A. ZIEGLER.

VENDING MACHINE.

APPLICATION FILED JULY 30, 1919.

1,433,444. Patented Oct. 24, 1922.

3 SHEETS—SHEET 1.

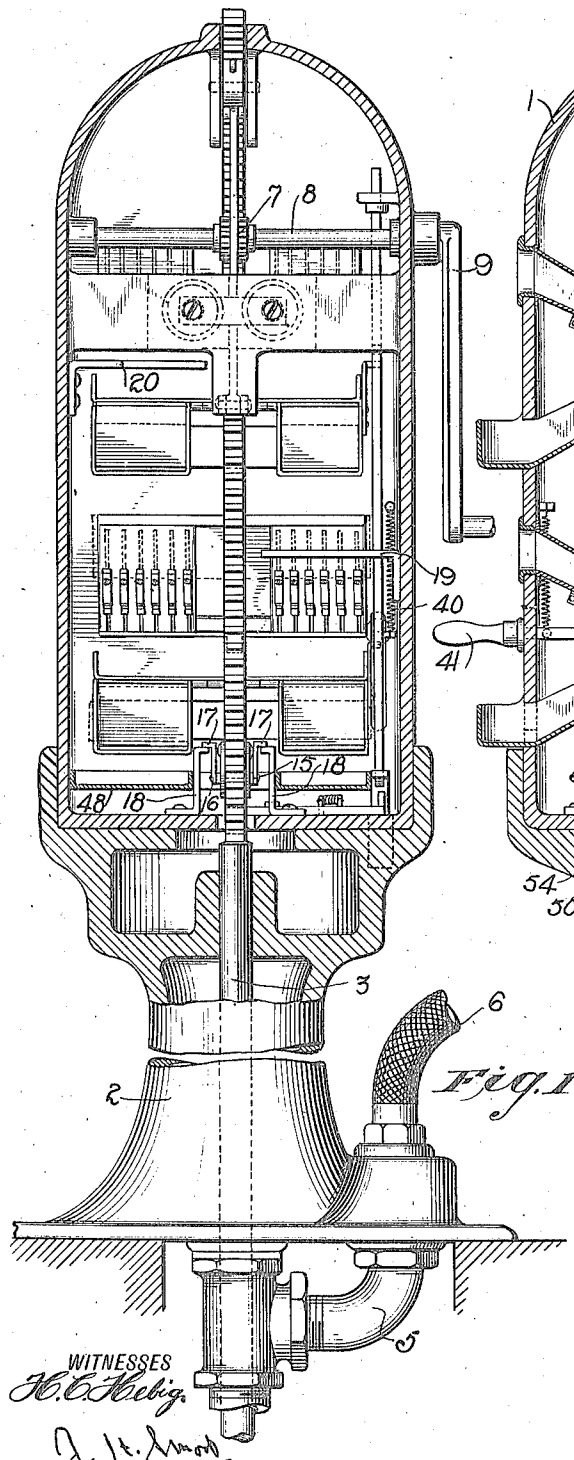


Fig. 1.

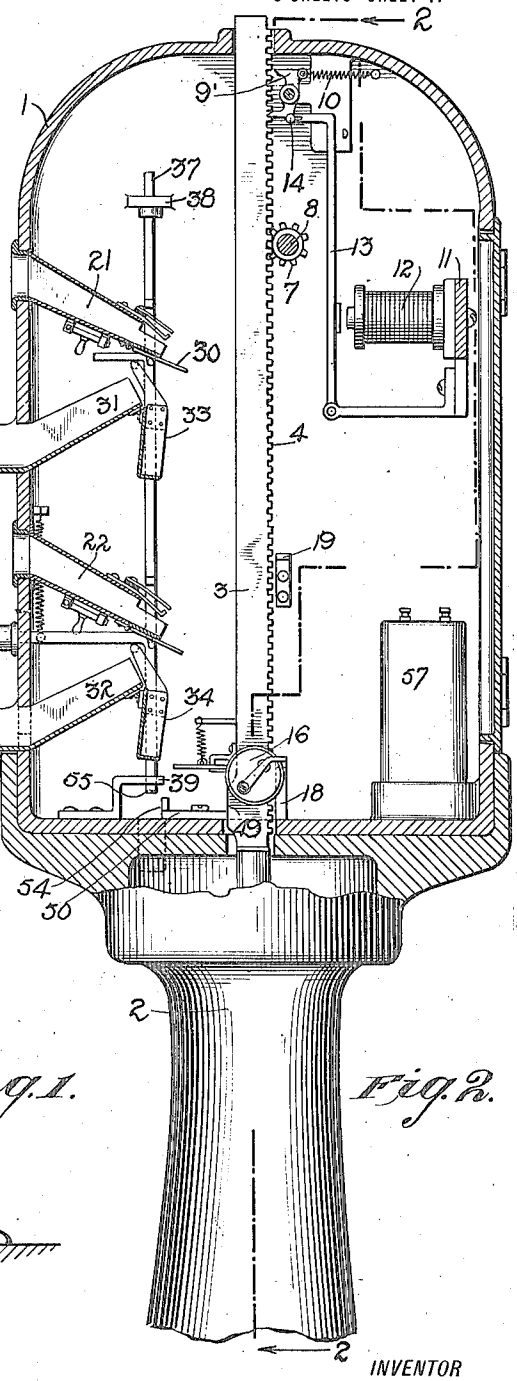


Fig. 2.

WITNESSES

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3 SHEETS—SHEET 2.

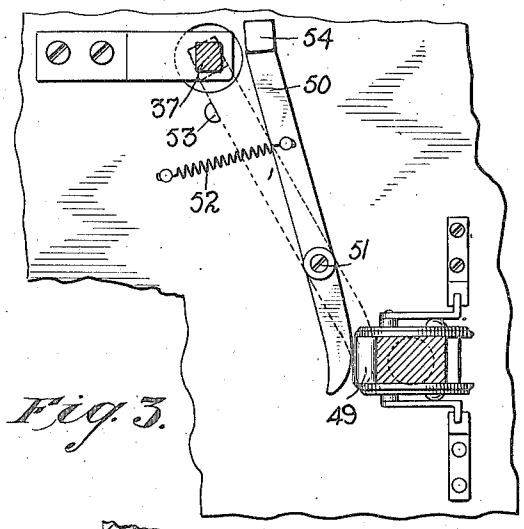


Fig. 3.

Fig. 5.

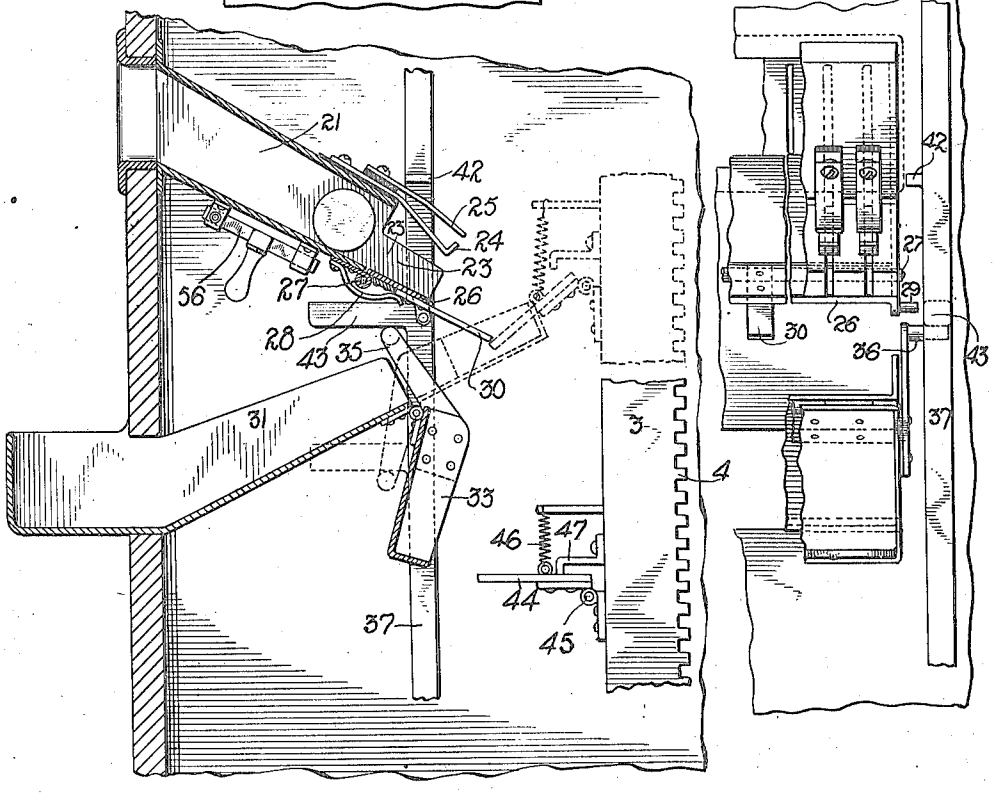


Fig. 4.

WITNESSES

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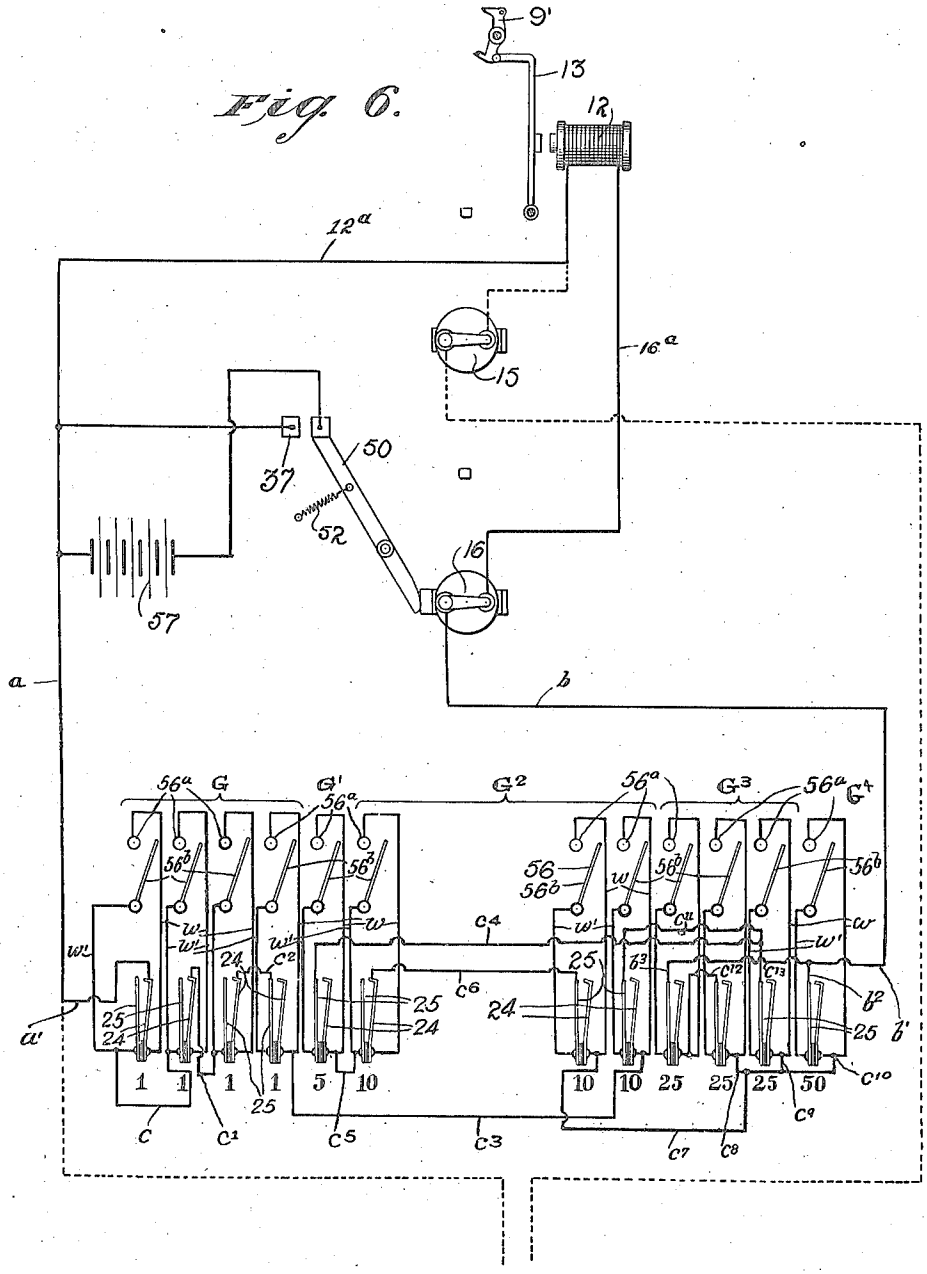
VENDING MACHINE.

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3 SHEETS—SHEET 3.

Fig. 6.



WITNESSES

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Patented Oct. 24, 1922. 1,433,444

UNITED STATES PATENT OFFICE.

ALVIN ZIEGLER, OF SCRANTON, PENNSYLVANIA.

VENDING MACHINE.

Application filed July 30, 1919. Serial No. 314,335.

To all whom it may concern:

Be it known that I, ALVIN ZIEGLER, a citizen of the United States, and a resident of Scranton, in the county of Lackawanna and State of Pennsylvania, have invented a new and Improved Vending Machine, of which the following is a full, clear, and exact description.

This invention relates to a vending machine, and aims to provide a coin-controlled, electrically-operated vending machine.

It is well known that a great difficulty in connection with vending machines adapted to dispense some material, such as gasoline, lubricating oil, etc., is that a person desiring to operate such machine might not always have the required coin to be inserted in the proper slot. This is illustrated, for instance, as follows: Gasoline to-day is being sold at 27¢ per gallon. Assuming now that a man had a 25¢ piece and two 1¢ pieces in his pocket, and that two 10¢, one 5¢ and two 1¢ pieces were required for the proper operation of the machine, it would be impossible for him to obtain the desired ware, even although he had an amount fully equivalent to that required for the proper operation of the machine.

With a view of overcoming this difficulty, I have provided a coin-operated vending machine, more particularly adapted for the dispensing of fluids, such as gasoline and oil, although the same may be readily employed in connection with dispensing any substance, which machine will operate properly under any number of combinations of coins, as long the total of the same reaches the requisite amount.

A further object of the invention is the provision of certain structure which will render it possible for the person operating the device to receive all of the coins which he has inserted in the machine back again providing that the machine for some cause fails to operate, or that the coins are of improper denominations.

A still further object of the invention is the incorporating of means which will eliminate any danger of the coins being returned should the machine once begin to operate. This provision will effectually discourage any attempt to secure the substance to be dispensed and, at the same time, obtain a return of the coins inserted.

Another object of the invention is the provision of certain means which will automatically lock the machine when the amount of substance paid for has been dispensed, so that the danger of theft upon this score is also nullified.

Reference is had to the attached sheets of drawings which illustrate one practical embodiment of my invention, and in which—

Figure 1 is a sectional front view taken along line 2—2 of Fig. 2;

Fig. 2 is a sectional side view through my dispensing machine;

Fig. 3 is an enlarged sectional view of certain details of my construction;

Fig. 4 is an enlarged sectional side view of the mechanism effecting the release and return of the coins;

Fig. 5 is a front view of the parts illustrated in Fig. 4; and

Fig. 6 is a wiring diagram showing the various circuits utilized in connection with the electrical control of the device.

In all of these views, like reference numerals designate similar parts, and the reference numeral 1 indicates a casing which is adapted to be supported by a pedestal, as, for instance, 2. Extending through the casing 1 and the pedestal 2 is a reciprocating pump-actuating bar 3, the upper end of which is formed with teeth, as indicated at 4.

This bar, as aforestated, is adapted to act upon a pump and to cause fluid, such as gasoline, oil, etc., to be forced upwardly through a pipe 5 and out through a hose 6. Of course, it is to be understood that this construction has nothing in common with my invention, and that the device might be employed in connection with any type of dispensing machine, and, merely for the sake of safety and convenience, I have illustrated the fluid connection as shown in Fig. 1.

The teeth 4 of the bar 3 are engaged by a gear wheel 7 mounted upon a shaft 8, which is adapted to be revolved by means of a handle 9, but which, on the other hand, might be motor driven. Mounted above the shaft 8, and acting upon the teeth 4, is a double-ended pawl 9′ which normally, by means of a spring 10, has one of its ends in engagement with the teeth 4, which prevents any upward movement of the bar 3.

Secured to a bar 11 extending through the casing 1 is an electro-magnet, as indicated by the reference numeral 12, which is adapted to act upon an armature 13 pivotally

connected as at 14 to the pawl 9', so that upon the armature 13 being attracted by the magnet 12, the teeth of the pawl 9' restraining the bar 3 from upward motion will be disengaged from the teeth 4 and permit such upward motion.

A pair of conventional switches 15 and 16 are mounted one upon each side of the bar 3 adjacent to the lowermost teeth 4. These switches are provided at their outer ends with outstanding fingers 17, for a purpose hereinafter more fully specified. Mounted upon the base of the casing 1 are switch actuators 18 which engage the underside of the fingers 17 when the bar 3 is in retracted position. Switch actuators 19 and 20 are mounted at different horizontal planes upon the inner face of the casing 1 and terminate adjacent the side faces of the bar 3, so that upon the bar 3 being projected, the switch 15 will be opened upon coming in engagement with the actuator 19, and the switch 16 will likewise be opened upon coming in contact with the actuator 20, for a purpose hereinafter more fully specified. The front face of the casing is provided with two series of coin slots 21 and 22, but for the sake of eliminating undue verbosity, I shall describe only the upper set of such slots, the lower set being a duplicate of the same in all details.

Referring now more particularly to Figs. 4 and 5, it will be seen that the upper portion of the coin slot 21 is preferably cut away adjacent its lower end, and projecting into such cutaway portion is an arm 24 of a switch adapted to contact with and close a circuit through an arm 25 directly overlying it, when a coin is projected through the slot 21 and wedges the arm 24 upward. The floor of the member forming the slot 21 is broken away adjacent its lower end and a plate 26 substituted therefor, which plate extends across the bottom of all of the slots. This plate 26, as indicated by the reference numeral 27, is pivoted to the outer end of the floor of each member forming the slot 21 and is normally held so as to form a continuation of this floor by means of a spring 28. A pin 29, for a purpose hereinafter more fully set forth, projects outwardly from the side edge of the plate 26, and fingers 30 extend downwardly from the lowermost edge thereof. Mounted below the series of coin slots 21 and 22 there are trays 31 and 32 respectively, whose inner ends terminate adjacent the inner ends of the coin slots 21 and 22. Hingedly secured to the ends of the trays 31 and 32 are pockets 33 and 34 respectively. Each of these pockets is provided with an outwardly-extending arm 35 which terminates in a lug 36 extending at right angles thereto.

A rod 37 is slidably secured within the casing by means of a bracket 38 and a guide 39. This rod is normally held raised by means of a spring 40, against the action of which it may be depressed by means of a handle 41. This rod extends adjacent to the pin 29 and the lug 36 and is provided with projections 42 and 43 which engage the pin 29 and lug 36 respectively when the rod is depressed against the action of the spring 40, serving to swing the pocket upwardly to the position indicated in dotted lines in Fig. 4 and to depress the plate 26 so as to permit the coin to be dropped into the pocket and thence to slide downwardly in the base of the tray 31. In this connection, note should be taken of the fact that the projection 43 is so spaced from the projection 42 that the pocket 33 is swung upwardly before the release of the coin is effected, thus preventing any possibility of accidentally dropping the coin.

Mounted upon the bar 3 and projecting outwardly therefrom is a pawl including a plate 44 pivotally mounted as at 45 upon the bar and normally retained in a horizontal position by means of a spring 46, a further upward swinging motion of the plate 44 being prevented by means of a stop 47. Reference being had to Fig. 4, it will be noted that while the bar 3 is being projected the plate 44 will override the fingers 30, due to its resilient pivotal connection with the bar 3, but upon the retracting stroke of the bar 3 the plate 44 will engage with the fingers 30 and cause any coin housed within the slots 21 to drop out of the lower end of the same and be caught by any suitable means, such as, for instance, trays 48 positioned adjacent the floor of the casing 1.

To provide means whereby to prevent the return of the coins inserted in the machine, even although the matter to be dispensed by the same has been received by the operator, I have formed the bar 3 adjacent its lower end, as most clearly shown in Figs. 2 and 3, with a shoulder 49, which engages a lever 50 pivotally mounted as at 51 upon the floor of the casing. A spring 52 normally tends to swing the outer end of the lever outwardly against a stop 53, as indicated in dotted lines in Fig. 3, but it will be noted that by virtue of the lever's engagement with the shoulder 49, the same will be held, when the bar is in position illustrated in Figs. 1 and 2, as shown in full lines in Fig. 3. The outer end of the lever is bent upwardly, as indicated by the reference numeral 54.

It will now be seen that should an attempt be made to depress the rod 37 by means of the handle 41 after the bar 3 has been raised so as to dispense fluid, the lower end of such rod will contact against the upwardly bent end 54 of the lever 50, thus effectually preventing any upward swinging of the pockets

33 or release of the coin from the slots. In this connection it might be well to state that the lower end of the rod 37 is provided with a thin insulating plate 55 for a purpose hereinafter more fully specified.

Each individual coin slot is provided with a switch 56 so that it will not be necessary to bring the arms 24 and 25 into contact one with the other by means of a coin, but any person in authority may bridge this gap in the circuit by means of switches 56, as clearly shown in Fig. 6 of the drawings.

Assuming that the various elements of the device are in the position indicated in Figs. 1 and 3, it will be seen in operation that it will be possible for one in authority, having access to the interior of the casing 1, to close the gaps in the circuit existing between the arms 24 and 25, by means of the switches 56, so that any combination of coins may be inserted by means of which a given amount is reached, such given amount being also capable of variation by means of the switches 56.

Assuming now that the requisite amount of coins has been inserted in either of the sets of coin slots and a circuit established through the electro-magnet 12, the armature 13 of the same will cause a disengagement of the pawl 9′ from the teeth 4 of the bar 3. It will now be possible for the operator of the device to turn the handle 9 which, by virtue of the shaft 8 with its associated gear 7, will cause a projection of the rod 3, resulting in dispensing, from the hose 6 by means of the pipe 5, the fluid desired by the purchaser.

It will, of course be understood that the circuit will be broken upon either of the switches 15 or 16 contacting with the switch actuators 19 or 20, according to whether the coins have been inserted into the set of slots 21 or 22, it being again understood that the slot 21 calls for double the amount called for by the set of slots 22, but dispensing twice as much fluid as is dispensed by a circuit established through the set of slots 22. The pawl, including the plate 44, will override the fingers 30 during the upward or projecting stroke of the bar 3. Upon opening the circuit, by means of either of the switches 15 or 16, the armature 13 will cease to be attracted and, consequently, the pawl 9′ will come into engagement again with the teeth 4 of the bar 3, effectually preventing any further upward motion of the same. The handle 9 will now be turned so as to retract the bar 3, and upon this stroke the plates 44 will engage the fingers 30 and effect a release of the coins contained in either of the sets of slots 21 or 22. When the bar 3 is retracted to its final position, the switch actuators 18 close the switches 15 and 16, so that the entire operation may be repeated upon the insertion of the requisite amount of coins within either of the sets of slots 21 and 22.

Assuming now that the machine, for some cause or other, such as, for instance, a short circuit, breaking of parts, etc., fails to operate after the proper amount of coins has been inserted or, on the other hand, assuming that a wrong coin has been inserted, it is always possible for the operator to secure the return of the deposited coins by depressing the handle 41 against the action of the spring 40 and, consequently, operating the rod 37 which, by means of the projections 42 and 43, will cause primarily an upward swinging of the pocket 33 and a depression of the plate 26, resulting in the coins held within the slots being permitted to slide downwardly free of the same and drop into the pocket 33 and subsequently slide into the tray 31, from which they may be taken by the operator.

Taking, for example, the case of a person who desires to secure a return of the amount deposited, even although he had been successful in obtaining the desired fluid, or other matter, it will be seen that immediately upon the fluid being dispensed by virtue of the projection of the bar 3, the shoulder 49 will have ridden past the inner end of the lever 50, permitting the outer end of such lever to move directly below the lower end of the rod 37, thus effectually preventing any depressing of this rod until the bar 3 has completed its projecting and retracting strokes. On the other hand, it might well be argued that it would be possible to depress the bar 37 slightly before the machine is operated so as to not cause the coins within the slots to be returned through the trays 31 and 32 but to, nevertheless, hold the lever from moving directly below the lower end of the rod 37, by which expedient it would seem that it would be possible to operate the device and yet secure a return of the coins. This possibility is eliminated by virtue of the thin strip of insulation 55 upon the lower end of the rod 37. Although the rod 37 would fail to establish any circuit through the lever 50 during the normal operation of the device, by virtue of the insulating plate 55, it will be seen that if the rod 37 were slightly depressed, so as to hold the lever 50 inwardly, whereby a return of the coins might be effected after the fluid has been dispensed, a circuit would be established through the side of the rod 37 and the upwardly-bent end 54 of the lever 50, which, as clearly shown in Fig. 6, would immediately cause a short circuit of the entire electrical system, to which current might be supplied by means of any extraneous source or a housed battery 57. This short circuit would result in the armature 13 being released by the electro-magnet 12 and the consequential locking against any movement of the rod 3.

As aforestated, the total amount to be

inserted in either of the sets of slots 21 or 22 may be varied at will by the person having access to the interior of the casing, by means of closing or opening certain of the switches 56. It will be seen that by closing certain of the switches it will be possible to establish a circuit through one of the sets of slots by inserting either a 25¢ piece in its corresponding slot and two 1¢ pieces in the one-cent slot, to represent the total amount of twenty-seven cents; or a circuit may be equally well established by inserting two 10¢ pieces, a 5¢ piece, and two 1¢ pieces. This would add greatly to the utility of a coin-operated dispensing device having no attendant, as the person who wished to operate the same could have the option of inserting any coins which he might have available to reach the total amount desired.

Referring now to Figure 6, it will be seen that there is provided a manually operated switch 56 for each coin operated switch. These manually operated switches include stationary contacts 56^a and movable contacts 56^b. The stationary contacts 56^a of switches 56 are connected to the arms 24 of the corresponding coin operated switches by wires w and the movable contacts 56^b are connected by wires w' to the arms 25 to the corresponding coin operated switches.

Each switch 56 and its corresponding coin operated switch and connecting wires w and w' constitute a set and the sets thus constituted are arranged in groups designated at G, G′, G^2, G^3 and G^4, respectively. These groups each include one or more sets and preferably group G includes four sets which correspond to the one cent slots; group G′ includes only one set which corresponds to the 5¢ slot; group G^2 includes three sets which correspond to the 10¢ slots; group G^3 includes three sets which correspond to the 25¢ slots; and group G^4 includes one set which corresponds to the 50¢ slot.

Wires or conductors C, C′ and C^2, connect the sets of the group G; wire C^3 connects the last set of group G with the last set of group G^2; wire C^4 connects the single set which constitutes group G′ with the last set of group G^3; wire C^5 connects the set G′ with the first set of G^2; wire C^6 connects the first set of G^2 with the second set thereof; wire C^7 connects the second set of G^2 with the second and third sets of group G^3 and with the single set which constitutes the group G^4 by means of branches C^8, C^9 and C^{10}; wire C^{11} connects the last or third set of group G^2 with the third set of group G^3; wire C^{12} connects the first and second sets of group G^3; and wire C^{13} together with wires b^2 and b^3 connects the first set of group G^3 with the set which constitutes group G^4. It is to be understood that in referring to these sets and to the groups thereof the sets to the left of Figure 6 are considered as first and the ones to the right are considered in ascending order, the intermediate sets being considered as second and third as the case may be and the ones to the extreme right may be considered as last.

When for instance the total amount is 26¢ and the manually operated switches are set as follows: In group G, three of the switches 56 are closed, such as the second, third and fourth switches of this group; in group G^2 the third switch is closed and the switch which constitutes G^4 is also closed. In this arrangement the person using the machine has the option of depositing either a 25¢ piece and a one cent piece or two 10¢ pieces, a 5¢ piece and a one cent piece. The directions for the operation of the machine however must specify that if the person desires to use a 25¢ piece and a one cent piece the 25¢ piece must be deposited in the third 25¢ slot which corresponds to the third coin operated switch of group G^3 and the one cent slot which corresponds to the first coin operated switch of group G, and if the person desires to deposit two 10¢ pieces, a 5¢ piece and a one cent piece it must be set out that these coins must be deposited in the first two 10¢ slots, the 5¢ slot and the first one cent slot.

In the event that a 25¢ piece and a one cent piece are deposited as described, the current flows from the battery 57, through wires a and a' to the first set of group G. In group G the current passes through the arms 24 and 25 of the coin operated switch of the first set (this coin operated switch being closed by the coin) and then through conductor C to the second set of this group and through wire w', closed switch 56, wire w and arm 24 of this second set, and then by means of conductor C′ to the third set. The wire w' in the third set receives the current from the conductor C′ and connects with the closed switch 56 and from this switch leads the wire w which carries the current to the arm 24 and from this arm the current passes by conductor C^2 to the arm 25 of the fourth set of this group. Current flows from the arm 25 through the wire w', closed switch 56, and wire w of this set to the conductor C^3 by which it is carried to the third set of group G^2. In this set the current flows through the wire w closed switch 56, wire w' and arm 25 to the conductor C^{11} which carries the current to the coin operated switch of the third set of group G^3. In this set the current is carried through the arms 24 and 25 of the coin operated switch (this coin operated switch being closed by the coin), to the conductor C^9 and then through the conductor C^{10} to the wire w of G^4. In this set the current

flows from the wire w through the closed switch 56, wire w' and arm 25 to the conductor b^2 from which it is taken by wires b' and b to the switch 16 and this switch being closed it is carried by the wire 16^a to the magnet 12. Flowing through the coils of the magnet it excites the magnet to bring about the action previously described and from these coils it flows through a wire 12^a back to the battery 57.

In the event that the purchaser deposits two 10¢ pieces, a 5¢ piece and a one-cent piece in the manner described, the current flows from the battery to the first set of group G, through the coin operated switch thereof and conductor C to the second set and through the closed switch 56 of the second set, and conductor C′ to the third set and through the closed switch 56 thereof and similarly to the fourth set and through the closed switch 56 thereof by means of the conductor C^2 and from this fourth set of group G the current is carried by conductor C^3 to the closed switch 56 of the third set of group G^2, and thence by means of conductors C^{11} and C^4 in the order named to the coin operated switch of group G′ and then by means of the conductor C^5 to the first set of group G^2. The current flows through the closed coin operated switch of this first set of group G^2 and conductor C^6 to the second set of this group and in this second set it flows through the closed coin operated switch thereof and then through the conductor C^7 and C^{10} to the set which constitutes group G^4 and in this set the current flows through the closed switch 56 to the wire b' and thence through wire b, switch 16, wires 16^a, magnet 12 and wire 12^a back to the battery. It is to be understood that for certain purposes and in certain instances the first two 25¢ slots which correspond to the coin operated switches of the first two sets of groups G^3 are equivalent or produce the same effect as the single 50¢ slot which corresponds to the coin operated switch of group G^4 and this gives the person who sets the machine the privilege of using his judgment as to whether it is advisable and more convenient to the purchaser to make it necessary to use two 25¢ pieces or a 50¢ piece to operate the machine under certain conditions. It is to be understood that after the authorized person setting the machine has manipulated the switches 56, the purchaser using the machine must deposit the money in certain slots which slots will be specified in the directions posted to acquaint those using the machine as to the manner in which the machine is to be operated.

Having thus described my invention, I desire to claim:

1. A vending machine, including a bar formed with teeth, a pawl engaging such teeth and normally locking the bar, an electro-magnet for withdrawing such pawl out of engagement with the bar, coin slots associated with such machine, switches, associated with such coin slots, adapted to close a circuit through such electro-magnet, a switch mounted upon such bar, and a switch actuator for opening such switch and breaking the circuit through the electro-magnet when the bar has traveled a predetermined distance.

2. A vending machine, including a bar associated with a dispensing device, a pawl for normally locking such bar, an electro-magnet for releasing such pawl, a series of coin slots, means associated with such coin slots for closing the circuit through the electro-magnet when the requisite amount of coins has been inserted therein, secondary circuits through said coin slots and switches controlling the secondary circuits through such coin slots, whereby such switches may be closed and the total amount to be deposited within such coin slots may be varied by bridging certain of such secondary circuits by means of said switches.

3. A vending machine, including means normally locking the mechanism adapted to dispense the material to be vended, electrically-operated releasing means therefor, a series of coin slots, means associated with such coin slots for closing the circuit through the electrical means when a requisite amount of coins has been inserted within such slots, and secondary means associated with such slots whereby the circuit through them may be closed independently of such first-named means, whereby to vary the total amount of coins to be deposited.

4. A vending machine, including means normally locked adapted to dispense the material to be vended, releasing means for such lock, coin slots adapted to receive and retain coins whereby to operate such releasing means, trays, pockets associated with such trays, and means for bringing such pockets below such coin slots and releasing the retaining means associated therewith, whereby the coins will drop through the slots into the pockets and be deposited within the trays.

5. A vending machine, including means normally locked adapted to dispense the material to be vended, releasing means for such lock, coin slots, means associated with such coin slots whereby when coins are deposited therein such releasing means will be operated, a coin return associated with such coin slots, and means for locking such coin return when the dispensing means has once been set in motion.

6. A vending machine including dispensing mechanism, locking means for said dispensing mechanism, electrically operated releasing means for said locking means, a se-

ries of coin slots, coin operated switches associated with said coin slots for closing the circuit through the electrically operated releasing means when a requisite amount has been inserted in said slots, and manually operable switches incorporated in the circuits of the coin operated switches for bridging any desired combination of said coin operated switches whereby the total and the denomination of the coins to be deposited may be varied.

7. In a vending machine, dispensing mechanism including a movable bar, locking mechanism for said dispensing mechanism, electrically operated releasing means for said locking mechanism including an electro-magnet, a series of coin slots, coin operated switches associated with said slots for closing the circuit through the electro-magnet of the releasing means, a coin return, a rod for operating the coin return, a lever controlled by the movable bar and engageable with the rod to prevent movement thereof after said bar begins to partake of dispensing movement, means for electrically insulating said rod from said lever when it is engaged therewith to prevent operation of the coin return, said rod and said lever being included in the circuit through the electro-magnet and being operable to short circuit the electro-magnet when the lever and the bar are engaged in any manner other than that in which the lever is effective to prevent operation of the coin return.

8. In a vending machine, electrically operated dispensing mechanism, a series of coin operated switches controlling the electrically operated dispensing mechanism and a series of manually operated switches associated with the coin operated switches and adapted to be selectively manipulated to bridge any desired combination of said coin operated switches whereby the denomination and total of the coins required to be deposited may be varied.

9. A vending machine, including means normally locked adapted to dispense material to be vended, releasing means for such lock, coin slots adapted to receive and contain coins whereby to operate such releasing means, trays, pockets hingedly secured to such trays, and means for bringing such pockets below such coin slots, whereby the coins will drop through the slots and be deposited within the trays.

10. A vending machine, including means normally locked adapted to dispense material to be vended, releasing means for such lock, coin slots adapted to receive and contain coins whereby to operate such releasing means, trays, pockets hingedly secured to such trays, a rod and means associated with such rod adapted to effect a releasing of the coins from such retaining means, and to permit such coins to be deposited within such pockets and trays.

11. A vending machine, including means normally locked adapted to dispense the material to be vended, releasing means therefor including coin slots adapted to operate such releasing means upon a coin being deposited within the same, coin retaining means associated with the lower ends of said slots, such retaining means including pivotally mounted fingers, trays, pockets associated with such trays, and means for moving such fingers and pockets to permit a coin within the slot to be released from such retaining means, and to drop into the pockets and be deposited within the trays.

12. A vending machine, including dispensing means, coin receiving means, a lock normally engaging such dispensing means and adapted to be released therefrom upon coins of the proper denomination being deposited in such slots, coin return means associated with such vending machine, and means capable of operating such coin return means, and further means for holding such latter means from operation subsequent to the commencement of the actuating of the dispensing mechanism.

13. A vending machine, including a bar adapted to operate the dispensing mechanism, means for moving such bar, coin receiving slots, a locking member adapted to normally hold such bar from movement, means for releasing such locking member upon coins being deposited within said slots, a coin return associated with said slots, means for actuating the said coin return, and means adapted to co-act with said bar and latter means for preventing the operation of the coin return subsequent to the commencement of operation of the dispensing mechanism.

14. A vending machine, including a bar adapted to operate the dispensing mechanism, means for moving such bar, coin receiving slots, a locking member adapted to normally hold such bar from movement, means for releasing such locking member upon coins being deposited within said slots, a coin return associated with said slots, means for actuating the said coin return including a movable rod, and the said bar being formed with a shoulder, a pivotally mounted lever having one of its ends bearing against said bar adjacent to such shoulder, whereby upon the commencement of operation of the dispensing mechanism and a conseqential movement of the bar the opposite end of said lever will be moved to a point beneath said movable rod to prevent the actuation of said coin return.

ALVIN ZIEGLER.