

C. J. PFOHL.  
 VENDING MACHINE.  
 APPLICATION FILED APR. 11, 1910.

1,001,438.

Patented Aug. 22, 1911.

2 SHEETS—SHEET 1.

Fig. 2.

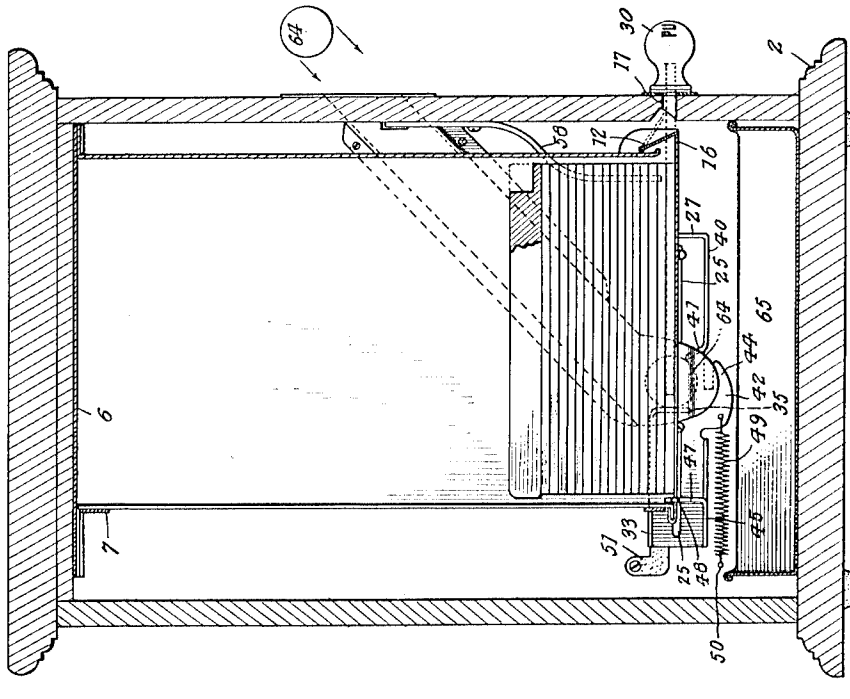
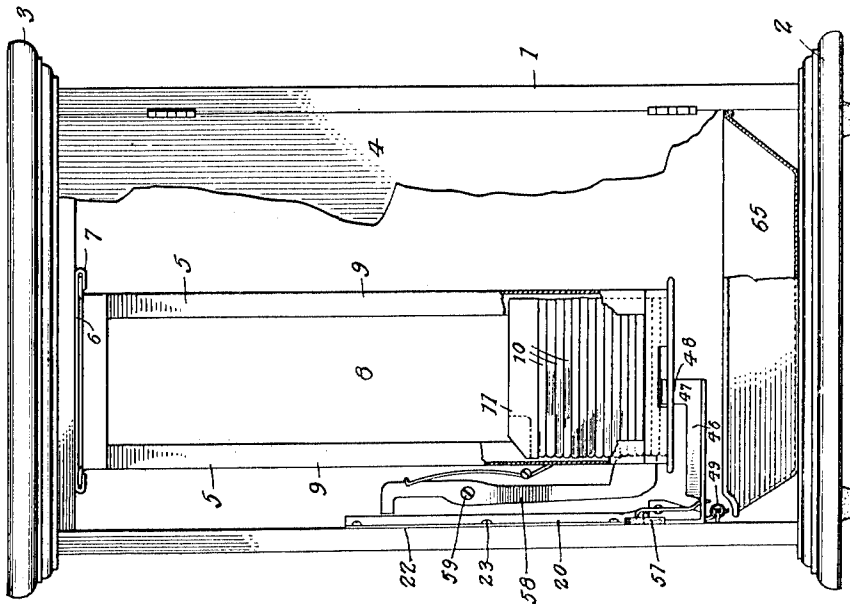


Fig. 1.



WITNESSES:

L. H. Schmidt.  
 C. E. Frazer

INVENTOR  
 CHARLES JOE PFOHL,  
 BY *Munn & Co.*

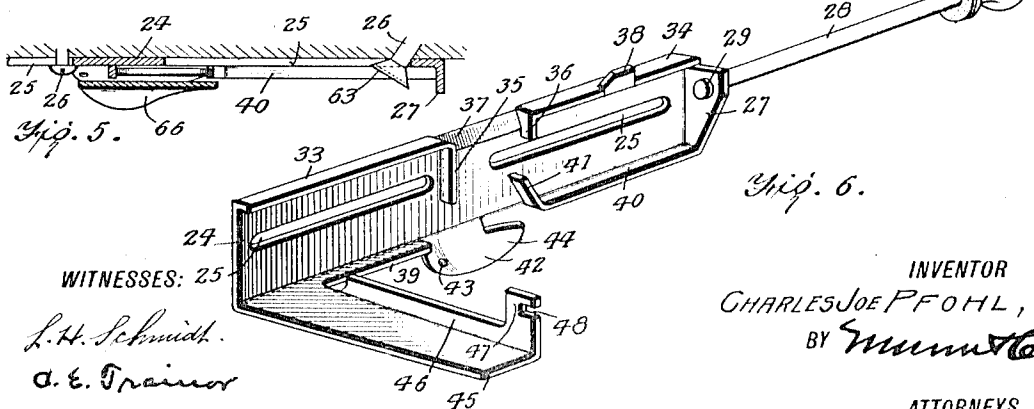
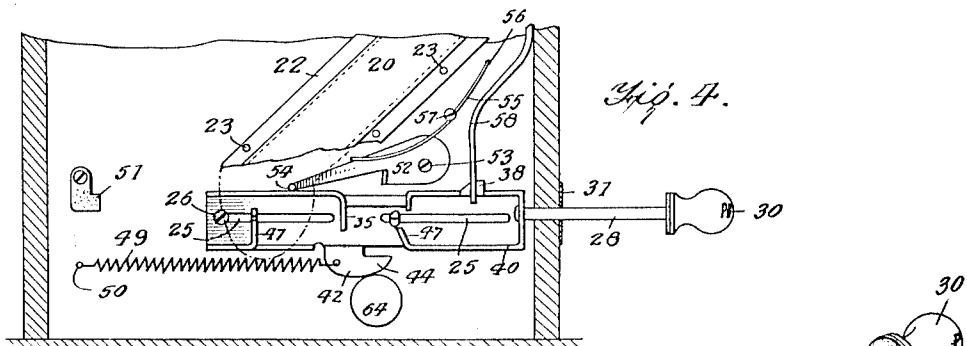
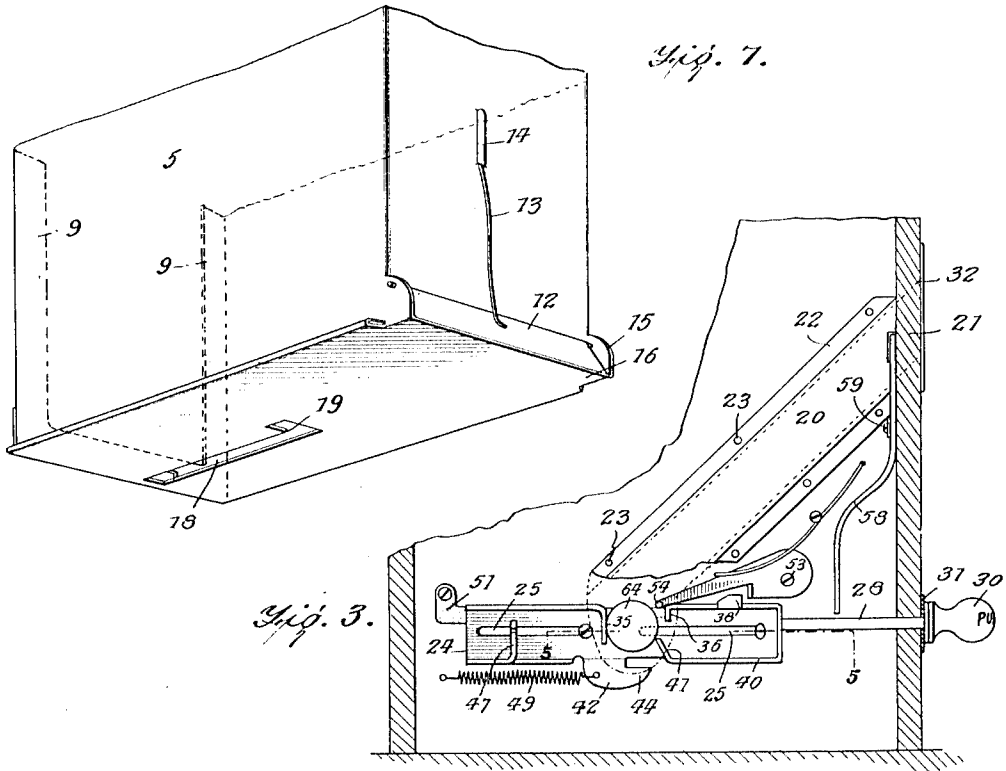
ATTORNEYS

C. J. PFOHL.  
 VENDING MACHINE.  
 APPLICATION FILED APR. 11, 1910.

1,001,438.

Patented Aug. 22, 1911.

2 SHEETS—SHEET 2.



WITNESSES: 25  
 L. H. Schmidt.  
 A. E. Trainer

INVENTOR  
 CHARLES JOE PFOHL,  
 BY *Munn & Co.*  
 ATTORNEYS

# UNITED STATES PATENT OFFICE.

CHARLES JOE PFOHL, OF SAN JOSE, CALIFORNIA.

VENDING-MACHINE.

1,001,438.

Specification of Letters Patent. Patented Aug. 22, 1911.

Application filed April 11, 1910. Serial No. 554,596.

To all whom it may concern:

Be it known that I, CHARLES J. PFOHL, a citizen of the United States, and a resident of San José, in the county of Santa Clara and State of California, have made certain new and useful Improvements in Vending-Machines, of which the following is a specification.

My invention is an improvement in vending machines, and consists in certain novel constructions and combinations of parts hereinafter described and claimed.

The object of the invention is to provide a simple, and cheaply constructed machine for dispensing small vest pocket account books or the like, which upon the insertion of a specified coin will deliver a single book, and wherein an efficient means is provided for preventing its operation without the insertion of the proper coin, and wherein the coin is utilized to restrain the operation of the said means.

A further object is to provide means for preventing the removal of the articles through the delivery slot, without operating the delivery means.

Referring to the drawings forming a part hereof, Figure 1 is a front view of the improvement with the casing partly broken away, Fig. 2 is a transverse vertical section, Fig. 3 is a sectional view with the magazine removed, showing the parts in non-operative position, Fig. 4 is a similar view with the parts in delivery position, Fig. 5 is a section on the line 5—5 of Fig. 3, Fig. 6 is a detail perspective view of the delivery slide, and Fig. 7 is a perspective view of the lower part of the magazine.

The embodiment of the invention shown in the drawings, comprises a casing 1, having a base 2, a top 3, and a hinged door 4, and a magazine is supported in the casing. The magazine consists of a case 5 substantially rectangular in cross section, and provided with a sliding cover 6, which moves in guideways 7 on the case.

The front of the case is open as shown at 8, the sides of the case being provided with lateral inwardly extending flanges 9, which retain the books 10 in position, and a follower 11 rests on the upper book as shown in Figs. 1 and 2. The magazine is provided with a hinged door 12 at one end and near the bottom, and the door is normally restrained closed by a spring 13, secured to the

case at one end at 14, the free end resting against the door.

The sides of the case are extended on each side of the door as at 15, and the bottom is also extended as at 16, and the edge of the door rests on the bottom, and the door stands in inclined position as shown. A slot 17 is provided in the end wall of the casing, in line with the opening of the magazine, through which the books may pass. The bottom of the magazine is also provided with a slot 18, extending from the end opposite the door 12, and at the end adjacent to the door, the slot is provided with an angular extension 19. A coin chute 20, leads from a slot 21 in the casing wall to approximately the center of one side wall, the chute being inclined and consisting of a plate having flanges 22, which are secured to the wall by screws or rivets 23.

A slide bar or plate 24 is provided with a plurality of alined longitudinal slots 25, through which extend screws 26, screwing into the side wall of the case, and at one end, the bar is provided with a lateral lug 27 having an opening, through which passes the end of a pull rod 28, the inner end of the rod being headed as shown at 29 to prevent the withdrawal. The rod extends through an opening in the casing wall and the outer end is provided with a knob 30 on which is printed the word "Pull," and the opening through which the rod passes, and the coin slot, are both encircled by reinforcing plates 31 and 32 respectively. The slide bar is provided on its upper edge at its inner end with a lateral flange 33 and at its outer end with a similar flange 34, the adjacent ends of the flanges having lateral depending extensions 35 and 36, which are normally at each side of the coin chute, and form a continuation of the same.

The upper edge of the slide bar between the flanges 35 and 36 is beveled as shown at 37 (Fig. 6), and the flange 34 is provided near its longitudinal center with an upwardly extending lug 38. The lower edge of the slide bar is also flanged at each end as shown at 39 and 40, the inner end of the flange 40 having an upward lateral extension 41, and between the adjacent ends of the flanges 39 and 40 is a downwardly projecting ear 42 having at its inner end an opening 43, and at its outer end a point 44. The flange 39 at its outer end is continued

into a transverse arm 45 having its edge adjacent to the ear 42 upwardly flanged as at 46, and at its outer end, the flange 46 is provided with an upwardly projecting lug 47, having in its outer edge a notch 48. A spring 49 secured at one end to a pin 50 in the wall of the casing, and at the other in the opening 43 of the ear, normally retains the slide bar in the inward position shown in Fig. 3.

The slide bar moves transversely of the casing wall, at one side of the magazine, (Fig. 1) the arm 45 extending beneath the magazine, with the lug 47 moving in the slot 18, and with the edge of the slot fitting the notch 48, except when it passes into the angular extension 19. The lug extends into the magazine only high enough to engage the lowermost book. The slide bar is drawn outwardly by means of the pull bar, and is returned by the coil spring 49, and a stop 51 is provided for engagement by the slide bar to limit its inward movement. A pawl 52 is pivoted to the casing wall by a screw 53 and the point of the pawl is laterally extended as at 54, and rides on the flanges 33 and 34 when the slide bar moves in and out. The pawl will normally engage the lug 38, to prevent the withdrawal of a book, and is pressed toward the slide by a spring 55 secured to the casing wall at 56, and pressed into engagement at its free end with the pawl by a screw 57. A lever 58 is pivoted to the inner face of the front end of the casing by a screw 59, and the lower end extends into the magazine so that when last book goes out the upper end of the lever automatically closes the coin slot. The upper end of the lever is laterally extended as at 60, and passes through a slot 61 in the coin chute, and extends across the same when swung as above described to close the coin slot, to prevent the insertion of another coin, after the last book goes out. (Fig. 2).

In operation, the magazine being filled with the superposed books, when a coin 64 is inserted in the chute it passes down the slot and into the space between the flanges 35 and 36, which space as before stated is normally at the bottom of the chute. The coin is temporarily held in this position by the extension 41 of the flange 40, which extension is not connected at its side to the slide bar, and is slightly resilient. The slide bar is now drawn outwardly by pulling on the knob. The extension 54 of the pawl 52 rides upon the rounded edge of the coin, and is lifted over the lug (38) and the gap between the flanges 33 and 34, as shown in Fig. 4, thus opposing no resistance to the movement of the slide bar, which by means of the arm 45 and the lug 47, slips out the lowermost book and delivers it through the slot in the casing wall, the door 12 being lifted by the book, and immediately closed

by its spring, after the book has passed. As soon as the book is delivered and the knob released, the spring 50 returns the slide to its original position. The coin is dislodged from its resting place on the extension 44, by means of one of the screws 26, which as shown in Fig. 5 is inserted in an inclined position the head 63 thereof being flat as shown, and acting as a cam to dislodge the coin. The ear 42 is also inclined and directs the coin into a tray 65, placed in the bottom of the casing for receiving the same, and a guard or shield 66 is arranged at the side of the space between the flanges 35 and 36 to prevent lateral movement of the coin. The door 12 effectually prevents any tampering with the books through the delivery slot, since it is always held closed by the spring except during the delivery of a book.

It will be evident that the machine may be arranged to operate with coins of any required denominations, merely by making the parts to suit. Should any one attempt to remove a book without first inserting a coin, the pawl will engage the lug 38 to prevent further outward movement of the slide bar. Since the space between lug 38 and the pawl 52 regulates the size, it would be very difficult to operate the machine with anything but the requisite coin.

The slide is provided with an upwardly projecting lug 38 which engages with a forwardly facing shoulder on the pawl between the point 54 of said pawl and the pivot thereof, thus operating to limit the outward movement of the slide unless a coin is inserted in such manner as to lift the point of the pawl and thus clear the engaging surfaces of the pawl and slide. It will also be noticed that the slide is of a special construction, cast in one piece with a body or web plate 24 and the flanges 33, 34, 35 and 36 as well as the coin support 41 projecting laterally from the body or web plate of the slide. This is not only a simple construction of slide but also forms the laterally opening coin seat from which the coin is ejected laterally when the slide is brought to its outermost position by the engagement with the coin of the cam or inclined surface 63 as best shown in Fig. 5 of the drawing.

I claim—

In a vending machine, the combination of a coin chute, a slide bar operating below the same and formed with a body or web plate and with flanges projecting laterally therefrom and spaced apart at their adjacent ends and having at said ends depending flanges also projecting laterally from the web plate, and a coin support carried by the slide, the slide being also provided in advance of the depending flanges with an upwardly projecting stop lug, the depending flanges and the coin support forming a passage normally

registering with the end of the coin chute  
and adapted to receive a coin therefrom, and  
a pivoted pawl provided adjacent to its pivot  
with a shoulder for engagement by the stop  
5 lug of the slide and having at its swinging  
end means to rest upon the lateral flanges  
of the slide and adapted to be supported by

a coin when adjusted into the coin passage  
of the slide, all substantially as and for the  
purposes set forth.

CHARLES JOE PFOHL.

Witnesses:

R. F. ROBERTSON,  
S. W. TERRY.