No. 787,251. PATENTED APR. 11, 1905.

R. D. WORK.

VENDING MACHINE.

APPLICATION FILED SEPT. 3, 1903.

2 SHEETS—SHEET 1.

Fig. 1.

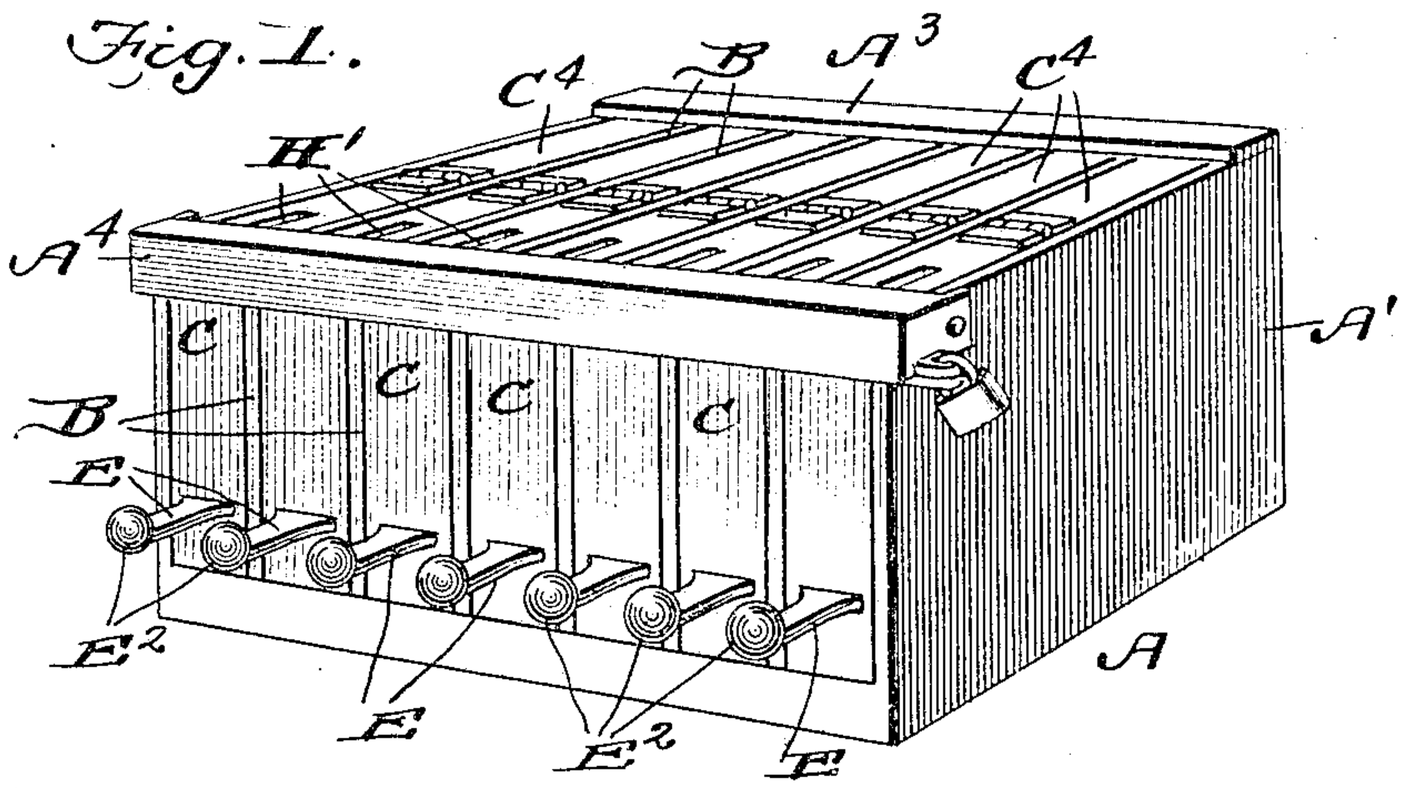


Fig. 2.

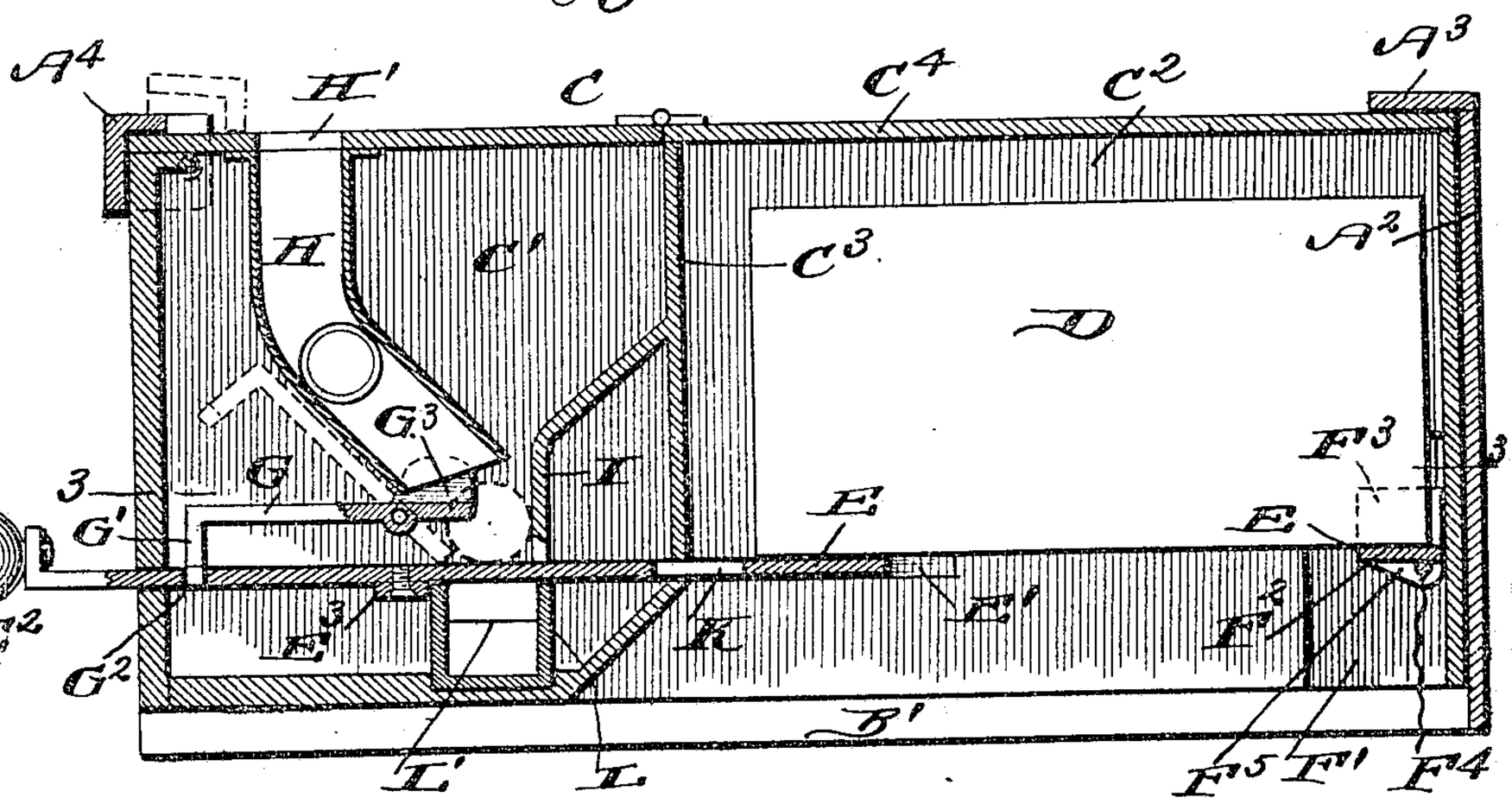
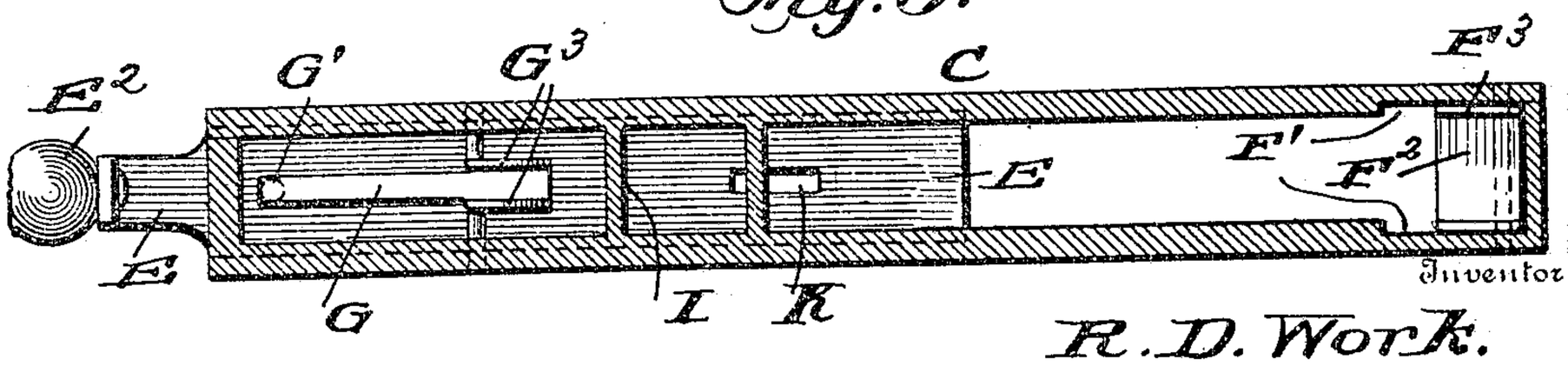


Fig. 3.



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2 SHEETS—SHEET 2.

Fig. 4.

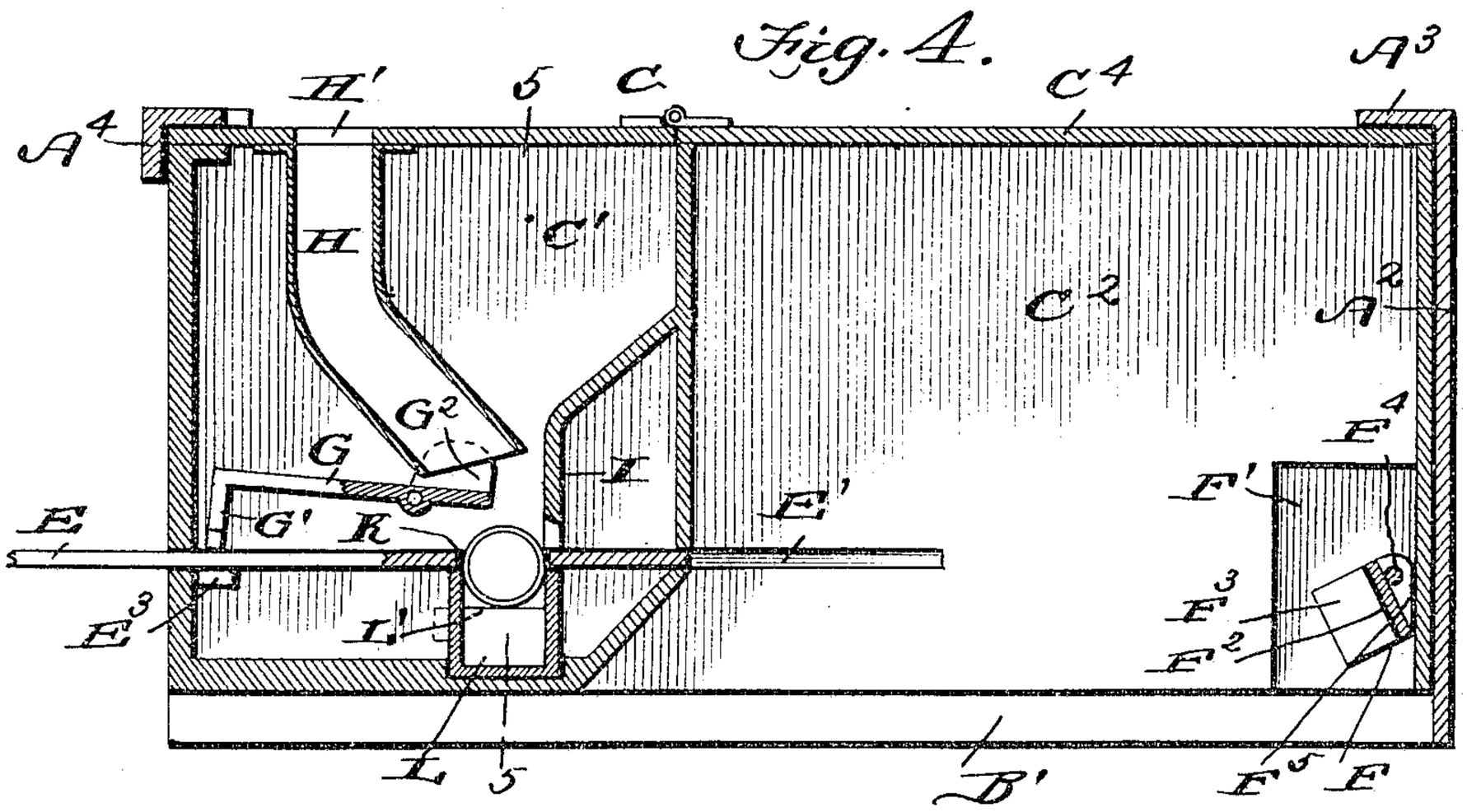


Fig. 5.

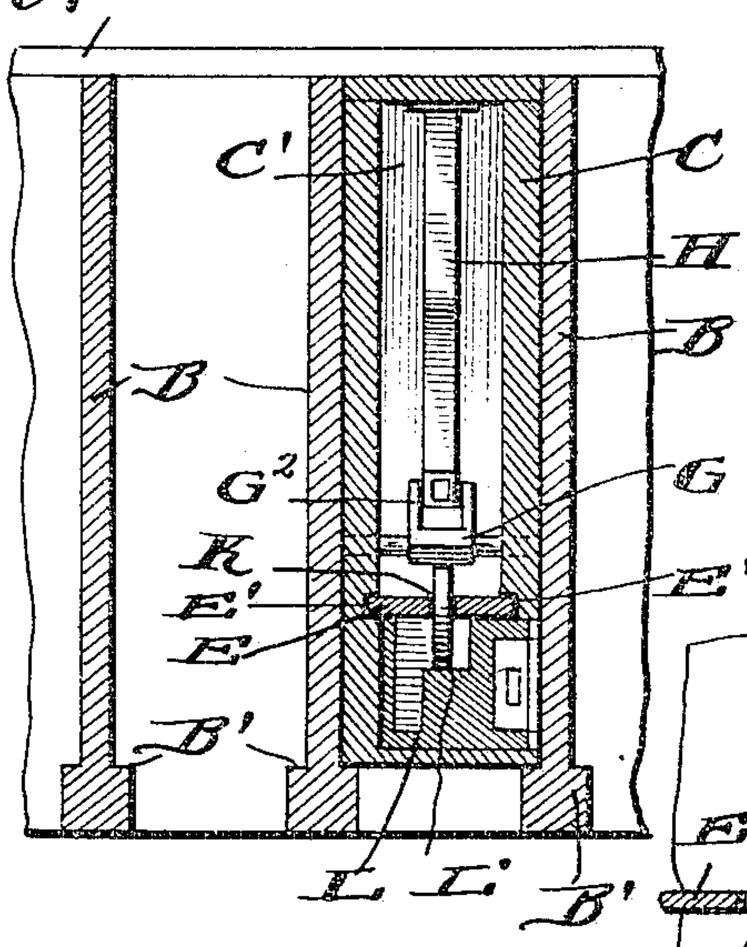


Fig. 6.

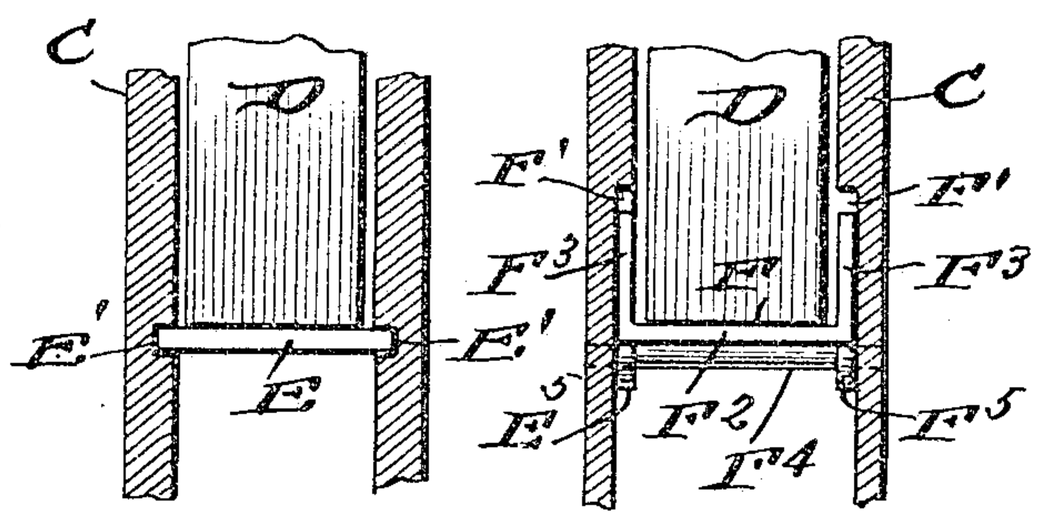


Fig. 8

Fig. 7.

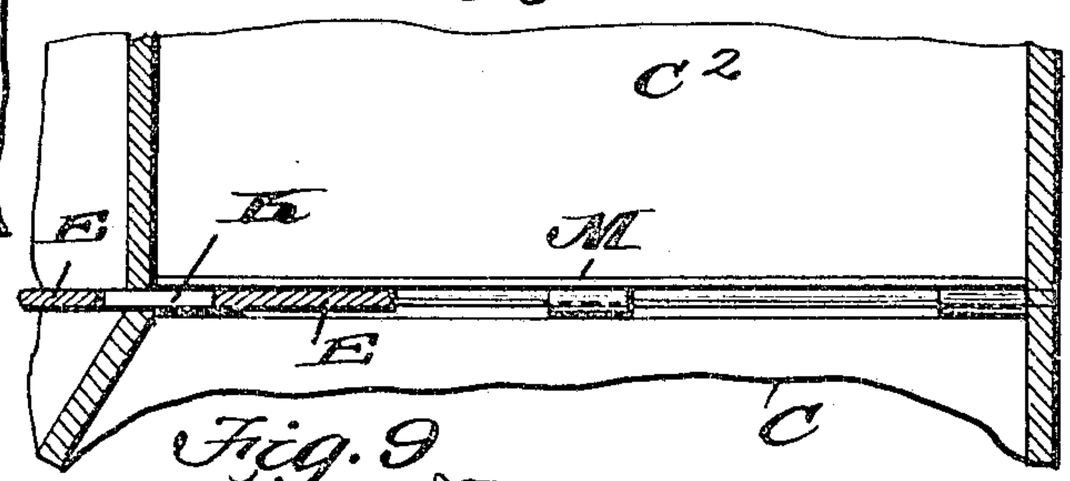
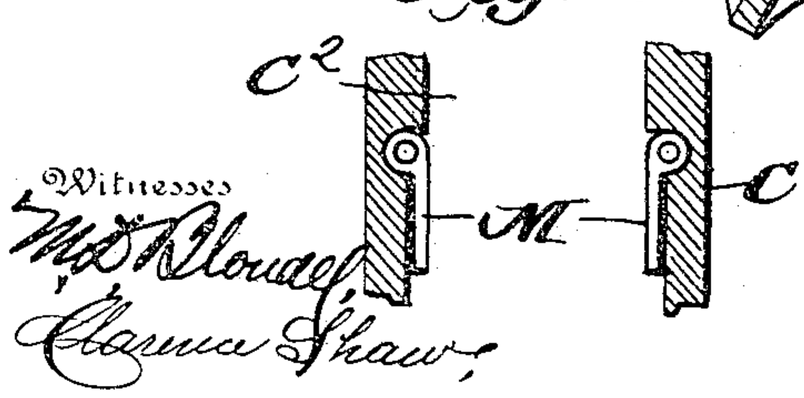


Fig. 9

Fig. 10.



Witnesses

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No. 787,251. Patented April 11, 1905.

UNITED STATES PATENT OFFICE.

ROBERT D. WORK, OF PHILADELPHIA, PENNSYLVANIA.

VENDING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 787,251, dated April 11, 1905.

Application filed September 3, 1903. Serial No. 172,020.

To all whom it may concern:

Be it known that I, ROBERT D. WORK, a citizen of the United States, residing at Philadelphia, in the State of Pennsylvania, have invented a new and useful Vending-Machine, of which the following is a specification.

This invention relates generally to vending-machines, and more particularly to one adapted for vending packaged goods, which merchandise may be in the form of candy, cigars, books, or any other article of a size and shape capable of fitting the compartments of the machine, it being understood that the articles of merchandise are only delivered after depositing a coin in the proper coin-chute and operating the pull-rod in connection therewith.

The object of the invention is to provide a machine enbodying these characteristics which shall be exceedingly cheap and simple in construction and thoroughly efficient in operation and one in which it will be impossible to defraud.

Another object of the invention is to provide a machine of this kind in which after one receptacle has been emptied the push-rod pertaining to that particular receptacle will remain extended outwardly, thereby indicating to the would-be purchaser that that particular receptacle has been emptied.

With these and certain other objects in view, as will hereinafter appear, the invention consists in the novel features of construction, combination, and arrangement, all of which will be fully described hereinafter, and pointed out in the claims.

In the drawings forming part of this specification, Figure 1 is a perspective view of a vending-machine constructed in accordance with my invention. Fig. 2 is a vertical sectional view taken through the same, the merchandise to be vended being arranged within the machine, the pull rod or slide represented in its innermost position, a coin being represented in full lines as descending the coin-chute and in dotted lines as having reached the end of the chute, the locking-lever being shown tripped in dotted lines. Fig. 3 is a horizontal sectional view on the line 3 3 of Fig. 2, the article of merchandise being omitted. Fig. 4 is a vertical longitudinal sectional view showing the positions of the various parts when the pull rod or slide has been drawn outwardly and the article of merchandise discharged from the receptacle. Fig. 5 is a sectional view on the line 5 5 of Fig. 4. Fig. 6 is a detail sectional view showing the manner of supporting the forward end of the article of merchandise. Fig. 7 is a similar view showing the manner of supporting the rear end of the article of merchandise. Fig. 8 is a view showing a slightly-modified construction, and Figs. 9 and 10 are detail sectional views showing the operation of such modified construction.

In carrying out my invention I employ a skeleton case A, comprising the sides A′, back A^2, rear strip A^3, and hinged forward strip A^4, said case being open at the top, front, and bottom and divided into a series of compartments by means of the partitions B, said partitions having inwardly-projecting shoulders B′ adjacent their lower ends, upon which rest the receptacles C, which fit snugly within the compartments, there being one receptacle for each compartment. As all of the receptacles are alike, a description of one will suffice for all.

Each receptacle C is divided into a front compartment C′ and the rear compartment C^2 by means of a vertical partition C^3, and the compartment C′ is intended to contain the coin-operated mechanism, while the section C^2 is intended to receive the package D, the merchandise which, as before stated, may be a box of candy, box of cigars, or any other article of the size and shape capable of fitting within the compartment C^2 of the receptacle C, said compartment having an upwardly-open hinged door C^4. The forward end of the package of merchandise is supported upon the rear end of a slide or pull rod E, which passes horizontally through the receptacle C′, working in grooves E′, produced in the sides of the receptacle, the outer end of said slide or pull rod being provided with a suitable knob or handle E^2, and the stop E^3 is arranged upon the under side of the same to limit the inward and outward movements of the said slide or pull rod.

The rear end of the package of merchandise rests upon a pivoted support F, pivoted between the sides of the receptacle C, said sides being cut away, as shown at F′, in order to provide ample space for the movement of the pivoted support, said support comprising the horizontal plate F^2 and the vertical side plates F^3, a pivoted bolt F^4 passing through the depending ears or lugs F^5. The package of merchandise is thus supported in horizontal position within the compartment C^2 of the receptacle C and will remain in that position so long as the slide or pull rod remains in its normal or inner position, and for the purpose of holding the said slide or pull rod in such position I employ a lever G, having a locking-finger G′, which fits into an opening G^2, produced in the said slide or pull rod adjacent its forward end, the rear end of this lever resting directly beneath the lower end of the coin-chute H, which is connected to the top of the receptacle in alinement with the coin-slot H′. When the coin is inserted in the slot H′, it passes down the chute H and strikes the inner end of the lever G, raising the locking-finger G′ out of the opening G^2, and the pull rod or slide can then be drawn outwardly, withdrawing its rear end from beneath the forward end of the package of merchandise, and the moment support is withdrawn the said package drops, turns the pivoted support at the rear, and is discharged vertically from the bottom of the machine, it being understood that said machine is supported at the proper height to permit the package of merchandise to be completely discharged from the machine.

The inner end of the lever is provided with guide-ears G^3, between which the coin rests, and a partition I serves to stop the coin after it has tripped the lever and holds the said coin in place during the movement of the pull rod or slide until a longitudinal slot K is brought into alinement with the coin, at which time the coin will drop into said slot and will effectively lock the said slide against further movement in either direction, the coin resting upon a shoulder L′ of a drawer L, inserted in the side of the receptacle and provided with a suitable locking mechanism. Thus it will be seen that after the package of merchandise has been discharged the pull rod or slide is locked in its outward or extended position, clearly indicating to the would-be purchaser that that particular receptacle has been emptied.

When the coin drops through the slot K, the lever G returns to its normal position and the inner end serves to prevent the coin being surreptitiously abstracted from the machine, as it will be impossible to get the coin out even though the machine be turned upside down.

In Figs. 8, 9, and 10 I have shown a slight modification in the form of the support for holding the package of merchandise, said support consisting of two longitudinally-hinged doors M, which are held raised and locked by means of the rear end of the slide passing thereunder, as most clearly shown in Figs. 8 and 9, and when the said slide is withdrawn the doors drop, as indicated in Fig. 10, thereby permitting the package of merchandise to pass down out of the machine.

In operation the receptacles are filled and inserted in the compartments of the case. The front strap A^4 is then turned down and locked, and as each receptacle is emptied the pull rod or slide will be held locked in its outer position, and after all the receptacles have been emptied the attendant having charge of the machine will unlock the strap A^4, turn the same up, remove the receptacles, unlock the drawer, and withdraw the same, and in withdrawing the drawer the coin which has been held locked in the slide will drop down into the deep portion of the drawer and be withdrawn from the receptacle. The slide can then be returned and likewise the locking-lever, the drawer replaced, and the compartment C^2 filled with another package of merchandise, and the receptacle is then ready to be reinserted into the case.

It will thus be seen that I provide an exceedingly cheap, simple, and efficient construction of vending-machine capable of carrying out all of the objects hereinbefore mentioned.

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

In a vending-machine, a receptacle divided into two compartments, one intended to receive merchandise and provided with a support for said merchandise, a coin-chute, a slide, a locking-lever, and drawer arranged in the other compartment, said slide having an opening near the forward end and a slot near the rear end, the lever having a finger at the forward end, and guide-lugs at the rear end, and a drawer having a shoulder at one side, all arranged substantially as described.

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