Nov. 23, 1937. M. FERRER 2,100,212

ELECTRICALLY ACTUATED DISPENSING APPARATUS

Filed Nov. 20, 1936

Fig. 1

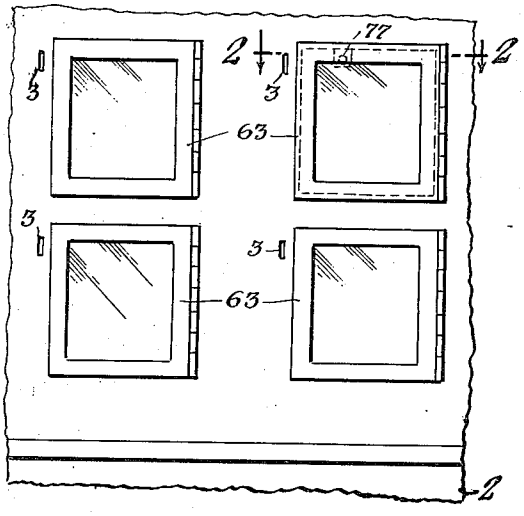


Fig. 3.

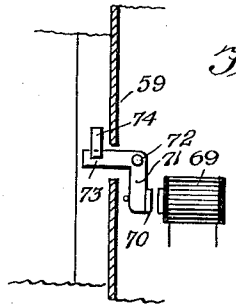


Fig. 4.

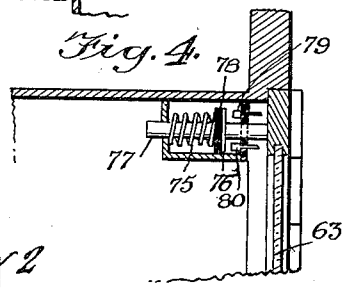


Fig. 2.

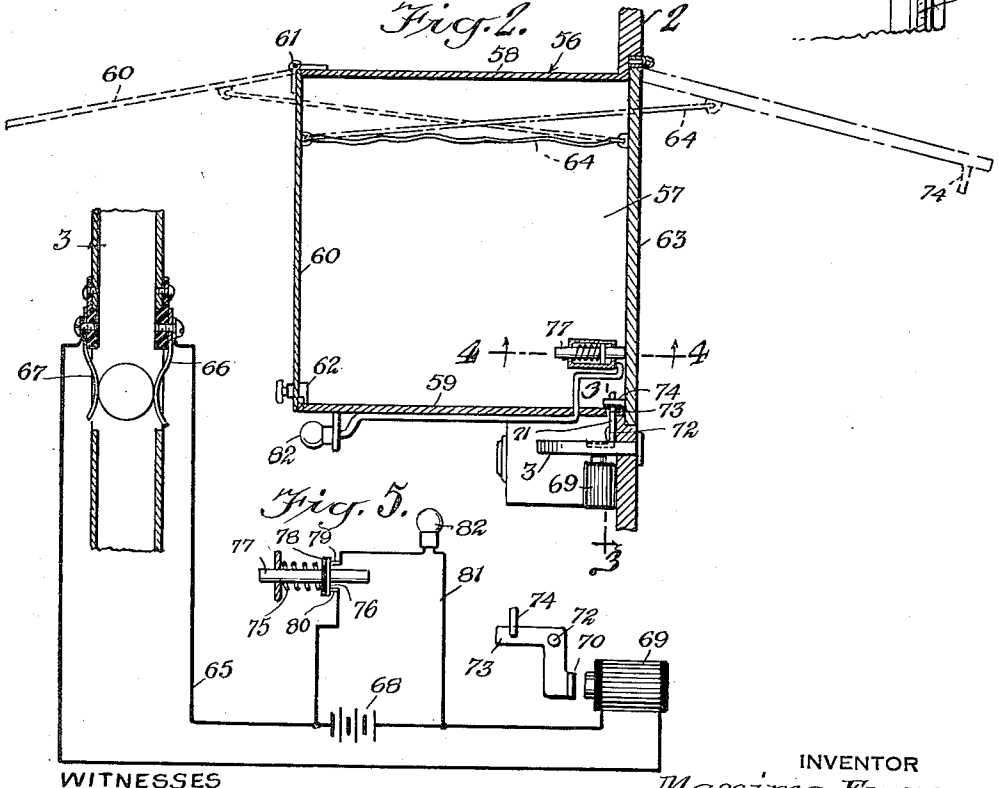


Fig. 5.

WITNESSES

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ELECTRICALLY ACTUATED DISPENSING APPARATUS

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1 Claim. (Cl. 232—1)

This invention relates to improved electrically actuated dispensing apparatus wherein means are provided which will automatically be actuated by electrical means upon the insertion of a coin whereby one or more articles may be dispensed.

An object of the invention is to provide an improved simplified structure wherein electrically actuated means are used to dispense one or more articles upon the insertion of a coin without requiring any work from the purchaser.

Another object of the invention is to provide an electrically actuated structure which may dispense automatically liquids or solid or substantially solid objects upon the insertion of a coin of the desired size.

A further object, more specifically, is to provide electrically operated devices wherein a measured quantity of liquid may be dispensed or comparatively solid articles of food may be released upon the insertion of a coin.

In the accompanying drawing:

Fig. 1 is a front view of part of a dispensing apparatus embodying the invention;

Fig. 2 is an enlarged sectional view through Figs. 1 and 4 approximately on the line 2—2;

Fig. 3 is a fragmentary sectional view through Fig. 2 approximately on the line 3—3;

Fig. 4 is a fragmentary vertical sectional view through Fig. 2 on the line 4—4;

Fig. 5 is a view partly in diagram illustrating the electrical circuit used in the structure shown in Fig. 2.

Referring to the accompanying drawing by numerals, 1 indicates an electrically actuated apparatus constructed according to the present invention. This apparatus may be as large or as small as desired so as to extend partly across a wall of a room or entirely around the wall. The apparatus may have duplicate vending mechanism connected with a single wall or casing 2. As shown in Fig. 1, there are disclosed four coin chutes 3, said chutes and associated apparatus being identical so that the description of one will apply to all. As shown in Fig. 1, there is a coin chute 3 associated with each of the units 56 as hereinafter described. Also as shown in the drawing, means have been provided to vend sandwiches, pies, and the like.

It will be noted that this structure is actuated through electrically operated means upon the insertion of a proper sized coin.

As shown in Fig. 2, the unit 56 is illustrated in horizontal section and the article to be vended is resting on the bottom 57. This section is provided with side walls 58 and 59 as well as with a suitable top wall on the bottom 57. A rear door 60 is hingedly mounted at 61 and is held by hand actuated catch 62 so that it will normally remain closed. When a workman desires to refill the compartment or unit the catch 62 is manually operated to an open position and the new article is placed on the bottom 57. After the door 63 is open the cable or other suitable closing means 64 is pulled until the door 63 snaps closed. The new article is then placed on the bottom or floor 57 and door 60 is manually closed.

Upon the insertion of a coin an electrical circuit 65 will be closed as the coin will contact with the contact springs 66 and 67 as shown at the left in Fig. 5. When this occurs current will pass from the battery 68 through the windings of the magnet 69, whereupon the armature 70 will be attracted. This armature is connected with a bell crank lever 71 pivotally mounted at 72. The leg 73 of lever 71 is normally beneath the hook 74 so that when armature 70 is attracted the leg 73 will be pulled downwardly and consequently the door 63 will be released. Immediately upon the release of the door in this manner, spring 75 (Fig. 4) will push against the abutment 76 which is rigidly secured to the push rod 77 and this push rod will push the door 63 open a short distance. A plate of insulation 78 is carried by the abutment 76 so that the spring 75 can not ground abutment 76. However, as the door 63 is opened the abutment will move toward the right as shown in Fig. 4 until it engages the contacts 79 and 80, thus closing the auxiliary circuit 81 of which lamp 82 is a part. In this manner the workman back of the dispensing apparatus will be notified that someone has removed the article from the compartment and may then release and swing door 60 inwardly and pull door 63 to a closed position. A new article is then placed in the compartment and the latch 62 re-engaged.

When the door 63 is closed it will strike the pin or rod 77 and push the same to the position shown in Fig. 4, whereupon the circuit of lamp 82 will be opened. The circuit of magnet 69 is closed by the coin and the closing period is only during the time the coin engages spring contacts 66 and 67 which is sufficiently long to permit the magnet to disengage the bell crank lever from hook 74 so that spring 75 may function. In this form of the invention the purchaser merely inserts a coin and the electrically actuated mechanism will perform all the work except the removal of the article which must be done by the purchaser. It will therefore be seen that the device is elec-

trically actuated at all times upon the insertion of the proper sized coin.

I claim:

A device of the character described including means forming a compartment, said means being formed with inner and outer doors, a flexible member connecting said doors, said flexible member being of a length to permit one door to be opened without molesting the other door while said other door is capable of being swung sufficiently to pull said flexible means for closing the first mentioned door, a catch for locking the first mentioned door closed, electrically actuated means for disengaging said catch, and spring actuated means for opening the first mentioned door.

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