(No Model.) 3 Sheets—Sheet 1.

H. BYRON.

COIN OPERATED VENDING MACHINE.

No. 493,973. Patented Mar. 21, 1893.

Fig. 1.

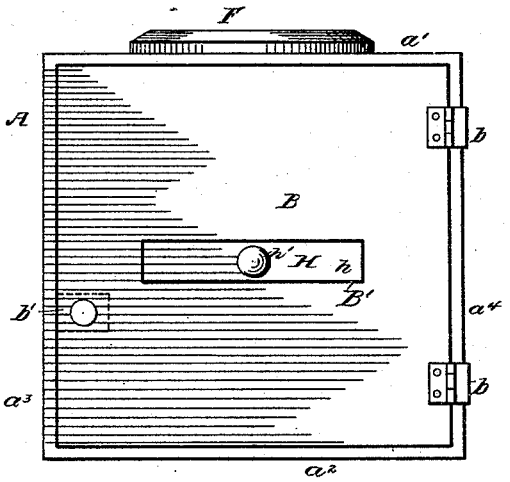
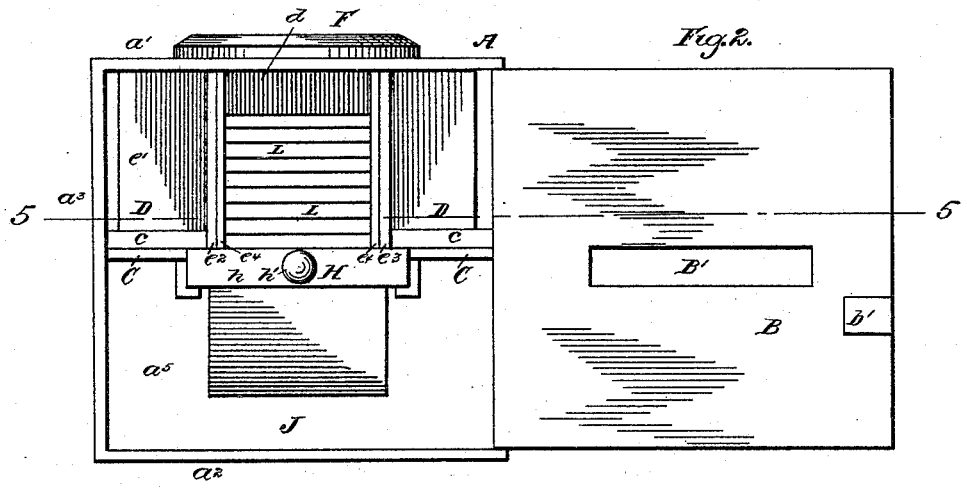


Fig. 2.



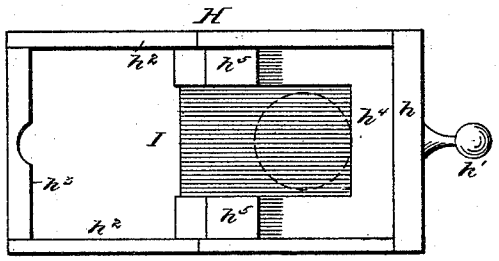


Fig. 3.

Witnesses
Henry M. Cummings
Willard N. Baylis

Henry Byron Inventor
By his Attorney Henry M. Byram

(No Model.) 3 Sheets—Sheet 2.

H. BYRON.

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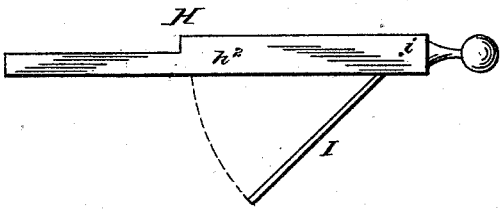

Fig. 4.

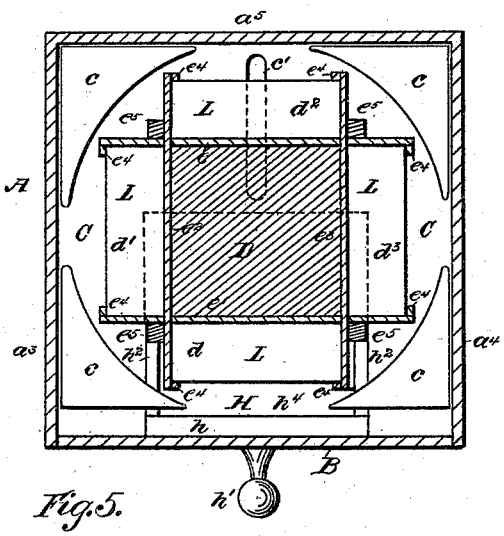

Fig. 5.

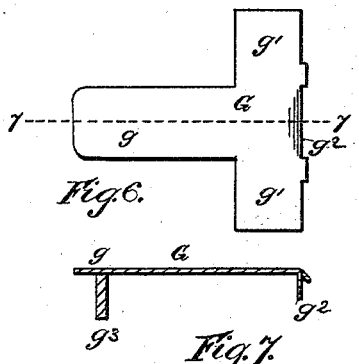

Fig. 6.

Fig. 7.

Witnesses
Henry M. Cummings
Willard A. Baylis

Henry Byron Inventor
By his Attorney Henry M. Brigham

(No Model.) 3 Sheets—Sheet 3.

H. BYRON.

COIN OPERATED VENDING MACHINE.

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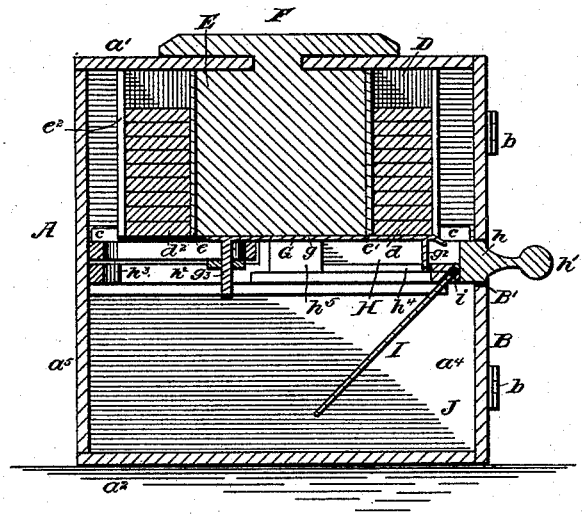

Fig. 8.

WITNESSES:
Fannie R. Perkins
Willard N. Bayles

Henry Byron INVENTOR

BY
Henry M Byington
his ATTORNEY

UNITED STATES PATENT OFFICE.

HENRY BYRON, OF NEW YORK, N. Y.

COIN-OPERATED VENDING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 493,973, dated March 21, 1893.

Application filed October 6, 1892. Serial No. 448,032. (No model.)

To all whom it may concern:

Be it known that I, HENRY BYRON, a citizen of the United States of America, and a resident of the city of New York, in the county and State of New York, have invented a certain new and useful Improvement in Coin-Operated Vending-Machines, of which the following is a specification.

My invention relates to coin-operated vending machines of the class in which the introduction of a coin of predetermined denomination operates interior mechanism to free, and deposit in a drawer, whence it may be removed, packages of candy, gum, stamps, tobacco or similar articles.

To this end the invention consists in certain novel interior mechanism for securing the packages in position and allowing them to fall into the drawer upon the introduction of a coin and subsequent operation of said drawer.

It further consists in the provision of means of a simple and durable nature for depositing the coin into a suitable receptacle after it has performed its work.

The invention further consists in the construction and combination of the several parts as will be hereinafter fully described and pointed out in the claims.

In the drawings Figure 1 is a front elevation of my invention, the door being closed. Fig. 2 is a similar view, the door being open. Fig. 3 is a plan view of the coin receiving and package delivering drawer. Fig. 4 is a side elevation of the same. Fig. 5 is a horizontal section taken on the line 5—5 of Fig. 2, the door, however, being shown as closed. Fig. 6 is a plan view. Fig. 7 a section on the line 7—7 of Fig. 6 illustrating the coin-operated slide by means of which the packages are supported and which, upon the introduction of a coin is moved from under them and allows one package to fall into the drawer, and Fig. 8 is a vertical central section, from front to rear, of Fig. 1.

Referring to the drawings in which similar letters of reference denote corresponding parts, A designates the casing or cover of the machine consisting of top and bottom a' a^2, sides a^3 a^4, back a^5 and door B. The door is hinged at b b to the side a^4 and is provided with a lock b' by means of which it is secured to the side a^3, and a horizontal slot or opening B'. The interior of the casing is divided intermediate of its top and bottom by a horizontal partition C above which is placed the package container D and movably secured to which is the coin operated mechanism about to be described.

The package container D is, in the present embodiment of the invention, provided with four compartments d, d', d^2, d^3. To this end the container is constructed of the two pieces e e' and two other pieces e^2 e^3 disposed across them in the manner shown and secured preferably to a core E. This core is not, however, an essential feature as the pieces e, e', e^2, e^3 may be given sufficient rigidity by being secured together in any desired manner. The core E is provided at its top with an upwardly projecting boss which projects through the top a' of the casing and is there rigidly secured to a disk F by means of which the container is revolved in order to present to the front any one of the compartments, for the purpose described. The disk F will preferably be provided with means to allow the operator to determine, when turning said disk, just what compartment is presented to the receiving drawer. I have found it expedient for this purpose to provide the top a' of the casing with four marks, one over the center of each compartment of the container and to label each of these with the name of the goods to be found in that compartment. A mark is then placed upon the disk F which, when brought into juxtaposition to one of the marks upon the top a', will indicate that the compartment containing the goods described is in such a position that one of the packages may be withdrawn upon the deposit of a coin. I may, if desired, provide the disk with vertical perforations and the top a' of the casing with perforations registering therewith and use in this construction a pin which will be inserted through the disk F and into one of the perforations in the top a' in order to hold the compartment securely in position. The pieces e, e', e^2, e^3 forming the compartments will preferably be provided with lips e^4 in order to retain the packages in position, and they may be strengthened upon the outside by means of strips e^5 glued or otherwise secured at the junction of said pieces.

The package container will rest upon the horizontal partition C. It will then be free to be revolved by means of the disk F. If desired the partition C may be provided with guides *c* for insuring the perfect operation of the container.

G designates a slide arranged under the partition C and consisting of a strip *g* preferably of metal, wings *g'* one on each side and a downwardly extending projection g^2 against which the coin abuts. The rear end of the slide is provided with a downwardly projecting lug g^3 which projects through and has a horizontally sliding movement in an elongated slot *c'* formed in the partition C. If desired the partition may also be longitudinally recessed to form a track for the slide G.

H designates the coin receiving and package delivering drawer. It is composed of the front cross bar *h* having the handle *h'*, two side bars h^2 and end h^3 and is provided around a portion of its inside with a bottom h^4.

I designates a hinged bottom one end of which is movably secured in the front end of the drawer by means of pins or pivots *i*. Normally this bottom will hang in the position illustrated in Figs. 4 and 8. The act of pulling the drawer out however, through the slot B' in the door, causes the free end of the hinged bottom to rise to the level of the side bars h^2 and thus adapt the drawer for the receipt of the coin. The partial bottom h^4 is provided with enlarged portions h^5 which determine the space within which the package of goods falls. The end piece h^3 of the drawer is preferably provided upon its inner surface with a cut-away portion, the object of which is to receive the lug g^3 of the slide G in order that when the drawer is pulled out the slide may be pulled forward also.

J designates the lower compartment of the casing which is utilized as a receptacle for coins.

The operation of my improved vending machine is as follows. The compartments having been stocked with the packages of candies, &c., the door is locked and the device ready for vending. Before introducing the coin the drawer H may be pulled out with no result. When, however, a coin of the proper denomination is deposited in the bottom of the drawer in the position illustrated in the drawings, the drawer may be closed to drop the coin and receive the package. In its normal position the wings *g'* of the slide G will support the packages L. When the drawer carrying the coin is pushed in the edge of the latter abuts on one side against the partial bottom h^4 of the drawer and on the other side against the downwardly projecting portion g^2 of the slide and shoves it back, whereupon the packages are allowed to fall upon the partial bottom h^4 of the drawer and at the same time the hinged bottom, which before has been held in position by the lower edge of the slot B' descends and allows the coin to fall into the receptacle J. The drawer may then be again pulled out and will carry with it the lowermost of the packages and the end piece h^3 of the drawer, acting upon the lug g^2 of the slide G, again brings the latter under the remaining packages to support them. After the package in the drawer has been removed the machine is in condition for another similar operation. It is obvious that this operation may be repeated so long as any packages remain in the several compartments of the container D, the condition precedent being the deposit of a coin in the drawer H.

Having now described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a coin-operated vending machine, the combination, with a receptacle for the goods, of a drawer having a hinged bottom adapted to receive and transmit the coin to a coin receptacle, a slide supporting the goods in the receptacle therefor and adapted to be pressed out of engagement with said goods by the coin, for the purpose of delivering one package thereof to the operator, substantially as described.

2. In a coin-operated vending machine, the combination, with a receptacle for the goods, of a drawer having a partial bottom adapted to receive one package of the goods and a hinged bottom adapted to receive and deposit a coin, a support for the goods adapted to be pressed out of engagement therewith by the coin for the purpose of delivering such goods to the operator, substantially as described.

3. In a coin-operated vending machine, the combination, with a receptacle for the goods, of a drawer adapted to receive the coin and deliver the goods, and a slide having wings to support the goods in the receptacle therefor, and provided with a downward projection adapted to be engaged by the coin deposited in such drawer and forced from engagement with such goods, substantially as described.

4. In a coin-operated vending machine, the combination, with a goods container, of a drawer having a partial bottom adapted to receive one package of the goods, and a hinged bottom adapted to receive and deposit a coin, a slide having wings to support the goods in one compartment of the container and provided with a downward projection adapted to be engaged by a coin supported upon such hinged bottom and forced from engagement with such goods, substantially as described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 5th day of October, 1892.

HENRY BYRON.

Witnesses:
HENRY M. CUMMINGS,
WILLARD N. BAYLIS.