C. V. & C. J. CASE & F. E. PARKER.

DISPENSING DEVICE.

APPLICATION FILED SEPT. 2, 1911.

1,027,177. **Patented May 21, 1912.**

3 SHEETS—SHEET 1.

Fig. 1.

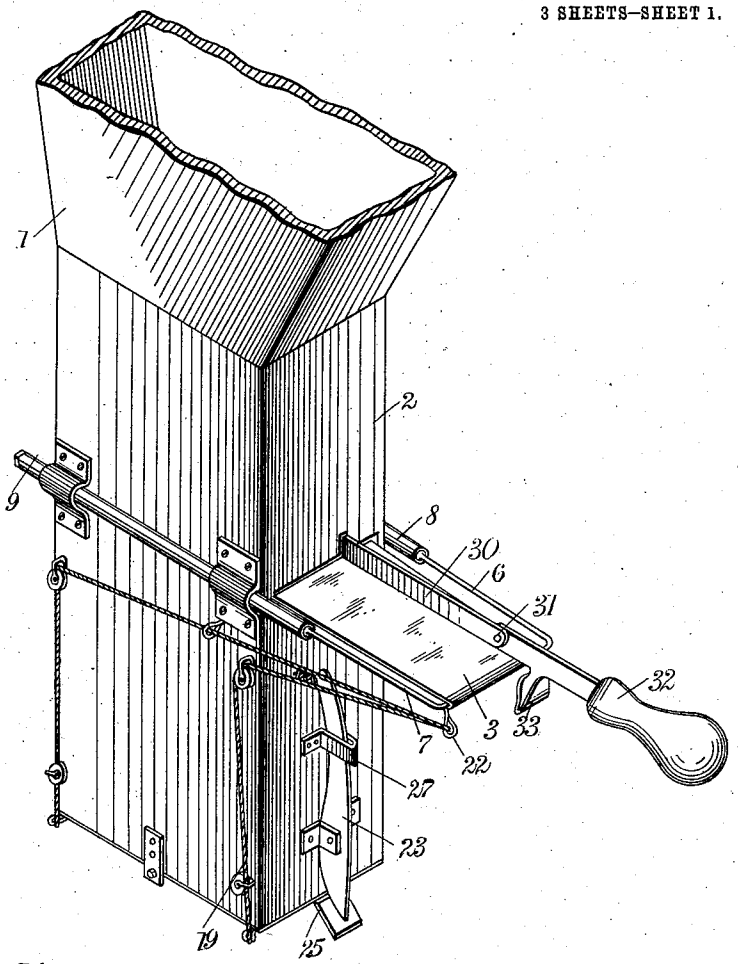
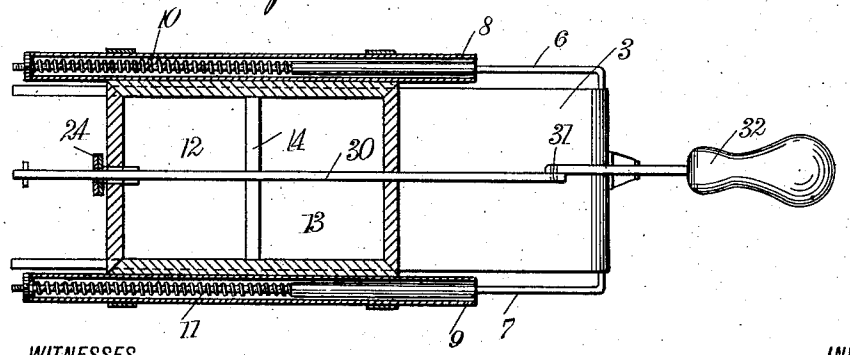


Fig. 2.



WITNESSES

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3 SHEETS—SHEET 2.

Fig. 3.

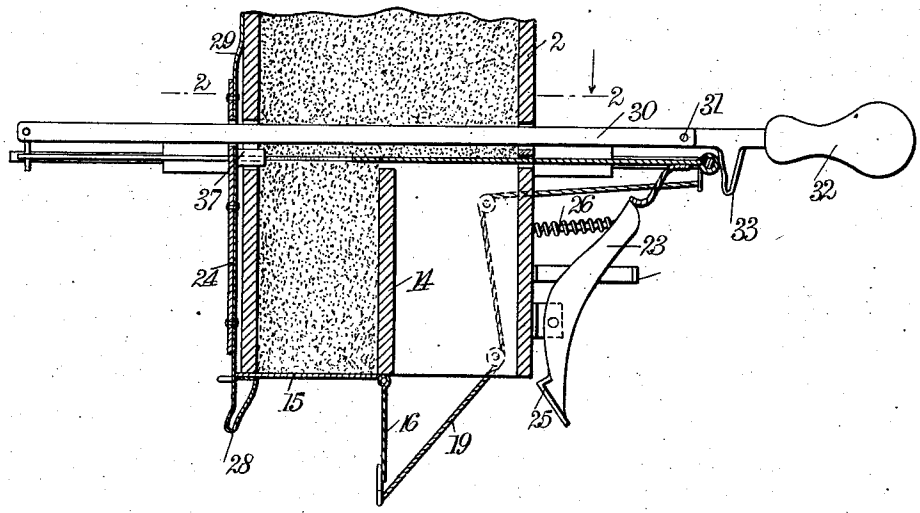


Fig. 4.

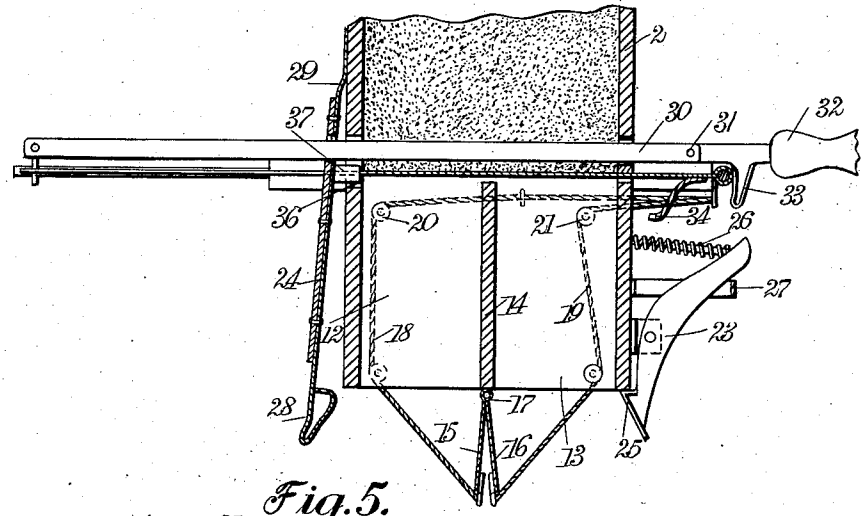
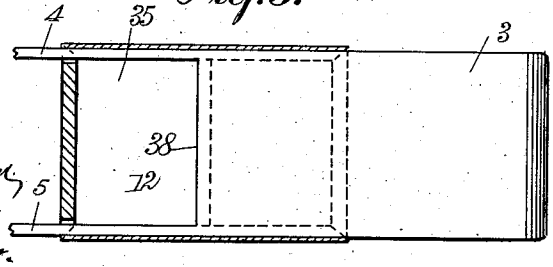


Fig. 5.



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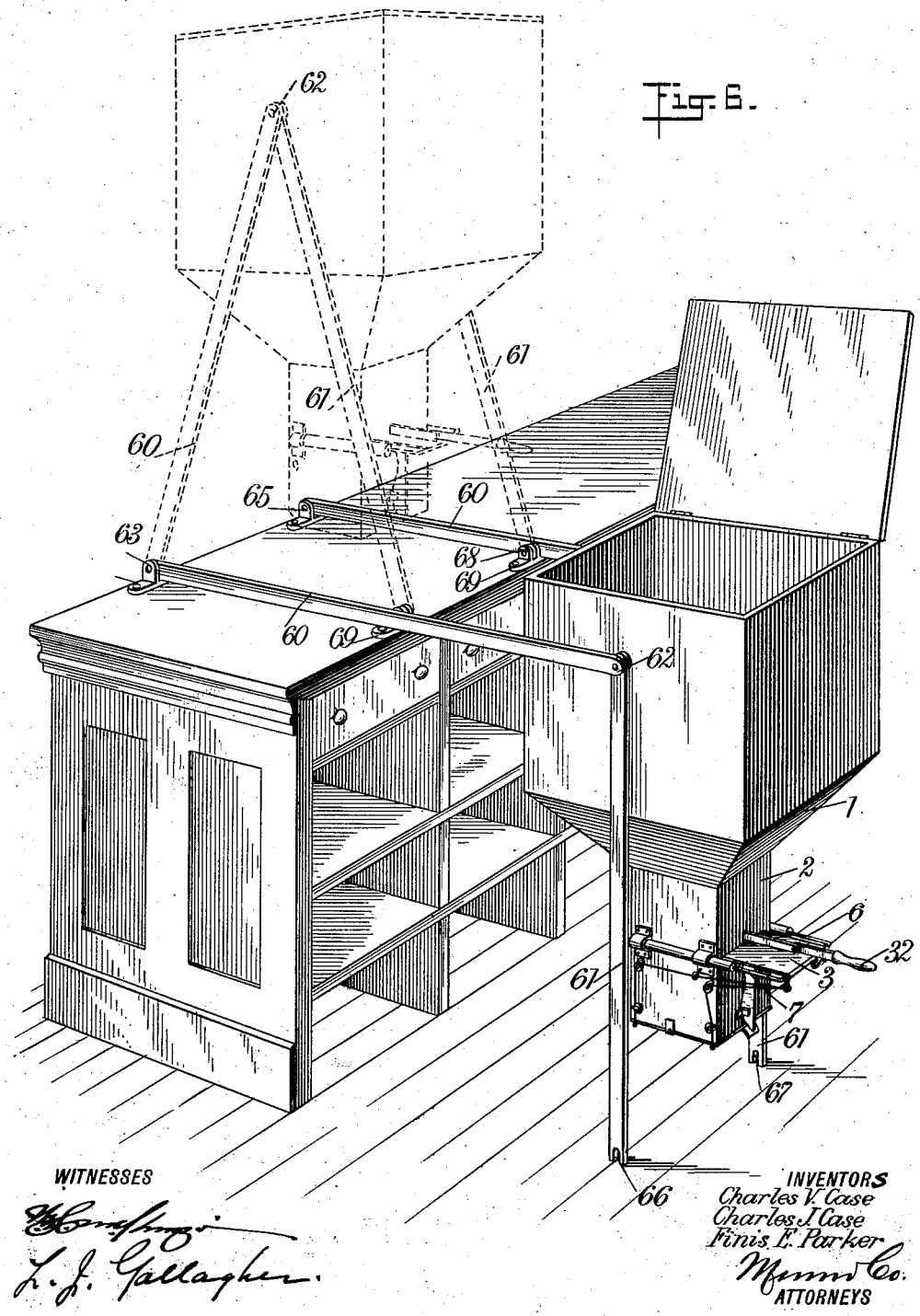
3 SHEETS—SHEET 3.

Fig. 6.



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CHARLES V. CASE AND CHARLES J. CASE, OF BARTOW, AND FINIS E. PARKER, OF ARCADIA, FLORIDA.

DISPENSING DEVICE.

1,027,177. Specification of Letters Patent. Patented May 21, 1912.

Application filed September 2, 1911. Serial No. 647,431.

To all whom it may concern:

Be it known that we, CHARLES V. CASE and CHARLES J. CASE, citizens of the United States, and residents of Bartow, in the county of Polk and State of Florida, and FINIS E. PARKER, a citizen of the United States, and a resident of Arcadia, in the county of De Soto and State of Florida, have invented a new and Improved Dispensing Device, of which the following is a full, clear, and exact description.

Our invention relates generally to dispensing devices and more particularly it involves an improved form of hopper and spout, especially adapted for grocers' use.

The object of our invention is to provide an improved form of hopper and spout adapted for attachment to any suitable bin and provided with means whereby a determined amount of material contained in the bin may be dispensed.

A further object of the invention is to provide a sanitary bin having automatic means for dispensing the material contained therein, the construction of the parts being such that the material is kept out of contact with the air and moisture, the material being dispensed in such a way that the hands do not necessarily come in contact therewith.

A further object of our invention is to provide a sanitary bin having improved means for mounting it on the counter, the construction and arrangement being such that the bin may be brought into another position whereby the cleaning and filling thereof are facilitated.

A still further object of the invention is to provide a device of the class described, which shall consist of few parts and be efficient in operation and which may be produced at a low cost.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference denote corresponding parts in all the views, and in which—

Figure 1 is a perspective view of the hopper and spout in closed position; Fig. 2 is a horizontal sectional view thereof, on the line 2—2 of Fig. 3; Fig. 3 is a partial vertical sectional view, showing one of the compartments in the spout empty; Fig. 4 is a similar view showing each of the compartments in the spout empty; Fig. 5 is a horizontal sectional view, showing the detail of the valve plate, and Fig. 6 is a perspective view, showing the bin provided with a spout mounted in position on a counter.

The hopper 1 is designed to be attached to any suitable bin or receptacle, the spout 2 extending from the hopper and being adapted to terminate adjacent a grocer's counter or other suitable support; the whole is suitably supported by any desirable means, such as brackets or arms to be later described. Extending transversely of the spout and approximately in a central plane thereof is a movable valve plate 3 having arms 4, 5, at one end which serve as guiding means, opposite sides of the valve at the other end being provided with longitudinally extending arms 6, 7, entering suitable spring devices, such as cylinders 8, 9, having helical springs 10, 11, therein; these springs are in engagement with the ends of the members 8, 9, and with the arms 6, 7, whereby when this plate is moved transversely of the spout, the springs will be compressed and when the pressure is released, the plate tending to return to the position shown in Fig. 1.

The lower portion of the spout is divided into two compartments 12, 13, by means of the vertically extending partition 14, the upper end of this partition extending closely adjacent the lower side of the valve plate 3. Each of the compartments is closed by a suitable cover 15, 16, pivotally supported at 17, to the bottom of the partition 14, each of the covers being operated by cords or wires 18, 19 extending around suitable pulleys 20, 21, and having their free ends in engagement with a suitable hook 22 at the outer end of the valve plate 3.

Each of the covers 15, 16 is retained in closed position by means of catches 23, 24; the catch 23 has a projecting end 25 adapted to engage the under side of the cover 16, as shown in Fig. 1, in order to hold it in closed position, a suitable spring 26 engaging the upper end of this catch to hold it in such position, the catch being contained within a suitable guide 27, carried on the outside of the spout. The other

catch 24 is provided with a hooked end 28 adapted to engage the cover 15 to keep it in closed position, as shown in Fig. 3; this catch is resiliently mounted by means of a flexible plate 29 engaging the outside of the spout.

From what has been described it will be seen that movement of the catches to the position shown in Fig. 4 will allow the covers 15, 16, to drop, thereby permitting whatever material is contained in each of the compartments 12, 13, to fall into any suitable receptacle. The movement of these catches is effected as follows. Extending transversely of the spout and through suitable openings in the side thereof is a bar 30 pivotally supported at 31 to a suitable handle 32; this bar is adapted for movement within the spout from the position shown in Figs. 1 and 2 to that shown in Figs. 3 and 4, by pushing on the handle end thereof; the lower end of the handle is provided with a lug 33 adapted to come into engagement with the end of the valve plate 3 whereby this plate may be moved by movement of the rod 30. The lower side of the plate 3 is provided with a downwardly extending portion 34 adapted to engage the upper end of the catch 23 in its movement toward the spout in order to move the upper end of the catch, thereby bringing the lower end thereof out of engagement with the cover 16 and permitting the same to fall, as shown particularly in Fig. 3. The catch 24 is operated by movement of the plate 3 which will be hereafter described in connection with this plate.

The plate 3 is provided with an opening 35 of substantially the same area as the cross section of the spout, this opening registering with the interior of the spout when the plate is in the position shown in Fig. 1 and the covers 15, 16 are closed, thereby permitting the material contained in the hopper to fall into the spout; by moving the handle 32 the plate 3 may be moved, thereby bringing a portion of the opening 35 therein out of register with the top of the compartment 13, and after this plate has been moved a distance equal to the width of the compartment 13, the member 34 on the lower side of the plate will engage the catch 23, thereby permitting the cover 16 to drop and allowing the contents of the compartment 13 to fall out; further movement of the handle 32 will carry the opening in the plate beyond the top of the compartment 12 and when this is accomplished the edge of the plate 3 engages a plug 37 contained in a suitable opening 36 in the back of the spout, whereby the plug is moved into engagement with the catch 24, thereby bringing it into the position shown in Fig. 4 and allowing the cover 15 to drop, the contents within the spout 12 falling out; it is to be noted, however, that the material is retained within the upper part of the spout by reason of the plate 3 which extends across the spout.

Releasing the handle 32 will permit the springs 10, 11, which are in engagement with the rods 6, 7, carried by the plate 3, to bring this plate back with the opening therein in register with the top of the compartments and permitting the material in the spout to fall into these compartments, the covers 15, 16 having been closed by reason of the cords or wires 18, 19, connected thereto and to one end of the plate 3. With the parts in this position the compartments are again filled with whatever material is contained in the hopper and spout, and the device is ready to be operated for dispensing further amounts.

We have stated earlier in this specification that the device may be suitably supported in position by any suitable means; in Fig. 6 we have illustrated the preferred means for mounting it on a counter, the construction and arrangement being such that the device may be lowered from the position shown in dotted lines, which is the operative position, into the full line position, in order to permit cleaning of the bin and filling thereof. A plurality of uprights 60, 61 are pivotally secured at 62 to the opposite sides of the bin by any suitable means, the lower ends of the uprights 60 being pivotally secured at 63 to suitable means, such as straps or angle irons 64 and carried by the top of the counter. The other uprights 61 are each provided at their forward ends with a recess 66, 67, to engage a suitable transversely extending pin 68, positioned on the bearing member 69 on the top of the counter. As shown in dotted lines, the bin, hopper and spout are pivotally mounted on these uprights, whereby they may always assume a vertical position and be movable into a lower position by merely lifting the uprights 61 a small distance out of engagement with the pins 68, and then allowing them to be positioned on the floor, the uprights 60 then being adjacent the top of the counter. When the bin is in this removed position, the cover may be raised or taken off, thereby making the interior accessible, and in position for cleaning or refilling.

From the above description taken in connection with the accompanying drawings, it will be noted that we have provided a dispensing device provided with suitable means for mounting it in position on a grocer's counter, the construction and arrangement of parts as a whole being such that it may be easily secured in position, and when put in use will fulfil the purposes for which it was designed in a cleanly and efficient manner. Of course, various changes may be made in the size and shape of the different parts, in order to adapt the device to dispensing dif-

ferent materials, without departing from the spirit and scope of the invention, as defined in the following claims.

Having thus described our invention, we claim as new, and desire to secure by Letters Patent:—

1. In a device of the class described, a spout, a plate having an opening therein positioned intermediate the ends of the spout and movable therein, the portion of the spout below the plate being divided into a plurality of compartments which normally communicate with the portion of the spout above the plate, together with means for moving the plate whereby the communication between one of the compartments and the said portion of the spout above the plate may be closed.

2. In a device of the class described, a spout, a plate having an opening therein positioned intermediate the ends of the spout and movable therein, the said opening being of substantially the same area as the cross section of the spout, a portion of the plate having the same area extending without the spout, the portion of the spout below the plate being divided into a plurality of compartments which normally communicate with the portion of the spout above the plate through the said opening, together with means for moving the plate whereby the portion thereof which is normally outside of the spout will be moved therein whereby the communication between one of the compartments and the said portion of the spout above the plate may be closed.

3. In a device of the class described, a spout, a plate having an opening therein positioned intermediate the ends of the spout and movable therein, the portion of the spout below the plate being divided into a plurality of compartments which normally communicate with the portion of the spout above the plate through the opening, movable covers at the bottom of the spout adjacent the compartments, means for holding the covers closed, means for moving the plate whereby the communication between one of the compartments and the said portion of the spout above the plate may be closed, together with other means actuated by the movement of the plate for releasing one of the said covers whereby when the plate is moved the cover may be opened.

4. In a device of the class described a spout, a plate having an opening therein positioned intermediate the ends of the spout and movable therein, the portion of the spout below the plate being divided into a plurality of compartments which normally communicate with the portion of the spout above the plate through the opening therein, a cover at the bottom of each compartment, independent means for keeping each cover closed, means for moving the plate whereby the communication between one of the compartments and the said portion of the spout above the plate may be closed, together with other means actuated by the plate whereby, when the plate is moved inwardly a certain distance, one of the covers may be opened and, when the plate is moved a further distance, communication between the other compartment and the portion of the spout above the plate may be closed, and the other cover opened.

5. In a device of the class described a spout, a plate having an opening therein positioned intermediate the ends of the spout and movable therein, the area of the opening being substantially equal to the cross sectional area of the spout, the plate normally extending without the spout, the portion of the spout below the plate being provided with a partition whereby a plurality of compartments are formed which normally communicate with the portion above the plate through the said opening, means for moving the said plate whereby the portion normally without the spout may close the communication between one of or both compartments and the upper portion of the spout, a cover at the bottom of each compartment, means for holding each cover in closed position, together with other means actuated by the movement of the plate whereby, when the plate has been moved inwardly a certain distance, one of the covers will be opened and, when the plate has been moved the full distance, the second cover will be opened.

6. In a device of the class described, a spout, a plate having an opening therein positioned intermediate the ends of the spout and movable therein, the opening in the plate being substantially equal in area to the cross section of the spout, a portion of the said plate normally extending without the spout, a partition within the spout and below the said plate whereby a plurality of compartments are formed which communicate with the upper portion of the spout through the said opening, covers hinged to the bottom of the spout and closing the said compartments, catches for keeping the covers closed, means for moving the plate whereby the portion thereof normally outside the spout may enter therein, thereby closing the communication between one of or both of the compartments and the upper portion of the spout, and other means actuated by movement of the plate whereby one of the covers will be opened on a given movement of the plate and both of the covers will be opened on the full movement of the plate.

7. In a device of the class described, a spout, a plate having an opening therein positioned intermediate the ends of the spout and movable therein, the opening in

the plate being equal in area to the cross sectional area of the spout, a portion of the plate extending without the spout, a partition within the spout and below the plate whereby two compartments are formed, a plurality of covers carried by the spout at the bottom thereof for closing the compartments, catches for keeping the covers in closed position, cords attached to the covers and engaging the said plate whereby, when the plate closes communication between the compartments and the upper portion of the spout, and the covers are opened, a full movement of the plate will open communication between both compartments and the upper portion of the spout and will bring the covers to closed position through the medium of the said cords.

8. In a device of the class described, a spout, a plate having an opening therein positioned intermediate the ends of the spout and movable therein, the portion of the spout below the plate being divided into a plurality of compartments which normally communicate with the portion of the spout above the plate, means for moving the plate whereby the communication between one of the compartments and the said portion of the spout above the plate may be closed, covers for closing the lower ends of the compartments, independent means for maintaining the covers in closed position, means whereby one of the covers will be opened when the plate is moved a given distance, and other means whereby the other cover will be opened when the plate is moved a further distance.

9. A device of the class described comprising a spout, a plate having an opening therein positioned intermediate the ends of the spout and movable therein, the said opening being of substantially the same area as the cross section of the spout, a portion of the plate having substantially the same area as the opening extending without the spout, the portion of the spout below the plate being divided into a plurality of compartments which normally communicate with the portions of the spout above the plate through the said opening, means for moving the plate whereby the portion thereof which is normally outside of the spout will be moved therein in order to close the communication between one of the compartments and the said portion of the spout above that compartment, further movement of the plate closing the communication between the other compartment and the portion of the spout above that compartment.

10. In a device of the class described, a spout, a plate having an opening therein positioned intermediate the ends of the spout and movable therein, the said opening being of substantially the same area as the cross section of the spout, a portion of the plate having substantially the same area as the said opening extending without the spout, the portion of the spout below the plate being divided into a plurality of compartments which normally communicate with the portion of the spout above the plate through the said opening, covers movably secured in position for closing the lower ends of the said compartments, independent means for maintaining the covers in closed position, means whereby the plate may be moved in order to bring the portion thereof normally outside of the spout into the spout, whereby the communication between one of the compartments and the portion of the spout above the said compartment may be closed, there being suitable means carried by the plate for engagement with the means holding the cover of the said compartment closed whereby that cover will be opened, further movement of the plate closing the communication between the other compartment and the portion of the spout above the plate, there being other means carried by the plate for engagement with the means retaining the second cover in closed position whereby, after such movement, the second cover will be opened, together with suitable members engaging each of the covers and in operative relation with the plate whereby, when the plate is returned to normal position, the covers will be brought to closed position.

11. In a device of the class described, a spout, a plate having an opening therein positioned intermediate the ends of the spout and movable therein, the opening in the plate being substantially equal in area to the cross section of the spout, a portion of the said plate normally extending without the spout, a partition within the spout and below the plate whereby a plurality of compartments are formed which communicate with the upper portion of the spout through the said opening in the plate, covers hinged to the bottom of the spout and closing the said compartments, catches for keeping the covers closed, means carried by the plate whereby, when the portion thereof normally outside the spout is moved into the spout, one of the covers will be opened, the compartment above the said open cover being out of communication with the space above the plate, other means carried by the plate whereby, when the plate is given a further movement, the other cover will be opened, the said plate being then positioned within the spout and the second compartment being out of communication with the portion of the spout above the plate, each of the said means being adapted for engagement with the catches which retain the covers in closed position, together with a

plurality of cords engaging the covers and also in movable relation with the said plate whereby, when the plate is returned to normal position, the covers will be closed and the said compartments be again placed in communication with the upper portion of the spout.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

CHARLES V. CASE.
CHARLES J. CASE.
FINIS E. PARKER.

Witnesses:
FLORENCE HEUSCHEN,
JOHN W. BURTON.