

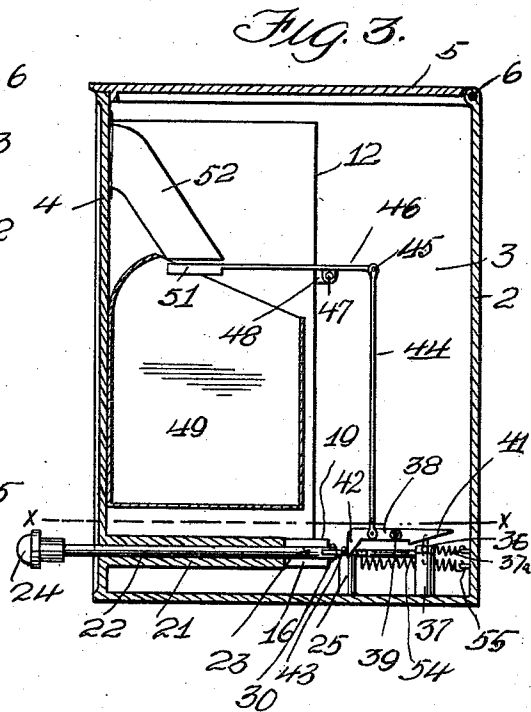
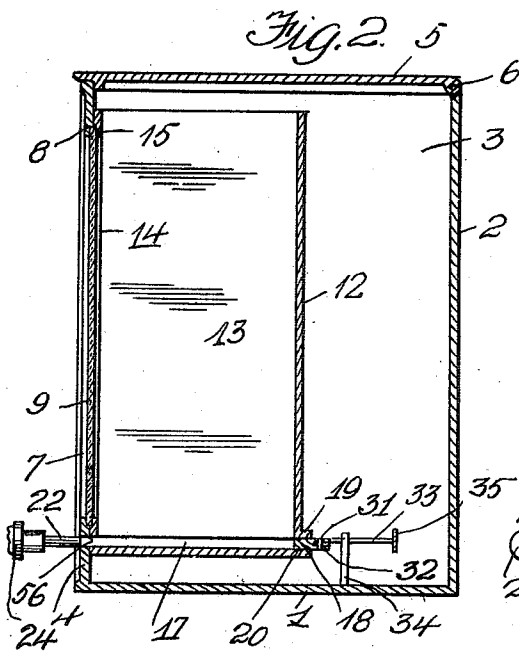
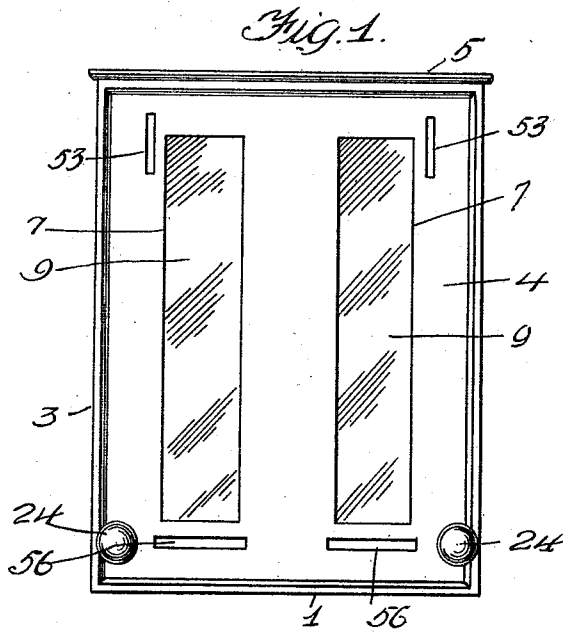
W. F. ABLETT.
VENDING MACHINE.

APPLICATION FILED APR. 14, 1910.

973,332.

Patented Oct. 18, 1910.

2 SHEETS-SHEET 1.



WITNESSES

Samuel Payne
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INVENTOR

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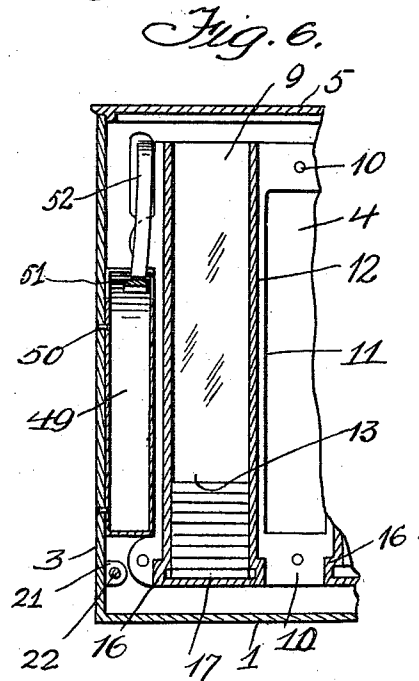
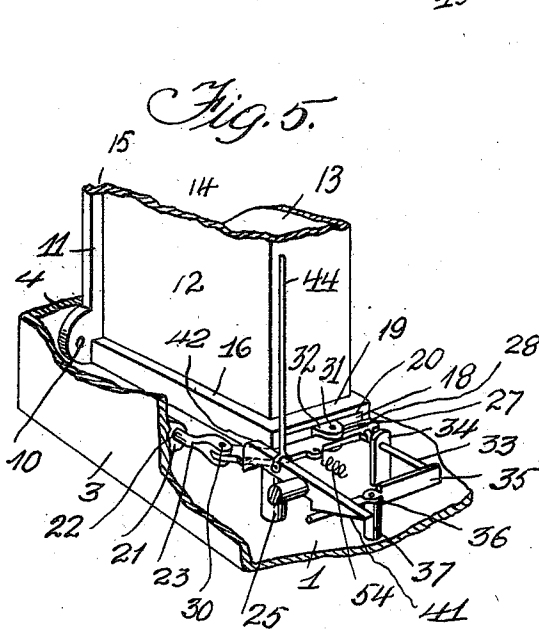
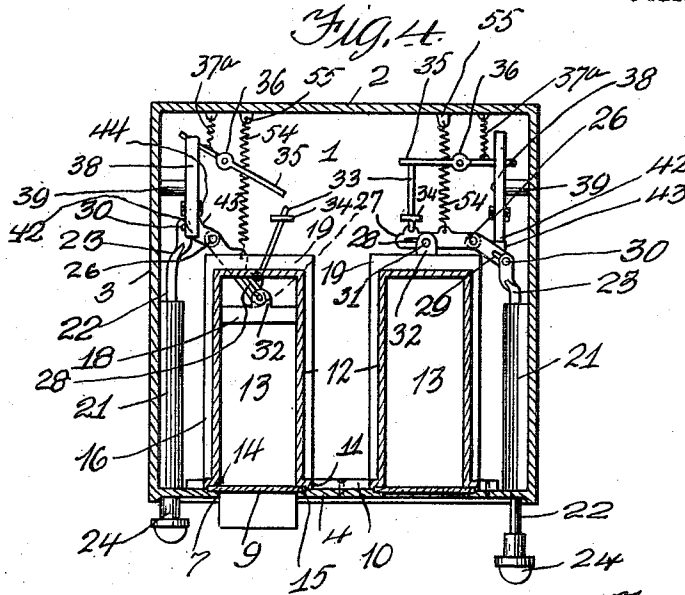
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UNITED STATES PATENT OFFICE.

WILLIAM F. ABLETT, OF PITTSBURG, PENNSYLVANIA.

VENDING-MACHINE.

973,332.

Specification of Letters Patent.

Patented Oct. 18, 1910.

Application filed April 14, 1910. Serial No. 555,344.

To all whom it may concern:

Be it known that I, WILLIAM F. ABLETT, a citizen of the United States of America, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Vending-Machines, of which the following is a specification, reference being had therein to the accompanying drawing.

10 This invention relates to a vending machine, and the object of my invention is to provide a coin-controlled machine for vending and dispensing small packages and papers, as packages or papers of various
15 kinds of pins, the vending machine being particularly designed for use in dry goods departments of stores, depots, hotels and public places.

20 My invention aims to provide a machine of the above type wherein a simple and inexpensive mechanism is employed for releasing and delivering articles, the mechanism being positive in its action, durable, easy to manipulate, and highly efficient for
25 the purposes for which it is employed.

30 To this end, I provide a suitable casing with compartments in which are arranged the articles to be vended, the articles being positioned whereby they will feed by gravity to such a point that the mechanism contained within the casing will eject the same. The mechanism employed for this purpose is controlled through the medium of a coin mechanism, whereby it will be impossible to
35 manually actuate the mechanism unless the coin is deposited in the machine.

40 To the foregoing and other useful ends, the invention consists in the matter to be hereinafter specifically described and claimed.

Referring to the drawings: Figure 1 is a front elevation of the vending machine. Fig. 2 is a vertical longitudinal sectional view taken through one of the article compartments thereof. Fig. 3 is a similar view taken through one of the coin compartments thereof. Fig. 4 is a horizontal sectional view of the machine taken on the line $x-x$ of Fig. 3. Fig. 5 is a perspective view of a portion of the machine, and Fig. 6 is a vertical transverse sectional view of a portion of the machine.

55 To put my invention into practice, I provide a suitable casing comprising a bottom plate 1, a rear wall 2, side walls 3, a front wall 4, and a hinged lid or cover 5, the lid

or cover being hinged to the upper edge of the rear wall 2, as at 6. The casing can be made of wood or any suitable material. The front wall 4 is provided with two vertical openings 7 and the material bordering upon the inner edges of said openings is cut away to form a seat 8 for transverse plates 9, preferably made of celluloid or vitreous material.

60 Secured to the inner side of the front wall 4 by screws 10 or other fastening means is a metallic rectangular frame 11 provided with two vertical and rectangular shells 12 forming compartments 13 for the articles adapted to be vended by the machine. The shells 12 are formed integral with the frame 11 and the front walls of said shells are provided with vertical openings 14 adapted to align with the openings 7 of the front wall 4, the material surrounding the openings 14 being cut away, as at 15, to provide clearance for the transparent plates 9. It is through the medium of these plates that the contents of the compartments 13 can be observed and the compartments replenished before being finally exhausted of their contents. The compartments 13 can contain various kinds of packages and articles, and as the mechanism used in connection with the compartments are identical, I deem it only necessary to refer to one of said compartments and the mechanism used in connection therewith.

90 The shell 12 has the lower end thereof provided with side enlargements 16 and these enlargements are provided with longitudinal confronting grooves 17 for a cross-head 18. An additional enlargement 19 is located at the rear side of the shell and provided with a slot 20, whereby the cross-head 18 can be easily placed in the groove 17 and suitable connections made therewith, as will presently appear.

100 The side wall 3 has the inner sides thereof provided with a longitudinal integral barrel 21 for a plunger 22 extending through the front wall 4 and said barrel, said plunger having the rear end thereof offset and bifurcated, as at 23, while the forward end thereof is provided with a button or push-knob 24.

105 Mounted upon the base plate 1 at the rear end of the shell 12 is a post 25 and pivotally mounted upon the upper end of said post by a pin 26 is an angle lever 27 having the ends thereof slotted, as at 28 and 29. Piv-

otally connected to the lever 27 through the medium of a pin 30 extending through the slot 19 is the off-set bifurcated end 23 of the plunger 22. Pivotally connected to the lever 27 through the medium of a pin 31 extending through the slot 28 are the rearwardly projecting lugs 32 of the cross-head 18. Pivotally connected to the lever 27 adjacent to the slot 28 is a rod 33 adapted to slide through a bearing 34 provided therefor upon the base plate 1. The free end of the rod 33 is adapted to engage the end 35 of an arm 36 pivoted upon the upper end of the post 37 carried by the base plate 1. The opposite end of the arm 36 is connected by a retractile spring 37^a to the rear wall 2, and this end of the rod is adapted to engage the beveled and toothed end of an arm 38 fulcrumed upon the outer end of a bracket 39 carried by the side wall 3. The rear end of the arm 38 is provided with a beveled surface 41, while the forward end thereof is provided with a depending tooth 42 adapted to engage a lug 43 carried by the lever 27.

Pivotally connected to the forward end of the arm 38 is a vertical rod 44 having the upper end thereof pivotally connected, as at 45, to the rear end of a coin arm 46, said arm being fulcrumed, as at 47, upon a bearing 48 carried by the rear side of the shell 12. The forward end of the arm 46 extends into the upper open end of a coin tray 49 suitably secured, as at 50, to the side wall 3. The forward end of the arm 46 is enlarged, as at 51, and extends beneath the lower end of an inclined coin chute 52 carried by the inner side of the front wall 4, the coin chute communicating with a vertical slot 53 provided therefor in the wall 4. The lever 27 adjacent to the slot 28 thereof is connected by a retractile spring 54 to a lug 55, carried by the inner side of the rear wall 2.

The lower end of the compartment 13 is adapted to communicate with a horizontal slot 56 provided therefor in the front wall 4, whereby the contents of the compartment 13 can be discharged. By opening the lid or cover 5 of the casing easy access is had to the compartments 13 and the trays 49 whereby the compartments 13 can be filled with articles or packages, the articles or packages being placed one upon the other, as best shown in Fig. 6, and the coins can be easily removed from the trays 49. Assuming that the compartments 13 have been filled and the machine is in condition for use, the manner of obtaining an article from either of the compartments 13 is as follows:—When a coin is deposited in the slot 53 and passes through the chute 52, the weight of the coin tilts the coin arm 46 allowing the coin to drop into the tray 49. The tilting coin arm will raise the forward end of the arm 38 and move the tooth 42 out of engagement

with the lug 43 of the lever 27, thus allowing the plunger 22 to be pushed inwardly until the button or knob 24 engages the front wall 4 of the casing. An inward movement of the plunger 22 shifts the cross-head 18 forwardly within the compartment 13, thus forcing one of the articles or packages into the slot 56, the end of the article or package protruding sufficiently, as shown in Fig. 4 of the drawings to allow the article or package to be gripped and withdrawn from the slot. When the cross-head 18 is moved forwardly the rod 33 slides in the bearing 34 and releases the arm 36, and through the medium of the retractile spring 37^a, the end of the arm engages the beveled surface 41 of the arm 38 and restores said arm to its normal position, with the coin arm 46 in a horizontal position ready to be again actuated by a coin deposited in the machine. When the plunger 22 is released the retractile spring 54 restores the lever 27 to its normal position and the rod 33 holds the arm 36, but the plunger cannot be pushed inwardly since the lug 43 bears against the tooth 42.

It is thought that the operation and utility of the vending machine is apparent from the foregoing, and while in the drawings there is illustrated a preferred embodiment of the invention, it is to be understood that the structural elements thereof can be varied or changed, as to the size, shape, and manner of assemblage without departing from the scope of invention.

What I claim, is:

1. In a vending machine, the combination with a casing having the front wall thereof provided with a slot, a hinged lid carried by said casing, a shell arranged within said casing and providing a compartment for articles adapted to be ejected through the slot of said casing, a cross-head movably mounted in said shell and adapted to move articles into the slot of said casing, an angle lever slidably pivoted adjacent one end thereof to said cross head, a plunger extending into said casing and slidably pivoted to said lever at the opposite end of the lever, a vertically fulcrumed arm arranged within said casing and adapted to lock said lever against movement by said plunger, and a horizontally fulcrumed arm arranged within said casing and adapted to move the last mentioned arm into locking position.

2. In a vending machine, the combination with a casing having the front wall thereof provided with a slot, a hinged lid carried by said casing, a shell arranged within said casing and providing a compartment for articles adapted to be ejected through the slot of said casing, a cross-head movably mounted in said shell and adapted to move articles into the slot of said casing, an angle lever slidably pivoted adjacent one end thereof

to said cross head, a plunger extending into
said casing and slidingly pivoted to said
lever at the opposite end of the lever, a ver-
tically fulcrumed arm arranged within said
5 casing and adapted to lock said lever against
movement by said plunger, a horizontally
fulcrumed arm arranged within said casing
and adapted to move the last mentioned arm
into locking position, a rod pivoted to the
10 lever at a point adjacent one end thereof and
the point of pivotal connection of the lever
with the cross-head, a bearing bracket car-
ried by the casing, said rod slidable through

said bearing and an end thereof adapted to
slidably contact the side of the horizontal 15
arm, a means for releasing said locking arm,
and means within said casing adapted to
restore said lever, plunger, horizontal arm
and cross-head to their normal positions.

In testimony whereof I affix my signature 20
in the presence of two witnesses.

WILLIAM F. ABLETT.

Witnesses:

K. H. BUTLER,
J. L. STEPHANY.