H. MILLER.

VENDING MACHINE.

APPLICATION FILED NOV. 3, 1910.

1,018,845. **Patented Feb. 27, 1912.**

2 SHEETS—SHEET 1.

Fig. 2

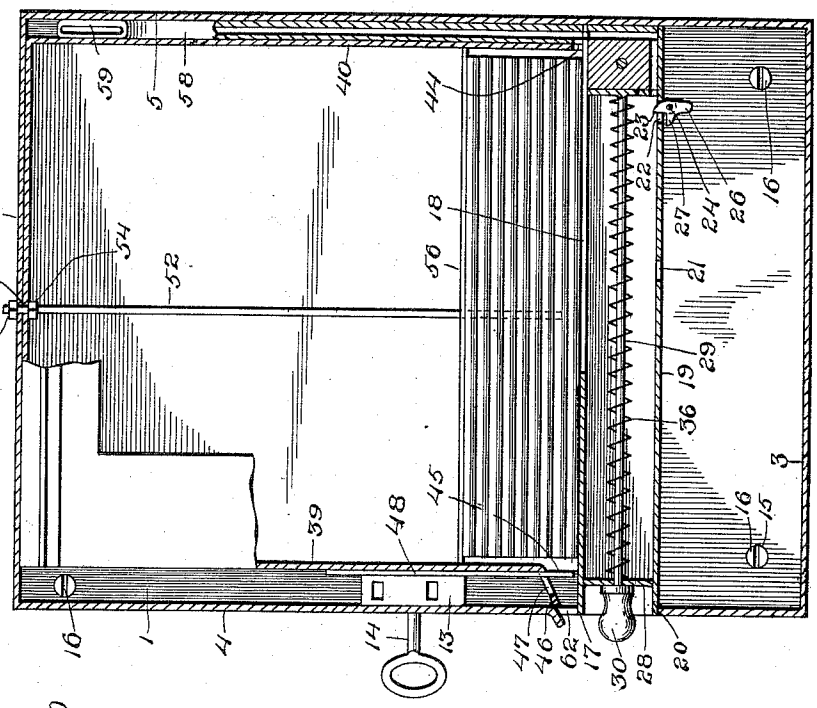
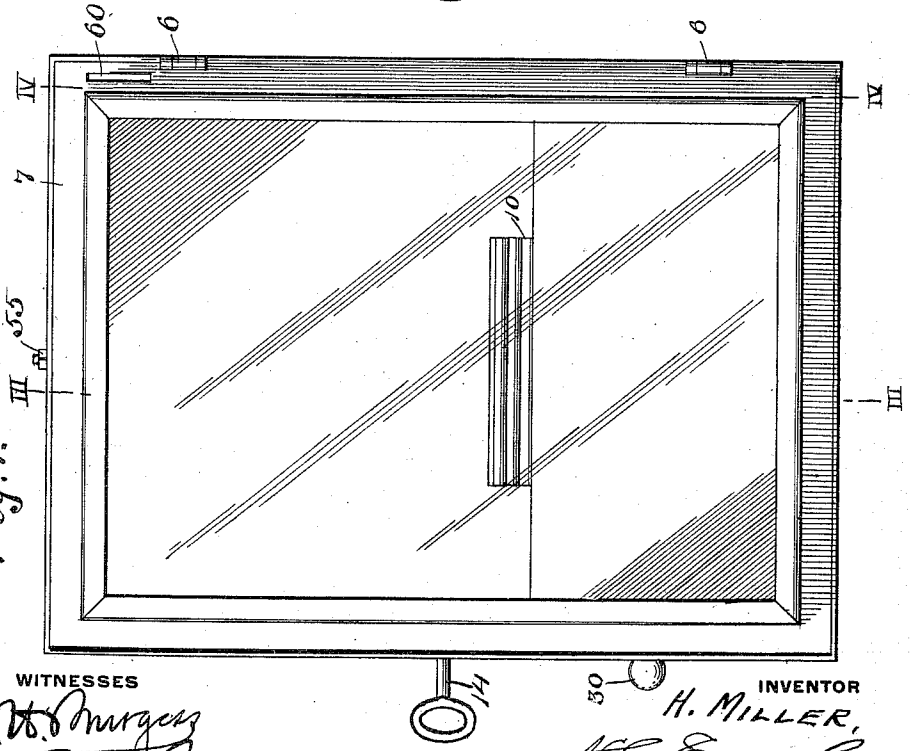


Fig. 1.



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2 SHEETS—SHEET 2.

Fig. 5.

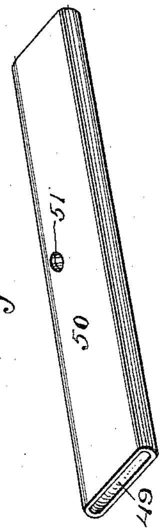


Fig. 6.

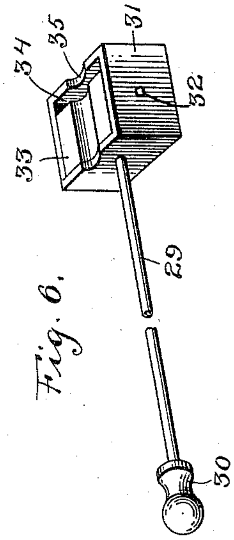


Fig. 4.

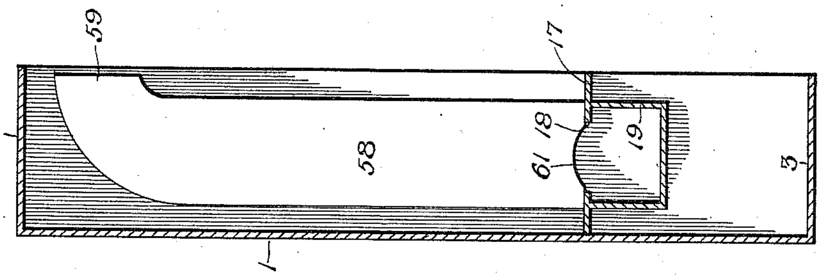
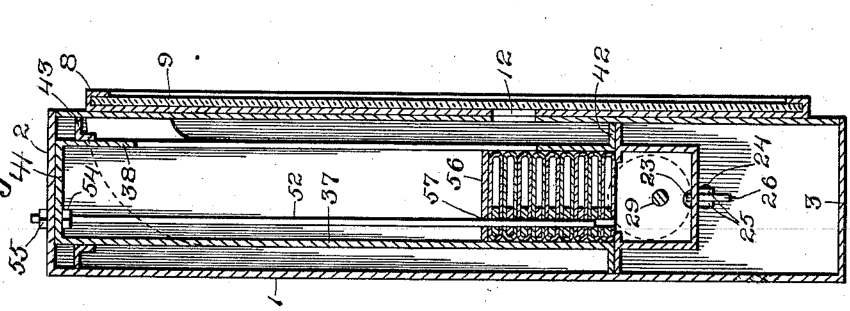


Fig. 3.



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UNITED STATES PATENT OFFICE.

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VENDING-MACHINE.

1,018,845. Specification of Letters Patent. Patented Feb. 27, 1912.

Application filed November 3, 1910. Serial No. 590,428.

To all whom it may concern:

Be it known that I, HARRY MILLER, a citizen of the United States of America, residing at Butler, in the county of Butler 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.

This invention relates to vending machines and more particularly to that type adapted to dispense combs and small articles in hotel rooms, steamboat cabins, Pullman compartments, toilets and other public places, the machine being especially designed for use in bed rooms whereby guests who have neglected to carry combs can easily obtain a comb for a small sum of money.

The primary object of the invention is to provide a vending machine of the above type that is compact, easy to operate, positive in its action and free from injury by ordinary use.

Another object of the invention is to provide a vending machine that can be used as an advertising medium, the machine itself containing advertisements or the combs or articles dispensed thereby.

A further object of this invention is to provide a vending machine of the above type that is simple in construction, strong and durable, inexpensive to manufacture, neat in appearance, and efficient for vending small articles.

With these and such other objects in view as may hereinafter appear the invention consists of the novel construction, combination, and arrangement of parts to be hereinafter specifically described and then claimed.

Reference will now be had to the drawings forming a part of this specification, wherein there is illustrated a preferred embodiment of the invention, but it is to be understood that the structural elements thereof are susceptible to such changes as fall within the scope of the appended claim.

In the drawings: Figure 1 is a front elevation of the machine. Fig. 2 is a vertical longitudinal sectional view of the same. Fig. 3 is a vertical cross sectional view taken on the line III—III of Fig. 1. Fig. 4 is a similar view taken on the line IV—IV of Fig. 1. Fig. 5 is a perspective view of one of the combs and the wrapper thereof, and Fig. 6 is a perspective view of an inverted actuating plunger.

A vending machine in accordance with this invention consists of an outer shell or casing that can be finished in various styles to harmonize with the compartment in which it is used, and in the outer shell or casing is located a detachable comb holder, and a coin-controlled mechanism which through the medium of the coin deposited within the machine is adapted to shift one of the combs from the reservoir or holder whereby the end of a comb will protrude from the machine and permit of it being manually removed.

The shell or casing of the machine comprises a rear wall 1, a top wall 2, a bottom wall 3, side walls 4 and 5, and hinged to the side wall 5, as at 6, is a front wall or door 7. The front wall or door 7 has a frame 8 for a mirror or advertisement 9, it being preferable to use a mirror and to remove the quicksilver or reflecting medium from a portion thereof in order to provide a transparent space 10 adapted to register with openings 12 in the door 7 and the frame 8, whereby the interior of the machine can be observed to determine when the contents thereof are exhausted. To retain the door in a closed position a conventional form of lock 13 is secured to the inner side of the wall 4, the lock being manipulated by a key 14.

To secure the machine to a suitable support as a wall, the rear wall 1 is provided with openings 15 for screws or other fastening means 16.

Within the shell or casing 1 is a horizontal partition 17 provided with a longitudinal slot 18 extending approximately from a point intermediate the ends of the partition to the side wall 5, and this partition is provided with a depending box shaped structure 19 corresponding in length to said partition, the partition and the box structure thereof extending into an opening 20 provided therefor in the side wall 4. The bottom of the structure 19 at a point approximately intermediate the ends thereof is provided with a coin slot 21 and adjacent to the side wall 5 with an opening 22. Extending into the opening 22 is a detent 23 pivotally mounted by a pin 24 between depending lugs 25 carried by the bottom of the structure 19 at the sides of the opening 22, said detent being normally retained in a vertical position by the weighted end 26 thereof and prevented from swinging rearwardly through

the medium of a lug 27 adapted to engage the bottom of the structure 19. In the end of the structure 19 adjacent to the wall 4 is a head 28 and slidably mounted in said head is a plunger rod 29 having the outer end thereof provided with a knob or handle 30, and the inner end thereof with a coin transferring frame 31 and in this frame is secured by a pin or rivet 32 a block 33 of a less length than the frame, thereby providing a coin slot 34. The under side of the block 33 and the other under edges and lower edges of the frame 31 are longitudinally grooved, as at 35, to provide clearance for the detent 23, whereby only a coin within the slot 34 will engage the detent 23. Encircling the plunger 29 between the frame 31 and the head 28 is a coiled compression spring 36, the object of which will presently appear.

Arranged within the casing is a comb reservoir or compartment which is detachably mounted within the casing whereby when the door 7 is opened it can be easily removed and loaded. The reservoir comprises a rear wall 37, a front wall 38, side walls 39 and 40, and a top wall 41. The lower longitudinal edges of the walls 37 and 38 are provided with lateral flanges 42 adapted to rest upon the horizontal partition 17, and adjacent to the upper edges of said walls are transverse angle bars 43 adapted to engage the rear wall 1 and the inner side of the door 7, these angle bars serving functionally as spacers. The lower end of the side wall 40 is cut-away, as at 44, to provide clearance for the upper edge of a coin, and the lower edge of the side wall 39 is cut-away, as at 45, and the cut-away material bent outwardly to provide a lip 46, which is apertured, as at 47, to provide clearance for the lower end of a resilient arm or detent 48, said arm or detent being soldered or otherwise connected to the outer side of the wall 39.

The combs or articles 49 to be dispensed by the machine are placed in wrappers 50, and said combs together with said wrappers are provided with vertical openings 51 to accommodate the lower end of a guide rod 52, said guide rod extending through openings 53 provided therefor in the walls 41 and 2, the upper end of said guide rod being detachably held in engagement with said walls by an inner nut 54 and an outer nut 55.

A gravity weight or plate 56 having an opening 57 can be mounted upon the guide rod 52, whereby the articles 49 will be retained in their assembled order and fed by gravity to the edges of the slotted partition 17, the longitudinal edges of said partition supporting the articles until they are removed.

Located between the walls 5 and 40 is a vertical coin chute 58 having the upper end thereof curved forwardly, as at 59, whereby the opening of said chute will register with a vertical slot 60 in the hinged edge of the door 7. The lower end of the chute rests upon the end of a partition 17 and is cut-away, as at 61, whereby a coin deposited in the chute can enter the coin slot 34 of the transferring frame 31 and clear the lower edges of the chute.

The wall 4 of the shell or casing directly above the end of the partition 17 joining said wall is cut, as at 62, and the material bent outwardly thereby providing an opening that allows one of the articles to be shifted in order that the end thereof will protrude from the casing.

Operation: The plunger 29 can be pulled outwardly without moving one of the articles within the casing, but immediately upon a coin being deposited in the slot 30 it is conveyed to the slot 34 of the coin transferring frame 31, the upper edge of the coin protruding from said slot and above the slot 18 of the partition 17. When the plunger 29 is pulled outwardly, the upper edge of the coin engages one end of one of the articles and shifts the opposite end of the article through the cut-away portions 45 and 62 of the walls 39 and 4 respectively, a sufficient amount of the article protruding from the wall 4 to permit of the same being gripped and removed. The grooved lower edges of the coin transferring frame provide clearance for the detent 23, but when the lower end of the coin engages this detent it is forced into the opening 22, it immediately assumes its normal position when the coin passes the detent, consequently should the plunger be released, the coin will be carried into engagement with the detent and the detent will hold the plunger. This detent prevents a single coin from being employed to secure numerous articles, and after the coin has once passed the detent, it is necessary for the operator of the machine to continue the pulling out of the plunger 29, whereby the coin contained within the slot 34 of the coin transferring frame will be deposited through the slot or opening 21 into the bottom of the casing. The resilient arm or detent 48 prevents the lowermost article from being surreptitiously removed from the machine, should the machine be placed upon its side and the lowermost article forced out by gravity.

From the foregoing it is apparent that I have devised a novel vending machine which can be used for vending various kinds of articles, and I reserve the right to make the same of various sizes, shapes, and of various kinds of material.

What I claim, is:

A vending machine comprising a casing, a horizontal partition arranged in said casing, said partition having a slot formed therein, a depending box-like structure car-

ried by said partition, a reservoir mounted in said casing above said partition and adapted to contain articles, said casing and said reservoir having the forward sides thereof upturned providing alining openings adapted to provide clearance for an end of the lowermost one of the articles contained within said reservoir and the upturned portion of said reservoir contacting said casing and having a limiting slot therein, a resilient detent secured to the front side of said reservoir above said opening therein and positioned between the reservoir and casing and extending through the said slot, a gravity weight within said casing and adapted to rest above the articles therein and having a perforation therethrough, said casing and reservoir having registering openings in the contacting tops thereof, and a guide rod rigidly secured in said top openings and in vertical alinement with said slot and freely extending through said perforation and articles.

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

HARRY MILLER.

Witnesses:
MAX H. SROLOVITZ,
KARL H. BUTLER.