

J. W. PATTERSON.
DISPENSING CABINET.

APPLICATION FILED NOV. 15, 1912. RENEWED MAR. 31, 1917.

1,244,889.

Patented Oct. 30, 1917.

2 SHEETS—SHEET 1.

Fig. 1.

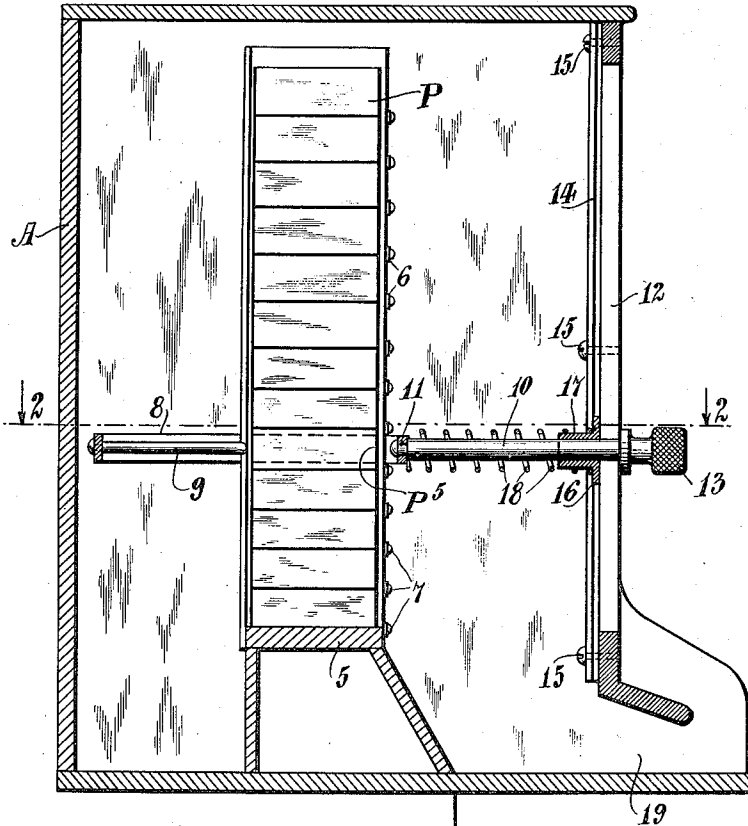


Fig. 2.

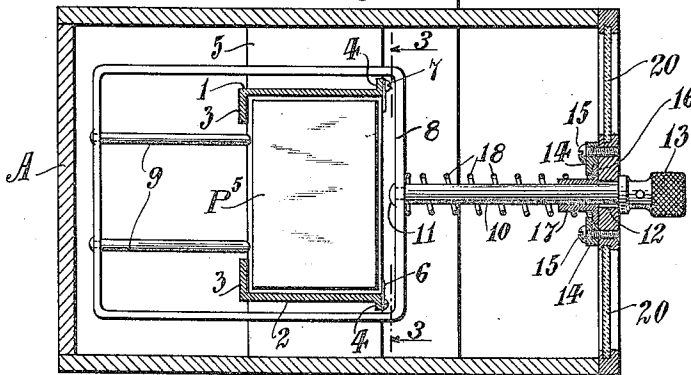
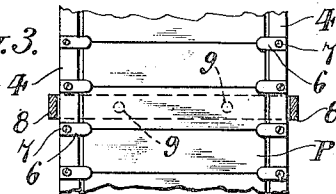


Fig. 3.



WITNESSES

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2 SHEETS—SHEET 2.

Fig. 4.

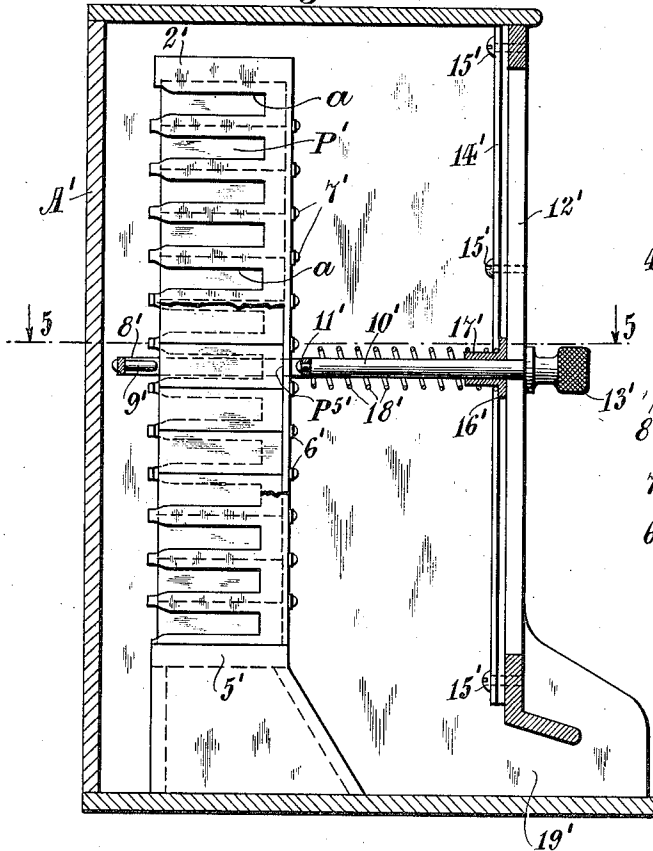


Fig. 6.

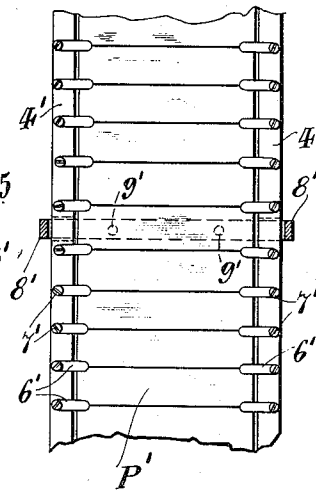
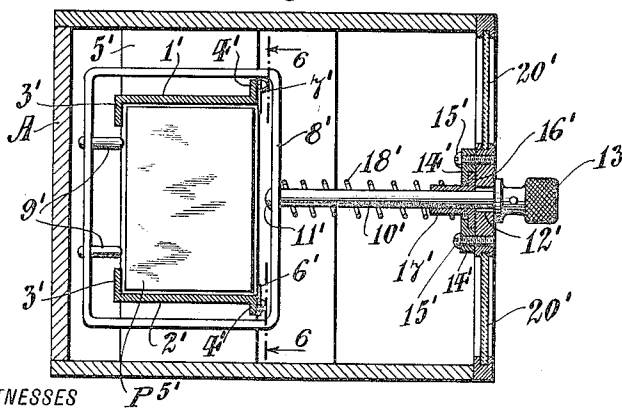


Fig. 5.



WITNESSES

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JAMES W. PATTERSON, OF NEW YORK, N. Y.

DISPENSING-CABINET.

1,244,889.

Specification of Letters Patent.

Patented Oct. 30, 1917.

Application filed November 15, 1912, Serial No. 731,526. Renewed March 31, 1917. Serial No. 159,001.

To all whom it may concern:

Be it known that I, JAMES W. PATTERSON, a citizen of the United States, and a resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Dispensing-Cabinets, of which the following is a specification.

My invention relates to dispensing cabinets or so-called "Help Yourself" machines, which the patron operates without a coin to obtain the desired article and then pays for it at the cashier's desk. The purpose of this cabinet is to dispense with the necessity of having the clerk wait on the customer. In cabinets of this kind heretofore constructed, it was necessary to have the same kind of goods in the cabinet, or at least in each magazine in the case of multiple-magazine cabinets, because the ejecting member was so constructed and arranged that it ejected only the lowermost or the uppermost package in the stack. In other words, the patron could not select any particular package from any one magazine, and it was necessary to provide a number of magazines, or cabinets, one for each kind of commodity.

The object of my present invention is to provide a selector which is manually adjustable from the outside of the casing to cause the ejection of any desired article from the magazine. In this way, a single-magazine cabinet may contain various kinds of articles—such as chewing gum, chocolates, bonbons, peppermints, etc.—and the patron may adjust the selector to eject any particular package.

Broadly considered, my invention comprises the combination with a suitable casing having a magazine for holding the articles, of a selector adapted to be manually adjusted and operated from the outside of the casing to eject any desired article from the magazine.

More specifically considered, the selector of my invention is arranged to be adjusted vertically into alinement with the desired article, and to be operated horizontally to eject the selected article which drops into the delivery-opening for removal by the patron. Suitable means is provided for guiding the selector in its vertical and horizontal movements.

The basic idea of my invention may be mechanically carried out in various ways, and for the sake of illustration I have shown

two forms of construction in the accompanying drawings, in which—

Figure 1, is a longitudinal view in section of a machine embodying my invention.

Fig. 2, is a horizontal sectional plan view taken on line 2—2 of Fig. 1.

Fig. 3, is a front view of a portion of the magazine, showing the springs for yieldably retaining the articles.

Fig. 4, is a view like Fig. 1, showing a modified form of construction.

Fig. 5, is a plan view in section on line 5—5 of Fig. 4; and

Fig. 6, is a front view of a portion of the magazine shown in Fig. 4.

I will describe in detail the form shown in Figs. 1, 2 and 3, and then the modification illustrated in Figs. 4, 5 and 6.

Referring to Figs. 1, 2 and 3, the casing A, which may be of any suitable construction, is provided with a magazine for holding the vendible articles. This magazine may be conveniently formed of a pair of sheet metal members 1 and 2 having each an inwardly extending rear flange 3, and an outwardly extending front flange 4. The members 1 and 2 are rigidly mounted upon a suitable support 5 fixed to the bottom of the casing. To the front flanges 4 are secured small leaf springs 6 by means of screws 7 or otherwise. The size of the magazine is of course such as to properly accommodate the stack of packages P, which may contain any suitable confections or other commodity. For instance, the packages or boxes P might contain books which are either sold or rented. The retaining springs 6 are so arranged that each box or package P is engaged by at least two springs, one on each side. In Fig. 3, the springs 6 are shown as each engaging two packages at the adjacent corners. But this precise arrangement is not necessary. While the springs 6 prevent the packages from accidentally falling out of the front of the magazine, the rear flanges 3 prevent the packages from falling out at the rear of the magazine in case the casing should be tipped backwardly.

In the specific embodiment shown in the drawings, my form of selector comprises a loop portion 8 which surrounds the magazine either wholly or partially, and is at the rear provided with a pair of forwardly extending ejecting pins or fingers 9. A rod is secured to the loop portion 8 by a rivet or otherwise, and extends to the outside of

the casing through the vertical slot 12 provided in the front wall of the casing. The outer end of the rod 10 carries an operating knob 13. On either side of the slot 12 on the inside of the casing is secured a guide strip 14 by screws 15 or otherwise. These guide strips 14 are arranged to engage the circular flange 16 of the sleeve 17 on the rod 10. A compression spring 18, coiled about the rod 10, normally holds the selector in the position shown in Figs. 1 and 2.

The operation of my selector will now be understood from the foregoing description and may be briefly stated as follows:

Suppose that the patron desires the fifth package from the bottom, indicated in Figs. 1 and 2 as package P⁵. By means of the knob 13, he adjusts the selector vertically until it is in alinement with the desired package. Then he pulls out the knob 13, which causes the pins or fingers 9 to eject the package out of the magazine. The ejected package falls into or near the delivery-opening 19 from which it is removed by the patron, who then pays the clerk or cashier the price of the package. When the knob 13 is released, the spring 18 forces the selector rearwardly into normal position, with the ejecting fingers behind the packages. As soon as the fingers 9 pass out of the magazine, the packages above settle down on the lower packages. The length of the ejecting fingers 9 is such that they completely push the selected package out of the magazine, against the action of the springs 6, which are of such resiliency as to yield readily when the package is pushed out. The sleeve 17, which is supported in horizontal position by means of the guide strips 14, guides the selector in its ejecting movement and retains the same in a substantially horizontal position. At either side of the slot 12, the front of the casing may have display windows 20 through which the packages in the magazine may be seen.

The modification shown in Figs. 4, 5 and 6, differs from the form described above, in that the side members of the magazine are provided with slots *a* for receiving the rear member of the loop portion 8' of the selector during the forward or ejecting movement thereof. The only advantage of this construction is that the pins 9' may be made considerably shorter than the pins 9 in the first arrangement, thereby saving space at the rear of the magazine. The slots *a* of the two magazine members are spaced so that each package will have a slot at each side thereof.

As the other details of construction described above with reference to Figs. 1, 2 and 3, apply also to Figs. 4, 5 and 6, it is believed that no further description of these last mentioned figures is necessary, except to say that the same reference numerals (with

a prime mark added for the sake of distinction) have been applied to Figs. 4, 5 and 6 as those which indicate corresponding parts in Figs. 1, 2 and 3.

While I have herein shown and described two specific forms of my invention, I would clearly have it understood that I do not intend to be limited to the details set forth, as it is obvious that changes and modifications may be made by those skilled in the art without departing from the scope of the invention as defined in the appendant claims.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent of the United States is:

1. In a dispensing cabinet, the combination of a magazine for holding the articles, and an ejecting member movable longitudinally of said magazine into alinement with the desired article, and also movable transversely of said magazine to push the selected article out of the magazine.

2. In a dispensing cabinet, the combination with a casing provided with a magazine for holding the articles in a vertical stack, of a selector arranged to be adjusted vertically into alinement with the article desired for ejection and to be operated horizontally to eject the selected article, and means for effecting said adjustment and operation by hand from the outside of the casing.

3. In a dispensing cabinet, the combination with a casing provided with a magazine for holding the articles in a vertical stack, of a selector arranged to be adjusted vertically for selecting any desired article for ejection and to be operated horizontally to eject the selected article, means for effecting said adjustment and operation by hand from the outside of the casing, and means for guiding said selector in its vertical and horizontal movements.

4. In a dispensing cabinet, the combination of a magazine for holding the articles, an ejecting member movable longitudinally of said magazine into alinement with the desired article, and also movable transversely of said magazine to push the selected article out of the magazine, and means for guiding said ejecting member in both of its movements.

5. In a dispensing cabinet, the combination with a casing provided with a magazine for holding the articles in a vertical stack, of a selector arranged to be adjusted vertically for selecting any desired article for ejection and to be operated horizontally to eject the selected article, said selector having a loop portion surrounding said magazine and ejecting fingers extending forwardly from said portion to push the selected article out of the magazine, and means for effecting said adjustment and operation by hand from the outside of the casing.

6. In a dispensing cabinet, the combination with a casing provided with a magazine for holding the articles in a vertical stack, of a selector arranged to be adjusted
5 vertically for selecting any desired article for ejection and to be operated horizontally to eject the selected article, said selector having a loop portion surrounding said magazine, ejecting fingers extending forwardly
10 from said portion to push the selected article out of the magazine, means for effecting said adjustment and operation by hand from the outside of the casing, and means for guiding said selector in its vertical and
15 horizontal movements.

7. In a dispensing cabinet, the combination with a casing provided with a magazine for holding the articles, said magazine having horizontal slots open at the rear and
20 arranged in alinement with the articles, of a selector adapted to be manually adjusted and operated from the outside of the casing to eject any desired article from said magazine, said selector having a portion surrounding said magazine and adapted to enter
25 said slots during the forward or the full ejecting movement of the selector.

8. In a dispensing cabinet, the combination with a casing provided with a magazine for holding the articles, of a selector
30 adapted to be manually adjusted and operated from the outside of the casing to eject any desired article from said magazine, said selector comprising a loop portion surrounding said magazine and provided with ejecting fingers, a rod extending from said loop
35 portion to the outside for manipulation by hand, a flanged sleeve on said rod, and a pair of stationary guides in the casing for re-

ceiving the flanges of said sleeve and thereby
40 guiding said selector in its movement.

9. In a dispensing cabinet, the combination with a casing provided with a magazine for holding the articles in a stack and
45 having a vertical slot in the front wall, of a selector arranged to be adjusted vertically for selecting the desired article for ejection and to be operated horizontally to eject the selected article, said selector having a loop
50 portion surrounding said magazine and having fingers extending forwardly from said portion to push the selected article out of the magazine, a rod extending from said loop portion to the outside of the casing through said slot for manipulation by hand,
55 a flanged sleeve on said rod, and a pair of stationary guides for receiving the flange of said sleeve and thereby guiding said selector in its movements.

10. In a dispensing cabinet, the combination with a casing provided with a magazine for holding the articles in a vertical
60 stack, of a selector arranged to be adjusted vertically for selecting any desired article for ejection and to be operated horizontally to eject the selected article, means for effecting said adjustment and operation by
65 hand from the outside of the casing, means for guiding said selector in its vertical and horizontal movements, and means mounted
70 on said selector for automatically returning the same to normal position upon release.

In witness whereof, I hereunto subscribe my name this 14th day of November, 1912.

JAMES W. PATTERSON.

Witnesses:

JOS. ROBINSON,
A. A. THOMAS.