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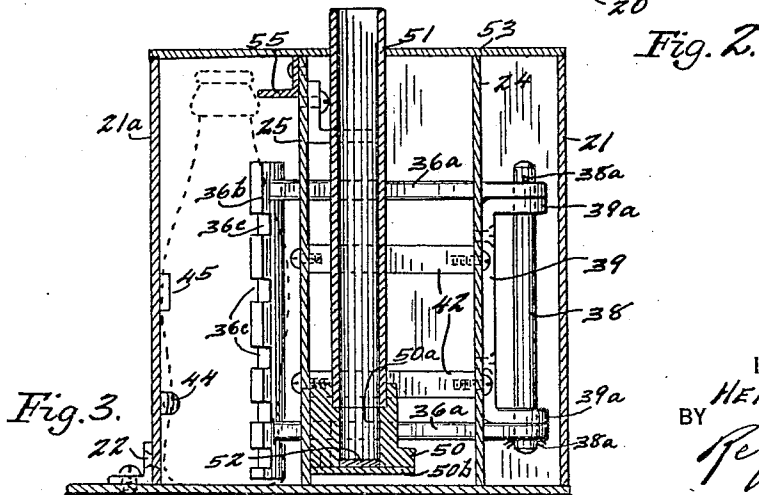
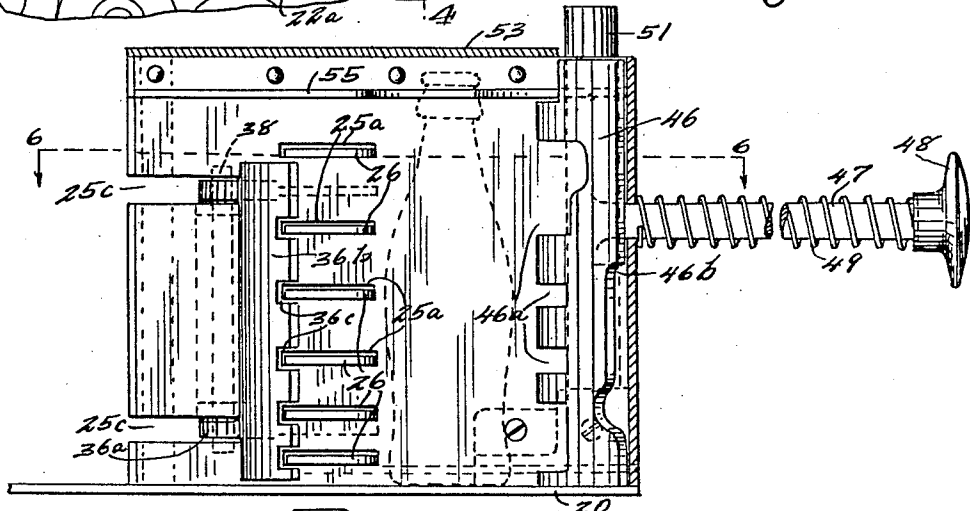
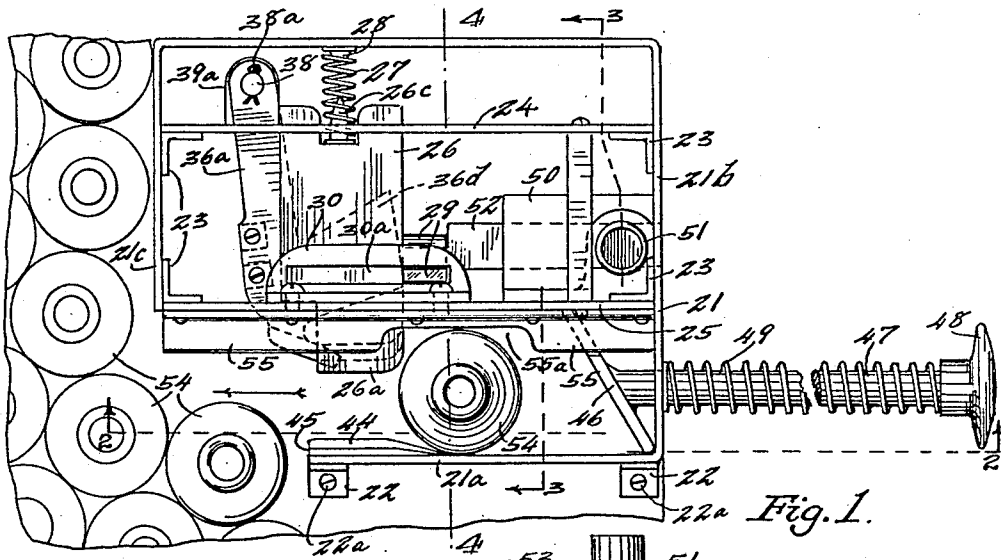
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1,901,528

BOTTLE RECEIVING AND COIN DISPENSING DEVICE

Filed March 7, 1931

5 Sheets-Sheet 1



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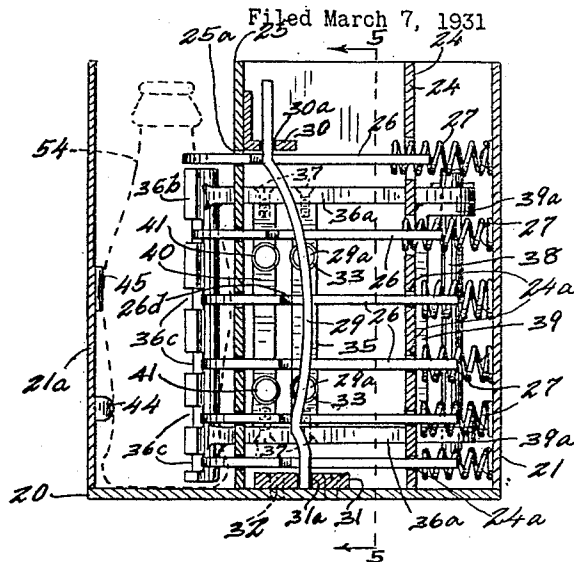


Fig. 4.

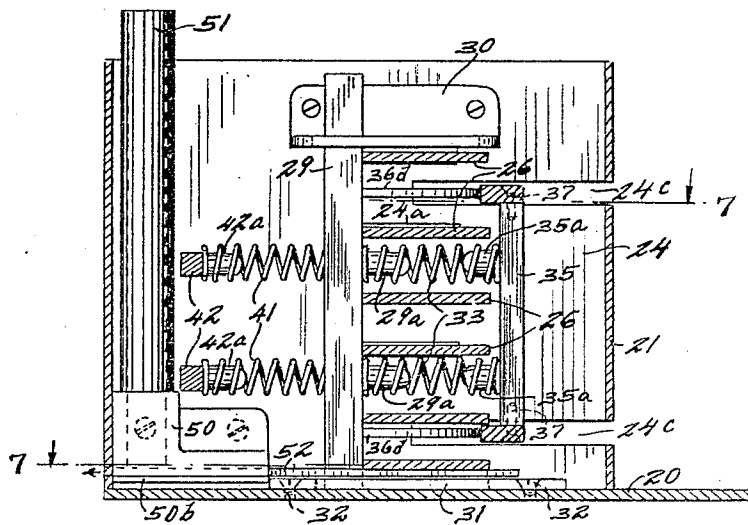


Fig. 5.

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5 Sheets-Sheet 3

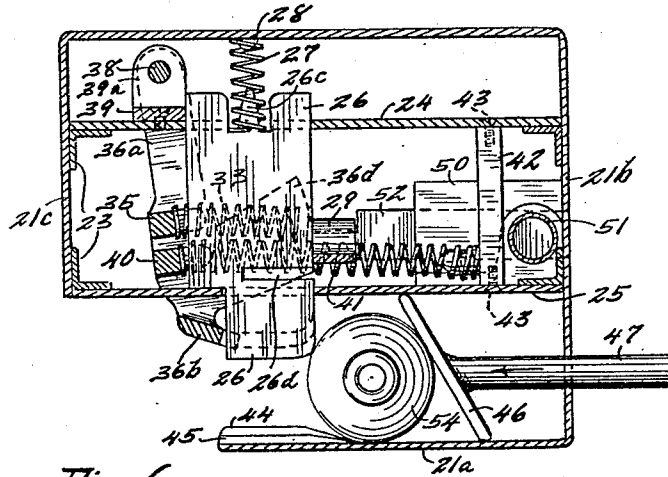


Fig. 6

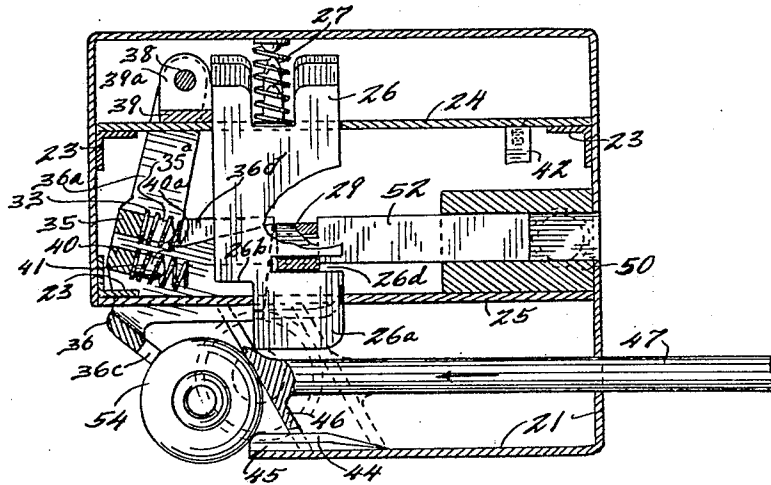


Fig. 7

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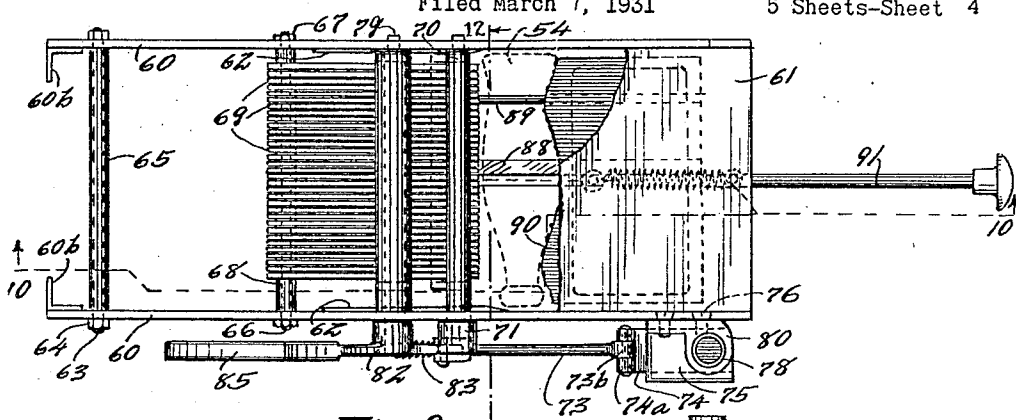


Fig. 8.

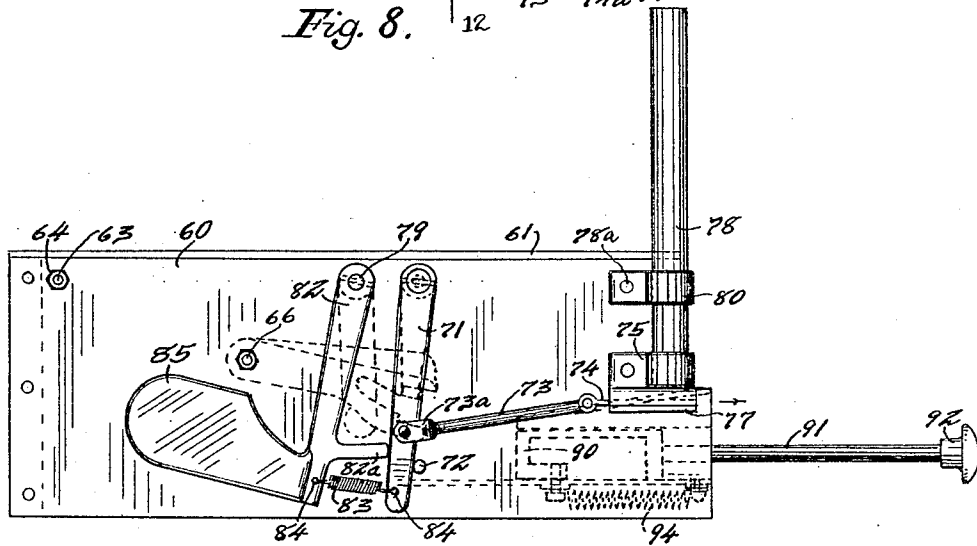


Fig. 9.

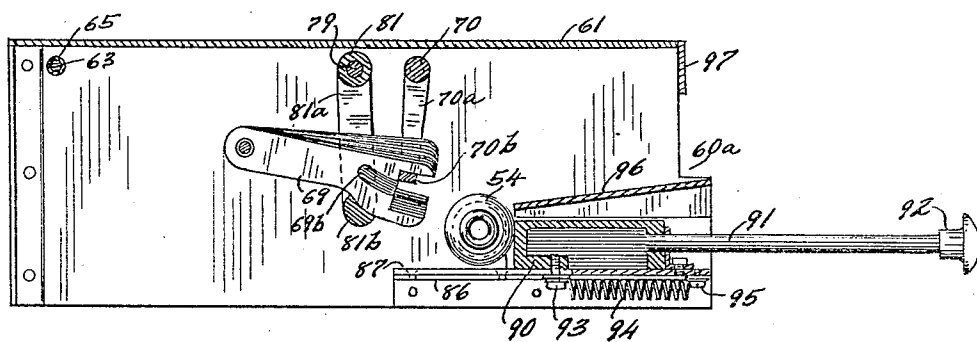


Fig. 10.

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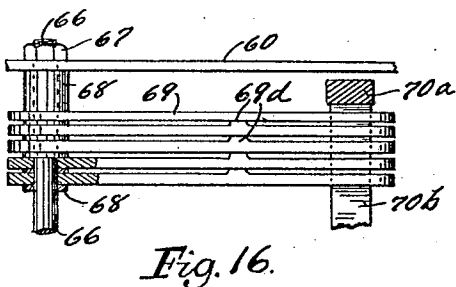
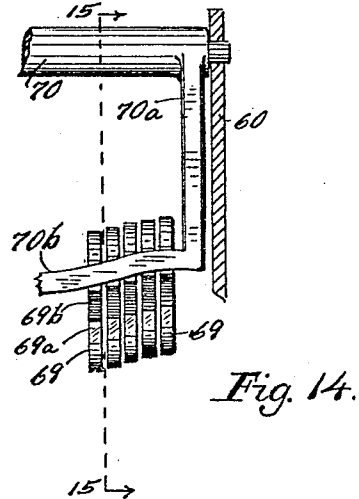
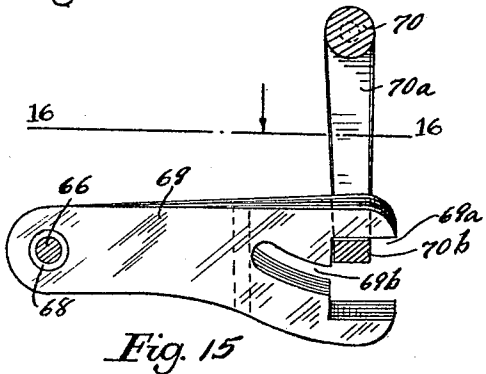
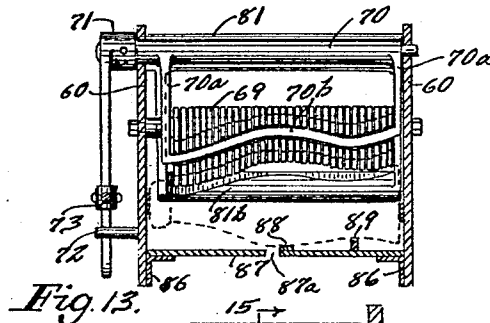
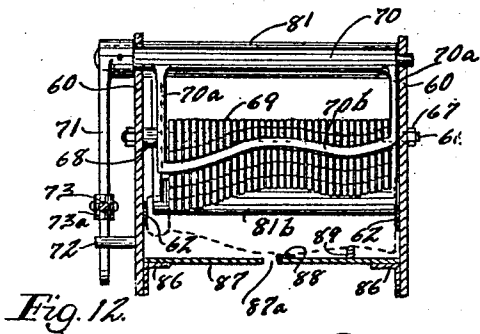
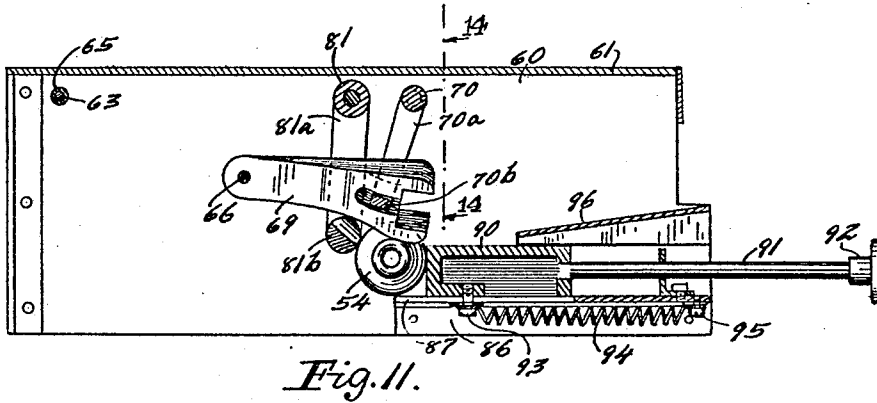
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BOTTLE RECEIVING AND COIN DISPENSING DEVICE

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5 Sheets-Sheet 5



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BOTTLE RECEIVING AND COIN DISPENSING DEVICE

Application filed March 7, 1931. Serial No. 520,808.

This invention relates to a device for receiving used containers such as bottles, and dispensing money therefor. It is now a common practice to have dispensing machines for various merchandise such as bottled goods, and with bottled goods it is desirable and important to have the empty bottles collected after the contents are used. These bottles are quite expensive and a great loss is incurred even if a small portion of the bottles are not recovered.

It is an object of this invention, therefore, to provide a simple and efficient device into which the container or bottle can be placed, which device will return a coin for the empty container or bottle if the container is of the kind desired.

It is a further object of the invention to provide a device which will receive a container or bottle of a certain shape and will return a coin for the bottle, but which cannot be operated if any other kind of a container or bottle is placed therein.

It is another object of the invention to provide a machine for receiving an empty container or bottle and dispensing a coin therefor, comprising a series of movable members with which the bottle engages, said members being moved by the bottle into a definite relation, together with another member which can be moved relatively to said members to operate a coin return device, but which will move relatively to said members only when they are in said definite relation.

It is still another object of the invention to provide a machine for receiving a container or bottle and returning a coin therefor, comprising a series of yielding mounted members, means for supporting a bottle at one side, means for advancing said bottle against said members which engage it at the side opposite said supporting means, said bottle being moved past said members which are disposed transversely of said bottle, said bottle moving said members into a definite relation, together

with a member which is movable relatively to said members only when they are in said definite relation and which operates a coin return means.

It is a further object of the invention to provide a device such as set forth in the preceding paragraph, also comprising a member engageable by said bottle and which is connected with the last mentioned member to move the same relatively to said series of members, means also being provided to return the parts to their initial position.

These and other objects and advantages of the invention will be fully set forth in the following description made in connection with the accompanying drawings, in which like reference characters refer to similar parts throughout the several views and in which:—

Fig. 1 is a plan view of the device;

Fig. 2 is a vertical section taken on line 2—2 of Fig. 1, as indicated by the arrows;

Fig. 3 is a vertical section taken on line 3—3 of Fig. 1, as indicated by the arrows;

Fig. 4 is a vertical section taken on line 4—4 of Fig. 1, as indicated by the arrows;

Fig. 5 is a vertical section taken on line 5—5 of Fig. 4, as indicated by the arrows;

Fig. 6 is a horizontal section taken on line 6—6 of Fig. 2, as indicated by the arrows;

Fig. 7 is a horizontal section taken on line 7—7 of Fig. 5, as indicated by the arrows;

Fig. 8 is a top plan view of a modified form of the device, some parts being broken away;

Fig. 9 is a view in side elevation of the device shown in Fig. 8;

Fig. 10 is a view taken on line 10—10 of Fig. 8, as indicated by the arrows;

Fig. 11 is a view similar to Fig. 10, showing the parts in a different position;

Fig. 12 is a vertical section taken on line 12—12 of Fig. 8, as indicated by the arrows;

Fig. 13 is a view similar to Fig. 12, showing the parts in a different position;

Fig. 14 is a vertical section taken on line

14—14 of Fig. 11, as indicated by the arrow;

Fig. 15 is a vertical section taken on line 15—15 of Fig. 14, as indicated by the arrows; and

Fig. 16 is a horizontal section taken on line 16—16 of Fig. 15, as indicated by the arrow.

Referring to the drawings, particularly Figs. 1 to 7, a device is shown comprising a supporting plate 20 to which is secured an upstanding frame comprising a metal plate 21 having four sides at right angles to each other. Said frame has one side 21a secured to plate 20 by right-angled clips 22 secured by screws 22a to said plate, said clips being secured to frame 21 by welding or any other suitable manner. Frame member 21 has side members 21b and 21c parallel to each other, to which are secured angles 23 of substantially right-angular form, the same being secured to frame 21 by welding or otherwise, and a pair of vertically extending plates 24 and 25 are secured to angle members 23, said plates 24 and 25 extending parallel to the side 21a of the frame 21. The plates 24 and 25 have openings or slots 24a and 25a therein, said openings alining horizontally in the respective plates, and plates 26 extend between and through the plates 24 and 25, passing through the openings 24a and 25a. Plates 26 are generally similar, each having a portion 26a projecting through plate 25 which is narrower than the portion of the plate disposed between said plates 24 and 25, thus forming an offset or shoulder 26b which engages with plate 25. Plates 26 have a slot in their other ends into which projects a pointed tongue 26c integral with plate 26, which tongue is surrounded by a coiled spring 27, the other end of which is secured by a screw 28 to the side of frame 21. The two uppermost openings in plate 24 are of sufficient width to admit the end of a spring 27, said upper springs 27 being somewhat longer than the lower ones. Plates 26 also have therein slots 26d which are narrow and open at the side of each plate toward the side 21b of the frame 21. Said slots 26d are not in vertical alinement in the normal position of the plates 26. A vertically extending bar 29 is provided, normally disposed between plates 26 and the side 21b, said bar being of irregular shape as shown in Fig. 4, the same having a vertically extending portion at its upper end adapted to move and be guided in a slot 30a of an angle bracket 30 secured adjacent the top of plate 25. The lower end of bar 29 is guided in a slot 31a of bar 31 secured by screws 32 to the plate 20. Bar 29 is of a cross section that is receivable in the slots 26d when said slots are in a certain definite relation. Bar 29 has projecting from its side nearest side 21c of plate 21 cylindrical projections 29a over which extend the ends respectively of coiled springs 33, said springs being secured to said projections and extending to and embracing

projections 35a extending from a bar 35. Bar 35 extends between and is secured to the arms 36a of a yoke-like member 36, bar 35 being secured to said arms by the screws 37. Arms 36a are pivoted on a pin 38 which extends through the ears 39a of a bracket 39 secured to the side of plate 24 opposite plate 25. Pin 38 is held in place by a cotter pin 38a extending therethrough at its upper and lower ends. The portion 36b of member 36 extending between the arms 36a remote from the pivot pin 38 is disposed at a slight angle to plate 25, the same extending vertically and having formed in its edge slots 36c horizontally alined with the plates 26. The plates 24 and 25 are provided with a pair of slots 24c and 25c to accommodate the movement of arms 36a. Portion 36b also has projecting therefrom at the side adjacent plates 26, vertically spaced plate-like portions 36d disposed in horizontal planes, the same being disposed between the upper and lower pairs of plates 26 as shown in Fig. 5, and normally engaging at their rear outer ends with the bar 29. Another bar 40 extends between the arms 36a parallel to and spaced a short distance from bar 35 and the same has projecting therefrom cylindrical portions 40a over which extend the ends of a coiled tensile spring 41, the other ends of which extend over cylindrical projections 42a projecting respectively from a bar 42 extending between and secured to plates 24 and 25 by the screws 43. The side 21a of frame 21 has spaced ribs 44 and 45 projecting therefrom and this side and plate 25 form a guideway in which is movable a plunger plate 46 extending vertically and at an angle to plate 25, said plunger plate having projecting from one side a rod 47 which extends through frame 21 and has a knob handle 48 at its outer end. Plate 46 has at its side adjacent plates 26 a plurality of notches or slots 46a adapted to clear the plates 26, and at its other side is also provided with notches or recesses 46b adapted to clear the ribs 44 and 45. A compression coil spring 49 encircles said rod and engages knob 48 at one end and the outer side of the frame 21 at the other end, said spring thus acting to move plunger plate 46 to the position shown in Figs. 1 and 2. A block 50 is secured to plate 25, having a bore 50a therethrough which is counter-bored to receive the lower end of a tube 51 projecting upwardly between plates 24 and 25 and above the top of frame 21. A plate 50b is secured to the bottom of block 50 and said block is slotted at the side to receive a thin plate 52 having a width equal to the diameter of bore 50a, plate 52 being slidable in block 50 and having an opening through which bar 29 passes. A cover plate 53 is secured to the top of frame 21 and the same will have an aperture through which projects tube 51 and an-

other aperture adjacent plunger plate 46 through which a bottle 54 can be dropped. Plate 25 also has adjacent its top an angle strip 55 having one flange projecting horizontally toward side 21a of frame 21, said angle strip having a recess 55a therein to accommodate the entry of bottle 54.

In operation, the parts will occupy the position shown in Figs. 1, 2 and 4 and the tube 51 will have therein a plurality of five cent pieces or coins. When a customer has an empty bottle which he wishes to return, he will place the same down through the opening in plate 53 and the same will occupy the position shown in Fig. 1. The bottle is thus disposed between plate 46 and the plates 26. The bottle has some definite contour as shown in Figs. 1, 2 and 4. While the machine is capable of being designed to handle bottles of various shapes, in the practical embodiment of the machine actually made, it is designed to handle Coca Cola bottles. These bottles are all of one size and have a certain definite shape or contour. When the bottle is placed in the position shown in Fig. 1, the operator then pushes inward on knob 48 and plunger plate 46 engages the bottle 54, moving the same as indicated by the arrow in Fig. 1. The bottle is supported at one side by the side 21a of frame 21 and by the ribs 44 and 45. As the bottle moves along in vertical position, it engages with its side opposite the ribs 44 and 45 the plates 26. These plates, it will be seen, extend transversely of the body and substantially at right angles to its axis. As the bottle passes the plates, they are moved to the right as shown in Figs. 1, 4 and 6 against the tension of springs 27. The plates thus take a certain definite position when the bottle is between them and ribs 44 and 45. As the bottle continues its movement, it engages the free or notched edge of the portion 36b of member 36 and swings this member about the axis of pin 38. Member 36 is connected to bar 29 by the springs 33, and as member 36 swings, it moves bar 29 or pulls said bar along in its guideways in members 30 and 31. When the bottle which the machine is designed to handle is between ribs 44 and 45 and the plates 26, said plates are in a certain definite relation and this relation is such that the slots 26d are disposed in a line coinciding with bar 29 and said bar can move into said slots. At all other times the bar 29 is kept from moving relatively to plates 26. As member 36 swings therefore, it pulls bar 29 into the slots 26d. As bar 29 is thus moved, it moves the small flat bar 52 and this moves from under the tube 51 and bore 50a in the block 50. The stack of five cent pieces or nickles thus moves down so that one nickle is in front of bar 52. When the bottle is pushed on past plates 26, it is freed after passing frame 21 and the ribs 44 and 45 and finds its place with the other bottles 54 which are supported upon

the plate 20. It will be understood that there is quite a large chamber surrounding the frame 21 and the various bottles are simply pushed about in this chamber as they are put into the device. When member 36 was moved by bottle 54, the bar 40 was moved and springs 41 were placed under tension. When the bottle moves free of plates 26 and portion 36b, springs 41 swing member 36 back to the position shown in Figs. 1 and 6 and the portions 36d engage bar 29 and move it back to the position shown in Figs. 1 and 6. As soon as the bar 29 is out of slots 26d, the plates can move to their normal position under the influence of springs 27. When the bottle was pushed past plates 26 and members 36, the operator releases the pressure on knob 48 and spring 49 returns plate 46 and rod 47 to the position shown in Figs. 1 and 2. When rod 29 is moved back by portion 36d in the movement of member 36, the plate 52 is again moved toward the tube 51 and it moves the five-cent piece or nickle in front of it out of the machine at the point shown by the arrow in Fig. 5. Plate 52 moves under the next to the lowest nickle and the machine is again in normal position. The angle strip 55 engages the bottle near its top and assists in holding it in proper vertical position. It will readily be seen that should a person attempt to return some other bottle than a Coca Cola bottle or the particular bottle that the machine is built for, that the openings or slots 26d will not be brought into the proper positions to receive the bar 29. Said bar will strike against the sides of plates 26 and will thus not be moved and the member 52 will thus not be operated and no coin will be returned.

In the device shown in Figs. 8 to 16, a pair of plates 60 are provided, disposed in vertical planes and these have extending between and over the tops thereof a horizontal plate 61. Thin comparatively narrow plates 62 are secured to the inner sides of plates 60 for a purpose to be later described. Angle strips 60b are secured at the rear ends of plates 60 adapted to be attached to other parts of the apparatus not shown. Plates 60 are also connected by a bolt 63 threaded at its ends to receive nuts 64 disposed at the outer sides of plate 60, which bolt passes through a sleeve 65 extending between and engaging the inner sides of plate 60. A bolt 66 threaded at its ends also extends through plates 60, the same having nuts 67 at its ends outside of said plates. Pivotaly mounted on bolt 66 is a plurality of vertically disposed plates 69, these plates being quite close together and having curved under sides as shown in Figs. 9, 10 and 15 and having wide slots 69a at their ends remote from bolt 66, from which slots extends a curved narrower slot 69b. Plates 69 are spaced from each other and from plates 60 by washers 68 and are further spaced adjacent their free ends by vertical

ribs 69d formed integral therewith. A shaft 70 has reduced portions journaled in the plate 60 and said shaft has projecting downwardly therefrom adjacent plates 60 arms 70a illustrated as integral with said shaft, and a bar 70b shown as integral with arms 70a extends between said arms, the same having a sinuous or irregular shape as shown in Figs. 12 and 13. Shaft 70 has secured thereto at the side of one of the plates 60 an arm 71. Arm 71 is adapted to engage a stop pin 72 projecting outward from plate 60 and said arm is also embraced by the forked end 73a of a rod 73 having an apertured end hub 73b disposed between apertured lugs 74a of a slide plate 74. Plate 74 is adapted to slide in a rectangular guideway formed in a block 75 secured to the outer side of plate 60 by screws 76 having countersunk heads at the inner end of plate 60. Block 75 has a rectangular guideway therein closed at its bottom by a plate 77 which preferably also will be positioned from within the plate 60 so as to be non-removable from the outer side of the device. Block 75 is bored with a vertical bore large enough to receive a nickle or five cent piece, and a tube 78 extends upward from said bore having an internal diameter alining with said bore and also adapted to receive nickles or five cent pieces. Tube 78 extends upward and is held in another bracket 80 secured to the outer side of plate 60 by screws 78a also having their heads countersunk at the inner side of plate 60. The sliding plate 74 normally extends beneath the bore in member 75 and beneath tube 78. Another shaft 79 extends between plate 60, having portions journaled therein, which shaft forms a bearing or journal for a bracket 81 having a tubular upper portion through which said shaft passes, and having arms 81a depending adjacent the sides of plates 60 between which extends a bar 81b. Bar 81b is cut away at its upper side to fit and form a support for the plates 69 as shown in Fig. 10. Shaft 79 has pinned thereto at the outer side of plate 60 adjacent arm 71 an arm 82 depending from shaft 79 and being connected to the lower end of arm 71 by a tensile coiled spring 83 having its ends secured to pins 84 in said arms. Arm 82 also has a projecting lug or arm 82a which, as shown in Fig. 9, is in engagement with arm 71. A weight 85 extends upwardly from arm 82 in a direction away from arm 71 as shown in Figs. 8 and 9. A pair of angle strips 86 are secured to the inner sides of plate 60 adjacent their bottoms and one end thereof, having horizontally extending flanges to which is secured a plate 87 extending between plate 60, the same having thereon a pair of spaced ribs 88 and 89 forming supports for the bottle 54 when in a position shown in Fig. 8. A pusher block 90 slides on plate 87 between plate 60, the same having a vertical end surface shaped

to approximate the contour of one side of the bottle 54 as shown in Fig. 8. Block 90 has secured at its outer end a plunger rod 91 projecting outwardly and to the other end of which is secured a knob 92. A bolt 93 is secured centrally to the bottom of block 93, the same moving in a slot 87a in plate 87 and one end of a coiled tensile spring 94 is secured to bolt 93, the other end of which is secured to another bolt 95 extending into the bottom of a plate 87. A downwardly inclined plate 96 extends between plates 60, said plate being highest at its outer end, said plates 60 having rectangular recesses 60a formed in their ends. A plate 97 extends downwardly at the ends of plate 60 and between the same, thus forming a space between its edge and plate 96 adapted to receive a bottle 54.

In operation a stack of nickles or five cent pieces will be placed in the tube 78 and will pass down into the bore in block 75 and rest on the slide 74. When a bottle is to be returned the operator places the same on the outer end of plate 96 and it rolls down on said plate and drops down onto plate 87 in the position shown in Fig. 10. The operator now presses in on knob 92 and pusher block 90 engages bottle 54 and pushes the same under the plates 69. The bottle is guided at its end portions by the plates 62 and the same rests at its under side on the ribs 88 and 89. As the bottle is pushed into engagement with plates 69, it lifts or cams said plates upwardly so that the lower edges of the plates conform to the shape of the bottle. As the bottle continues its advance, it engages member 81b as shown in Fig. 11 and swings said member rearwardly about shaft 79. This rotates shaft 79 and swings arm 82 which is secured thereto, said arm swinging in a clockwise direction. As arm 82 swings, it tends to swing arm 71 in a clockwise direction due to the connection therewith through the spring 83. Arm 71 can swing only when the bar 70b can pass into the slots 69b. When the proper bottle is placed in the machine and the plates 69 located as described, the slots 69b are brought into a certain definite relation, which is such that the bar 70b can move thereinto as shown in Fig. 12. At all other times bar 70b will strike the shoulders formed at the bottom of slots 69a and the plates 69 will thus act as a stop or lock preventing movement of arm 70b. When the bottle 54, therefore, is in the position shown in Fig. 11, arm 82 can swing arm 71 with it and bar 70b moves into the slots 69b as shown in Fig. 11. This movement of arm 71 pulls on the link 73 and slide 74 is moved from beneath the bore in block 75 and the column of nickles in said bar and tube 78 drop down so that a nickle becomes disposed in front of the slide 74. The bottle movement is continued and the bottle eventually is pushed past the member

81b and drops down between the plates 60 into a suitable receptacle (not shown) which is adapted to receive the bottles. When the bottle passes member 81, it is freed and spring 94 retracts the pushing block 90 and rod 91, moving them to the position shown in Figs. 8, 9 and 10. Weight 85 swings member 81 back to normal position and arm 82 through its projecting lug 82a engages arm 71, swinging it back to normal position against stop 72. This movement pushes on link 73 and slide 74 is pushed forwardly to its normal position, which movement pushes out the nickle or coin in front of said plunger out of the machine at the point indicated by the arrow in Fig. 9. All parts are thus brought again to normal position and the operator has received five cents for the empty bottle. Should another bottle than that which the machine is designed to receive, be placed in the machine, it will be pushed rearwardly by the pusher bar 90 and will move under the plates 69 and swing member 81. Plate 69, however, will not be brought into position so that bar 70b can move into the slots 69b and said bar will engage the shoulders at the bottom of slots 69a in one or more of the plates 69. Instead of moving arm 71, therefore, arm 82 will merely distend spring 83 until the bottle has been pushed past member 81b and spring 83 will then, together with the arm 85 return arm 82 to normal position as shown in Fig. 9, without moving arm 71. Since arm 71 is not moved, the link 73 and slide 74 are not operated and no coin is returned. While the machine can be designed to accommodate bottles of different shapes, in practice the machine has been designed to return money for Coca Cola bottles, and as this bottle has a distinctive shape, no bottle of other shape will actuate the machine to return a coin.

The cam members 44 and 45 used in the modification shown in Figs. 1 to 7 and cam members 88 and 89 shown in Figs. 8 to 16, are quite important. These act to accurately gauge the bottle, and also to throw a foreign bottle out of position for operating the yielding plates with the slots therein. Some foreign bottle might be quite close in shape to the bottle for which the machine is designed. If such a bottle is placed in the machine, the cams 88 and 89 will tilt the bottle and throw the upper portion so far out of position, that there will be no chance of it operating the yielding plates to bring the slots into the proper relation to permit movement of the member which operates the coin device.

From the above description it is seen that applicant has provided a very simple and efficient machine which will receive a container of irregular shape such as a bottle containing a beverage, and will return a

coin for said bottle. The machine is constructed and arranged to receive only one certain container or bottle, and as fully described above, if a bottle of a different shape is placed therein, no coin will be returned. The device is simple and rugged in structure and needs no attention for maintenance. The same has been actually demonstrated in actual practice and found to be very successful and efficient.

It will, of course, be understood that various changes may be made in the form, details, arrangement and proportions of the parts, without departing from the scope of applicant's invention, which generally stated, consists in a device capable of carrying out the objects above set forth, in the parts and combinations of parts disclosed and defined in the appended claims.

What is claimed is:—

1. A mechanism device for handling empty containers of special shapes such as a bottle of general cylindrical shape, having in combination, a series of members engageable by said cylindrical container and movable to conform to the shape of said cylindrical container to bring said members into a definite relation, means for moving said cylindrical container into engagement with said members with said members extending transversely of the axis of said container, an operating device, an actuating means for said operating device movable relatively to said members only when they are in said definite relation, to actuate said operating device and means for moving said actuating means.

2. A coin return device for empty containers of special shapes such as a bottle, having in combination, a series of yieldingly mounted members adapted to engage said container, rigid means for engaging said container at the opposite side from said members, means for pushing a container between said rigid means and said members to move said series of members into a definite relation, said members being fixed against movement with said container, a member movable relatively to said first mentioned members only when they are in said definite relation and engageable with said members to be stopped thereby if they are not in said definite relation, means for moving said last mentioned member and a coin moving means actuated by said last mentioned member.

3. A coin return device for empty containers of special shapes such as a bottle, having in combination, a series of yieldingly mounted movable members, means for supporting a container to move into engagement with said members with said members extending transversely of said container, said members being movable into definite relation by engagement with said container as it moves

therepast, means for moving said container, a movable member engageable by said container, a second member movable relatively to said first mentioned members only when they are in said definite relation, and means connecting said first mentioned member and said second member to move the latter, and a coin moving plunger connected to said second member to be operated thereby.

4. The structure set forth in claim 3, said first mentioned means including ribs spaced longitudinally of said container.

5. A coin return device for empty containers of special shapes such as a bottle, having in combination, a casing adapted to receive a container or bottle, a plunger for advancing said container in said casing, a plurality of spaced movable members engaged by said container, means for supporting said container in engagement with said members, said members being constructed and arranged to be moved by said container into a definite relation and having slots therein, a bar extending transversely of said members and being movable into said slots when said members are in said definite relation, a member engaged and movable by the movement of said bottle connected to said bar by yielding means, and a coin operating member secured to said bar whereby if the proper container is placed in said device, said members will be moved into said definite relation to permit movement of said bar into said slots, and said coin actuating member will be operated, but if a foreign container is placed in said machine, said members will not be moved to permit movement of said bar into said slots and said member connected to said bar will merely swing and distend said yielding means so that said coin actuating member will not be moved.

6. A coin return device for empty containers of special shapes such as a bottle, having in combination, a casing adapted to receive a container or bottle of definite irregular shape, a coin receiving tube, a flat plunger movable transversely at the bottom of said tube on which said coins rest, said plunger being of the thickness of a coin, means for advancing said bottle in said casing, means engaged by said bottle and moved into a definite relation thereby, a member movable relatively to said means only when the same are in said definite relation, said member being connected to said plunger, and means moved by the bottle yieldingly connected to said member, whereby if the bottle is a proper one for said machine, said member will be moved and said plunger moved from beneath said column of coins, and means for subsequently retracting said member and plunger whereby a coin dropping in front of said plunger will be ejected from said device.

7. A coin return device for empty containers of special shapes such as a bottle

having in combination, a casing having an opening for receiving a container such as a bottle of a particular shape, a plunger having means extending without said casing for advancing said bottle in said casing, a series of members engaged by said bottle and movable to be brought into a definite relation thereby, a member movable relatively to said plates by movement of said plunger only when said plates are in such definite relation and engageable with said plates to be stopped thereby when said plates are not in said definite relation, a tube containing a column of coins, a flat plunger connected to said last mentioned member and supporting said column of coins and having a thickness of one coin, and adapted to be drawn from beneath said coins when said member is moved by movement of said plunger, a member for moving said last mentioned member and means for retracting said last mentioned member and plunger to eject a coin which drops in front of the same when it is moved.

8. A coin return device for empty containers of special shapes such as a bottle, having in combination, a casing having an opening for receiving an irregular rigid container such as a bottle, means extending to the outer side of said casing adapted to be operated for advancing said bottle in said casing, a series of plates engageable by said bottle and movable thereby, said plates each having a slot therein, said bottle being movable past said plates to move said plates into a certain definite relation, a bar extending transversely of said plates and adapted to move into said slots when said plates are in said definite relation, movable means engaged by said bottle after engaging said plates, a yielding connection between said movable means and said bar, a coin operating plunger connected to said bar, and means for returning said plates, movable means and said bar to normal position.

9. A coin return device for empty containers of special shapes such as a bottle, having in combination, a casing having an opening for receiving a rigid irregular container such as a bottle, guiding means for said bottle, a series of spaced plates extending transversely of said bottle engageable by said bottle as it is advanced to be moved into a definite relation thereby, means extending to the outer side of said casing for advancing said bottle, a swinging member engageable by said bottle after it has engaged said plates, said plates each having a recess therein, a bar extending transversely of said plates and movable into said recesses when said plates are in said certain definite relation, a yielding connection between said swinging member and said bar, means for returning said swinging member and bar to normal position after said bottle has been advanced therepast, and a coin operating plunger connected

to said bar to be reciprocated thereby to eject a coin.

10. A coin return device for empty containers of special shapes such as a bottle, having in combination, a series of members engageable by said container and movable to conform to the shape of said container to bring said members into a definite relation, means for moving said container into engagement with said members, said members being fixed against movement in the direction of movement of said container, a member movable relatively to said series of members when they are in said definite relation, but engageable therewith and held stationary thereby when said members are in any other relation, means for moving said last mentioned member and a coin dispensing means connected to said last mentioned member.

11. A device for receiving an empty container of special shape such as a bottle, having in combination, a casing having an opening for receiving an irregular rigid container such as a bottle, means extending to the outer side of said casing adapted to be operated for advancing said bottle in said casing, a series of members engageable by said container substantially aligned in a direction at right angles to the movement of said container and movable to conform to the shape of said container to bring said members into a definite relation, and a supporting means for said bottle engaging said bottle at spaced points and adapted to so position a foreign bottle that it cannot bring said members into said definite relation.

12. A device for receiving empty containers of special shapes such as a bottle, having in combination, means for moving a bottle, a series of members engageable by one side of said bottle and arranged side by side in a direction transverse to the direction of movement of said bottle and movable thereby into a certain definite position, and a member movable in a path intersecting said members and movable relatively to said means only when in said definite position.

13. A mechanism for receiving empty containers of particular form such as bottles having in combination, a series of members engageable by said container along the surface thereof, arranged in a line transverse to the movement of said container, and movable by said container into a definite relation, an actuating member movable in a certain relation to said members only when in said definite relation and engageable with said members to be stopped thereby when said members are not in said certain relation, means for moving said container into engagement with said series of members, and means for moving said actuating member.

14. A mechanism adapted to be operated by a container such as a bottle having a particular contour, comprising a series of mov-

able members adapted to be engaged by the surface of said container and be moved into a certain definite relation thereby, said members being fixed against movement with said container, and a member movable relatively to said series of members only when they are in said definite relation and engageable therewith to be stopped thereby when said members are not in said definite relation, means for moving said container into engagement with said series of members, said last mentioned member forming an actuating means.

15. A mechanism for handling a container such as a bottle, having in combination, a group of members adapted to be moved by a container as it is moved therepast, said members being arranged side by side in a direction substantially at right angles to the direction of movement of said container, a second member adjacent said group and movable in a path to engage one or more of said members except when they are moved into a certain relation by engagement with said container, a device to be operated, means moved by said second member for operating said device, and means for moving said container and operating said second member.

16. A coin return device for empty containers of particular shape such as bottles, having in combination, a series of movable members, means for supporting a container for movement into engagement with and past said members, said members being disposed to extend transversely of said container, means for pushing said container into engagement with said members to bring said members into definite relation, a second member movable relatively to said series of members only when said members are in said definite relation, a coin handling means, a connection between said second member and coin handling means, and means actuated by said first mentioned means for moving said second member by a continued movement of said bottle.

17. A coin return device for empty containers such as bottles of a particular shape, having in combination, means for moving a bottle, a series of plates arranged side by side in a direction transverse to said movement, said plates being engageable by the side of said bottle and moved transversely of said bottle into a definite relation in accordance with the contour of said bottle, each of said plates having a slot therein, said slots being aligned when said plates are in said definite relation, a member movable into said slots when in such alinement but engageable with said plates to be stopped thereby when said plates are not in said relation with said slots in alinement, and an operative device actuated by movement of said last mentioned member.

18. A coin return device for empty con-

ainers of particular shape such as bottles, having in combination, means for moving a container, a series of plates arranged side by side in a direction transverse to the movement of said container, said plates being engaged by said container and moved into a certain definite relation thereby, a second member constructed and arranged to be movable relatively to said plates only when they are in said definite relation, and means for moving said member.

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