

Aug. 15, 1939.

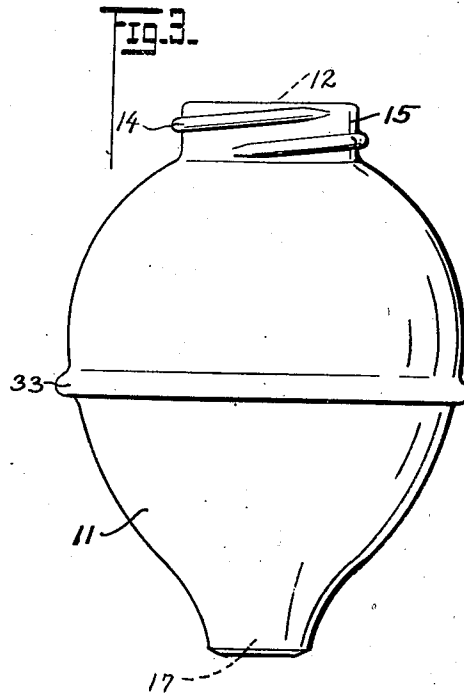
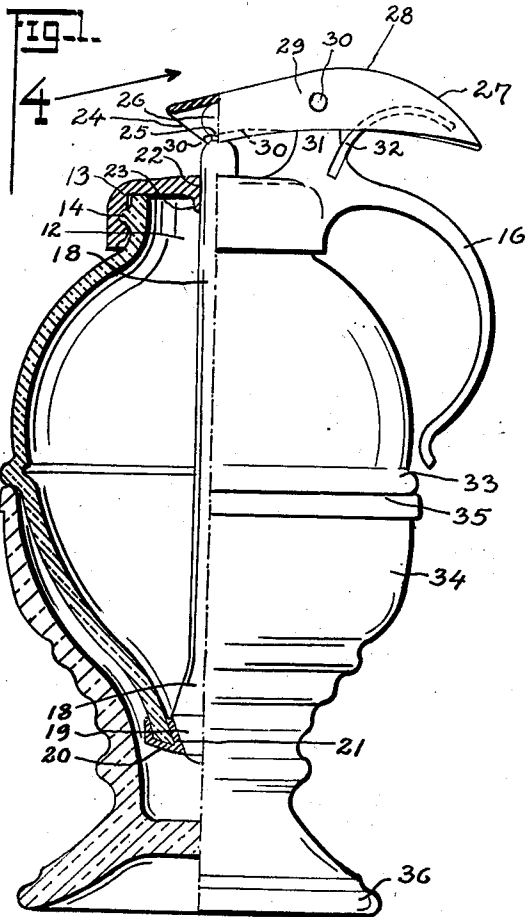
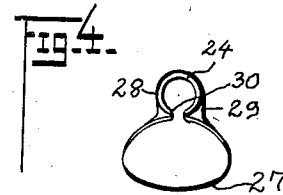
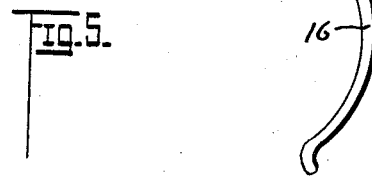
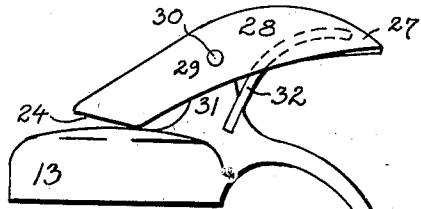
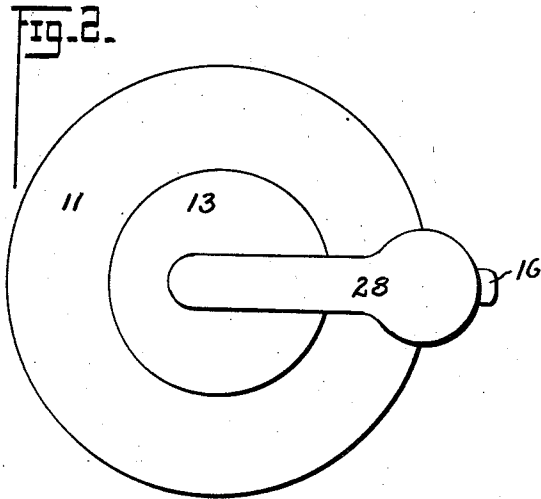
R. WILDERMANN

2,169,778

DISPENSER

Filed Nov. 14, 1936

2 Sheets-Sheet 1



INVENTOR:

*Rudolf Wildermann*

Aug. 15, 1939.

R. WILDERMANN

2,169,778

DISPENSER

Filed Nov. 14, 1936

2 Sheets-Sheet 2

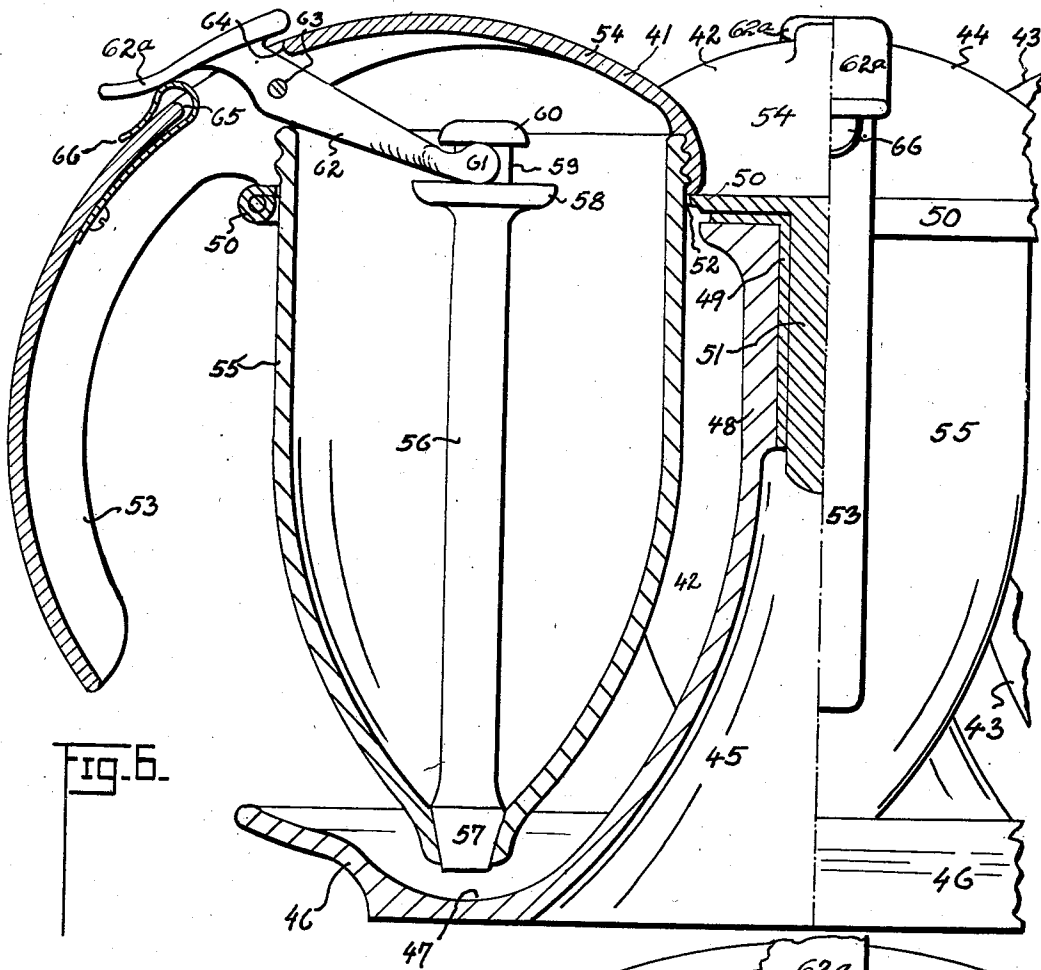
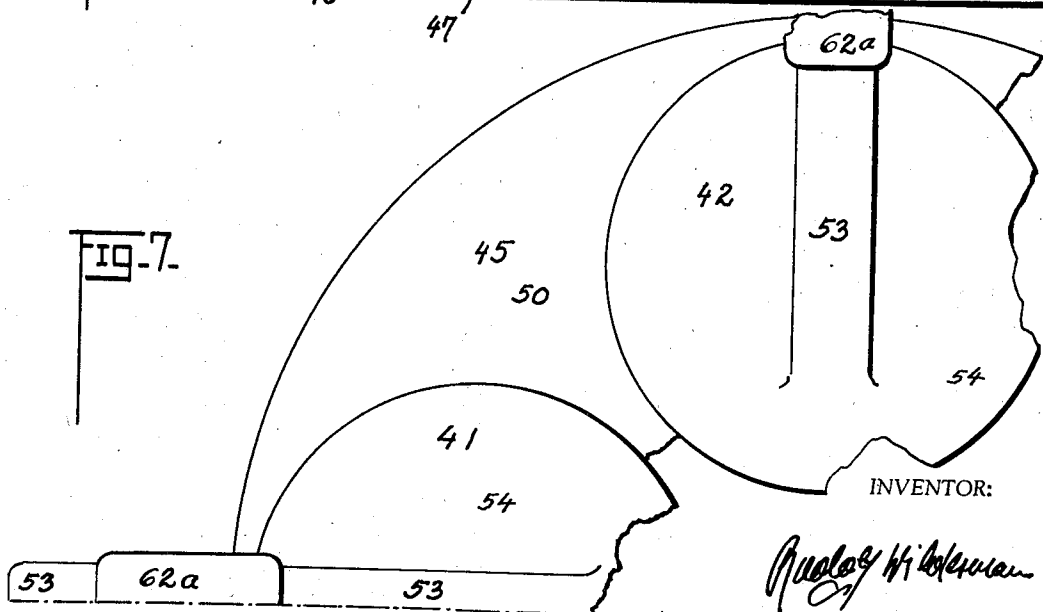


Fig. 6.

Fig. 7.



INVENTOR:

*Rudolf W. Wildermann*

# UNITED STATES PATENT OFFICE

2,169,778

## DISPENSER

Rudolf Wildermann, New York, N. Y., assignor,  
by mesne assignments, to The Food Dispenser  
Company, Hartford, Conn., a corporation of  
Connecticut

Application November 14, 1936, Serial No. 110,910

21 Claims. (Cl. 221-67)

The dispenser of this invention is especially de-  
vised for convenient pouring and dosing of ac-  
cessories in liquid, semi-liquid or possibly in pow-  
der form, such as oil, cream, syrup, various condi-  
ments and spices, sugar, etc., in the household,  
kitchen, etc., but foremost at the table.

Novel use is recognized in the convenience of  
the dispenser, as well as in hygiene, preservation  
and control concerning the fluid contents of the  
dispenser.

Under specific aspects the invention represents  
a combination of a dispensing container having a  
closable outlet at a low point of its normal posi-  
tion, in which position it is however not adapted  
to stand by itself,—with a supporting cup adapted  
to retain such dispenser in the said normal posi-  
tion, and serving at the same time to receive, in  
a position of rest of the dispenser, drops, which  
may have formed, when the said outlet was closed  
after use of the dispenser.

Convenience and handiness during and after  
use, and the hygienic considerations which arise  
particularly from a desire of keeping such an  
accessory clean and of providing for ease of  
cleaning, involve manifold arrangements, and are  
further objects of this invention, which will be  
better understood from the following description  
of several exemplary modifications of this in-  
vention. Such examples of this invention are  
illustrated in the accompanying drawings, in  
which:—

Fig. 1 is a partly sectioned elevation of an as-  
sembled combination of the instant invention.

Fig. 2 presents a corresponding top view.

Fig. 3 shows the dispensing vessel alone.

Fig. 4 is a detail end view of a lever used in  
the arrangement of Fig. 1, seen in the direction  
indicated by an arrow and the numeral 4 in the  
view of Fig. 1.

Fig. 5 shows the cap of Fig. 1 in a correspond-  
ing view, but in a removed, collapsed state.

Fig. 6 illustrates a modification in a sectioned  
elevational part view.

Fig. 7 shows a corresponding plan view.

Similar numerals refer to similar parts  
throughout the various views.

Fig. 3 shows the dispenser 11 proper which  
has for instance the shape of a bulb in the modi-  
fication of Figs. 1, 2, 3 and 4 of the drawings. It  
is provided with an opening at the top by way of  
which it may be filled, and which serves to admit  
the valve control means. The said opening may  
be provided with a suitable closure, which may  
for instance be attached by a bayonet or screw  
lock, thread 14 being shown for that purpose

upon the outside of a neck 15 surrounding the  
opening 12, said thread engaging upon the inside  
of the cover, cap, or closure 13. For convenience  
of manipulation the dispenser may be provided  
with a handle. In the drawings the handle 16 is  
shown to extend from the cap or closure 13.

Dispenser 11 may be downwardly attenuated,  
and at the lower end it is provided with a dis-  
pensing opening 17. This opening may be closed  
by any suitable closing means inserted into the  
dispenser from the top thereof; in the drawings  
I show a stem 18 extending through the dispenser;  
that stem 18 is provided at the lower end  
with a conical valve 19. If the dispensing vessel  
11 is made of a transparent material, like glass,  
I may provide a metal shell or ferrule 20 at its  
lower end. The ferrule may for instance be  
fastened by spinning the inner sleeve part 21  
thereof out, so that it engages upon the contract-  
ing lower end of the opening 17; the ferrule 20  
may be further secured by a suitable adhesive  
or cement. The inner surface of sleeve 21 is  
shaped to provide a suitable seat for the conical  
valve 19. The stem 18 slidably extends through  
a hole 22 in the cover, cap or closure 13. A skirt  
23 extends around hole 22 from the cap or  
closure in order better to guide the stem or  
plunger 18.

Above said cap 13 the stem or plunger 18 is  
shown to converge into a neck 25, upon which is  
superimposed a ball 26; this ball is substantially  
of the diameter of the plunger or stem 18, so that  
it also fits through the opening 22 in cap 13.

The front end of lever 28 is shaped as a cir-  
cular trough as seen in the end view of Fig. 4,  
so that the converging lower edges 30 at the  
front of said lever engage around and underneath  
the ball 26, said ball substantially slidably fitting  
into the track thus formed at the front end of  
lever 28.

At the center 29 of the lever 28 the converging  
lower edges 30 have been flared out, so that the  
sides of the lever 28 there extend substantially  
in parallelism, the hub 31 extending up from the  
cap 13 being accommodated between the parallel  
walls at this point 29 of lever 28 and the lever  
being fulcrumed by a stud 30 upon said hub 31.

The back part 27 of lever 28 is flared out fur-  
ther, so that it offers a convenient knob-forma-  
tion for manipulation by the thumb of a hand,  
whose other fingers are engaged upon the handle  
16.

The lever 28 is always tensioned around the  
fulcrum at stud or rivet 30 by a flat spring 32,  
which is accommodated in a slot in the cap 13

between the lug 31 and the handle 16, and the free end of which is guided in the concave hollow of the back 27 of lever 28.

At the circular trough-formation of the lever 28 I provide a slanted front 24, so that the converging lower edges 30 of the upper front of lever 28 engage around ball 26 in the position of Fig. 1, in which said lever depresses the plunger and stem 18, and thereby the valve 19 into the seat 21. The said edges 30 also engage below the ball 26, when lever 28 is manipulated at the end 27 and swung in clockwise direction, so that the converging edges lift the ball 26, and thereby the valve out of its closing position of the lower end of the container 11; and the valve is open when the knob 27 has been pressed down. Thus the lever 28 serves to manipulate the valve 19 at random, when the device is assembled as shown in Fig. 1. But when the cap 13 is unscrewed from the container 11, then the plunger or stem 18 may remain in the seat at the bottom of said container, and the descending stem or plunger allows the lever 28 to follow the pressure of the spring 32, said lever swinging in counterclockwise rotation into the ultimate position of Fig. 5. In the position of Fig. 5 the converging edges 30 at the front of the lever have swung so far to the right, that they clear the ball 26, so that stem or plunger 18 falls out, or it may be withdrawn. When the cap is screwed on again, the procedure is reversed, the ball 26 enters through opening 22 and engages the top extent of lever 28 at the top front, until the circular trough formation of the lever is fully engaged upon the ball 26, after the cap 13 has been screwed onto the container 11 again.

The dispenser 11 may be supported in the position, in which it is shown in the drawings, by a supporting vessel of suitable size. But I may also provide a rim 33, extending around dispenser 11, such rim providing a level bottom which may be deposited upon the upper rim of a suitable supporting vessel, for instance a glass. In the drawings I show a supporting cup 34, the inside of which is shaped substantially analogously to the lower end of dispenser 11, the upper rim 35 of said cup having an inner diameter accommodating the dispenser just below the rim 33, so that the rim 33 is seated on cup 34. The base 36 of cup 34 should be large enough safely to support the cup itself as well as the dispenser superimposed thereupon.

Of course the conical valve 19 may be seated directly in the dispenser, it being well known that the outlet 17 of a glass dispenser 11 may be ground to offer a conical seat for a suitable conical valve.

That is illustrated in the modification of Figs. 6 and 7. But that modification serves at the same time as an example for the ramifications by way of which the instant invention may be adapted in accordance with varying circumstances.

In Figs. 6 and 7 we find a plurality of dispensers, e. g. the four dispensers 41, 42, 43 and 44 arranged in a circle upon a stand 45. The stand 45 has exemplarily been given the shape of a revolving tray; it comprises a plate 46 at the bottom, which may be suitably indented or depressed in order to receive the drippings from the lower ends of the dispensers suspended thereabove. In the drawings I show a groove 47 to extend around the circular plate 46, and the riser 48 extends centrally up from said plate. The upper end of the riser 48 is hollow and is provided with a suit-

able bushing material 49, into which rotatably extends an arbor 51 from the top tray 50. Such a tray 50 may be rotated at will, so that the user may turn on the stand any preferred dispenser into his direction. The dispensers extend through and depend from suitable openings 52 in the tray, and always face at their lower end the groove 47, as long as they are suspended in the tray.

Let us now study the various dispensers 41, 42, 43 and 44. Each one comprises a container 55, which clears and hangs down through a corresponding opening 52 in the tray. At the lower attenuated end of the container 55 is an opening in which is seated the conical valve 57 arranged at the bottom end of plunger 56. At the upper end of the plunger 56 is a knob 60, and a circular platform 58 is arranged therebelow, so that a groove 59 is formed therebetween, which serves to receive the forked end 61 of the operating lever 62.

When the plunger is executed in glass, I may, in accordance with the knowledge of those acquainted with this art, grind the valve 57 and the groove 59, in order to obtain a greater precision and a better fit. But of course the whole plunger assembly does not have to be integral, I may for instance assemble a metal platform 58 and a metal knob 60 on a glass plunger 56.

The upper open ends of the containers 55 are again closed by caps 54, which may be secured and tightened on the container by way of a thread, as shown. When using a thread, I do not know the exact position at which the cap tightens upon the container,—but it is always desirable to have the valve operating lever and the handle in alignment,—so that the handle 53 is carried by the cap 54. It is expressly understood, that in case I use some other locking means for the cap on the container, e. g. a bayonet lock, in which case I know the exact angular position in which the cap and container assemble, I may attach the handle upon the container, the valve operating lever aligning thereabove in the cap. Or the valve operating lever may be mounted in the container above the handle, extending through a suitable hole or notch in the side of the container, whereupon the cap may assume the form of any closure, which is independently screwed onto the top of the container.

In the exemplary execution of Figs. 6 and 7 the whole valve operating lever 62, with the exception of the manipulating part, knob 62a, is accommodated upon the inside of the container, so that the dispenser presents a very clean-cut exterior. The handle 53 is circularly arranged and merges with the cover 54 at one end, whereupon it bulges as a rib or ridge up from said cover, until it finally swerves completely away from the cover, e. g. in U-shape for facilitating casting. Between the walls of the U-shaped handle 53, the lever 62 is fulcrumed by a pivot 63 upon the handle and cover, protruding through a clearance in the surface of the handle 53, which extends from 64 to 65. The edge 64 of the cover or handle is so far removed from the lever, that it allows the same to swing for a certain angle in clockwise direction, when the cover is unscrewed from container 55. After the lever has swung through that angle, it vertically clears the knob 60 at the top end of the plunger or stem 56, but it still faces the platform 58. The unscrewed cover may therefore be removed from the container, the plunger or stem 52 remaining behind, standing erect in the container.

But when the cover is reassembled with the container, the forked end 61 of the lever first comes to rest upon the platform 58, and, as the cap or cover 54 is screwed onto the container, the forked end 61 advances toward the center, sliding across upon the platform 58, until it engages again underneath the knob 50, so that operative relationship with the plunger 66 and valve 57 are restored. A flat spring 66 is fastened upon the inside of the handle 53, extends around the edge 65 of the clearance opening in the handle, and then is engaged underneath the knob 62a pressing this knob in clockwise direction around the fulcrum at 63 of the lever 62, so that valve 57 is normally pressed into a closed position in container 55, when the cap or cover 54 is affixed to the container. When the lever is manipulated counterclockwise, the forked end 61 lifts knob 60, thus opening the valve 57.

For purposes of convenience a section of the cap or cover 54,—between the side walls of the handle 53,—is indicated to be omitted. The handle 53 is swerved away from the container for such a distance, as to permit convenient manipulation, when, by way of gripping the said handle, the user lifts the whole container 55 out of the opening 52 in the tray 50 of stand 45.

Having thus described my invention in detail, I do not wish to be limited thereby, except as the state of the art and the appended claims may require, for it is obvious that various modifications and changes may be made in the form of embodiment of my invention, without departing from the spirit and scope thereof.

What I claim is:

1. In a dispenser of the kind herein described, a container open at the top and with an outlet at the bottom, said outlet having a valve seat opening downward, a valve in said seat, a valve stem for lifting and lowering said valve, arising in said container, and removable means fitted on the top of said container carrying operating connections connected to the upper end of said stem during operation of said valve and releasing said stem when said means are removed from said container.

2. A dispenser comprising a container, a cover for said container, an outlet in the bottom of said container, said outlet having a valve seat opening downward, a valve in said seat, a valve stem for lifting and lowering said valve, arising in said container, and manipulating means for operating said valve from the outside of said container, operatively engaging upon the upper end of said stem when said cover closes said container, but disengaging from said stem when said cover is removed from said container.

3. A dispenser comprising a container, a cover for said container, an outlet in the bottom of said container, said outlet having a valve seat opening downward, a valve in said seat, a valve stem for lifting and lowering said valve, arising in said container, manipulating means for operating said valve from the outside of said container, operatively engaging upon the upper end of said stem when said cover closes said container, but disengaging from said stem when said cover is removed from said container, and a spring engaged upon said means and forcing said means onto said stem, thus closing said valve, when said cover closes said container.

4. A dispenser comprising a container, a cover for said container, an outlet in the bottom of said container, said outlet having a valve seat opening downward, a valve in said seat, a valve

stem for lifting and lowering said valve, arising in said container, and manipulating means for operating said valve from the outside of said container and operatively engaging said stem when said cover is positioned on said container, and a spring pressing said manipulating means out of engagement with said stem, when said cover is being removed.

5. A dispenser comprising a container, a cover for said container, an outlet in the bottom of said container, said outlet having a valve seat opening downward, a valve in said seat, a valve stem for lifting and lowering said valve, arising in said container, and manipulating means for operating said valve from the outside of said container and operatively engaging said stem when said cover is positioned on said container, and a spring pressing said manipulating means laterally out of engagement with said stem, when said cover is being removed.

6. A dispenser comprising a container, a removable cover for said container, an outlet in the bottom of said container, said outlet having a valve seat opening downward, a valve in said seat, a valve stem for lifting and lowering said valve, arising in said container, manipulating means carried on said cover for operating said valve and extending from the outside of the covered container into engagement upon said stem, and a spring acting upon said means and pressing said valve into said seat by way of said means and said stem.

7. In combination with a container, a valve closing the bottom of said container, and a stem arising from said valve, and a terminal at the upper end of said stem, a cover mounted on said container, and an operating lever mounted on said cover and engaging said terminal from below, said lever moving laterally away from below said terminal, when said cover is removed from said container.

8. A table accessory, comprising a dispenser with a closable bottom outlet, a cup, a contracted portion on said dispenser intermediate to its ends, a top rim on said cup fitting around said portion and adapted for removably supporting said dispenser above said cup, and a handle arched over the part of said dispenser overlying said portion.

9. A table accessory, comprising a dispenser with a closable bottom outlet, a plate, a tray spacedly arranged above said plate, means for removably suspending said dispenser above said plate for free removal upon lifting said dispenser from said tray, and a handle for lifting said dispenser from said tray, said handle extending from the suspended dispenser above said tray.

10. A dispenser with an opening at the top and with a bottom outlet, a valve seated on said outlet, a cover engaged upon said dispenser and substantially closing said opening, a stem arising from said valve and slidably extending through said cover, manipulating means for said valve mounted on said cover and operatively engaging said stem, and a spring reacting between said cover and said means and pressing said means onto said stem.

11. A dispenser with an opening at the top and with a bottom outlet, a valve seated on said outlet, a cover engaged upon said dispenser and substantially closing said opening, a hollow handle forming part of said cover, a stem arising from said valve, a lever engaging upon said stem and extending through said hollow handle, and manip-

ulating means for said valve at the end of said lever outside of said handle.

12. A table accessory, comprising a downwardly attenuated glass dispenser with an outlet at the bottom, a valve seated in said outlet, a stem arising from said valve through said dispenser to a point below the top thereof, and manipulating means for said valve depending into said container and engaged from the side over the upper end of said stem.

13. The combination with a supporting cup, of a dispenser seated therein, said dispenser having an outlet at its bottom, outlet controlling means and a handle both near its top, and a portion of maximum diameter intermediate its top and bottom, and said cup having a clearance opening in its top in which the part of said dispenser below said portion is received, and supporting means of a diameter less than said portion and from which said dispenser may be freely lifted by said handle, said supporting means engaging said portion and supporting said outlet in said cup in spaced relation above the bottom of the latter.

14. In a dispenser, a container open at the top and with an outlet at the bottom, said outlet having a valve seat opening downward, a valve on said seat, an upstanding valve stem for operating said valve, a filling cover removably connected on the top of said container and having the upper end of said stem projecting there-through, and valve operating lever means pivoted on said covering having operative connections to the upper end of said stem for enabling removal of said cover while said valve continues to close said outlet.

15. In a dispenser, a container open at the top and with an outlet at the bottom, said outlet having a valve seat opening downward, a valve on said seat, an upstanding valve stem for operating said valve, a filling cover removably connected on the top of said container, and valve operating lever means pivoted on said cover, said stem having a head portion on its upper end and said lever means having operative connections to said head portion for enabling removal of said cover while said valve remains on said seat.

16. In a dispenser, a container open at the top and with an outlet at the bottom, said outlet having a valve seat opening downward, a valve on said seat, an upstanding valve stem for operating said valve, a cover removably connected on the top of said container, and valve operating lever means pivoted on said cover and operatively connected to the upper end of said stem, said cover and lever means having handle and operating portions one overlying the other.

17. In a dispenser, a container open at the

top and with an outlet at the bottom, said outlet having a valve seat opening downward, a valve on said seat, an upstanding valve stem for operating said valve, a cover on the top of said container, and valve operating lever means pivoted on said cover and operatively connected to the upper end of said stem, and spring means outside said container acting between said lever means and said cover and normally actuating said stem to bias said stem and valve to closed position.

18. In a dispenser, a container open at the top and with an outlet at the bottom, said outlet having a valve seat opening downward, a valve on said seat, an upstanding valve stem for operating said valve, a cover on the top of said container, and valve operating lever means pivoted on said cover and operatively connected to the upper end of said stem, said stem having a reduced neck on its upper end and said lever means having an open-ended slot receiving said neck and an open-ended trough above said slot receiving the extremity of said stem.

19. A dispenser having an opening at the top and with a bottom outlet, a valve seated on said outlet, a cover on said top, an upstanding stem on said valve, and manipulating lever means pivoted on and extending transversely of said cover and operatively connected to the upper end of said stem and having an actuating portion on the opposite side of its pivot from said operative connection, said cover having a depending handle and said actuating portion being disposed adjacent the top of said handle in position to be operated by the thumb of the hand grasping said handle.

20. A combined cover and actuating mechanism for dispensers comprising a cover member connectible to the top of a container and having an aperture therethrough for an operating stem controlling a bottom outlet in said container, a lever pivoted on said cover on one side of said aperture having one end projecting over the latter and adapted to be operatively connected to the upper end of such a stem, and a laterally projecting actuating portion on the opposite side of the lever pivot, said cover having a handle portion projecting downwardly beneath the actuating portion of said lever.

21. A dispenser having an opening at the top and with a bottom outlet, a valve seated on said outlet, a cover on said top, a stem on said valve, and manipulating lever means pivoted on and projecting through said cover and operatively connected within the latter to the upper end of said stem and having an actuating portion operable from the exterior of said cover.

RUDOLF WILDERMANN.