March 28, 1933. S. MICHLIK ET AL 1,903,008

VENDING MACHINE SIGN ILLUMINATING MECHANISM

Filed Feb. 28, 1930 2 Sheets-Sheet 1

Fig. 1

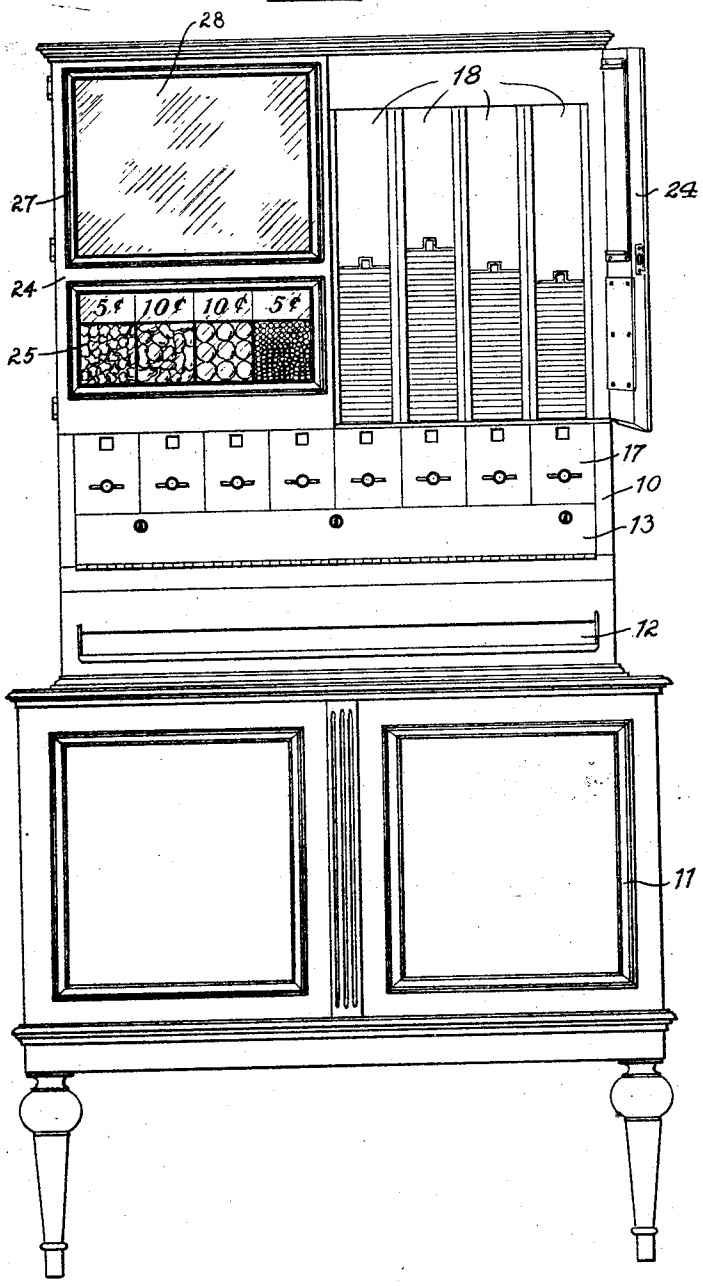
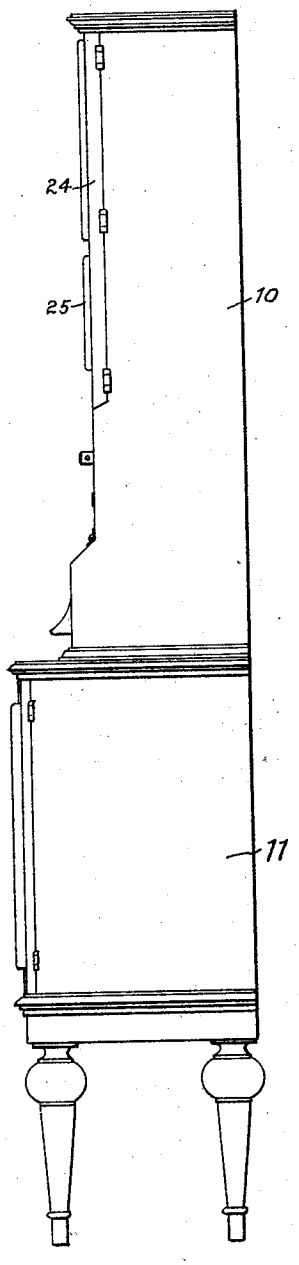


Fig. 2



Stephen Michlik and Charles L. O'Reilly INVENTORS

BY

Schuchty & Lotsch

ATTORNEYS

March 28, 1933. S. MICHLIK ET AL 1,903,008

VENDING MACHINE SIGN ILLUMINATING MECHANISM

Filed Feb. 28, 1930 2 Sheets-Sheet 2

Fig. 4

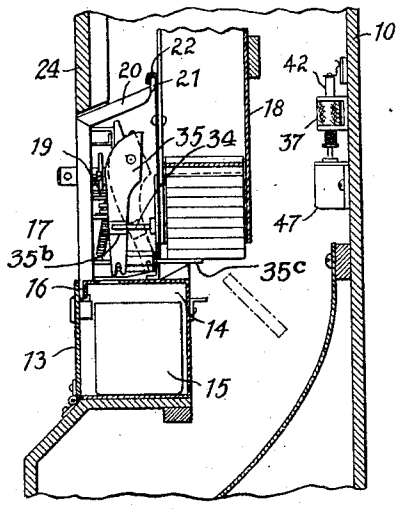


Fig. 5

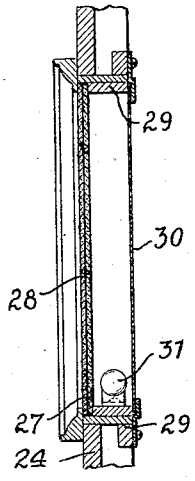


Fig. 3

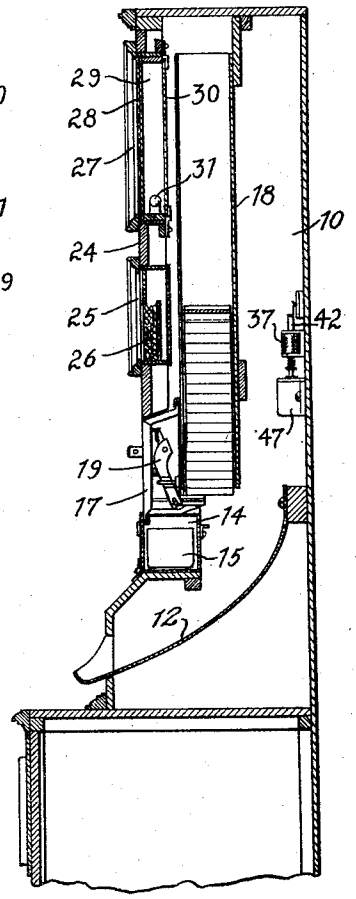
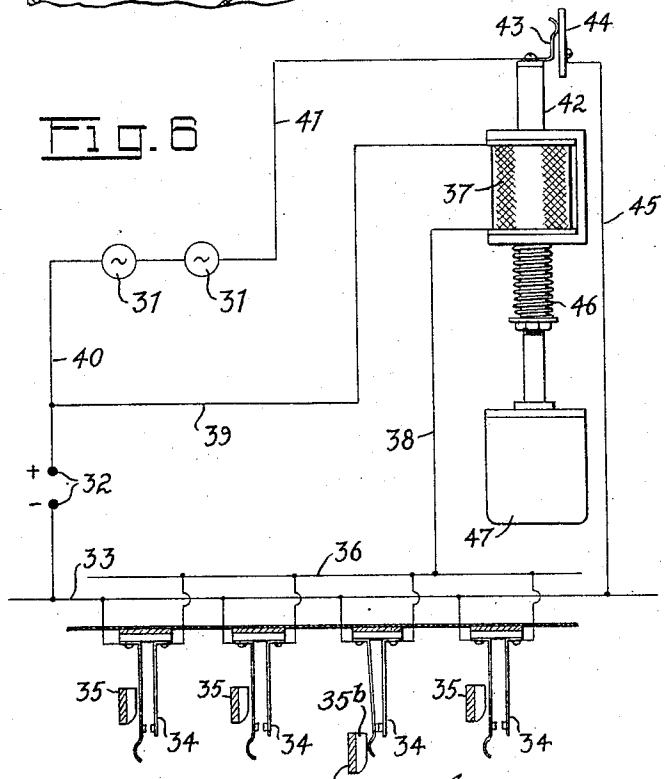


Fig. 6



INVENTORS
Stephen Michlik and Charles L. O'Reilly
BY
Schuchts & Lockett
his ATTORNEYS

Patented Mar. 28, 1933 1,903,008

UNITED STATES PATENT OFFICE

STEPHEN MICHLIK, OF BROOKLYN, AND CHARLES L. O'REILLY, OF NEW YORK, N. Y., ASSIGNORS TO SANITARY AUTOMATIC CANDY CORPORATION, A CORPORATION OF NEW YORK

VENDING MACHINE SIGN ILLUMINATING MECHANISM

Application filed February 28, 1930. Serial No. 432,028.

It is among the objects of the present invention to provide a novel and improved device of the character set forth including a novel advertising means therefor.

A further object of the present invention is to provide in a vending machine a mirror plate which upon operation of the machine will be rendered transparent so as to display advertising matter.

A further object of the present invention is to provide in a vending machine a novel electrical circuit which is adapted, upon operation of the machine, to energize illuminating lamps.

A further important object of the present invention is to provide in a vending machine improved structural features by means of which the device may be readily assembled or disassembled.

A further object of the present invention is to provide in a vending machine an improved cover plate which may be secured to the machine without bolts and which may thus be readily removed for repairs.

Other objects of the present invention include the combination and interrelation of parts whereby the whole forms a novel and improved device which is simple in construction and operation designed to meet the demands of economic manufacture.

Other objects of the present invention will be apparent from a consideration of the following specification taken in conjunction with the accompanying drawings in which

Fig. 1 is a front elevation of a vending machine embodying one form of the present invention;

Fig. 2 is a side elevation of the machine shown in Fig. 1;

Fig. 3 is a sectional view of the upper part of the machine;

Fig. 4 is a detail section showing the improved cover plate;

Fig. 5 is a detail section showing the mirror and light assembly; and

Fig. 6 is a wiring diagram of the device.

Referring more particularly to Figs. 1 and 2 of the drawings the therein illustrated embodiment of the present invention includes a cabinet having the upper vending mechanism section 10 and a lower storage section 11. It will be understood, however, that the invention is in no way confined to this cabinet or type of cabinet. It will be readily seen that the invention is applicable to numerous types of vending machines for vending a plurality of types of goods, and that it is also applicable for a single goods vending machine.

The upper section 10 of the present machine includes a discharge trough 12 formed as shown in Fig. 3. Above the trough 12 there is provided a hinged door 13 which closes the space 14 within which coin receiving boxes 15 are positioned. The door 13 is adapted to be locked in closed position. As shown in Fig. 4 the inner face of the door 13 includes and is adapted to secure the lower edge 16 of the improved cover plates 17. The device as shown embodies a plurality of merchandise chutes indicated at 18 and a plurality of vending mechanisms indicated at 19, a plurality of cover plates 17 are provided, one for each chute 18. These plates 17 each carry thereon the vending mechanism 19. This vending mechanism forms no part of the present invention.

As shown in Fig. 4, the lower edges 16 of the plates 17 are locked behind the door 13 and against the front edge of the cover of the space 14. The upper ends of the plates extend inwardly as at 20 and terminate in a vertical lip 21 which is adapted to be received in and be secured by a flange 22 carried by the associated chute 18. The arrangement is such that the door 13 secures the plates in proper position and permits removal of the plates when the door is opened. This structure besides doing away with the necessity of bolting the plates leaves both the upper and lower edges of the plates within the machine whereby prying off of the plates is prevented. Thus it will be seen that this feature of the present invention provides a novel and improved cover plate mounting and assembly for vending machines.

Referring again to Figs. 1 and 2 of the drawings it will be seen that the upper section 10 further includes a pair of vertically

hinged doors 24, the lower edge of which rests when closed upon the portion 20 of the plates 17. The lower portion of the doors includes glass windows 25 which cover merchandise spaces 26 so that the merchandise to be sold may be displayed through the windows 25 in a conventional manner.

The doors 24 further include a novel advertising device including the window 27 within which a pair of glass plates 28 are provided. Between the plates 28, mercury silver or a similar reflecting medium is spread, the arrangement being that under normal illuminating effects the plates 28 act as reflectors or mirrors. The structure is illustrated in detail in Fig. 5. Behind the plates 28 and spaced therefrom by a supporting sill 29 an advertising card 30 or the like is mounted. Within the space formed by the sill and card 30 electric lamps 31 are provided. With this arrangement it will be seen that normally the plates with the mercury act as a mirror but that upon energization of the lamps 31 the plates become transparent due to the thinness of the mercury therebetween and thus the card 30 is displayed through the window 27.

For controlling the energization of the lamps 31 by the operation of the vending mechanism, the circuit and mechanism shown in Fig. 6 are provided. The circuit includes the source of power indicated at 32 from which extends a conductor 33 leading to one side of a plurality of spring switches of the phone jack type as indicated at 34. As shown in Fig. 4 the switches are adapted to be mounted upon the chutes 18 adjacent the merchandise discharge arm 35, the arrangement being such that discharge of the material by the arm-controlled slide 35*c* causes the pivotally mounted arm to spring into a forward position as indicated by the arm 35A in Fig. 6 whereby a pad 35*b* mounted on the arm closes one of the switches and completes the circuit through the conductor 33, one of the switches and conductor 36 to a solenoid 37. The conductor 36 joins all the switches and is connected by a conductor 38 to the solenoid 37, the conductor 39 completing the circuit from the solenoid to the other side of the source of potential 32.

The circuit of the lamps 31 includes a conductor 40 leading from one side of the source of potential with the conductor 39 to the lamps 31 and a conductor 41 leading from the lamps to the core 42 of the solenoid 37. The core 42 includes a brush 43 which is adapted to be moved over a conducting plate 44 associated by a conductor 45 with the conductor 33 to complete the circuit of the lamps 31. Below the windings of the solenoid, the core is provided with a spring 46 which normally holds the core 42 down, thus breaking the energization of the lamps 31. A dash pot device 47 is provided on the lower extremity of the core 42 to insure slow return movement of the core thereby increasing the duration of the lamp energization. The solenoid and dash pot assembly may be conveniently mounted within the cabinet as indicated in Figs. 3 and 4.

In the operation of the device it will be seen that upon discharge of merchandise the arm 35 moves to complete the circuit through one of the switches 34 and thus between the conductors 33 and 36 whereby the solenoid 37 is energized to move upwardly the core 42 whereby its brush 43 contacts with the plate 44 to establish a circuit therebetween to energize the lamps 31. Thus it will be seen that upon discharge of merchandise the plates 28 change from a mirror to a transparent window and the card 30 is displayed.

From the foregoing it will be readily seen that the invention provides a novel structure as well as a novel operation. It is understood that the invention is not confined to the specific structural details herein presented but that numerous changes and modifications in the device may be resorted to without departing from the spirit or scope of the present invention as outlined in the appended claims.

Having now described our invention, what we claim and desire to secure by Letters Patent, is:

1. In a vending machine, a sign to be illuminated, electric lighting units to illuminate the same, a circuit supplying current to said units and means to control the energizing of the same, said means including a second circuit, a solenoid therein, a switch actuated by the solenoid and included in said first circuit to make and break the same, and means actuated by the operation of the vending mechanism to energize said second circuit.

2. In a vending machine or the like, a sign to be illuminated, electric lighting units to illuminate the same, a circuit supplying current to said units and means to control the energizing of the same, said means including a second circuit, a solenoid therein, a switch actuated by the solenoid and included in said first circuit to make and break the same, means actuated by the operation of the vending mechanism to energize said second circuit, and means associated with said solenoid to cause said first circuit to remain energized for a time interval after energization of said second circuit has ceased.

3. In a vending machine or the like, a sign to be illuminated, electric lighting units for illuminating the same, a circuit supplying current to said units and means to control the energizing of the same, said means comprising a second circuit, a solenoid therein, a

switch actuated by said solenoid and included in said first circuit to make and break the same, means actuated by the operation of the vending mechanism to energize said second circuit, and dashpot means associated with said solenoid to retard the action of the same and to cause said first circuit to remain energized for a time interval after the energization of said second circuit has ceased.

This specification signed the 26th day of February, 1930.

STEPHEN MICHLIK.
CHAS. L. O'REILLY.