

Aug. 11, 1964

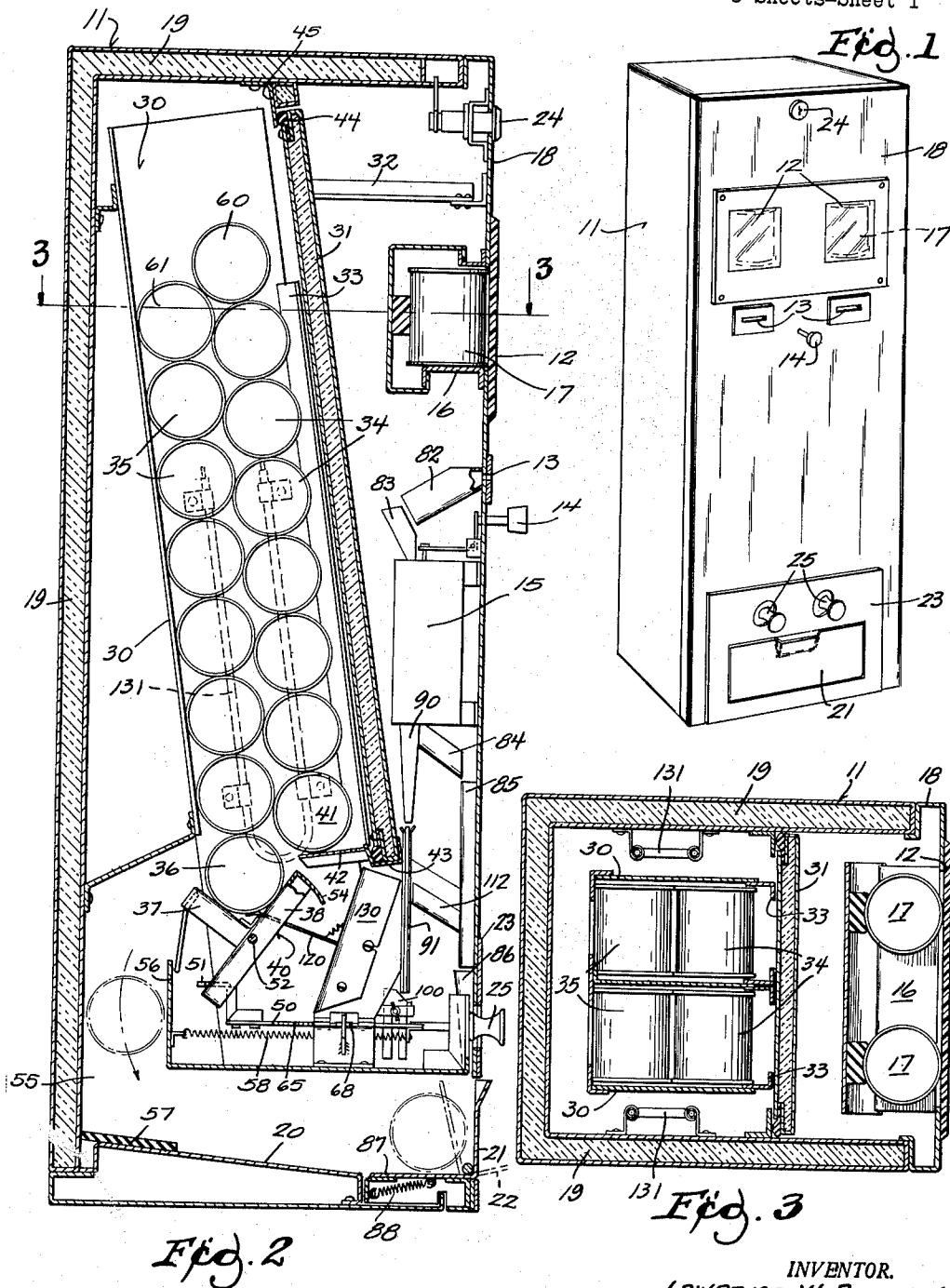
L. W. PETERSON

3,144,113

CAN DISPENSER

Filed Nov. 2, 1959

3 Sheets-Sheet 1



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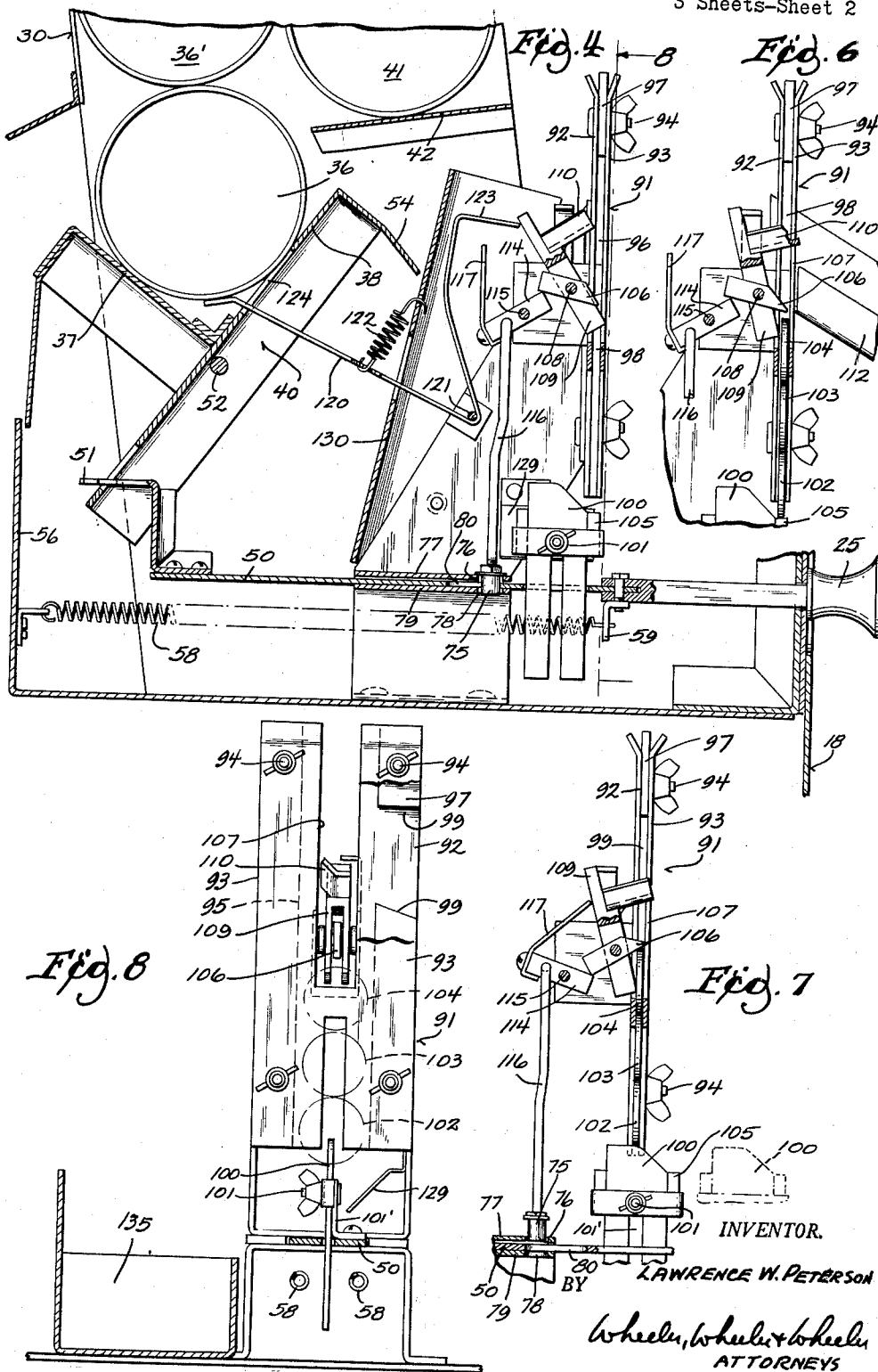
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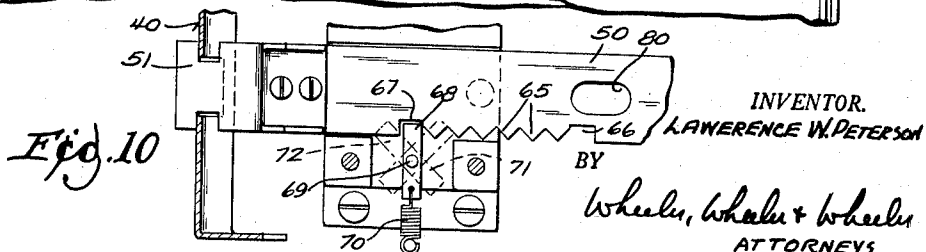
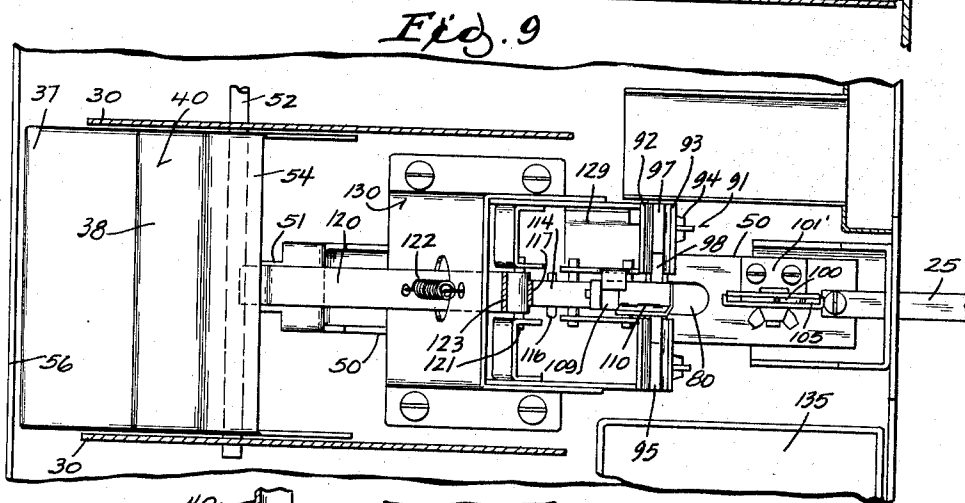
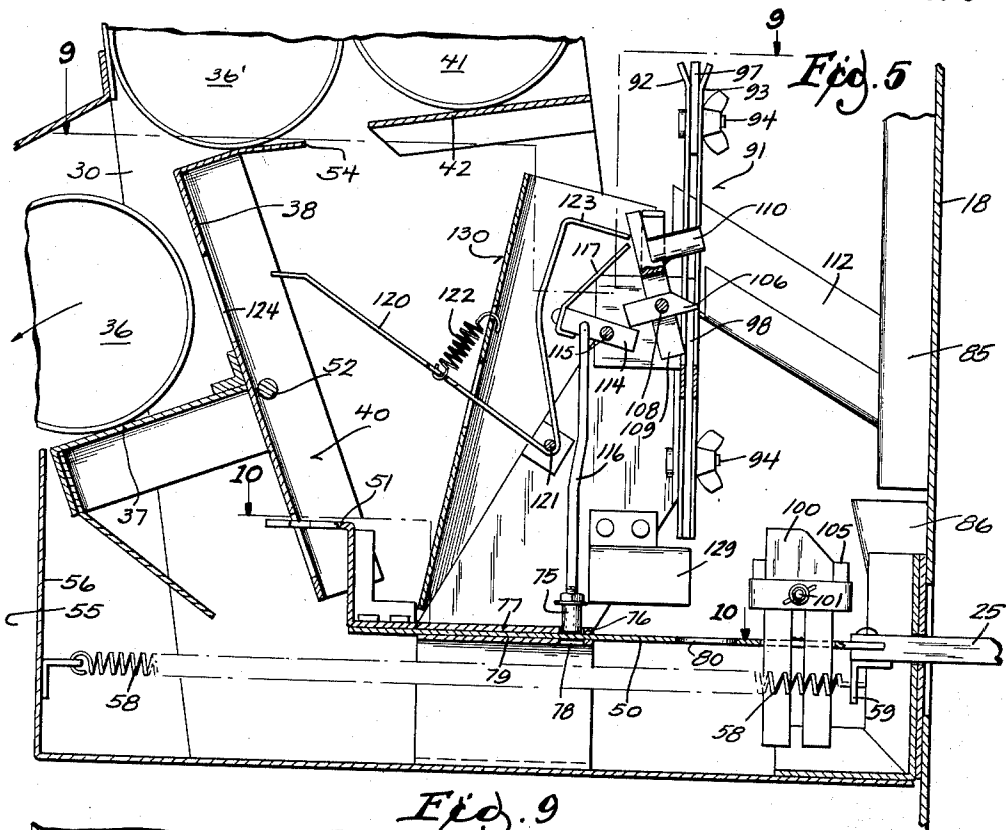
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3 Sheets-Sheet 3



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3,144,113

CAN DISPENSER

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13 Claims. (Cl. 194—37)

This invention relates to a can dispenser. As disclosed, the device is particularly adapted to dispense cans of heated food, the canned food being heated within the dispenser and maintained hot pending delivery.

The dispenser is coin-controlled. A coin sorting mechanism which forms no part of the present invention rejects slugs and bent coins and delivers to the control mechanism coins which are capable of releasing a manually operable escapement whereby the cans can be discharged singly.

The cans are stored and heated in an inclined hopper which contains two tiers of cans. The escapement mechanism discharges a single can from the rearmost tier. The cans of the forward tier are staggered with reference to the cans of the rearmost tier and as the cans in the rear tier drop consequent to the delivery of the bottom can, the uppermost can in the forward tier rolls over onto the top of the rear tier.

The escapement mechanism is in the nature of a manually operable bell crank having divergent arms in which the lowermost can of the rear tier is normally cradled. The bell crank may be oscillated in a direction to discharge the can cradled therein. The arm which oscillates upwardly provides support for the superimposed cans until the bell crank is returned to its original position. At that time the can which is then lowermost drops into the bell crank to be cradled therein for a subsequent discharge operation.

The bell crank is biased toward its can receiving direction and has a manually operable handle connected to it to effect tilting to can delivery position. Coins are stored in a chute which is adapted to receive from one to three coins and to return any surplus to the operator. Only when the number of coins for which the device is set are stored in the chute is it possible to effect can discharge. A cam is connected with the handle to engage the lowermost coin in the chute. There is some lost motion between the handle and the escapement mechanism to permit the cam to lift the coin or coins in the chute. Assuming that coins are present to the requisite number, the lifting of the coins in the chute during the initial movement of the handle will release a latch which otherwise locks the handle against movement to can discharging position. Means is provided whereby this lifting movement not only releases the lock to permit continued movement of the handle, but also continues in operative effect the means for returning to the operator any surplus coins. Such means is also acted upon and rendered effective in the event that the stock of cans in the dispenser is exhausted.

The hopper in which the cans are stored is electrically heated and means is provided for insulating it to conserve heat. A section of insulated partition is removable bodily when a front section of the cabinet is removed, such partition removal giving access to the hopper for replenishment of the stock of cans. All of the operating mechanism with the exception of the commercial coin sorter remains as a part of the cabinet when the front wall section thereof is removed. The coin sorter, however, is attached to the removable front wall section and is removable therewith, thereby giving improved access to the partition and hopper.

Excluded from the heating arrangement are sample

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cans which are displayed through a window in the upper part of the cabinet, such cans being mounted on a shelf for which space is provided by the inclination of the hopper.

In the drawings:

FIG. 1 is a view in perspective showing an exemplification of the invention.

FIG. 2 is an enlarged detail view in front to rear vertical section through one of the hoppers with which the device of FIG. 1 is provided.

FIG. 3 is a view taken in cross section on the line 3—3 of FIG. 2.

FIG. 4 is a further enlarged fragmentary detail view showing in front to rear section the lower end of the hopper and the escapement mechanism and some of the operating mechanism therebeneath.

FIG. 5 is a view similar to FIG. 4 showing the escapement mechanism in can discharging position and showing some of the operating parts in positions other than those shown in FIG. 4.

FIG. 6 is a fragmentary detail view of the coin chute and some of the coin control parts in positions other than those shown in FIG. 4 and FIG. 5.

FIG. 7 is a fragmentary detail view similar to FIG. 6 and showing control parts in still another position of operation, the latch for the handle being illustrated.

FIG. 8 is a detail view on the line 8—8 of FIG. 4.

FIG. 9 is a detail view on the line 9—9 of FIG. 5.

FIG. 10 is a detail view on the line 10—10 of FIG. 5.

The cabinet 11 has windows at 12 through which the goods stocked in the respective hoppers hereinafter to be described can be displayed. There are coin-receiving slots at 13 beneath the respective windows, and there is a coin-return button 14 connected with the conventional coin selector 15 which is bought on the open market and with which the present invention is not concerned. It is the function of this selector to reject slugs and bent coins and cans of improper size.

The windows 12 and the shelf 16 which supports the display cans 17 behind the windows are all mounted on the front wall 18 of cabinet 11. The cabinet rear sides and top are desirably insulated as shown at 19. The base of the cabinet is built to provide a forwardly inclined discharge ramp 20 leading to a door 21 which may be opened to give the user access to a discharged can in the position indicated in broken lines at 22 in FIG. 2. This door is pivoted to a front panel 23 which is fixed to the base of the cabinet and about which the front wall 18 extends. A lock 24 secures the upper end of the front wall to the cabinet, its lower end being received in part behind the front panel 23 so that the front wall cannot be removed except when the lock 24 is opened. The handles 25 for controlling delivery of cans from the respective hoppers hereinafter to be described are located in the front panel section 23 which is a permanent part of the cabinet.

As best shown in FIG. 3, the hoppers 30 are side by side within the rear part of the cabinet behind an insulated partition 31. This partition is readily removable but is held in position when the device is in use by means of an arm 32 which is connected with the removable front wall 18 of the cabinet and projects rearwardly into engagement with the partition 31 as shown in FIG. 2.

The hoppers are identical in function. They are bodily inclined from the top rear of the cabinet toward the bottom front thereof. They are of skeletonized construction, using angles for wall portions with which the rims or ends of the cans are engaged. The flanges 33 which provide the front wall portions of the respective hoppers desirably terminate near the tops of the hoppers so that cans can be inserted thereover. The operator can

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reach between the laterally spaced flanges 33 to lower the cans into position, resting on cans already in the hopper, or upon the bottom of the hopper if the latter was empty to start with.

As is clearly apparent in FIG. 2, there are forward and rearward tiers 34, 35 of cans. The lowermost can 36 in the rear tier is cradled between the arms 37 and 38 of a bell crank 40. The lowermost can 41 in the forward tier rests upon a slightly rearwardly inclined shelf at 42 which is at a level such that this can is staggered approximately midway between the lowermost pair of cans in the rear tier 35. Opposite this shelf there is a transverse channel at 43 which receives the lower end of the partition 31. The upper end lies against a gasket 44 carried by the transverse angle 45 connected to the top of the dispenser cabinet. When the front wall of the cabinet is removed, the pressure of the strut 32 against partition 31 is relieved and the partition may thereupon be lifted out bodily, giving complete access to the hoppers.

The escapement mechanism operates as follows:

Each of the handles 25 comprises, or is connected with, a reciprocable slide 50 (FIGS. 4 and 10) having an upstanding and rearwardly projecting notched arm at 51 interlocked with the lower end of the bell crank 40. As already stated, the normal position of the bell crank as shown in FIGS. 2 and 4 is such that the lowermost can 36 in the rear tier 35 of the hopper 30 is cradled between the bell crank arms 37 and 38. When the handle 25 and slide 50 are pulled forwardly from the position of FIG. 4 to the position of FIG. 5, the bell crank 40 is oscillated about its pintle 52 to the position of FIG. 5. In this position, the arm 37 is oscillated to incline rearwardly for the rearward delivery of the can 36. Meantime, the arm 38 is oscillated to an upright position wherein it supports the next lowest can 36' in the rear tier. If necessary, the width of arm 38 is increased by means of a tongue such as that shown at 54.

The can 36, meantime, will roll through the delivery chute 55 behind partition 56 (FIG. 2) dropping onto the cushion at 57 and rolling forwardly through the discharge ramp 20 to the door 21 where it will be accessible to the customer.

A pair of tension springs 58 are anchored to the partition 56 and connected at their forward ends to the spring anchorage 59 carried by handle 25. As soon as the customer releases the handle 25, these springs return the handle rearwardly. The rearward motion thereof is communicated through slide 50 to oscillate the bell crank 40 on pintle 52 clockwise as viewed in FIGS. 4 and 5 to the original position shown in FIG. 4. As soon as the upper end of arm 38 of the bell crank passes from behind 5 to the original position shown in FIG. 4. As soon as is cradled between arms 37 and 38 thereof exactly as was the delivered can 36 prior to its delivery.

The uppermost can 60 in the forward tier 34 was originally supported in part by the uppermost can 61 in the rearward tier. When the cans of the rearward tier move downwardly to permit the lowermost can 36' to be cradled in the bell crank 40, this removes the support for can 60 and, due to the tilt of the chute or hopper 30, the can 60 now rolls over on top of can 61.

It is desirable that any movement of the handle slide, once initiated in either direction, be carried to completion. This is accomplished by the mechanism best shown in FIG. 10. The slide 50 has serrations which provide a series of teeth 65 terminating in relatively broad notches 66 at the forward end of the teeth and 67 at the rear. Adjacent the path of movement of slide 50 is a square ended pawl 68 pivoted at 69 and biased by a tension spring 70 to a position at right angles to the movement of the slide. FIG. 10 shows the slide in its forward position, which it assumes when a can has just been delivered. In the rearward position of the slide, the pawl 68 was in the notch 66. As the slide started forwardly as the result

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of the customer's manipulation of handle 25, the pawl 68 was engaged by successive teeth 65 and caused to assume an oblique position as indicated by the dotted lines at 71, its engagement with successive teeth preventing any retrograde movement of the slide until the pawl finally registered with notch 67 and could resume its full line position.

Similarly as the slide is moved rearwardly by the tension springs 58, pawl 68 is engaged by successive teeth 65 and caused to oscillate counterclockwise to the dotted line position shown at 72 in FIG. 10, its engagement with successive teeth preventing any forward movement of the slide until the pawl again resumes its full line position upon registry with notch 66. Thus, the pawl requires slide movement in either direction of slide reciprocation to be completed to the full extent of slide reciprocation before the slide movement can be reversed.

When the slide movement is coin-controlled in accordance with the preferred practice of the invention, means is provided for locking the slide against movement until released by the deposit of a required coin or coins. The lock for this purpose is shown at 75 in FIGS. 4, 5 and 7. It comprises a bolt vertically reciprocable through a hole 76 in an upper plate 77 toward a hole 78 in a lower plate 79, the slide 50 being confined between such plates. The slide has an elongated opening 80 which, in the rearward position of the slide shown in FIG. 4, registers at its forward end with the holes 76 and 78. The slide is permitted a certain amount of movement, accommodated by the length of slot 80, from the position of FIG. 4 to the position of FIG. 7. In this position, the rear end of slot 80 registers with the holes 76 and 78. Continued outward movement of the slide and handle 25 is permitted only if the bolt 75 is withdrawn as shown in FIG. 7 so that the slotted portion 80 of the slide can advance to the position of FIG. 5 and FIG. 9.

The coin-controlled means for releasing this bolt upon initial movement of the handle 25 is as follows:

The short chute 82 leads from the coin slot 13 (FIG. 2) into the hopper 83 of the conventional coin sorter 15. Rejected coins pass from the sorter through chute 84 to the coin channel 85 on the rear face of the front wall 18 of the cabinet, thence being discharged into the rejection chute 86 which delivers the coin into the can discharge passage immediately behind the pivoted door 21. As shown in FIG. 2, the door 21 is integrally connected with the front panel 87 onto which either the can or the returned coin is delivered. When the door is opened against the bias of spring 88, the can or the returned coin, as the case may be, is moved outwardly within the grasp of the operator.

If the coin is accepted by the sorter 15, it is delivered through the chute 90 into the control chute 91 which is shown in detail in FIGS. 4 to 9. The control chute 91 comprises a rear plate 92 and a front plate 93 held by clamping bolts 94 upon the spacers 95, 96 and 97. The spacer 95 is continuous at one side of the coin path 98. At the other side of the coin path, the spacers 96 and 97 are separated to provide a lateral discharge slot 99 through which coins may be deflected under certain circumstances hereinafter described. Unless deflected, coins introduced at the top of the control chute on coin path 98 will pass vertically downwardly through the chute confined between the front and rear plates 93 and 92 and the spacers 95 on one side and 96-97 on the other side.

Such a coin will be arrested in the control chute 91 by means of a cam 100 adjustably clamped by wing nut 101 on a bracket 101' carried by the slide 50. As shown, the cam 100 is set in a position such that three coins 102, 103 and 104 can be stacked upon it as a prerequisite to the operation of the release mechanism. For coins of different size or for varying the number of coins required the cam may be raised or lowered.

FIGS. 2, 4 and 5 show the device with no coins in the control chute 91. FIG. 6 shows the three coins in place resting on the shoulder 105 of cam 100, prior to any operation of handle 25. As each coin falls through the control chute 91, it pushes aside the trip lever 106 which projects into the chute through the slot 107 in the rear plate 92. The trip lever 106 is mounted on a pintle 108 between the legs of a bifurcated lever 109 which may also enter the chute through the slot 107, as in FIG. 4, but is pushed aside clockwise by coins descending through the chute and is moved clockwise and is held displaced by the top coin 104 when the chute is filled to the level shown in FIG. 6. In FIG. 6, it will be noted that the bifurcated lever 109 is offset from the coin path of the chute, while the lever 106 has returned to position above coin 104.

Lever 109 carries a deflector 110. When the lever 109 is in the position shown in FIG. 4, there being no coin in the chute at that level, the deflector 110 is outside of the control chute 91. However, when the control chute is full of coins to the required level as in FIGS. 6 and 7, the deflector 110 lies across the path of coins in the chute so that any coin subsequently inserted with the parts in this position will be ejected through the lateral slot 99 between the spacer elements 96 and 97 to fall into the trough 112 which leads to the rejection chute 86 above described.

With the requisite number of coins in place, as shown in FIG. 6, an outward pull on handle 25 will cause the cam 100 to act on the lowermost coin 102, thereby raising the coin or coins in the chute above the cam to displace the lever 106 about the pintle 108, thus moving this lever from the position of FIG. 6 to the position of FIG. 7. This movement is transmitted from lever 106 to lever 114 which oscillates clockwise around its fulcrum 115 to lift the link 116 which carries the lock bolt 75, thereby retracting the lock bolt from the slide 50. The purpose of the elongated slot 80 in the slide 50 is to permit sufficient lost motion of the slide to bring about the camming action which has raised the coins to release the lock bolt. This amount of motion of the slide is permitted, whether or not there are coins in the control chute. However, only if coins are present in the requisite number and size for which cam 100 is adjusted will motion be transmitted through the coins and the levers 106 and 114 to release the bolt and permit continued movement of the slide to discharge a can.

Lever 114 is provided with an arm at 117 which, in the clockwise movement of the lever from its FIG. 4 and FIG. 6 position to the position shown in FIGS. 5 and 7, will move over to engage the upper end of the bifurcated lever 109 to hold the bifurcated lever in a position in which the deflector 110 extends into the control chute for the lateral deflection into trough 112 of any coins inserted at such a time. In other words, this makes it impossible for coins to accumulate in the control chute while the cam 100 is not properly positioned to receive and support such coins.

Means is also provided for holding the lever 109 and deflector 110 in the position shown in FIG. 5 in the event that the can supply hopper is empty. A detector arm 120 is pivoted at 121 and biased by spring 122 toward the position shown in FIG. 5 in which a rocker arm extension 123 engages the upper end of the lever 109 upon which deflector 110 is mounted. The detector arm 120 is received through an opening at 124 in the bell crank arm 38 to lie in the path of a descending can. Thus, when can 36 is cradled in the bell crank between arms 37 and 38 thereof as shown in FIG. 4, the can rests on the end of detector arm 120 and has oscillated such arm counter-clockwise in opposition to the bias of its spring 122 so that the bell crank arm 123 has been retracted sufficiently to permit the bifurcated deflector lever 109 to withdraw the deflector 110 from the control chute.

The deflector lever is biased to the FIG. 4 position by

gravity and the deflector 110 only moves into the control chute when the bifurcated lever is displaced either by engagement by a coin (as in FIG. 6) or by the finger 117 consequent on withdrawal of the locking bolt (as in FIG. 7) or by the absence of a can on the detecting arm 120 (as in FIG. 5). It will be understood, of course, that the detecting lever 120 moves to the FIG. 5 position every time a can is discharged, and it moves back to its FIG. 4 position if the subsequent return of the escapement mechanism allows a new can to drop into cradled position on the bell crank level. Only if no new can is available, the supply hopper being empty, will the control arm 120 remain in the position shown in FIG. 5 to deflect coins from the control chute for return to the customer.

The outward movement of the control handle as above described has not only withdrawn the locking bolt 75, but has released the lowermost can in the supply hopper for delivery to the customer. As soon as the customer releases the control handle 25, the escapement mechanism returns from its FIG. 5 position to its FIG. 4 position, a can drops from the supply hopper onto the bell crank arms, the locking bolt 75 reengages, the deflector 110 moves out of the control chute, the apparatus is set for a further operation.

Meantime, the withdrawal of the cam 100 from the position of FIG. 7 to the position of FIG. 5 has opened the coin control chute 97 for the gravity discharge therefrom of all the coins which were in the chute as a prerequisite to the release of the handle. The coins fall from the chute against the deflector 129 which diverts them into the coin box 135 (FIGS. 8 and 9). In passing from the deflector to the coin box, the coins roll over the slide 50, but this offers no obstacle.

The coin box 135 is accessible only when the front wall 18 of the cabinet is unlocked at 24 and removed from the cabinet. In practice, the operating levers 109, 114 and related parts are enclosed in a housing 130 which remains fixed in the bottom of the cabinet when the front wall is removed, the selector 15 and the chutes 84, 85 and 90 coming off with the front wall.

In order to keep the foods warm in the cans, heating elements are provided at 131 on both sides of the cabinet (FIG. 2 and FIG. 3). The heat is desirably thermostatically controlled to maintain the cabinet at a temperature approximately 150° F. The object is to maintain the temperature high enough to prevent the development of undesirable organisms which might cause spoilage but low enough to preclude flavor changes such as occur when the temperature is much higher than 150° F. Canned foods can safely be maintained without appreciable flavor change for any normal dispensing period and even up to ten days or more in such a device.

While the exemplifications of the various elements as disclosed herein are the best constructions known to me, it is desired that the various features be covered generically within the scope of the appended claims. For example, changes in the escapement mechanism can be made without departing from the essentials of the coin control device as herein disclosed. Conversely, changes in the coin control device can be made, or the escapement mechanism directly operated manually without control. The latch device may be something other than a bolt and the part or parts 25, 50, upon which it operates, need not necessarily have rectilinear reciprocation.

For some purposes, the articles dispensed may be something other than cans. Moreover, the use of the heating elements is, obviously, an optional feature.

I claim:

1. A can vending device comprising an inclined hopper of dimensions to receive side by side tiers of cans of circular cross section to be dispensed, said hopper having an opening at its top to receive said cans into both of said tiers and its inclination being in a plane parallel to the diameters of the cans, means at the bottom of the inclined hopper for supporting said tiers, the supporting

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means including an escapement mechanism for discharging the lowermost can from one of said tiers, the inclination of the hopper being such that the cans of the other tier are inclined over the cans of said one tier, said escapement mechanism supporting said lowermost can at a level lower than the cans of the adjacent other tier, and the inclination of the hopper being such that as cans are discharged by the escapement mechanism, successive uppermost cans roll from the adjacent other tier onto the top of the said one tier from which cans have been dispensed.

2. The device of claim 1 in further combination with a cabinet in which the inclined hopper is disposed, the upper end of the inclined hopper being adjacent the rear of the cabinet and the inclination being such that the lower end of the hopper extends toward the front of the cabinet, the escapement mechanism being in supporting and discharging relation to the cans of the said one tier at the rear of the cabinet, the cabinet including means providing a discharge passage adapted to receive successive cans discharged by the escapement mechanism and to pass such cans downwardly behind the escapement mechanism and thence forwardly to the front of the cabinet beneath the escapement mechanism.

3. The device of claim 2 in which the front of the cabinet includes a first section having a door through which discharged cans may be withdrawn from said passage and a second section removable independently of the first section for access to the hopper, the escapement mechanism having operating connections mounted in part in said first front wall section whereby to be unaffected by the removal of the second front wall section.

4. The device of claim 3 in further combination with coin control means for said operating connections, said coin control means including parts mounted upon the respective front wall sections whereby some of said parts are removable with the second front wall section while other parts remain with the first front wall section, the respective parts of the coin control means including chutes for feeding coins from the parts mounted on the second front wall section to the parts mounted on the first front wall section.

5. The device of claim 4 in which the coin control means includes a coin accumulator containing a plurality of coins and the operating connections include means for transmitting motion through coins accumulated by said accumulator, one coin in said accumulator being in the path of said last mentioned means, lock means for precluding operation of said escapement mechanism, and lock releasing means having a part in the path of a different coin in said accumulator and adapted to receive motion through said coins in initial movement of said actuating connections for release of said locking means to permit continued movement of said connections for the actuation of said escapement mechanism.

6. A can dispenser comprising a cabinet having front, rear, side and top walls and provided with a front dispensing opening, interior means providing a can delivery passage from the rear of the cabinet toward said front opening, can dispensing mechanism immediately above said passage forming means and including an escapement bell crank having angularly divergent arms normally in can cradling position, the bell crank being oscillatable for the rearward discharge into the passage formed by said passage-forming means of a can cradled between said arms, one of said arms moving upwardly in the course of such bell crank movement to intercept and support a successive can, hopper means in which cans are stacked above the bell crank and supported upon a can cradled between the arms thereof and upon such a successive can during the discharge of the can so cradled, and operating connections including a handle at the front of said cabinet for the oscillation of said bell crank in further combination with a lock for the escapement bell crank, operating connections for the escapement bell crank, said lock con-

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trolling said connections, and coin controlled means for releasing said lock, said lock releasing means including a coin storage chute in which a plurality of coins are stored and mechanism for transmitting motion through a sequence of coins stored in said chute to said lock releasing means for the release thereof.

7. In a dispensing device, the combination with an article dispenser, of a manually operable operator therefor, a lock for said operator, the operator including a movable part having lost motion engagement with said lock, whereby limited movement of said part is permitted even while locked, and coin control means for transmitting motion from said part to said lock to release said lock, whereby to permit continued movement of said operator to dispense an article, the coin control means including a coin accumulating chute adapted to receive at least one coin for travel through said chute in a predetermined direction, a cam connected with said operator and held by said lock in a position to engage a coin in the chute, to propel said coin in a reverse direction in said chute, and motion transmitting means also engaged with a coin in the chute and adapted to be actuated through said coin in the course of its reverse direction of movement in said chute by lost motion of said part with reference to said lock to effect release of said lock.

8. The combination of claim 7 in which the cam is adjustably mounted on said part to extend to various distances respecting said chute, whereby to vary the coin requirements for transmission of motion from said part for the release of said lock.

9. In a coin control mechanism, a reciprocable part, a detent for said part, an operating handle connected with said part, means for accommodating lost motion between the handle and the detent, a cam connected with the handle, a coin accumulating chute leading toward said cam, the cam being operable by the handle in the course of such lost motion to move in said chute a coin engaged with the cam, a lever biased to project into the chute behind the coin, and to be displaced by a coin moving in the chute toward the cam, the lever behind the coin being adapted to receive motion transmitted through the coin from the cam upon manipulation of the handle, and means for transmitting motion from the handle through said coin to the detent in a direction to withdraw the detent from locking engagement with said part, whereby the lost motion of the handle respecting the detent withdraws the detent to permit continued handle operation of said part in a dispensing direction.

10. The combination with a slide provided with a handle with which the slide is connected, the slide being provided with a slot, a detent bolt normally engaged in the slot to permit only a limited movement of the slide in a dispensing direction, the slide being biased in opposition to such movement, a cam mounted on the slide and having low and high points, a coin accumulating chute with which a low point of the cam normally registers, the chute being slotted, a lever pivoted for movement through the slot into the path of coins traversing the chute toward said cam, the lever being biased toward a normal position in which it extends into the slot in the path of such a coin, the lever being oscillatable in opposition to its bias by a coin traversing the chute, bolt retracting mechanism including a part normally engaged by the lever in the course of its movement in accordance with its bias, and being adapted to limit such movement of the lever, said cam being adapted to act through a coin in said chute upon said lever for the transmission of motion through the coin and the lever and the said part to said bolt for the retraction thereof, whereby limited movement of said slide when a coin is present in said chute will retract the bolt for continued movement of the slide.

11. The combination of claim 10 in further combination with means for diverting successive coins from said

chute when said part is operated to effect cam actuation of a coin in said chute.

12. The combination of claim 10 in further combination with means for deflecting further coins from said chute when a coin therein is in a position for the actuation of said lever. 5

13. The combination of claim 10 in further combination with an article dispenser including means for supplying successive articles to be dispensed by said dispenser, and a sensing device in the path of articles so supplied 10 and having connections including means for deflecting coins from said chute when there is no article in a position to be dispensed.

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UNITED STATES PATENT OFFICE
CERTIFICATE OF CORRECTION

Patent No. 3,144,113

August 11, 1964

Lawrence W. Peterson

It is hereby certified that error appears in the above numbered patent requiring correction and that the said Letters Patent should read as corrected below.

Column 3, lines 51 and 52, strike out "be- and 5 to the original position shown in FIG. 4. As soon as" and insert instead -- beneath can 36' such can drops onto the bell crank and --; column 6, line 23, after "chute," insert -- and --; line 27, for "97" read -- 91 --.

Signed and sealed this 24th day of November 1964.

(SEAL)

Attest:

ERNEST W. SWIDER
Attesting Officer

EDWARD J. BRENNER
Commissioner of Patents