No. 798,626. PATENTED SEPT. 5, 1905.

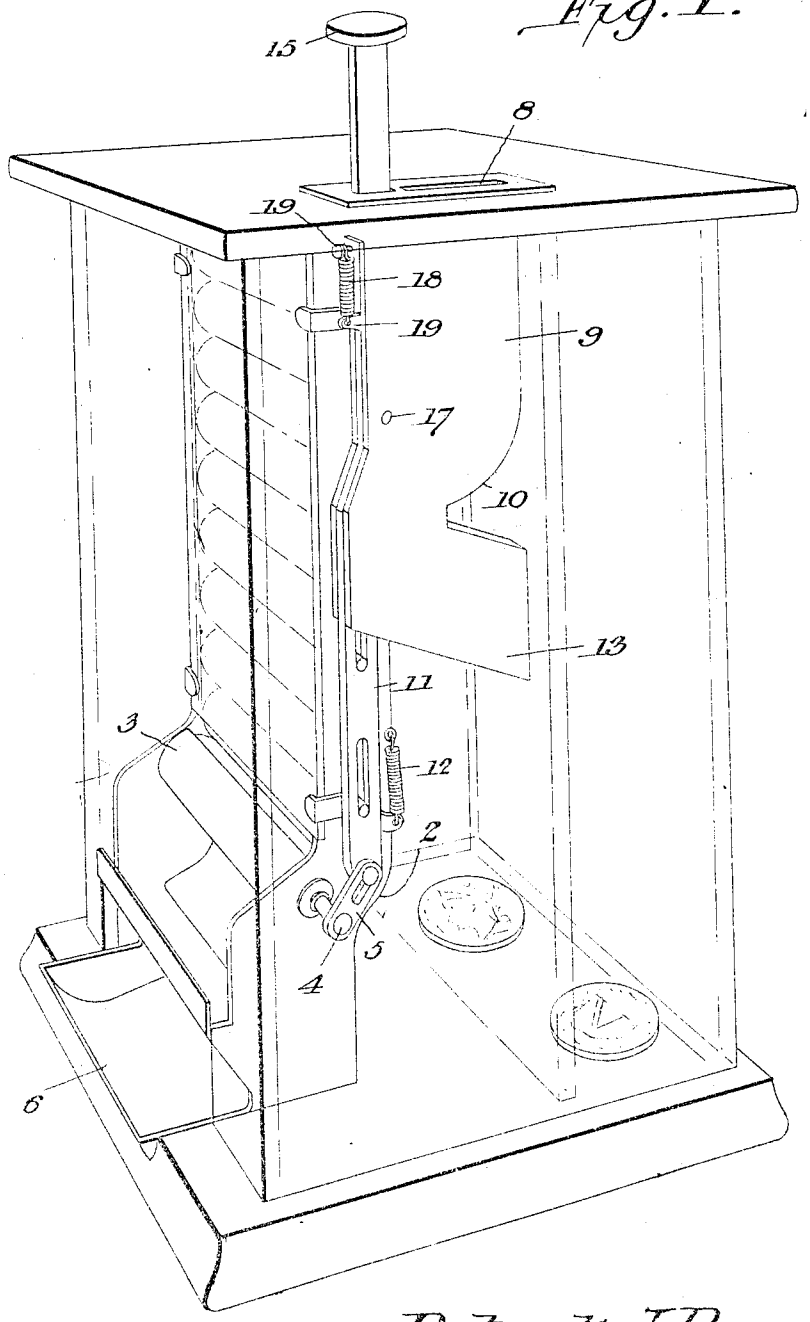
P. J. REGAN.

VENDING MACHINE.

APPLICATION FILED AUG. 26, 1904.

2 SHEETS—SHEET 1.

Fig. 1.



Patrick J. Regan,
Inventor.

Witnesses
E. W. Stewart
J. E. Porter

by Crosby & Co.
Attorneys

No. 798,626. PATENTED SEPT. 5, 1905.

P. J. REGAN.

VENDING MACHINE.

APPLICATION FILED AUG. 26, 1904.

2 SHEETS—SHEET 2.

Fig. 2.

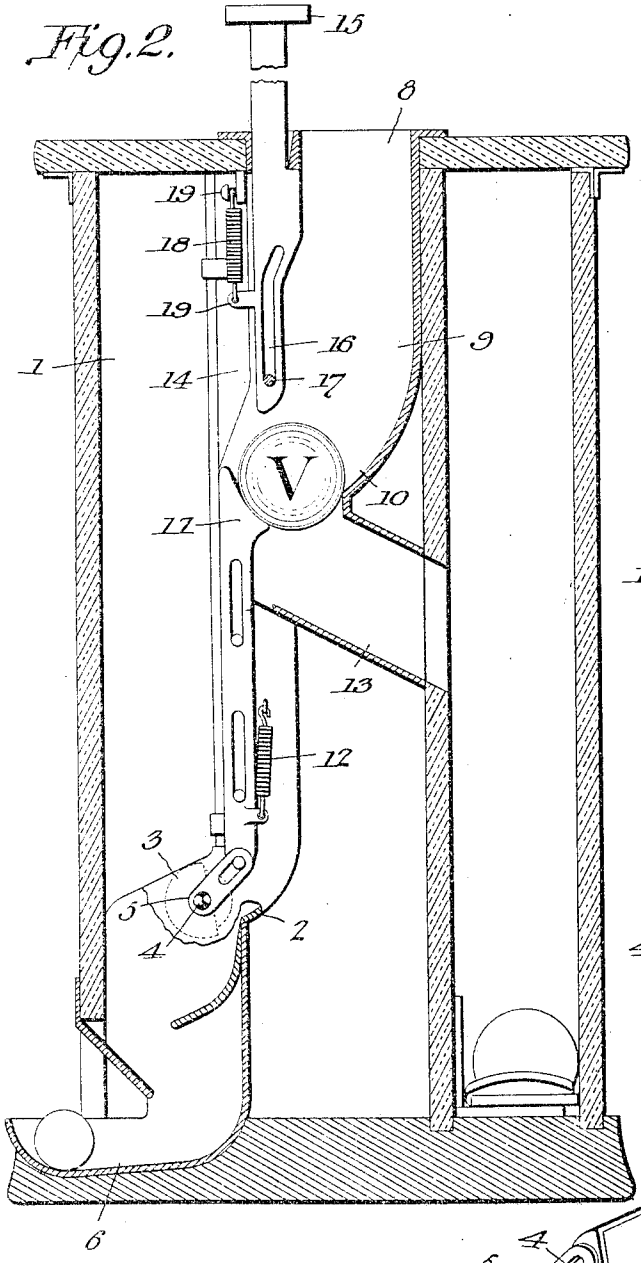


Fig. 3.

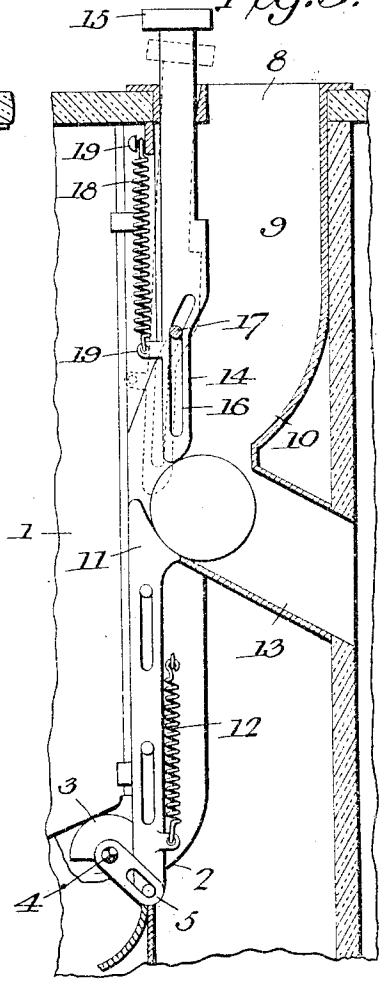
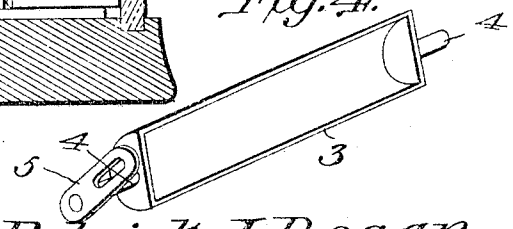


Fig. 4.



Witnesses

E. C. Stewart

Inventor.

Patrick J. Regan,

by C. A. Snow & Co.

Attorneys

UNITED STATES PATENT OFFICE.

PATRICK J. REGAN, OF IOWA CITY, IOWA.

VENDING-MACHINE.

No. 798,628. Specification of Letters Patent. Patented Sept. 5, 1905.

Application filed August 26, 1904. Serial No. 222,318.

To all whom it may concern:

Be it known that I, PATRICK J. REGAN, a citizen of the United States, residing at Iowa City, in the county of Johnson and State of Iowa, have invented a new and useful Vending-Machine, of which the following is a specification.

This invention relates to vending mechanisms, and has for its principal object to provide a novel form of machine for the vending of cylindrical or other articles—such as cigars, bottles of perfume, and the like—in which provision is made for the delivery of single articles only after a coin of predetermined size has been inserted in the machine.

A further object of the invention is to provide a machine of this character wherein coins of a smaller size, blanks, slugs, and the like will be delivered into the money-receptacle or at some other point without resulting in the operation of the mechanism or the discharge of the contents of the reservoir or magazines.

With these and other objects in view, as will more fully hereinafter appear, the invention consists in the novel construction and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that various changes in the form, proportions, size, and minor details of the structure may be made without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings, Figure 1 is a perspective view of a vending-machine constructed in accordance with the invention. Fig. 2 is a sectional elevation of the machine, showing a coin inserted in readiness for a discharging operation. Fig. 3 is a similar view of a portion of the mechanism shown in Fig. 2, showing a coin about to be discharged into the coin-receptacle. Fig. 4 is a detail perspective view of the discharging trough or receptacle detached.

Similar numerals of reference are employed to indicate corresponding parts throughout the several figures of the drawings.

The various working parts of the device are contained within a suitable casing, which may be formed either of wood or metal, but preferably is provided with transparent panels in order to expose to view the contents of the reservoir or magazine. The reservoir or magazines in the present instance comprises an elongated chamber 1 of a width slightly greater than the diameter of the articles to be vended, these in the present instance being represented as small bottles of perfume or the like. The lower end of the reservoir is slightly curved and terminates in a discharge-mouth 2, that normally is disposed opposite a delivery device in the form of a pivotally-mounted receptacle 3, the parts when in normal position being so arranged that the receptacle really constitutes the bottom of the reservoir and always contains the lowermost article, and said receptacle is in the form of a partial cylinder, so that when turned to effect the discharge of the article which it contains the wall of the cylinder will close the mouth of the reservoir and prevent the discharge of any of the contents thereof until the empty receptacle has again been restored to its initial position. The receptacle is provided with end pintles 4, one of which is in the form of a small spindle or shaft, to which is connected a rocker-arm 5, and when said arm is moved to the extent of ninety degrees or more the article contained in said receptacle will be dumped on a delivery-tray 6 within convenient reach of the intending purchaser. At the top of the receptacle is a slot 8 for the introduction of the coin, and communicating with this slot is an approximately vertical chute 9 of a width slightly greater than the width of a coin of predetermined value—as, for instance, a nickel. The coin-chute is provided with a curved or inclined portion 10, which directs the entered coin to a seat formed in part by the upper end of a vertically-disposed bar 11, said bar being connected to the rocker-arm 5 and being normally held in elevated position by a coiled tension-spring 12. The width of the chute at a point below the coin-rest is contracted, so that should a coin, slug, or other device of smaller diameter than a predetermined coin be placed in the chute it will fall down beyond the rest and will be delivered through the lower portion 13 of the chute to a suitable receptacle. At a point to one side of the chute is a coin-engaging slide 14, the upper end of which is in the form of a stem guided in a suitable opening at the top of the casing and provided at its upper end with a finger-piece 15, which is depressed by the intending purchaser. The lower portion of the slide is somewhat pointed, and said slide is provided with an elongated slot 16, through which extends a stationary pin 17, and the upper por-

tion of this slot is curved or inclined, so that when pressed downward the lower pointed end of the slide will be directed toward the left, and thus insure the safe delivery of the operating-coin to the coin-receptacle or other similar receptacle. This slide is normally elevated by a coiled spring 18, that extends between a pair of pins 19, one carried by the slide and the other by the fixed frame of the machine.

In the operation of the device, the parts being normally in the position shown in Fig. 1, any coin of proper size delivered to the chute will fall and be directed to the seat formed at the upper end of the bar 11. The intending purchaser then depresses the finger-piece 15, and the downward movement is transmitted through the slide and coin to the bar 11 and from thence to the rocker-arm 5, causing a partial rotative movement of the delivery-receptacle 3, the contents of the latter being dumped on the tray 6. As the coin-engaging slide nears the limit of its downward movement the inclined portion of the slot will cause the lower end of the slide to travel slightly toward the left and will thus positively insure the forcing of the coin downward through the inclined lower portion of the chute. When the pressure is relieved, all of the parts are restored to initial position by the springs 12 and 18. Should any article of less diameter than a coin be placed in the slot, it will fall directly through the chute to the coin-receptacle, so that manipulation of the machine by spurious coins or coins of less size than those intended to operate the device will be prevented. During the operation of the delivery device the cylindrical wall of the latter is turned into contact with the next lowermost article of the reservoir and closes the mouth of the reservoir in such manner as to positively prevent the flow of any goods therefrom by gravity.

Having thus described the invention, what is claimed is

1. The combination in a vending-machine, of a delivery device, a movable bar connected thereto, a chute having a curved or inclined portion which in connection with the end of the bar forms a coin-rest, a coin-engaging slide having a cam-slot, and a pin entered in said slot and serving to direct the path of movement of said slide into engagement with the coin and thereby effect both downward and lateral discharging movement thereof.

2. The combination in a vending-machine, of a delivery device, a vertically-movable bar connected thereto and provided with guiding-slots, stationary pins entered in the slots, a chute having a curved or inclined lower end which in connection with the upper end of the bar forms a coin-rest, a manually-operable slide having a cam-slot and serving by engagement with the coin to depress the bar, a guiding-pin entered in said cam-slot, and serving to direct the slide into engagement with the edge of the coin to one side of the center of the coin, thereby effecting downward and lateral discharging movement of said coin and springs for restoring the parts to initial position.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

PATRICK J. REGAN.

Witnesses:

JAMES M. CASH,

STEVENS A. COLDREN.