Aug. 12, 1958 M. J. BRASILE ET AL 2,847,145

DISPENSING MECHANISM

Filed Sept. 14, 1954

3 Sheets-Sheet 1

Fig. 1.

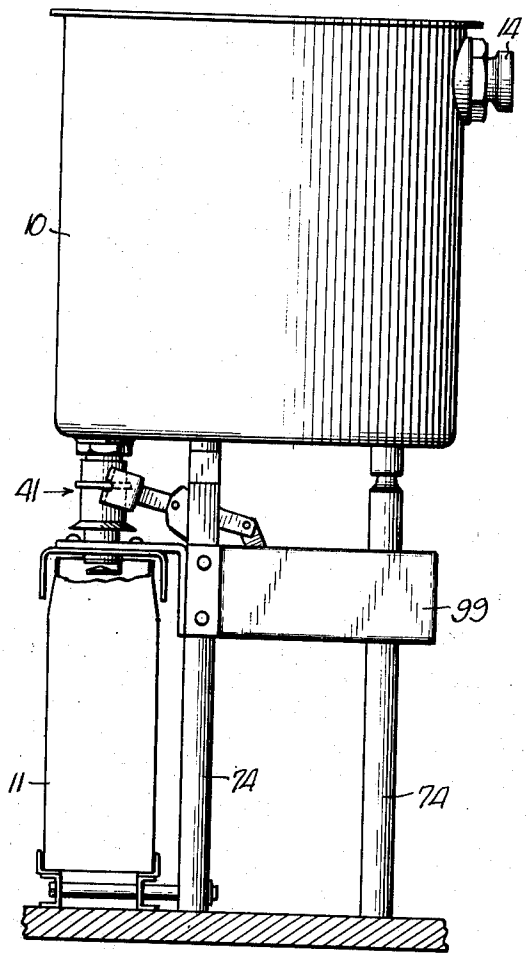
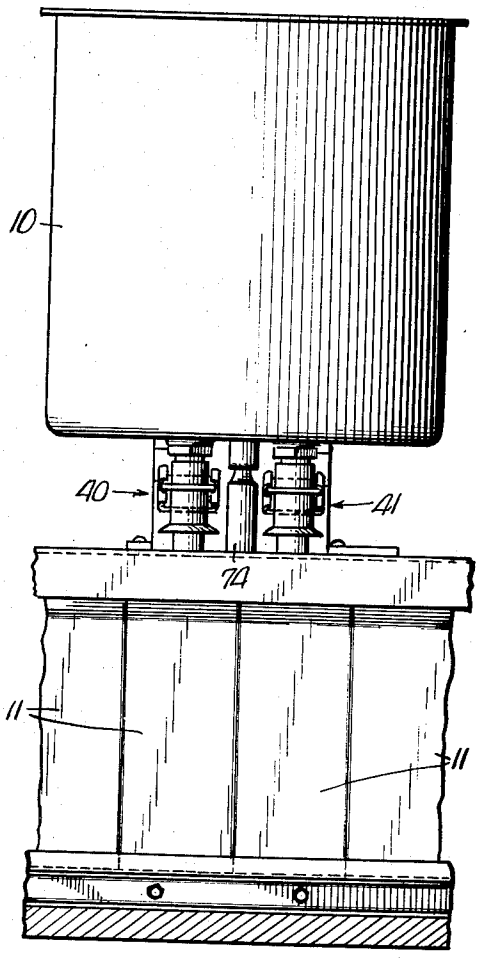


Fig. 2.



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Fig. 3.

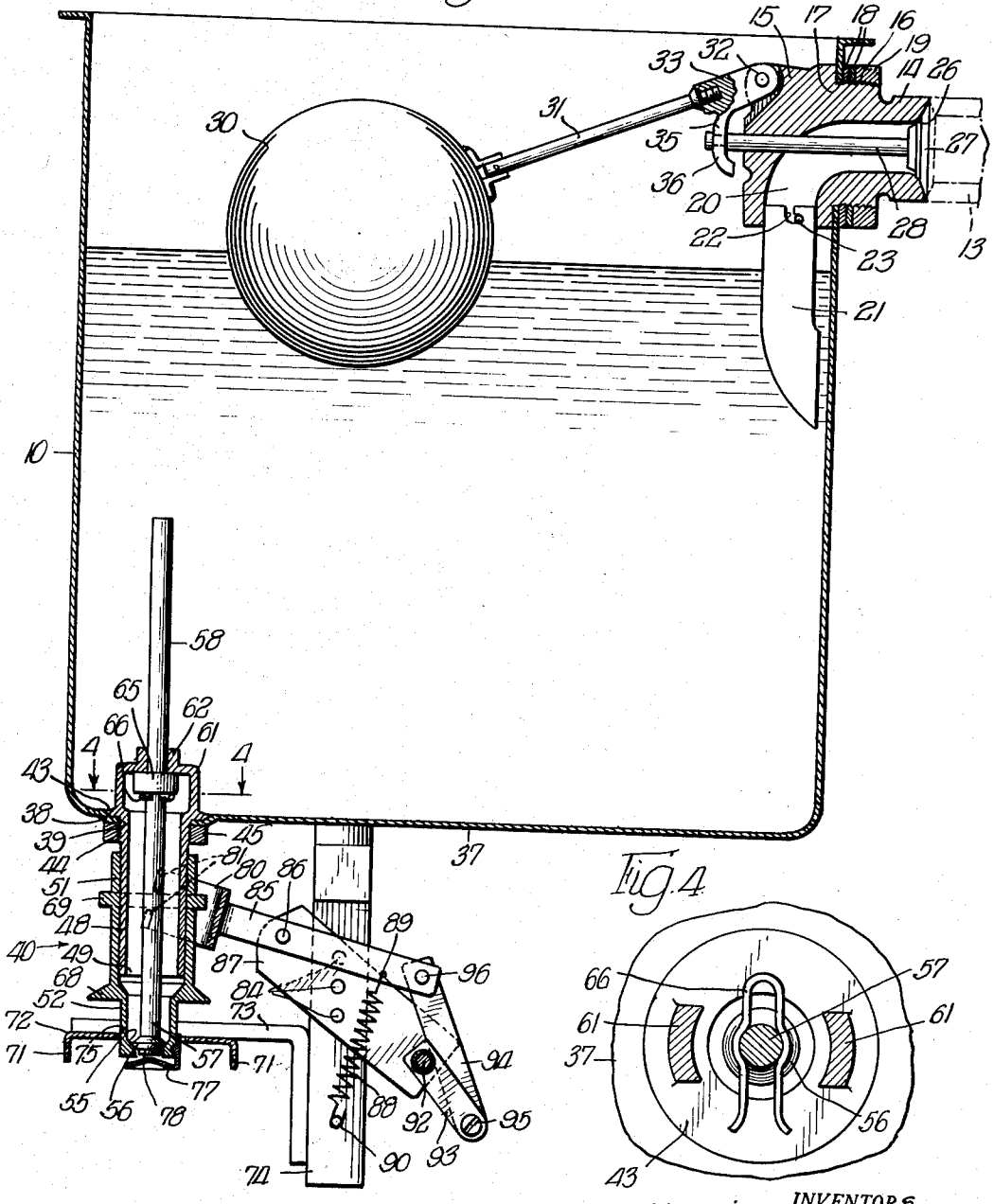


Fig. 4.

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Fig. 5

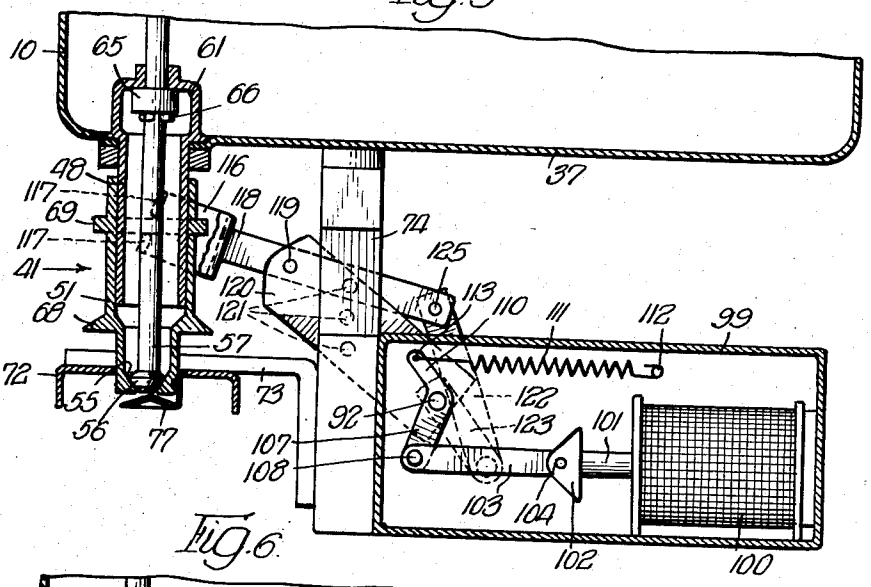


Fig. 6

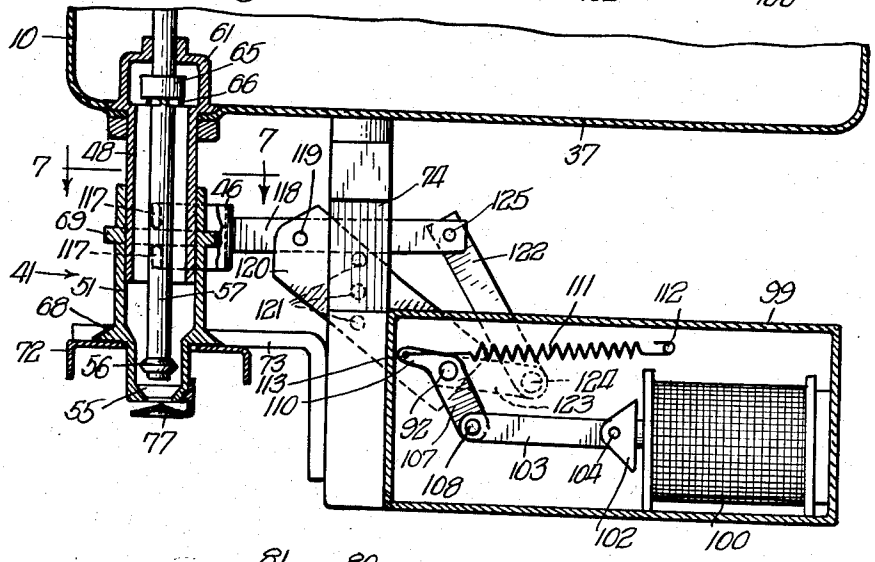
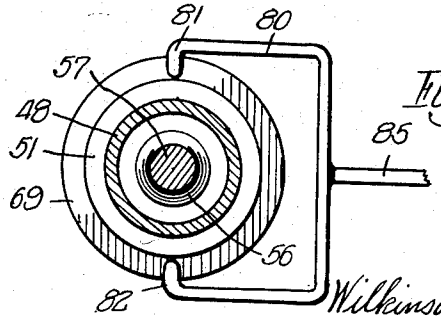


Fig. 7



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2,847,145

DISPENSING MECHANISM

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Application September 14, 1954, Serial No. 455,918

18 Claims. (Cl. 222—67)

This invention relates, as indicated, to a dispensing mechanism, and more particularly to a dispensing mechanism provided with an improved valve for discharging fluids.

In the milk industry, particularly the retail selling of milk, stringent laws and sanitary codes are in effect to restrict the sale of milk except through the medium of approved equipment. Thus, any dispensing mechanism for milk must meet with the approval of such laws and codes.

It is desirable in dispensing fluids into receptacles to prevent undue spilling or splashing of such fluids. In the past spilling or splashing has been prevented by moving the receptacle to a position adjacent to the discharge nozzle of the dispensing mechanism.

It is, therefore, an object of this invention to provide a dispensing mechanism which will meet the approval of various sanitary codes.

It is a further object of this invention to provide a dispensing mechanism which is easily disassembled and cleaned.

It is a yet further object of the invention to provide a valve that is operated by a mechanism external to such valve.

It is a still further object of this invention to provide a dispensing mechanism having a telescopic valve that reduces and spilling and splashing of fluids.

Further objects and advantages of this invention will become evident as the description proceeds and from an examination of the accompanying drawing which illustrates one embodiment of the invention and in which similar numerals refer to similar parts throughout the several views.

In the drawings:

Figure 1 illustrates a side elevation view of the dispensing mechanism embodying the invention.

Figure 2 illustrates a front elevation view of the dispensing mechanism shown in Figure 1.

Figure 3 is a vertical section view taken through valve 40 and the float valve of the dispensing mechanism.

Figure 4 is a sectional view taken along line 4—4 of Figure 3.

Figure 5 is a fragmentary vertical section view of the dispensing mechanism taken through valve 41 and solenoid box 99, showing the valve in closed position.

Figure 6 is a view of the dispensing mechanism shown in Figure 5 with the valve in open position.

Figure 7 is a sectional view taken on line 7—7 of Figure 6.

In general the dispensing mechanism comprises a container 10 and valves 40, 41 for discharging fluids into a receptacle 11.

Container 10 is supported by posts 74 and is supplied with fluids from a supply tank (not shown) through a supply conduit 13 to nipple 14.

As shown in Figure 3, the container 10 is provided with a supply control through a float mechanism comprising a fitting 15 having a nipple 14 which is an extension of fitting 15 outside container 10. Fitting 15 has a threaded portion 16 projecting through opening 17 in the container 10. Washers 18 are mounted on the projection of fitting 15 outside container 10.

Fitting 15 is held in position by a lock nut 19 which engages screw threads 16. A conduit 20 extends through fitting 15 from nipple 14 to inside container 10 in which it turns downwardly to an open end for admitting fluids to the container 10.

A tube extension 21 is removably mounted to fitting 15 by a slot 22 and bayonet pin 23. The extension 22 conducts the fluid below the surface level to prevent foaming.

A valve seat 26 is provided in nipple 14. Cooperating with valve seat 26 to shut off the fluid supply is a disc 27 disposed outside valve seat 26 and between valve seat 26 and the supply 13. Connected to the disc 27 is a valve stem 28.

A float 30 of the usual type is provided in container 10 having a rod 31 mounted in arm 33. Arm 33 is pivoted on fitting 15 at 32 above stem 28.

Arm 33 has a flange 35. Valve stem 28 is connected to flange 35, so that as float 30 is raised and lowered the valve is closed and opened. The lower extremity of flange 35 is bent toward the fitting 15 to form a bent portion 36 serving as a stop for the valve stem 28.

As the fluids enter the container 10 through supply conduit 13, such fluids exert a positive pressure against disc 27 firmly seating said disc against the valve seat 16 preventing entry of the fluid into container 10. As the level of the fluid drops in container 10, float 30 also drops and operates arm 32, pivoting it about 32, moving valve stem 28 and disc 27 to permit further entry of the fluid into container 10.

Valves 40, 41 have the same construction, and the same reference numerals have been used to designate similar elements in both valves. Referring now to valve 40, as shown in Figure 3, a conduit means 48 is connected to the bottom wall 37 of container 10. The bottom wall 37 has a depression 38. A tubular conduit 48 in valve 40 is inserted from the interior of container 10 through opening 39 in depression 38. The conduit 48 has mounted thereon flange 43 shaped to fit the contour of depression 38. Conduit 48 is provided with threads 44 below flange 43. Lock nut 45 is screwed on such threads to secure valve 40 to container 10. It will be seen that in assembling the valve mechanism, conduit 48 is inserted through opening 39 in the bottom wall of 37 of the container 10. Lock nut 45 is then screwed on threads 44 to hold the valve tightly in position.

Conduit 48 is cylindrical in shape and has a downwardly projecting open end 49. An outer sleeve 51 is mounted for sliding movement on conduit 48. Sleeve 51 has a tubular projection 52 extending below the open end 49 of conduit 48. Tubular projection 52 has a smaller diameter than conduit 48.

The valve seat 55 is mounted within the tubular projection 52. A plug 56 is adapted to rest on valve seat 55 to close the valve. A valve stem 57 is connected to plug 56. Plug 56 and stem 57 are free floating elements. Valve stem 57 has an upper end 58 which projects upwardly within conduit 48 and into container 10. Formed on the upper end of conduit 48 within container 10 is a bonnet 61 for supporting the upper end 58 of valve stem 57 by a bearing 62.

Valve stem 57 has formed thereon a boss 65. This boss is adapted to abut against bearing 62 when the valve stem 57 is in raised position. Thus the boss 65 acts as a stop limiting the upward movement of sleeve 51 by valve seat 55 abutting plug 56 and boss 65 on valve stem 57 abutting bearing 62.

As more clearly shown in Figure 4, valve stem **57** is provided with a pin **66** immediately below and adjacent boss **65**. Pine **66** serves as a stop limiting the downward travel of valve stem **57**. When the sleeve **51** and valve seat **55** are lowered, plug **56** and valve stem **57** ride with the movement of such valve seat until pin **66** abuts the flange **43** on bottom wall **37** of container **10** thereby stopping the downward travel of the valve stem **57**. Continued movement of sleeve **51** downwardly separates valve seat **55** from plug **56**, thereby discharging the fluids.

Sleeve **51** is provided with a flange **68** adapted to abut the plate **72** to limit the downward stroke of the sleeve. It will be noted that in order to separate the valve seat **55** from plug **56** to permit discharge of fluids, pin **66** is positioned so as to limit the downward travel of plug **56** to a distance less than the downward stroke of sleeve **51**.

A boss **69** is formed on sleeve **51** and cooperates with yoke **80** in the upward and downward movements of sleeve **51**.

A plate **72** is mounted by brackets **73** to posts **74** below the valve **40**.

Plate **72** serves to abut flange **68** when the outer sleeve **51** of the valve is moved downwardly. Plate **72** is provided with downwardly turned flanges **71** adapted to guide the receptacles as they are moved to and from the valve. Plate **72** also has an opening **75** for reception of the tubular projection **52** of the sleeve **51** when such sleeve is moved downwardly.

A splash plate **77** may be mounted below the opening **78** in the tubular projection **52** of sleeve **51**.

Referring now to Figure 7, the sleeve **51** is moved by the C-shaped yoke **80**. Yoke **80** has inwardly turned ears **81**, **82** above and below flange **69** for engagement therewith.

Referring again to Figure 3, yoke **80** is mounted on a first-class lever **85** which is pivotally mounted by pin **86** to mounting plate **87**. Mounting plate **87** is secured by screws **84** to post **74**. The yoke **80** holds sleeve **51** in the upward or closed position by tension spring **88** fastened at **89** to lever **85** and at **90** to post **74**. Sleeve **51** is moved downwardly through lever **65** by operation of rock shaft **92**. As rock shaft **92** rotates in a counter-clockwise direction it also rotates crank arm **93**. A link **94** is pivotally connected at **95** to crank arm **93** and to lever **85** at pivot joint **96**. Thus, counter-clockwise rotation of rock shaft **92** also rotates crank arm **93** operating lever **85** through link **94**, thereby imparting downward movement to sleeve **51** against the tension of spring **88**.

Referring now to Figures 5 and 6, the rotation of rock shaft **92** to open and close valve **41** is illustrated. The solenoid **100** employed for the rotation of crank shaft **92** is mounted in box **99**. Box **99** is mounted to post **74** rearwardly of the valve **41**. As shown, a solenoid **100** having an armature **101** is mounted within box **99**. Armature **101** has ears **102** at one extremity thereof. Ears **102** pivotally mount arm **103** by pin **104**. Arm **103** is pivotally connected to crank shaft **107** at **108**. Crank shaft **107** is mounted on rock shaft **92**. A crank arm **110** is mounted on rock shaft **92**. A tension spring **111** is fastened between pin **112** on box **99** and an aperture **113** in crank arm **110**. Tension spring **111** biases crank arm **110** in a clockwise direction to hold the valve closed.

Figure 5 shows the valve **41** in closed position. The solenoid **100** is de-energized and the armature **101** is disposed outside the coil solenoid **100**. The rock shaft **92** holds valve **41** in closed position by tension spring **111** and by a tension spring between lever **118** and post **74** (not shown).

In Figure 6 the solenoid has been energized by closing of a switch (not shown) to move armature **101** inside the coil of solenoid **100**. The rock shaft **92** has been rotated in a counter-clockwise direction against the tension spring **111** to move the sleeve **51** of the valve downwardly.

The movement and mounting of the yoke on the sleeve **51** has been described in regard to valve **40**, but a further description of the mounting of the yoke to valve **41** will be explained hereinafter. The yoke **116** is mounted for engagement with sleeve **51** of valve **41**, as shown in Figures 5 and 6. Yoke **116** is provided with ears **117** for engaging flange **69** of sleeve **51**. First-class lever **118**, pivotally mounted by pin **119** on mounting plate **120**, is connected to yoke **116**. The mounting plate **120** is fastened to post **74** by screws **121**. A link **122** is pivotally connected at **125** to lever **118**. Link **122** is pivotally connected at **124** to crank arm **123**. Crank arm **123** is mounted on shaft **92** and operates to impart downward movement to sleeve **51** when shaft **92** is rotated in a counter-clockwise direction.

From the foregoing, the operation of the dispensing mechanism should be apparent. Fluids are supplied to container **10** and maintained at a fixed level by the float valve mechaism. Receptacles are moved in a position below valves **40** and **41** for the discharge of fluid from container **10**. At the proper time the solenoid **100** is energized to move the outer sleeve **51** of the valves downwardly to a point at which the sleeve **51** abuts plate **72** through flange **68**. As the sleeve is moved downwardly, the valve stem **57** rides with the sleeve for a certain distance, less than the distance in which the sleeve moves. As the pin **66** engages the flange **43** to stop the downward travel of valve stem **57**, plug **56** is separated from valve seat **55**, permitting the discharge of fluids into the receptacle. It will be seen that if the receptacles are below the valves, the extension of the valves will move the tubular projection **52** toward the receptacles, reducing the space therebetween to prevent splashing and spilling of liquids outside of such receptacles.

Ordinarily, both valves **40**, **41** are employed for filling half gallon cartons. If smaller sizes are to be filled only one valve is used. The other valve is rendered inoperative by disconnecting link **94** or **122**.

In the drawing and specification, there has been set forth a preferred embodiment of the invention, and although specific terms are employed, they are used in a generic and descriptive sense only and not for purposes of limitation. Changes in form and in the proportion of parts, as well as the substitution of equivalents are contemplated, as circumstances may suggest or render expedient, without departing from the spirit or scope of this invention as further defined in the following claims.

We claim:

1. In a dispensing mechanism for supplying fluids from a container into a receptacle, a telescopic valve comprising a conduit means communicating with said container having a downwardly projecting open end, a sleeve means mounted for movement relative to said conduit, said sleeve means having a section projecting beyond said open end of said conduit means, a valve seat having a passageway therethrough mounted internally on said section, a floating plug member seated against said valve seat closing said passageway to prevent the discharge of fluids from the container, and means for discharging fluids from the container including a stop member for limiting the movement of said plug member with said sleeve means, whereby said plug member is separated from said valve seat as said telescopic valve is extended toward the receptacle.

2. In a dispensing mechanism for supplying fluids from a container into a receptacle, a telescopic valve comprising conduit means communicating with said container having a downwardly projecting open end, sleeve means mounted for downward movement of a predetermined distance relative to said conduit means, said sleeve means having a section projecting beyond said open end of said conduit means, a valve seat having a passageway therethrough mounted internally on said section, a floating plug member seated against said valve seat closing said passageway to prevent the discharge of

fluids from the container, and means for discharging fluids from the container including a stop member for limiting the downward travel of said plug member to a second distance less than said predetermined distance of movement of said sleeve means, whereby said plug member is separated from said valve seat as said telescopic valve is extended toward the receptacle.

3. In a dispensing mechanism for supplying fluids from a container into a receptacle, a telescopic valve comprising a conduit means communicating with said container having a downwardly projecting open end, a sleeve means mounted on said conduit means, means for moving said sleeve means a predetermined distance relative to said conduit means, said sleeve means having a tubular section projecting beyond said open end of said conduit means, a valve seat having a passageway therethrough mounted internally on said tubular section, a floating plug means seated against said valve seat closing said passageway to prevent the discharge of fluids from the container, and means for discharging fluids from the container including a stop member for limiting the downward travel of said plug means to a second distance less than said predetermined distance of movement of said sleeve means, whereby said plug member is separated from said valve seat as said telescopic valve is extended toward the receptacle.

4. In a dispensing mechanism for supplying fluids from a container into a receptacle, a valve comprising a conduit communicating with said container having a downwardly projecting open end, sleeve means mounted for movement relative to said conduit, said sleeve means having a section projecting beyond said open end of said conduit, a valve seat having a passageway therethrough mounted internally on said section, a floating plug member seated against said valve seat closing said passageway to prevent the discharge of fluids from the container, a first stop member for limiting the downward movement of said sleeve means to a first distance, and means for discharging fluids from the container including a second stop member for limiting the downward travel of said plug member to a second distance less than said first distance of said sleeve movement, whereby said plug member is separated from said valve seat.

5. In a dispensing mechanism for supplying fluids from a container to a receptacle, a valve comprising a conduit means communicating with said container having a downwardly projecting open end, a sleeve means mounted for sliding movement on said conduit, said sleeve having a section of reduced diameter projecting beyond said open end of said conduit means, means disposed outside said container for moving said sleeve in a downward stroke, a valve seat having a passageway therethrough mounted internally on said sleeve section, a floating plug member seated against said valve seat closing said passageway to prevent the discharge of fluids from the container, stop member for limiting the downward stroke of said sleeve to a first distance, and means for discharging fluids from the container including a stop member for limiting the downward travel of said plug member to a second distance less than said first distance of said sleeve means, whereby said plug member is separated from said valve seat.

6. In a dispensing mechanism for supplying fluids from a container to a receptacle, a valve comprising a conduit communicating with said container having a downwardly projecting open end, sleeve means mounted for movement relative to said conduit, said sleeve means having a section projecting beyond said open end of said conduit, a valve seat having a passageway therethrough mounted internally on said section, a floating plug member seated against said valve seat closing said passageway to prevent the discharge of fluids from the container, means for moving said sleeve means relative to said conduit, a first stop means for limiting the downward stroke of said sleeve means to a first distance, and means for discharging fluids from the container including a second stop member for limiting the downward travel of said plug member to a second distance less than said first distance of said sleeve means, whereby said plug member is separated from said valve seat.

7. In a dispensing mechanism for supplying fluids from a container to a receptacle, a valve comprising a conduit communicating with said container having a downwardly projecting open end, a sleeve mounted for movement on said conduit, said sleeve having a section projecting beyond said open end of said conduit, a valve seat having a passageway therethrough mounted internally on said section, a plug seated against said valve seat closing said passageway to prevent the discharge of fluids from the container, a valve stem connected to said plug and extending upwardly within said conduit adapted to move a part of the distance with said sleeve, and means for discharging fluids from the container including a stop member for limiting the downward travel of said stem to a distance less than the distance of said sleeve movement, whereby said plug is separated from said valve seat.

8. In a dispensing mechanism for supplying fluids from a container to a receptacle, a valve comprising a conduit communicating with said container having a downwardly projecting open end, a sleeve mounted for sliding movement on said conduit, said sleeve having a section projecting beyond said open end of said conduit, a valve seat having a passageway therethrough mounted internally on said section, a plug seated against said valve seat closing said passageway to prevent the discharge of fluids from the container, a valve stem connected to said plug and extending upwardly within said conduit into said container adapted to move a part of the distance with said sleeve, and means for discharging fluids from the container including a stop mounted on said stem within said container for limiting the downward travel of said stem to a distance less than the distance of said sleeve movement, whereby said plug is separated from said valve seat.

9. In a dispensing mechanism the combination of a fluid container, means for supplying fluid to said container, means in said container operable to maintain the fluid in said container at a preselective level, a valve mounted on said container for dispensing fluid from said container into a receptacle, said valve comprising conduit means communicating with said container having a downwardly projecting open end, sleeve means mounted for sliding movement on said conduit, said sleeve means having a section projecting beyond said open end of said conduit means, a valve seat having a passageway therethrough mounted internally on said section, a floating plug member seated against said valve seat closing said passageway to prevent the discharge of fluids from the container, and means for discharging fluids from the container including a stop member for limiting the downward travel of said plug member to a distance less than the movement of said sleeve means, whereby said plug member is separated from said valve seat.

10. In a dispensing mechanism the combination of a fluid container, means for supplying fluid to said container, means in said container operable to maintain the fluid in said container at a preselective level, a valve mounted on said container for dispensing fluid from said container into a receptacle, said valve comprising conduit means communicating with said container having a downwardly projecting open end, sleeve means mounted for movement relative to said conduit, said sleeve means having a section projecting beyond said open end of said conduit, a valve seat having a passageway therethrough mounted internally on said section, a plug seated against said valve seat closing said passageway to prevent the discharge of fluids from the container, a first stop means for limiting the downward stroke of said sleeve means to a first distance, and means for discharging fluids from the container including a

second stop member for limiting the downward travel of said plug member to a second distance less than said first distance of said sleeve movement, whereby said plug member is separated from said valve seat.

11. In a dispensing mechanism the combination of a fluid container, means for supplying fluid to said container, means in said container operable to maintain the fluid in said container at a preselective level, a valve mounted on said container for dispensing fluid from said container into a receptacle, said valve comprising conduit means communicating with said container having a downwardly projecting open end, sleeve means mounted for movement relative to said conduit means, said sleeve means having a section projecting beyond said open end of said conduit, a valve seat having a passageway therethrough mounted internally on said section, a floating plug member seated against said valve seat closing said passageway to prevent the discharge of fluids from the container means for moving said sleeve means relative to said conduit, a first stop member for limiting the downward stroke of said sleeve means to a first distance, and means for discharging fluids from the container including a second stop member for limiting the downward travel of said plug member to a second distance less than said first distance of said sleeve movement, whereby said plug member is separated from said valve seat.

12. In a dispensing mechanism the combination of a fluid container, means for supplying fluid to said container, means in said container operable to maintain the fluid in said container at a preselective level, a valve mounted on said container for dispensing fluid from said container into a receptacle, said valve comprising a conduit communicating with said container having a downwardly projecting open end, a sleeve mounted for movement on said conduit, said sleeve having a section projecting beyond said open end of said conduit, a valve seat having a passageway therethrough mounted internally on said section, a plug seated against said valve seat closing said passageway to prevent the discharge of fluids from the container, a floating valve stem connected to said plug and extending upwardly within said conduit adapted to ride a part of the distance with said sleeve, and means for discharging fluids from the container including a stop for limiting the downward travel of said stem to a distance less than the distance of said sleeve movement, whereby said plug is separated from said valve seat.

13. In a dispensing mechanism the combination of a fluid container, means for supplying fluid to said container, means in said container operable to maintain the fluid in said container at a preselective level, a valve mounted on said container for dispensing fluid from said container into a receptacle, said valve comprising a cylindrical conduit communicating with said container having a downwardly projecting open end, a sleeve mounted for sliding movement on said conduit, said sleeve having a section projecting beyond said open end of said conduit, a valve seat having a passageway therethrough mounted internally on said section, a plug seated against said valve seat closing said passageway to prevent the discharge of fluids from the container, a floating valve stem connected to said plug and extending upwardly within said conduit into said container adapted to ride a part of the distance with said sleeve, and means for discharging fluids from the container including a stop stop mounted on said stem within said container for limiting the downward travel of said stem to a distance less than the distance of said sleeve movement, whereby said plug is separated from said valve seat.

14. In a dispensing mechanism for supplying fluids from a container to a receptacle, a valve comprising a conduit communicating with said container having a downwardly projecting open end, a sleeve member mounted for movement relative to said conduit, said sleeve member having a section projecting beyond said open end of said conduit, a valve seat having a passageway therethrough mounted internally on said section, a floating plug means for closing said passageway to prevent discharge of fluids from the container by seating against said valve seat, means for moving said sleeve member downwardly relative to said conduit, means for discharging fluids from the container including a stop member for limiting the downward travel of said plug member with said sleeve member so that said plug member is separated from said valve seat, and means including a spring for moving said sleeve member upwardly.

15. In a dispensing mechanism for supplying fluids from a container to a receptacle, a valve comprising a conduit communicating with said container having a downwardly projecting open end, a sleeve member mounted for movement relative to said conduit, said sleeve member having a section projecting beyond said open end of said conduit, a valve seat having a passageway therethrough mounted internally on said section, a floating plug means for closing said passageway to prevent discharge of fluids from the container by seating against said valve seat, means for moving said sleeve relative to said conduit, means for discharging fluids from the container including a stop member for limiting the downward travel of said plug member with said sleeve member so that said plug member is separated from said valve seat, and spring means for biasing said valve to closed position.

16. In a dispensing mechanism for supplying fluids from a container to a receptacle, a valve comprising a conduit communicating with said container having a downwardly projecting open end, a sleeve member mounted for movement relative to said conduit, said sleeve member having a section projecting beyond said open end of said conduit, a valve seat having a passageway therethrough mounted internally on said section, a floating plug means for closing said passageway to prevent the discharge of fluids from the container seating against said valve seat, spring means for biasing said sleeve to an upward position, means for moving said sleeve member to a downward position against said spring means, and means for discharging fluids from the container including a stop member for limiting the downward travel of said plug member with said sleeve member so that said plug member is separated from said valve seat.

17. In a dispensing mechanism for supplying fluids from a container into a receptacle, a conduit member for communicating with said container having an open end, a sleeve member on said conduit member for extending relatively axially thereto from a retracted to an extended position, a section on said sleeve member projecting beyond said open end of said conduit having a passageway therethrough, a plug member in said section of the sleeve member and movable therewith closing said passageway when said sleeve is extended from a retracted position to a predetermined distance from said retracted position, and means for separating said valve from said passageway after said sleeve has been extended beyond a predetermined distance to permit fluid to flow therefrom.

18. In a dispensing mechanism for supplying fluids from a container into a receptacle, a conduit member for communicating with said container having an open end, a sleeve member on said conduit member for extending relatively axially thereto from a retracted to an extended position, a section on said sleeve member projecting beyond said open end of said conduit having a passageway therethrough, a plug member in said section of the sleeve member and movable therewith closing said passageway when said sleeve is extended from a retracted position to a predetermined distance from said retracted position, and means including a member operatively as-

sociated with said plug member to open said passageway for discharging fluids from the container after said sleeve has been extended beyond a predetermined distance.

References Cited in the file of this patent

UNITED STATES PATENTS

218,135 Rich ---------- Aug. 5, 1879

803,722 Smith ---------- Nov. 7, 1905
1,613,248 Searing ---------- Jan. 4, 1927
2,404,119 Zanolli ---------- July 16, 1946
2,611,525 Spurr ---------- Sept. 23, 1952