

(No Model.)

2 Sheets—Sheet 1.

O. A. WHEELER.
VENDING MACHINE.

No. 466,313.

Patented Dec. 29, 1891.

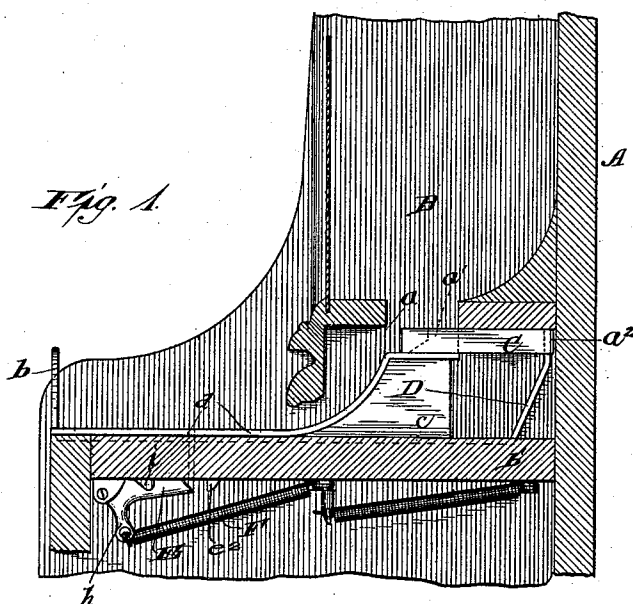


Fig. 2.

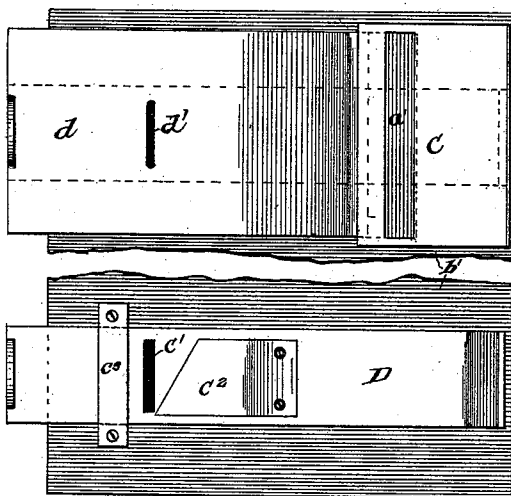


Fig. 3.

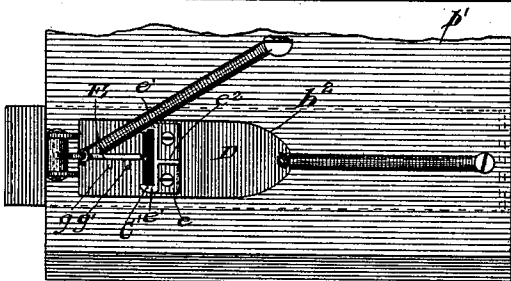


Fig. 4.

Witnesses
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Inventor
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BY *Chas. C. Tillman Att'y.*

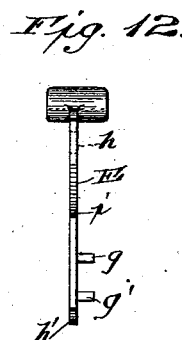
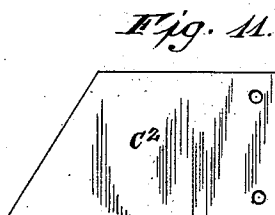
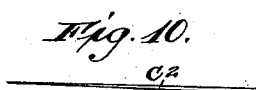
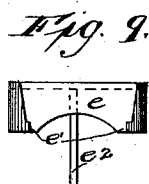
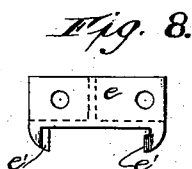
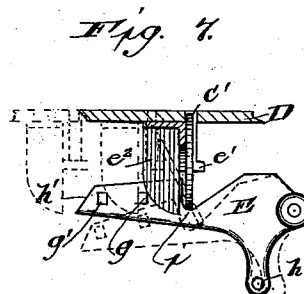
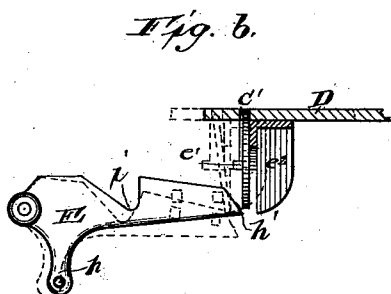
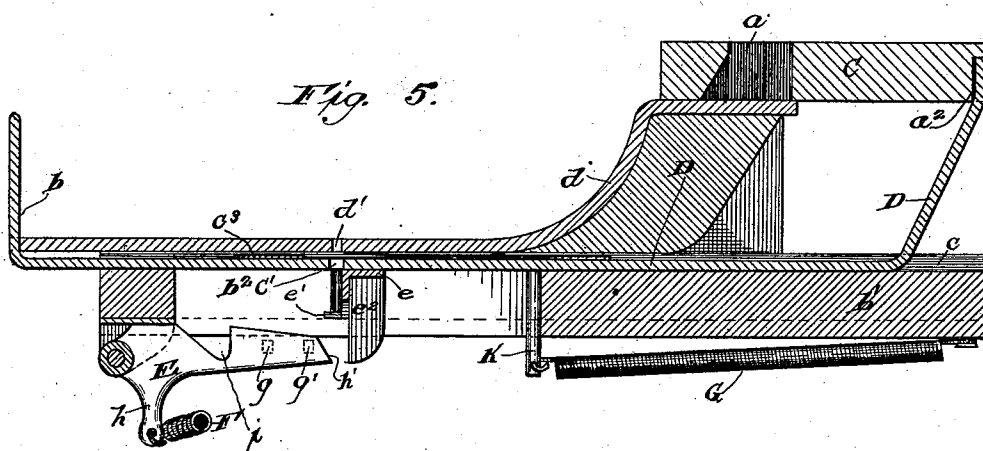
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No. 466,313.

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Witnesses
 Jas. E. Gorton.
 Ruth. G. Gorton.

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By Chas. C. Wilhams Atty

UNITED STATES PATENT OFFICE.

ORRIN A. WHEELER, OF CHICAGO, ILLINOIS.

VENDING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 466,313, dated December 29, 1891.

Application filed April 27, 1891. Serial No. 390,590. (No model.)

To all whom it may concern:

Be it known that I, ORRIN A. WHEELER, 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 certain new and useful improvements in coin-controlled vending-machines, and is especially adapted to that class of such machines to be used for vending small bottles of perfume and other articles; and it consists in the peculiarities of the construction and the novel arrangement and operation of the various parts thereof, as will be hereinafter more fully set forth and specifically claimed.

The objects of my invention are, first, to afford a machine for automatically vending articles of various kinds and of different values which shall be simple and inexpensive in construction and effective in operation; second, to afford such a machine in which the operation of delivering the article sold is done and controlled by coins having certain circumferences and thicknesses, and, third, a machine in which the withdrawal of a coin having a string secured to it is prevented after the delivery is made.

In order to enable others skilled in the art to which my invention pertains to make and use the same, I will now proceed to describe it, referring to the accompanying drawings, in which—

Figure 1 is a vertical sectional view of my machine, showing a portion of the upper and lower parts thereof broken away. Fig. 2 is a plan view of the operating-piece, delivery-slide, and protecting-plate. Fig. 3 is a plan view of the operating-piece with the delivery-slide and plate removed. Fig. 4 is a bottom view of the operating mechanism. Fig. 5 is a side view of the same. Figs. 6 and 7 are detail views showing the positions of the trigger when being operated by the coin. Fig. 8 is a plan view of the coin-catch. Fig. 9 is an end view of the same. Fig. 10 is a side view of the knife-blade detached. Fig. 11 is a plan view of the same, and Fig. 12 is a plan view of the trigger detached.

A represents a case or main frame, made of suitable size, form, and material, having its

base enlarged, so as to form a pedestal, and its upper part provided with a receptacle for the articles to be sold. The front part of the upper portion of the case is provided with a glass pane, on a portion of which may be displayed the instructions for operating the device or other suitable inscriptions. The lower portion of the glass is usually left transparent, so that the articles to be sold may be seen by the purchaser. The back of the case is supplied with a door to permit the removal of the coins, mechanism, &c.

The bottom of the receptacle B is formed with an opening a , through which the article or articles to be sold may escape to the delivery-regulating piece C, which is provided with one or more slots a' of proper size to receive the article to be delivered. The piece C is provided at its rear portion on the under side thereof with a recess a^2 or other means for connecting it with the rear end of the operating-piece D, which has its front and rear ends bent upward, the front to form a handle b and the rear to engage with the piece C, as before stated. The piece D is preferably made of a long flat piece of metal and extends from the front to the rear of the enlarged part of the frame and is adapted to slide back and forth in a groove c , formed for this purpose in the upper surface of a floor b' , which floor is removably secured to the sides of the case A at a proper point below the bottom of the receptacle B. Near the front end of the floor b' is formed an opening b^2 for the reception and operation of parts of the operating mechanism, which are secured to the under side of the piece D.

To the upper surface of the piece D, just to the rear of the slot c' therein, is secured a knife-blade c^2 , which has its cutting-edge formed, as shown in Fig. 3, to present it at an angle to the edge of the blade c^3 , which is secured to the top of the floor b' , across the groove c and opening b^2 therein and in front of the slot c' in the piece D. It will be clearly seen and readily understood that when the piece C is moved forward, the two blades c^2 c^3 will be brought in contact and that a string or other article attached to a coin and dropped in the slot with the intent to withdraw it after delivery of the article is effected will be severed.

To the top of the floor *b'* is secured a protecting-plate *d*, which extends from the front of said floor over the groove *c* and opening *b*² to near the middle, at which point it is bent upward and then horizontally, terminating at a point directly beneath the rear edge of the opening *a* of the receptacle B. This horizontal portion serves for a floor to the delivery-regulating piece C, and retains the article in the slot *a'* thereof till it is moved forward to the inclined portion of the plate *d*, when the article will be released and deposited thereon. At a suitable point just over the slot *c'* in the piece D the plate *d* is formed with a slot *d'*, through which the coin is passed.

To the lower side of the piece D and at the rear edge of the slot therein is secured a coin-guide *e*, having a flange *e'* at each end of the slot *c'*, which flanges are bent slightly inward at their bottoms, as seen in Figs. 4 and 8, and having a downwardly-projecting arm *e*² about midway between the flanges, which arm engages with the laterally-extending lugs *g g'* on the trigger E when there is no coin of the requisite value in the guide and the piece D is moved forward. The trigger E is movably secured to the under side of the front part of the floor *b'* in front of the groove *c* and opening *b*², and extends back in the middle of said opening to near the slot *c'*. The front end of the trigger is provided with an arm *h*, to the end of which is secured one end of a spring F, which has its other end secured to the floor *b'* at a suitable point and retains the trigger in the position shown in Figs. 1 and 5. The rear end of the trigger is beveled, as at *h'*, and near this end and on the side of the trigger adjacent to the arm *e*² are provided the lugs *g g'*, which engage with said arm, as above stated. The upper portion of the trigger, between the front end thereof and the lug *g*, is formed with a recess or depression *i*, into which the coin drops after passing over the lugs and is thereby released.

To the under side of the piece D and about the middle thereof is provided a projection *k*, to the free end of which is secured one end of a spring G, which has its other end secured to the rear of the floor *b'* and retracts the piece D to its normal position.

The operation of my device is as follows: A number of bottles of perfume or other articles are placed in the receptacle B, when one of them will drop into the slot *a'* of the piece C, (which slot is of a size to receive one only,) when a coin may be placed in the slots

d' c' and is caught by the flanges *e'* of the guide *e*. The piece D is now drawn forward by means of the handle *b*, when the bottom of the coin will strike the beveled end of the trigger and press the same down, thus causing the lugs *g g'* to pass under the free end of the arm *e*² till the recess *i* is reached, when the article will be deposited on the plate *d* and the coin released by reason of the backward movement of the piece D. It will be seen that the rear portion of the arm *e*² is beveled, so that in its backward movement it will pass over the lugs *g g'*, thus tripping the trigger and causing the coin to fall to the floor of the case.

In the drawings I have shown a case or frame with one device only and to deliver but one article at a time; but I may have any number of devices in one case and may construct them so as to deliver one or more articles for one coin without departing from the spirit of my invention.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a coin-controlled vending-machine, the combination of the case A, having the receptacle B, the opening *a*, and the floor *b'*, said floor having the groove *c* and opening *b*², with the operating-piece D, having the slot *c'*, coin-guide *e*, having the flanges *e'* and arm *e*², the piece C, having the slot *a'*, the trigger E, having the arm *h*, the recess *i*, the lugs *g g'*, the beveled end and spring F, and the spring G, secured at one end to the piece D and at the other to the floor *b'*, all constructed, arranged, and operating substantially as set forth.

2. In a coin-controlled vending-machine, the combination of the case A, having the receptacle B, the opening *a*, and the floor *b'*, said floor having the groove *c* and opening *b*², with the operating-piece D, having the slot *c'*, coin-guide *e*, the flanges *e'*, blades *c*² *c*³, and arm *e*², the piece C, having the slot *a'*, the trigger E, having the arm *h*, the spring F, the recess *i*, the lugs *g g'*, and the beveled end, the spring G, secured at one end to the piece D and at the other to the floor *b'*, the plate *d*, having the slot *d'*, all constructed, arranged, and operating substantially as set forth.

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