
25 more clearly in Fig. 3, where *a* illustrates the same in plan and *b* in side view. Looking down on the screw-eye the eye appears perfectly circular; but the side view shows that
30 the end of the wire eye is bent up out of the plane of the circle far enough to form room for the entrance of the rod. Hence when the screw-eye 24 is first inserted in the case it is left with the plane of the eye substantially vertical. Then when the rod is inserted through
35 its opening the eye is turned to substantially a horizontal plane, and thereby locks the rod therein.

What I claim as my invention, and for which
40 I desire Letters Patent, is as follows, to wit:

1. The combination with a coin-operated machine and case therefor having a delivery-passage permanently open at its lower end, of a shelf located immediately over the lower
45 part of said passage and open thereto at its rear edge but wholly closed at its front, a drawer slidable on said shelf and having an opening in its bottom, and means located within the case and normally inaccessible, for
50 sliding the drawer rearward and depositing its contained coins into said delivery-passage, substantially as described.

2. In a coin-drawer for vending-machines, the combination with the case having the delivery-passage and the door for giving access
55 to the article-chutes, of a coin-drawer constructed to have its contents discharged into said passage, and means controlled by said

door when closed to lock said coin-drawer from being made to discharge its contents into said passage, substantially as described. 60

3. In a coin-drawer, the combination with the case having the delivery-passage and the supporting-shelf immediately above the latter, of the coin-drawer slidable on said shelf
65 and having the trap-door in its bottom normally supported by said shelf, and the vertical rod revolvably supported by said case and having the arms projecting from its ends, the lower one of which engages the coin-drawer
70 and serves to move it partially on and off said shelf, substantially as described.

4. In a coin-drawer, the combination with the case having the delivery-passage and the supporting-shelf immediately above the latter, of the coin-drawer slidable on said shelf
75 and having the trap-door in its bottom, the vertical rod revolvably supported by the case and having the arms projecting from its ends, the lower one of which engages said drawer, and the case-door having a projection constructed to come behind the upper of said
80 two arms when such door is in place and thereby lock the coin-drawer against movement, substantially as described. 85

5. In a coin-drawer, the combination with the case having the delivery-passage and the supporting-shelf immediately above the latter, of the coin-drawer slidable on said shelf
90 and consisting of the rear and side walls and the rearwardly-slanting bottom terminating in the trap-door, the central strip fixed in said drawer and having the opening therein, the vertical rod terminating in the arms the lower
95 one of which enters said opening, and the two screw-eyes fixed in the case and revolvably supporting said rod, the upper of said screw-eyes being partially open for receiving the rod, substantially as described.

6. In a coin-drawer, the combination with
100 the case having the delivery-passage and the supporting-shelf immediately over the latter, of the coin-drawer slidable on said shelf and consisting of the sheet-metal rear and side walls and the slanting bottom, the doubled
105 trap-door hinged to said bottom, and the shoulder or bead fixed to the rear wall, substantially as described.

In testimony that I claim the foregoing invention I have hereunto set my hand this 17th
110 day of July, 1902.

CHARLES L. HURD.

Witnesses:

A. B. UPHAM,
FRANK A. SMITH.