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VENDING MACHINE.

APPLICATION FILED SEPT. 30, 1909.

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Patented Mar. 8, 1910.

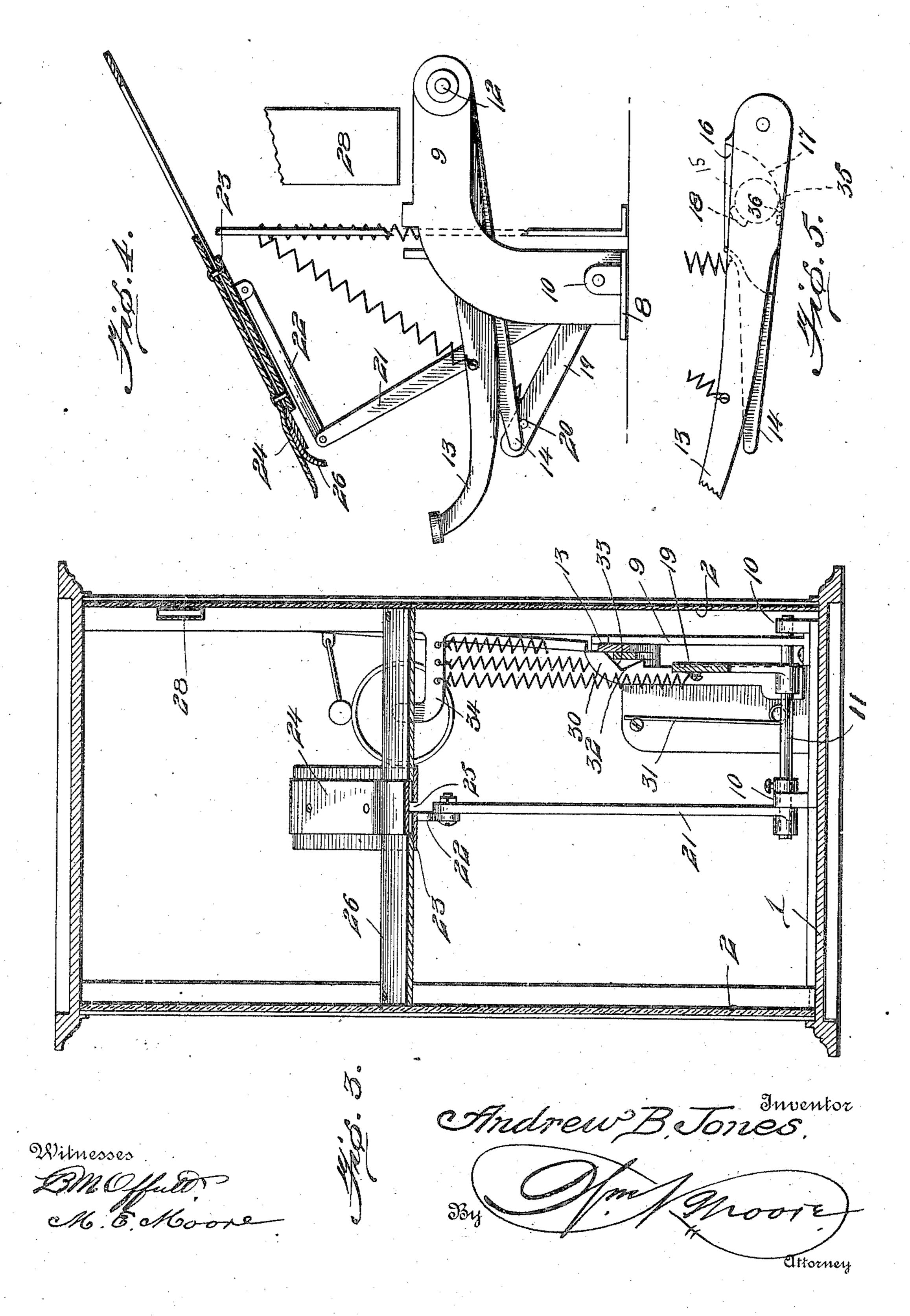
2 SHEETS-SHEET 1.

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UNITED STATES PATENT OFFICE.

ANDREW B. JONES, OF LEXINGTON, KENTUCKY, ASSIGNOR TO CENTRAL VENDING MACHINE COMPANY, OF LEXINGTON, KENTUCKY, A CORPORATION.

VENDING-MACHINE.

951,733.

Specification of Letters Patent. Patented Mar. 8, 1910.

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To all whom it may concern:

Be it known that I, Andrew B. Jones, a citizen of the United States, residing at Lexington, in the county of Fayette and State 5 of Kentucky, have invented certain new and useful Improvements in Vending-Machines, of which the following is a specification.

My invention relates to improvements in vending machines, and the leading object 10 of my invention is the provision of a device of this character adapted to collect a coin for all articles given out by it.

A further object of the invention is the provision of a device particularly adapted

15 for vending envelops.

With these and other objects of a like character in view, my invention consists in a vending machine having novel features of construction and combination and arrange-20 ment of parts for service substantially as hereinafter described, and as illustrated in the accompanying drawings, which illustrate a machine constructed in accordance with and embodying the general principles 25 of my invention.

Figure 1, represents a front view of the device as it appears when empty. Fig. 2, represents a side elevation of the device, the wall thereof being cut away. Fig. 3, repre-30 sents a vertical sectional view on the line 3—3 of Fig. 2. Fig. 4, represents a detailed view of the ejecting mechanism, and, Fig. 5, represents a fragmentary view of the actuating and operating levers, the manner of 35 connection thereof by a coin being shown in

dotted lines.

In the drawings, in which similar characters of reference denote corresponding parts in the various views: The numeral 1, desig-40 nates the base of the machine, having arising therefrom the metallic side walls 2 and the rear wall 3, said wall 3 preferably having a door therein to permit of access to the interior of the device.

The lower portion 4 of the front of the device is also formed of metallic material, and has formed therein the vertical slot 5 in which the actuating lever moves, and the horizontal slot 6 through which the ejector 50 operates. As will be seen by reference to Fig. 1, the upper portion 7 of the front is preferably of glass, and may permit an unobstructed view into the interior of the device or may have placed thereunder any de-55 sired advertisement.

Secured to the base of the machine is the plate 8 bearing the rearwardly extending curved support 9, and being also provided with the pair of upstanding lugs 10 which serve as bearings for the rocker shaft 11. 60 Pivotally secured to the end of the support 9 by the common pivot 12 are the actuating lever 13 and the operating lever 14, said levers being adapted to be locked by a coin to move in unison and having the corre- 65 sponding recesses 15 and 16 formed in their adjacent faces and adapted to receive the coin. Formed on the lower side of the recess 16 on the operating lever 14 is the abutment shoulder or wall 17 on which the coin 70 is adapted to rest, while formed on the inner face of the actuating lever 13 is the lug 18 which bears down upon the coin and frictionally locks it in place, at the same time

serving to move the operating lever.

Fixedly secured to the rock shaft 11 near its outer end is a lever arm 19, said arm having formed on its outer face near the upper end the lug 20, said lug being so disposed as to be contacted with by the operating lever, the 80 pressure on the lug forcing the arm 19 downward and rocking the shaft. Secured to the innerend of the rock shaft and swung forward by the rocking thereof is the lever 21, while secured to the free end of the lever 21 is a link 85 22, the other end of the link being secured to the slide 23, bearing the ejector 24. As will be observed by reference to Fig. 1, the slide 23 moves in and is guided by the slot 25 formed in the plate 26, the forward end of 90 said plate 26 being secured to the front just below the slot 6 and extending upwardly and rearwardly at an angle to the front, the plate 26 serving as a support for the envelops or other goods vended by the machine and 95 being provided with the pair of spring members 27 which serve to normally retain said goods above the slot 6.

The operation of the machine is as follows: A stack of envelops having been 100 placed in the machine and the doors closed, when it is desired to secure an envelop from the device, a coin is introduced into the coin chute 28 through the slot 29. The lower end of the chute 28 opens immediately above the 105 recesses 15 and 16, and any coin in the chute drops into and is retained in said recesses as has been heretofore described and as is clearly illustrated in Fig. 5. Since the coin now serves to lock the levers 13 and 14, the 110

depression of lever 13 carries with it lever 14, and lever 14 in turn contacting with lug 20 on arm 19 rocks the shaft 11 and moves lever 21, and thus the slide and ejector con-5 nected thereto, forward. As will be observed, the forward end of the ejector has a bend therein which causes it to lie in a plane above that of the plate 26, and upon its forward movement said end engages under the 10 flap of the envelop, which is arranged downward in loading the machine, and as the ejector continues its movement it draws the envelop downward and forces it out through the slot 6, as will be best understood by reference to Fig. 2, the spring members 27 forcing the remaining envelops upward and preventing them from also passing out through the slot.

The envelop having been delivered, to re-20 lease the coin which has hitherto been retained in place by its frictional engagement with the levers, I provide the latch member 30, said latch being forced into operation by the spring 31 and having intermediate its 25 length the abutment latch member 32, and on its upper end the cam portion 33.

As the operating and actuating levers are depressed, they both pass below the abutment portion 32 of the latch, while on the 30 return movement the abutment 32 engages and retards the movement of the operating lever, while the actuating lever continuing upward, the coin is released from said frictional engagement and is permitted to drop 35 to the bottom of the machine. The further upward movement of the actuating lever brings it in contact with the cam portion 33 of the latch, and by bearing thereagainst it forces the latch back and out of engagement 40 with the operating lever and allows it to resume its normal position. It will be understood that for returning the parts to normal position any desired means may be employed, that shown, of a spring attached to 45 the actuating lever, a spring to the operating lever, and one to the arm on the rock shaft, the other ends of said springs being secured to the lug 34 projecting from the side of the machine being the preferred form.

To further aid in releasing the coin and preventing the same from sticking in the recesses and thus being used more than once, I form in the wall 17 back of the diameter of the coin passing through the points of con-55 tact the groove 35, and on the lever 13 I form a lug 36 adapted to move in said groove, said lug being adapted to move up through the groove and exert a camming action against the coin to force it out of the recesses as the lever 13 rises while the lever 14 is locked down by the latch.

From the foregoing description taken in connection with the drawings, the construction and operation of my device will be readily understood and its advantages fully 65 appreciated, and it will be seen that I provide a strong, simple and durable machine for vending which will collect a coin for all goods given out and which will absolutely prevent the employing of the coin to secure 70 more than one article from the machine.

1 claim:

1. In a vending machine, the combination with the base, of a support rising therefrom, a pin projecting from the support, 75 a pair of levers mounted on the pin, said levers having corresponding recesses formed in their adjacent faces, the levers being adapted to be locked to move in unison by the presence of a coin of predetermined de- 80 nomination in the recess, a spring pressed latch member adapted to engage one of the levers when depressed to retain the same in depressed position, the upward movement of the other lever serving to widen the retain- 85 ing recess and permit the coin to drop therefrom, and a cam portion on the upper end of the latch member adapted to be engaged by the upwardly moving lever when near the upper limit of its movement, the con- 90 tact of the lever with said cam serving to release the latch member and allow the detained lever to move upward into normal position.

2. In a vending machine, the combination 95 with the base, of a support projecting upward therefrom, an actuating and an operating lever pivotally secured to the support, an ejector operated by the operating lever. abutments carried by the adjacent faces of 100 said levers, means for delivering a coin into the space between said abutments, said abutments being so spaced apart as to engage and retain only a coin of predetermined denomination, the presence of said coin serving to 105 lock the levers together, and a spring-pressed catch adapted to engage one of the levers when depressed and retain it in said position while permitting the other lever to rise, the upward movement of said lever increasing 110 the distance between the abutments and removing the retaining pressure from the coin, thus allowing the coin to drop from between the abutments into a suitable receptacle provided therefor, said latch being provided 115 with a cam portion adapted to be contacted with by the free lever to force the latch member out of engagement with the other lever and allow all the parts to resume normal position.

In testimony whereof I affix my signature, in presence of two witnesses.

ANDREW B. JONES.

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Witnesses:

HENRY MITCHELL, H. L. Geers.