

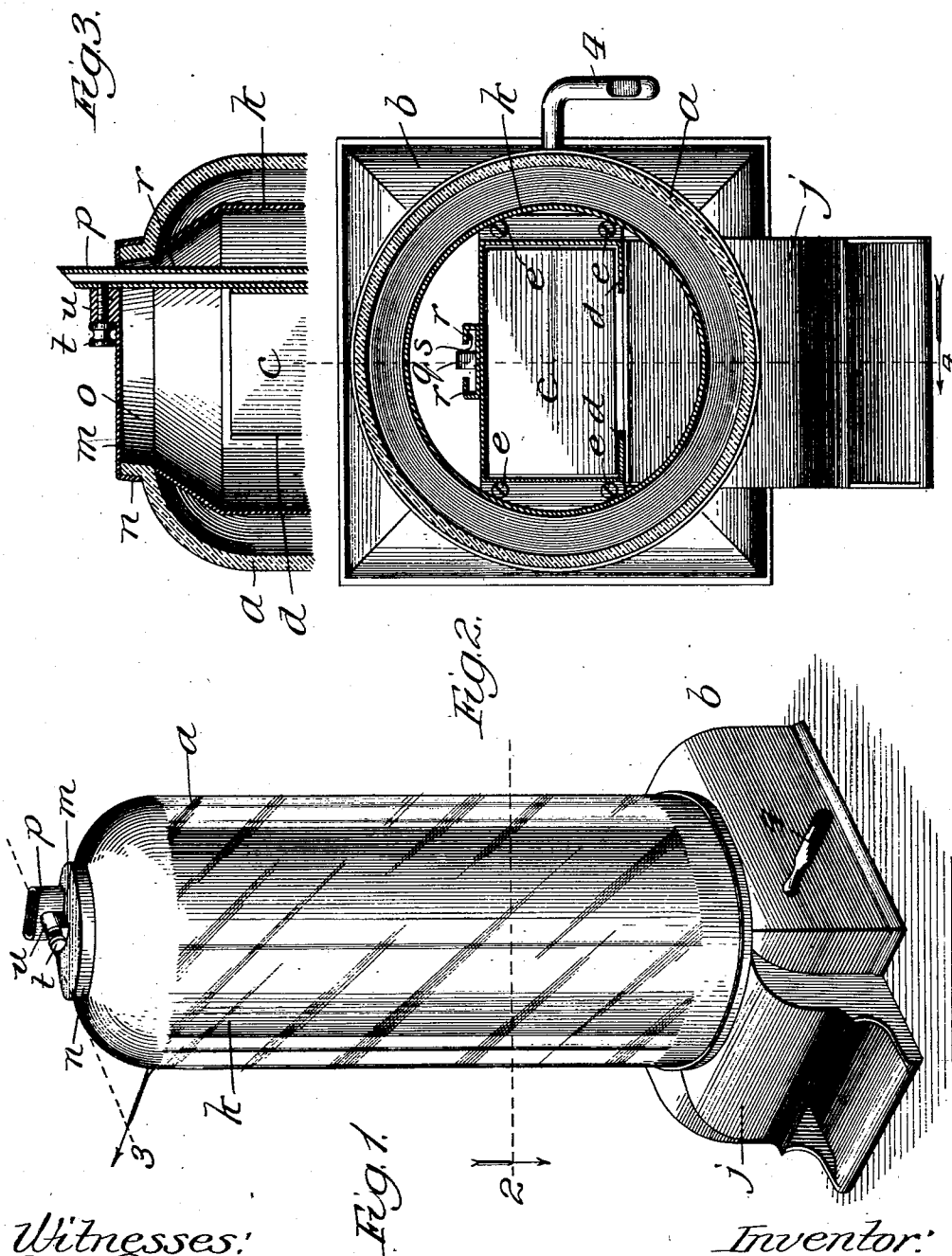
No. 822,909.

PATENTED JUNE 12, 1906.

P. E. BERGER.
VENDING MACHINE.

APPLICATION FILED JUNE 26, 1905.

2 SHEETS—SHEET 1.



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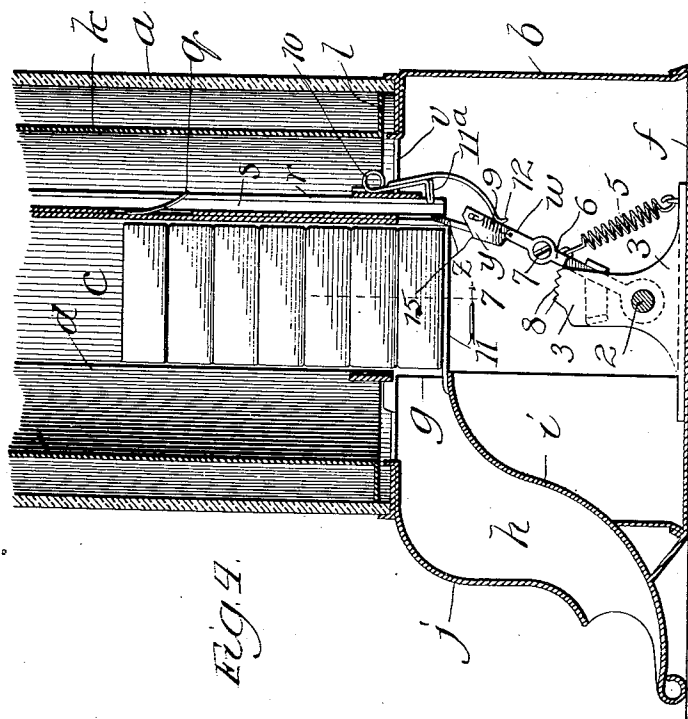
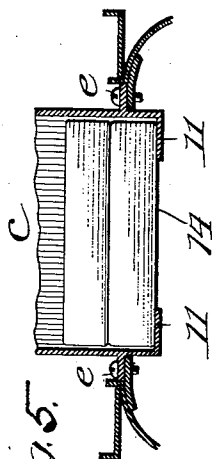
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2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

PAUL E. BERGER, OF CHICAGO, ILLINOIS.

VENDING-MACHINE.

No. 822,909.

Specification of Letters Patent.

Patented June 12, 1906.

Application filed June 26, 1905. Serial No. 288,919.

To all whom it may concern:

Be it known that I, PAUL E. BERGER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Vending-Machines, of which the following is a specification.

My invention relates to that class of vending-machines adapted to contain packages or material to be vended.

The principal object of the invention is to provide a simple, economical, and efficient vending-machine.

Other and further objects of the invention will appear from an examination of the drawings and the following description and claims.

The invention consists in the features, combinations, and details of construction herein-after described and claimed.

In the accompanying drawings, Figure 1 is a perspective view in elevation of a vending-machine constructed in accordance with my improvements; Fig. 2, a sectional plan view taken on line 2 of Fig. 1; Fig. 3, a fragmentary sectional view in elevation of the upper part of the device, taken on line 3 of Fig. 1 looking in the direction of the arrow; Fig. 4, a sectional view in elevation of the lower part of the machine, taken on line 4 of Fig. 2 looking in the direction of the arrow, showing the discharging mechanism in initial position; Fig. 5, a detail sectional elevation of an inner portion of the machine, showing the lower end of the inner chamber for containing the packages or material to be vended.

In constructing a vending-machine in accordance with my improvements I provide an outer casing *a*, which may be of glass or other material and which is here shown in cylindrical form. This outer casing is mounted upon a base portion *b*, made, preferably, of metal, and an inner chamber *c*, adapted to contain packages or material to be vended, is formed by inner upright walls *d*, which are secured by means of screws *e* or in any ordinary and well-known manner to the base portion. The bottom of the walls which form this inner chamber are mounted a sufficient distance above the bottom *f* of the base portion to provide a sufficient space for containing the mechanism for discharging the package or material, as hereinafter described, and an opening *g* is provided at or near the bottom of the inner chamber, as

shown in Fig. 4, communicating with the chute *h*, formed between inclined outwardly and downwardly extending walls *i* and *j*, through which the material to be vended is discharged. The walls *i* and *j*, which form the top and bottom of the chute, are arranged at such an incline and sufficiently close together to prevent the easy removal of the material to be vended, except by means of the discharging mechanism, after the coin has been deposited in the receptacle.

An intermediate vertical cylindrical member *k* may be mounted between the inner walls which form the receptacle or chamber for containing the material to be vended and the outer casing, such cylindrical member having a bottom flange *l*, extending outward to the lower portion of the outer casing and forming a chamber between such outer casing and such cylindrical member. A cap *m*, preferably of metal, having an annular flange *n*, is mounted at the upper end of the outer casing, closing the opening *o*, and a coin-receiving slot member *p* extends into the casing, preferably through the opening *o* and the cap and preferably outside of the walls which form the inner chamber for containing the material to be vended and downward to the bottom of such chamber. The bottom portion of this coin-receiving slot is provided with a spring *q*, the back wall of the slot member being cut away, so as to form flanges *r*, the inner edges of which are so disposed as to retain a coin of the proper size in the slot *s* until it reaches the bottom of such slot and permit a coin of small size to be thrown out of the slot by the spring *q* before it reaches the end of the slotted member or the discharging mechanism. The cap *m* is secured to the upper portion of the slot member *p* by means of a thumb-screw *t*, mounted in a perforated lug portion *u* of the cap and having its inner end in engagement with the slot member, the lower end of the slot member being secured to the base portion of the machine in any ordinary and well-known manner. By this means the slot member holds the outer casing and lower base portions together, and they may be locked in position by means of lock mechanism of any desired known type.

The device here shown and described is designed principally to be used in doors—as, for instance, upon a counter or cigar-case or the like—for the purpose of vending packages of

matches, gum, or any desired material, and would ordinarily be used where an attendant is present. A lock therefore would be unnecessary, and hence is not shown or described herein.

A diaphragm *v* forms the top of the base portion, or, in other words, forms a partition between the lower or base portion of the device and the upper casing and chambers.

In order to provide a simple, economical, and efficient means for discharging packages or material to be vended, a discharging arm or lever *w*, having a pocket *y* for receiving a coin *z* and holding it in operative position, is mounted upon a rock-shaft 2 inside the base portion of the machine by means of a bracket or brackets 3, in which such rock-shaft is journaled. One end of the rock-shaft extends out through the wall of the base portion and is provided with a crank or handle portion 4, by means of which the rock-shaft and discharging arm or lever may be operated. A spring 5 is connected at one end with the operating-lever and at the other end with the base or bracket, so as to hold the operating-lever yieldingly in initial position and return it to initial position after it has been moved to discharging position by means of the handle or crank. A pawl 6 is pivotally mounted, by means of a pivot 7, upon the discharging lever or arm, one end of such pawl being adapted to engage the rack-teeth 8 upon the bracket 3, the opposite end of such pawl being provided with a spring 9, so that when the operating-lever is moved downward to its discharging position a sufficient distance to cause the pawl to engage the rack-teeth the pawl will prevent the return of the lever until the lever is moved a sufficient distance in the necessary direction to discharge a package or given portion of the material to be vended.

A spring 10 is provided at the lower end of the coin-receiving slot having a projecting shoulder 11, extending across the lower portion or end of the coin-receiving slot when the spring is in one position and leaving the slot free for the passage of a coin when the spring and its projecting shoulder is in a second position. A depending portion 12 of this spring extends downward and into the path of movement of the discharging arm or lever. When the lever is moved to initial position or position to receive a coin, the shoulder portion of this spring is pressed outward, so as to permit the passage of the coin from the coin-receiving slot into the pocket portion of the discharging arm or lever, and when such discharging arm or lever is moved in the direction necessary to discharge a package or portion of the material to be vended it releases the spring 12, so that its shoulder portion extends across the lower portion of the coin-receiving slot. It is then in position to retain a coin dropped into the

slot until the discharging arm or lever returns to initial position. The coin is then dropped into the pocket of the discharging-arm and is in position to permit the discharge of a package or portion of material to be vended. The discharging-arm is so mounted that it rotates upon the rock-shaft in a vertical plane beneath the chamber for containing the packages or material to be vended and moves in the direction of the discharge-chute throughout its entire stroke without coming in contact with the material or package to be vended. When the coin is dropped into the pocket portion at the upper or swinging end of the discharging-arm, it is held removably in such pocket portion, so as to extend above the upper edge thereof and into engagement with the package or receptacle containing the material to be vended.

In order to enable the coin to discharge the package or material, the bottom 13 of the receptacle which contains the material to be operated upon is slotted or in the form of two horizontal flange portions having a space or slot 14 of sufficient width to permit the passage of the coin while in engagement with the package to be discharged. The front wall 15 is of less depth than the back wall 16 of the pocket and may have its inner surface at an upward and outward incline, so as to readily drop the coin when the discharging-arm is in discharging position and the package has been discharged and allowed to pass out of contact with the coin. By this arrangement it will be seen that when a coin is dropped into the coin-receiving slot, the discharging mechanism being in initial position, the coin is received in the pocket portion of the discharging-arm and pressed against the package or receptacle containing the material to be vended, being held against the package until discharged and then permitted to fall into the coin-receptacle formed by the base portion of the machine. It will also be seen that while the pawl 6 is adapted to engage the rack-teeth and prevent the return of the discharging-arm to initial position when such arm has been inadvertently stopped during the discharging operation and before completing the operation, nevertheless the discharging-arm is permitted to return to initial position after the discharging operation is completed and the pawl moved out of engagement with the rack-teeth.

I claim—

1. A vending-machine comprising a base-plate, a package-holding receptacle secured thereto at its lower end and open at its upper end, an exterior casing on the base-plate also open at its upper end, a slotted cap for covering the casing, a coin-chute secured to the package-holding receptacle and passing through the slotted cap, and means for securing the cap to the coin-chute.

2. A vending-machine comprising a base-

plate, a package-holding receptacle secured thereto at its lower end and open at its upper end, an exterior casing on the base-plate also open at its upper end, a slotted cap for closing the open end of the casing, a coin-chute secured to the package-holding receptacle and passing through the slotted cap, a screw-

threaded lug on the cap adjacent to the slot, and a thumb-screw therein.

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