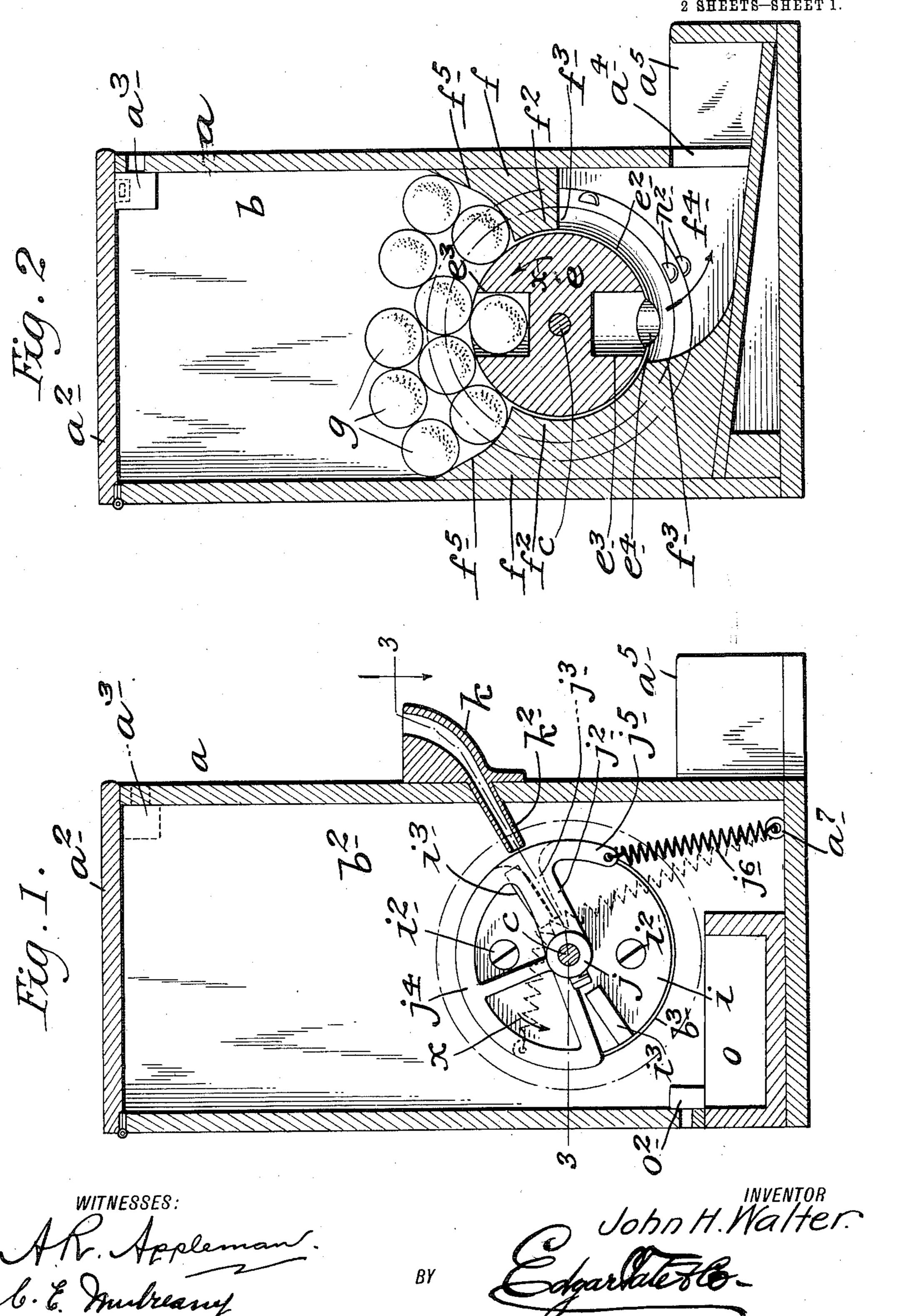
J. H. WALTER. VENDING MACHINE.

APPLICATION FILED FEB. 26, 1910. 985,382.

Patented Feb. 28, 1911.

2 SHEETS-SHEET 1.

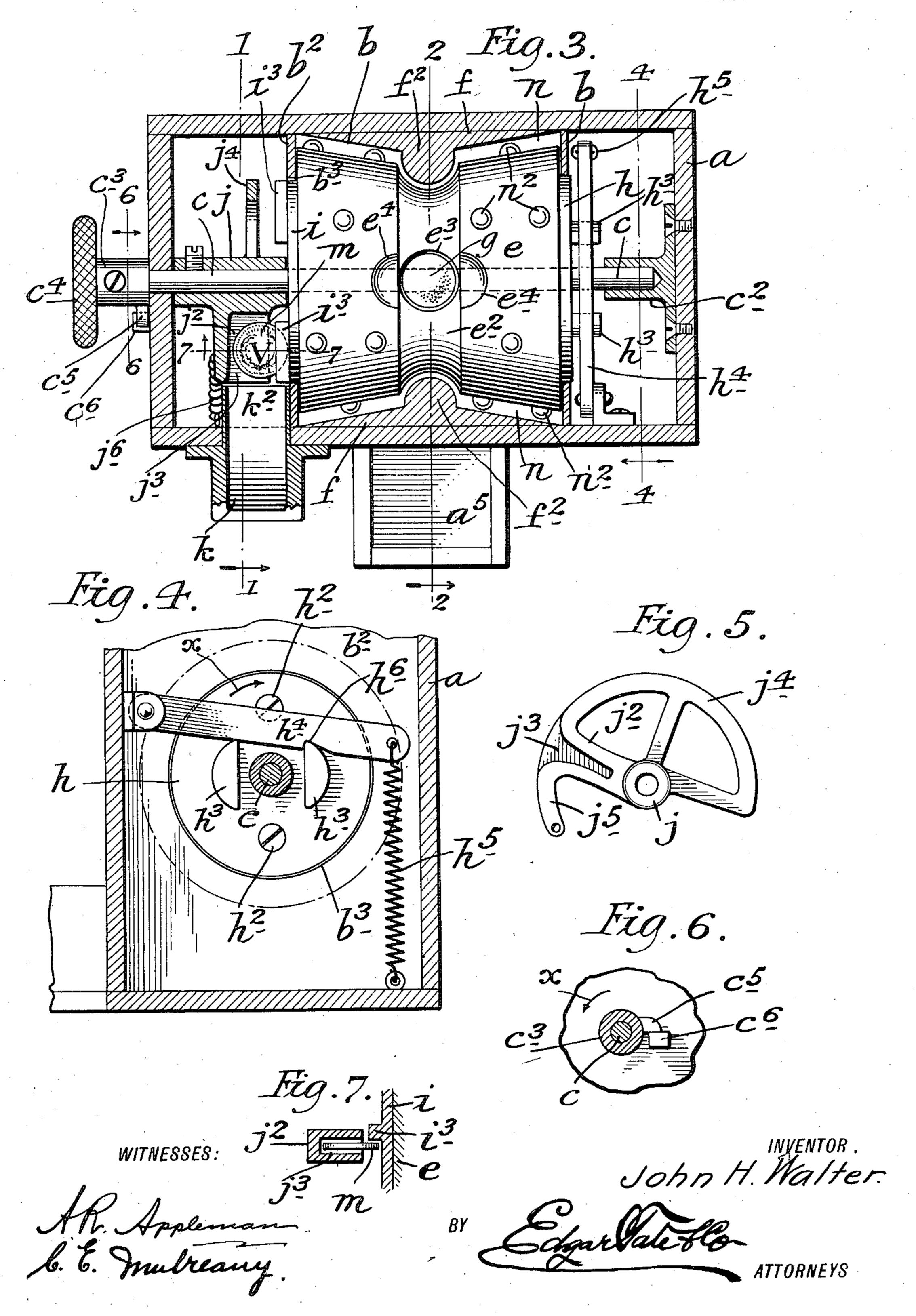


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## UNITED STATES PATENT OFFICE.

JOHN H. WALTER, OF BROOKLYN, NEW YORK, ASSIGNOR OF ONE-HALF TO GUSTAV REGELMANN, OF BROOKLYN, NEW YORK.

## VENDING-MACHINE.

985,382.

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Specification of Letters Patent.

Patented Feb. 28, 1911.

Application filed February 26, 1910. Serial No. 546,146.

To all whom it may concern:

Be it known that I, John H. Walter, a citizen of the United States, and residing at Brooklyn, in the county of Kings and State 5 of New York, have invented certain new and useful Improvements in Wending-Machines, of which the following is a specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to machines for vending various kinds and classes of articles, and commonly known as coin operated vending machines; and the object of the inven-15 tion is to provide an improved machine of this class particularly designed for use in vending products or articles of spherical form or made into balls; and with this and other objects in view the invention consists 20 in a machine of the class specified constructed as hereinafter described and claimed.

The invention is fully disclosed in the following specification, of which the accompanying drawing forms a part, in which the 25 separate parts of my improvement are designated by suitable reference characters in each of the views, and in which;—

Figure 1 is a vertical section through my improved vending machine taken on the line 30 1—1 of Fig. 3; Fig. 2 a similar section taken on the line 2-2 of Fig. 3; Fig. 3 a horizontal section on the line 3—3 of Fig. 1; Fig. 4 a partial vertical section on the line 4—4 of Fig. 3; Fig. 5 a view of a detail of 35 the construction forming part of the coin operated mechanism; Fig. 6 a section on the line 6-6 of Fig. 3, and;—Fig. 7 a partial section on the line 7—7 of Fig. 3.

In the practice of my invention, as shown 40 in the drawing, I provide an upright casing a preferably provided with a hinged cover a² having a suitable lock or fastening device  $a^3$  and the bottom of the casing a is provided centrally of one side, the front side as 45 shown in the drawing, with an opening  $a^4$ inclosed by a receiving receptacle  $a^{5}$ , open at the top.

The casing a is provided with a central, vertical chamber b formed by vertically ar-50 ranged partitions b2 having in the bottom part thereof circular openings b3 and passing through the casing a and at right angles to the partitions b2 and centrally through said circular openings  $b^3$  is a shaft c, one

end of which is provided within said casing 55 with a socketed bearing  $c^2$ , and the other of which extends through the opposite side of said casing, and is provided with a sleeve  $c^3$ having a head or handle  $c^4$  by which said shaft may be turned.

Mounted on the shaft c between the vertically arranged partitions b2, and in the bottom of the chamber b, is a rotatable block member e having a deep central annular groove  $e^2$ , and the end portions of said ro- 65 tatable block member are tapered inwardly toward the groove  $e^2$  as clearly shown in Fig. 3, and the central portion of said rotatable block member is provided in its opposite sides with receptacles  $e^3$  which open outwardly 70 and radially in the bottom of said groove, and the end portions of said rotatable block member are provided adjacent to said groove and said receptacles with semi-circular recesses  $e^4$ .

The opposite sides, or the front and back portions of the receptacle a, between which the rotatable block members e are placed, are thickened at the bottom of the chamber b or provided with thickening members f 80 which are secured thereto in any desired manner, and at the center thereof are annular rib members  $f^2$  which correspond with and fit in the groove  $e^2$  in the rotatable block member e, and the walls of the said thicken- 85 ing parts or members f on the opposite sides of the rib members f2 are tapered to correspond with the taper of the end portions of the rotatable block member e, but at the bottom of the space in which said rotatable 20 block member is mounted, the annular rib members  $f^2$  are cut out as shown at  $f^3$  in Fig. 2, to form an open space or chute  $f^4$  which extends from the rotatable block member e to the opening  $a^4$  in the bottom of the front 95 of the casing a, and the top portions of the rib members  $f^2$  and of the thickening portions or members f at the opposite sides or front and back of the casing a are tapered at the tops thereof as shown at f<sup>5</sup> and this 100 taper corresponds, to an extent, with the taper of the end portions of the rotatable block member e, and the top portion of the chamber b forms a receptacle in which, in practice, the spherical or ball-shaped articles 105 g to be vended are placed, and the rotatable block member e forms in connection with the tapered top parts for of the thickening mem-

bers f, the bottom of this receptacle and all the spherical or ball-shaped bodies g placed therein gravitate, as will be understood toward the center part of the rotatable block 5 member e. The said rotatable member e is provided at one end with a hub plate h which is secured thereto by screws  $h^2$  or in any desired manner, and which fits in and rotates in the opening b3 in the correspond-10 ing partition  $b^{\bar{2}}$  and said hub plate is provided with two stops or projections  $h^3$  arranged on the opposite sides of the shafts c, and pivoted to one side of the casing a, the front side thereof, in the form of construc-15 tion shown, is an arm h4 which ranges transversely and backwardly of the said casing, and connected with the free end thereof is a spring  $h^5$  which is secured to the bottom of said casing, and the arm  $h^4$  is provided in 20 the bottom edge thereof with a recess  $h^6$ , which is adapted to be alternately engaged by the stops or projections  $h^3$  when the rotatable member  $\bar{e}$  is turned, in the operation of the machine as hereinafter described. 25 The opposite end of the rotatable block member e is also provided with a hub plate i, which is secured thereto by screws  $i^2$ , or in any preferred manner, and the said hub plate i is provided with oppositely and 30 radially arranged stops  $i^3$ .

Although I have shown and described the stops  $h^3$  and  $i^3$  as being connected with plates h and i secured to the rotatable block member e, it will be understood that the said ro-35 tatable block member may be provided with these stops in any desired manner, and the parts h and i need not necessarily be formed separately from the rotatable block mem-

ber e.

Secured to the shaft cadjacent to the end of the rotatable block member e which is provided with the radial stops i is a sleeve j provided with a radially arranged member j² having å coin receiving slot-shaped recep-45 tacle  $j^3$ , and the front of the casing a is provided with a coin chute k having an inwardly and downwardly directed extension  $k^2$  adapted to communicate with the slot-

shaped coin receptacle  $j^3$ .

In the form of construction shown, the sleeve j and radially arranged member  $j^2$ thereof are provided with a segmental brace  $j^4$ , opposite which the part  $j^2$  is provided with a finger  $j^5$ , the parts  $j^2$ ,  $j^4$  and  $j^5$  being all formed at their outer edges on the arc of a circle, and connected with the finger j<sup>5</sup> is a spring  $j^6$  which is secured to the bottom of the casing a as shown at  $a^7$ . The sleeve  $c^3$ on the outer end of the shaft c is also proovided with a lug or projection c<sup>5</sup> which is adapted to operate in connection with a stop  $c^{6}$  on the adjacent side of the casing and it will be understood that Figs. 1, 2, 3, 4 and 7 show the parts of the machine in their nor-65 mal positions.

In the operation of the machine the material to be vended in the shape of balls or spherical bodies is placed in the chamber or receptacle b as shown in Fig. 2, and in the form of construction shown the receptacles 70  $c^3$  in the rotatable member e are just large enough to receive one of said balls or bodies. If now it is desired to operate the machine a coin m is passed in through the chute  $k-k^2$  and falls into the coin receptacle in the 75 part  $j^2$  of the sleeve j and this coin abuts against one of the radial stops  $i^3$  at the corresponding end of the rotatable member e. The shaft c is then turned, by means of the head or handle  $c^4$  to the left as indicated by 80 the arrows x in Figs. 1, 2, 4 and 6, in which operation the rotatable member e is turned through a half a revolution and the ball or body j in the top receptacle  $e^3$  as shown at  $e^2$ is dropped out at the bottom of said recep- 85 tacle and rolls into the receiving receptacle as at the front of the casing, and when the head or handle  $c^4$  of the shaft c is released the spring  $j^6$  turns the shaft c, and the sleeve j with the part  $j^2$  turns back into the 90 position shown in full lines in Fig. 1, while the rotary member e remains stationary, being held stationary by the arm h<sup>4</sup> which operates in connection with one of the stops  $h^3$ ; and this operation may be repeated 95 whenever desired by the insertion of a coin through the chute k and the turning of the shaft c as described.

The bottom of the casing a is provided with a drawer o having a suitable lock de- 100 vice  $o^2$  and in the operation of the shaft c, or the turning of said shaft to the left as indicated by the arrows in Figs. 1, 2, 4 and 6 the coin m, at the limit of said movement is dropped into said drawer as will be readily 105 understood and this drawer may be removed and emptied of its contents whenever desired.

The chamber or receptacle b or that part thereof in which the rotary member e is placed is of greater transverse dimensions 110 than said rotary member and this forms an annular space n around the end portions of said rotary member and said end portions of the rotary member are provided with knobs or projections  $n^2$ , the object of said 115 knobs or projections being to stir up the balls or spherical bodies g as said rotary member is turned.

From the foregoing description taken in connection with the accompanying drawing 120 it will be seen that the bottom of the chamber b which is formed partly by the inwardly tapered end portions of the rotatable block member e and the side walls  $f^5$  in the bottom of said chamber is substantially 125 cup-shaped in form and as the block e is rotated the radially arranged receptacles  $e^3$ are successively brought into position in the bottom of said chamber b and centrally thereof, and this facilitates the feeding into 130

said receptacles of the balls or spherical bodies g and the operation of the machine as described.

My invention is not limited to the size of the balls or bodies g, nor to the dimensions of the receptacles e³, in the rotary member e, and said receptacles and balls may be of such dimensions that the former will receive a number of the latter if desired; and various other changes in and modifications of the construction herein described may be made within the scope of the appended claims without departing from the spirit of my invention or sacrificing its advantages.

Having fully described my invention what I claim as new, and desire to secure by Let-

ters Patent, is;—

1. In a vending machine, a casing having a vertically arranged central chamber, a 25 rotary shaft passing through the bottom pertion of said chamber, a rotary block member mounted on said shaft in the bottom of said casing, said rotary member being adapted to turn independent of said 25 shaft and being provided centrally with a deep annular groove, and the end portions of said block member being tapered inwardly toward said groove and said rotary member being provided centrally thereof and in the opposite sides thereof with receptacles which open radially into said groove.

tacles which open radially into said groove. 2. In a vending machine, a casing having a vertically arranged central chamber, a rotary shaft passing through the bottom por-35 tion of said chamber, a rotary block member mounted on said shaft in the bottom of said casing, said rotary member being adapted to turn independent of said shaft and being provided centrally with a deep 40 annular groove, and the end portions of said block member being tapered inwardly toward said groove and said rotary member being provided centrally thereof and in the opposite sides thereof with receptacles which 45 open radially into said groove, and the front and back walls of said chamber being tapered to correspond with the taper of the end portions of said rotary member and being provided centrally with beaded portions 50 which fit in said groove.

3. In a vending machine, a casing provided with vertically arranged partitions forming a main vertical chamber, said partitions being provided with circular openings, a shaft mounted in said casing and 55 passing centrally through said openings and one end of which projects from said casing, a rotary block member mounted on said shaft in said chamber and adapted to turn independent of said shaft, said rotary 60 block member being provided with hub and end portions which fit in said openings and said rotary block member being also provided centrally with a deep annular groove and the end portions thereof being tapered 65 toward said groove and said member being also provided centrally of the opposite sides thereof with radially arranged receptacles, which open in the bottom of said groove, the front and back walls of said chamber 70 being tapered at the bottom thereof to correspond with the taper of the end portions of said rotary member and being also provided with beaded portions which fit in said groove.

4. In a vending machine, a casing having a chamber in the top portion thereof, a rotary block member mounted in the bottom of said chamber and forming a part of said bottom, the end portions of said rotary 80 block member being tapered inwardly toward the middle thereof and the middle portion of said block member being provided with radially arranged receptacles, and the side walls of said chamber being 85 also tapered inwardly whereby the bottom of said chamber which is formed by said rotary block member and the inwardly tapered walls of said chamber, is cup-shaped in form and means for turning said block 90 member through a part of a revolution.

In testimony that I claim the foregoing as my invention I have signed my name in presence of the subscribing witnesses this

25th day of February 1910.

## JOHN H. WALTER.

Witnesses:

C. E. MULREANY, B. M. RYERSON.