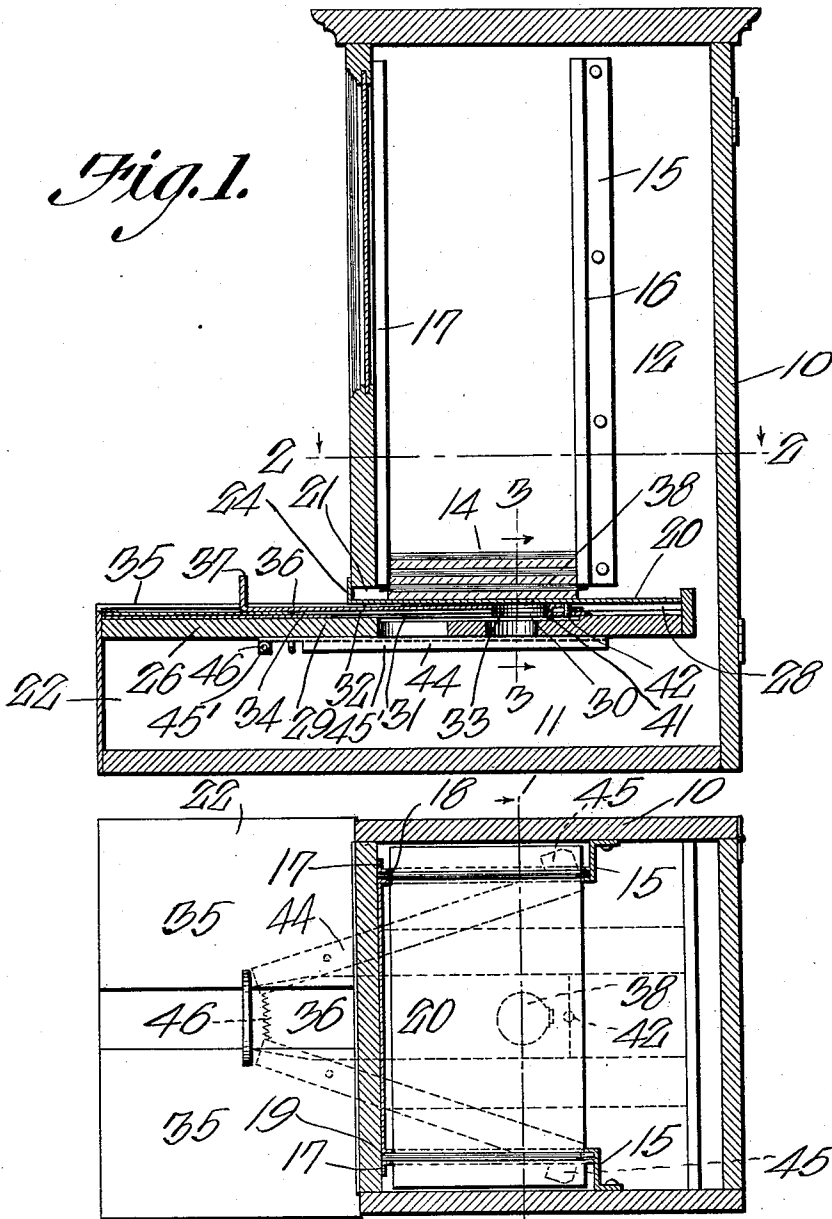


1,069,132.

Patented Aug. 5, 1913.

2 SHEETS—SHEET 1.



Witnesses
J. P. Tomlin
L. H. Wilson

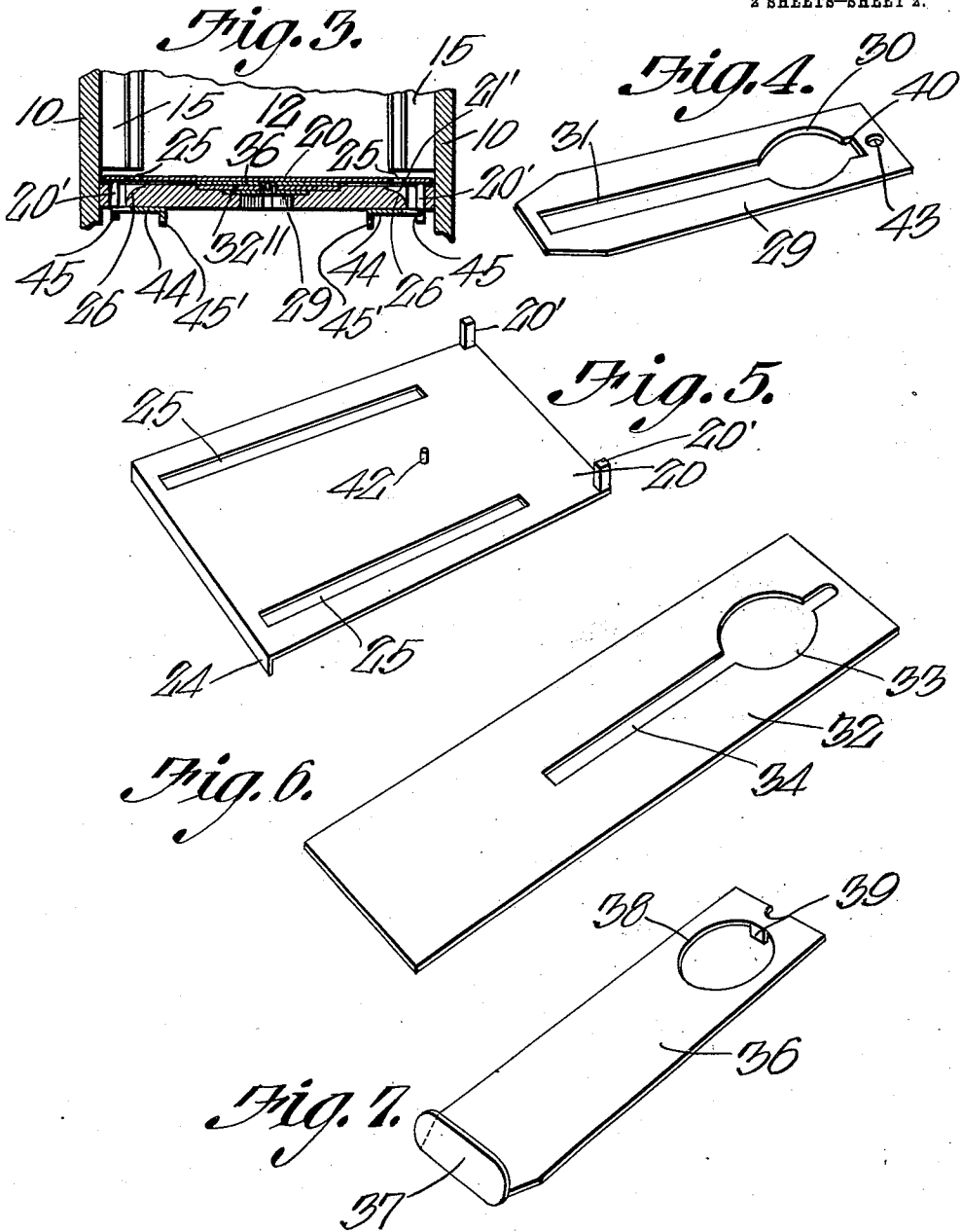
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 Attorneys

I. F. HARRIS.
 VENDING MACHINE.
 APPLICATION FILED NOV. 23, 1911.

1,069,132.

Patented Aug. 5, 1913.

2 SHEETS—SHEET 2.



Witnesses
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UNITED STATES PATENT OFFICE.

IRVIN F. HARRIS, OF WAXAHACHIE, TEXAS.

VENDING-MACHINE.

1,069,132.

Specification of Letters Patent.

Patented Aug. 5, 1913.

Application filed November 23, 1911. Serial No. 662,019.

To all whom it may concern:

Be it known that I, IRVIN F. HARRIS, a citizen of the United States, residing at Waxahachie, in the county of Ellis and State of Texas, have invented a new and useful Vending-Machine, of which the following is a specification.

This invention relates to an improvement in vending machines.

The primary object of the present invention is to provide simple and efficient means for vending articles such as tablets of paper, envelopes, post cards or other merchandise upon the depositing of a coin of a proper denomination.

A further object of the invention is to provide simple means for separating the articles served, said separating means being removed after the article with which the same contacts has been dispensed.

In the drawings:—Figure 1 is a longitudinal section of the apparatus. Fig. 2 is a section on the line 2—2 of Fig. 1. Fig. 3 is a section on the line 3—3 of Fig. 1. Fig. 4 is a perspective view of the under sliding plate. Fig. 5 is a perspective view of the sliding delivery plate. Fig. 6 is a perspective view of the stationary plate, and Fig. 7 is a perspective view of the plunger.

In the drawings 10 designates the casing which may be of any suitable construction being provided with the lower coin compartment 11 and the upper compartment 12 which receives the article to be vended. The device is intended to vend articles such as tablets of writing paper, envelopes, post cards or other merchandise and the articles are separated by rods 14 which are guided at one end by brackets 15 which are formed with guideways 16, and at the other end by guide plates 17 secured to the front wall of the casing, said plates being provided with guideways 18 and 19. The cards or sheets are arranged one above the other and are separated by the rods 14, the lowermost article to be vended resting upon a sliding plate 20 which is adapted to slide through an opening 21 in the front wall of the casing, resting in its extended position upon the extension 22 of the casing and being provided with an upwardly turned edge 24. This plate is provided with elongated slots 25 which align with the guides for the rods 14, said rods falling through said slots into the coin receptacle as the articles are vended. The partition 26 which separates the upper

and lower compartments is slotted to allow said rods to be deposited in the lower chamber, and the portions 21' of the partition adjacent said slots are beveled to facilitate the depositing of the rods. Arranged centrally on the partitioning member 26 are spaced parallel guides 28, and slidably arranged between said guides is a plate 29 which is provided with the coin opening 30 and the slot 31. This plate is guided in its movement by the stationary plate 32 which is provided with the coin opening 33 and the slot 34 which slot and opening align with the slot and opening in the plate 29, the slot in the plate 32, however, extending for a short distance beyond the coin opening 33, the partitioning member 26 being formed with a similar slot and opening which correspond with the slot and opening in the plate. The partitioning member is also provided with a second opening larger than the first arranged at the end of the slot remote from the opening which is in alinement with the apertures in the plate. The upper opening is in alinement with the opening in the plate, the small opening in the partitioning member receiving and depositing smaller coins than that required to operate the device.

The extension of the casing is formed with guides 35 which direct the movement of a plunger 36 which is formed with the upturned handle 37. This plunger is provided with a coin opening 38 and at a point near the end remote from the handle, it is provided with a depending lug 39 which enters and slides in the slots formed in the two plates 29 and 32. The plunger is pulled forward and the coin deposited in the opening 38, and the plunger is then returned, the opening 38 registering with the openings 30 and 33. If the coin is not of the proper size the same will then fall through the opening in the partitioning member 26 and the device will not be operated. If, however, the coin is of the proper size the same will rest on the partitioning member 26 in the opening 30 of the sliding plate 29, the lug 39 of the plunger being behind the coin, and entering a notch 40 in the plate 29. The lug 39 travels in a groove 41 in the partitioning member. The plunger 36 is then pulled forward and the coin which is resting in the opening 30 of the plate 29, is engaged by the lug 39 and forms a connection between the plunger 36 and the plate 29. By this means the

plate 29 is moved forward and with it the plate 20 which is provided with a projection 42 which enters an aperture 43 in the plate 29, the plate 20 carrying the article to a point where the same may be conveniently removed by the purchaser.

In order to prevent the plate 20 from moving forward until a coin has been deposited, a plurality of resilient arms are secured to the under face of the partitioning member, said arms 44 being formed with off-set end portions 45 and the downwardly turned edges 45'. These arms are pivotally supported and their ends remote from the extensions 45 are connected by a coiled spring 46, said arms normally extending across the slots through which the partitioning rods 14 fall. The plate 20 is provided with the depending members 20' which ride in the slots, said depending members normally contacting with the end portions 45 of the arms, the plate being thus held against movement. When a coin of the proper denomination is deposited and the under sliding plate 29 carried forward, its beveled edges contact with the downwardly turned edges 45' of the arms 44, separating the same against the normal tendency of the spring 46 withdrawing the extensions 45, allowing the downwardly extending portions 20' of the plate 20 to ride in the slots, thus allowing the plate or carrier to move forward. The members 44 then assume their normal position, their portions 45 extending across the slots, after the under sliding plate passes backward so far that it no longer contacts with projections at the front end of said arms, and slides forward the arms 44 are forced apart, the front end of the slide contacting with the resilient arms to move the same against the tension of the coiled spring 46. Thus it will be noted that the sliding plate or carriage 20 is effectually held against movement until the coin has been deposited.

The many advantages of a vending apparatus of this character will be clearly apparent as it will be noted that the same provides simple and efficient means for serving the article, said means being provided with an effectual fraud preventive.

Particular attention is called to the manner of separating the articles which are vended, and the manner in which the members which separate the articles are deposited within the lower compartment after each article is vended and attention is called to the fact that the entire structure is such as may be easily and economically manufactured, the various parts being readily assembled.

What is claimed is:—

1. In a vending machine, a sliding apertured plate, a plunger provided with a coin receptacle for receiving and depositing a

coin within the aperture of the plate, means carried by the plunger for engaging the coin when in the aperture of the plate and forming with the coin a connection between the plunger and plate, and an article delivering plate having an operative connection with said sliding plate, whereby the article to be vended may be withdrawn as the plunger and plate are withdrawn.

2. In a vending machine, a sliding delivery plate, a second sliding plate provided with a coin receiving aperture, a plunger, provided with a coin receptacle for receiving and for depositing a coin within the aperture of the second sliding plate, and co-operable means carried by the plunger and the second sliding plate and including the coin whereby both the sliding plates are moved in locked relation upon the return movement of the plunger.

3. In a vending machine, a sliding plate, said plate being provided with a coin receiving aperture, a sliding plunger provided with a coin receptacle for receiving and depositing a coin within the aperture of the plate, coöperable means carried by the plunger and plate for moving the plate and plunger as a unit after the depositing of a coin, and an article distributing plate actuated by the sliding plate during the movement of the sliding plate and plunger as a unit.

4. In a vending machine, a sliding apertured plate, a plunger provided with a coin receptacle for receiving and depositing a coin in the aperture of the plate, coöperable means carried by the plunger and plate for moving the plunger and plate simultaneously after the deposit of the coin in the aperture of the plate, and an article delivering member movable with the first mentioned sliding plate.

5. A vending machine, including a sliding plate, provided with a coin receiving aperture, a plunger provided with a coin receptacle for receiving and depositing a coin in the aperture of the plate, a lug carried by the plunger for engaging the deposited coin to move the sliding plate with the plunger, and an article distributing plate having an operative connection with the sliding plate.

6. In a vending machine, a sliding apertured plate, a sliding plunger provided with a coin receptacle for receiving and depositing a coin in the aperture of the sliding plate, coöperable means carried by the plunger and sliding plate for coaction with the deposited coin to lock the plunger and plate for simultaneous movement, and an article distributing member operably connected to the sliding plate.

7. In a vending machine, a sliding apertured plate, a plunger provided with a coin receptacle for receiving and depositing a

coin in the apertured plate, contacting means
 carried by the sliding plate and plunger for
 engaging the deposited coin and connect-
 ing the plunger and plate for simultaneous
 5 movement, a sliding delivery plate, said de-
 livery plate being formed with a projection
 adapted to enter the aperture of the first
 sliding plate and whereby said plates and
 plunger move in unison to normal position
 10 after the coin has been deposited.

8. In a vending machine, a sliding aper-
 tured plate, a plunger provided with a coin
 receptacle for receiving and depositing a
 coin in the apertured plate, an article dis-

tributing member, a lug carried by the plun- 15
 ger for engagement with the deposited coin,
 and means carried by the sliding plate and
 article distributing member for connecting
 the plate and member for movement in
 20 unison.

In testimony that I claim the foregoing
 as my own, I have hereto affixed my signa-
 ture in the presence of two witnesses.

IRVIN F. HARRIS.

Witnesses:

ROBT. CARLISLE,
 J. N. McELROY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
 Washington, D. C."