

1,046,408.

Patented Dec. 3, 1912.

Fig. 1.

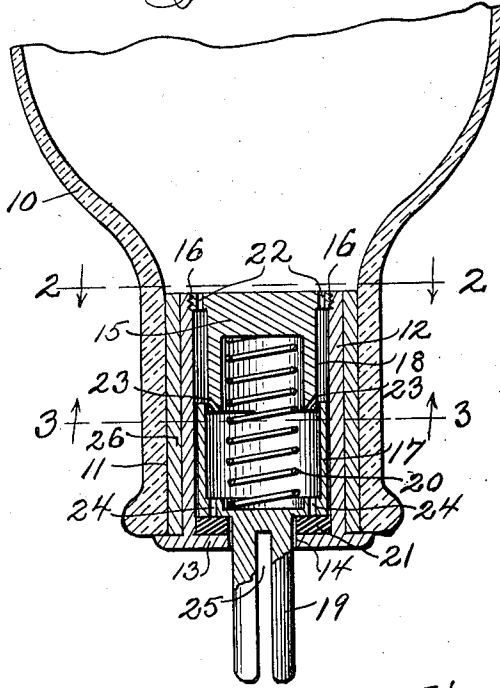


Fig. 6.

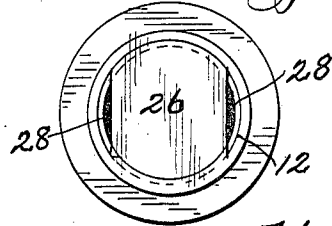


Fig. 5.

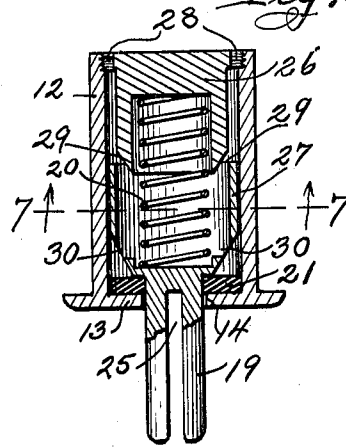


Fig. 2.

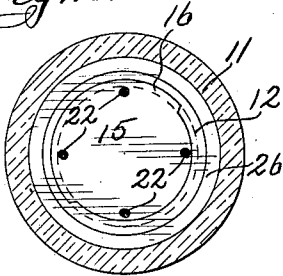


Fig. 3.

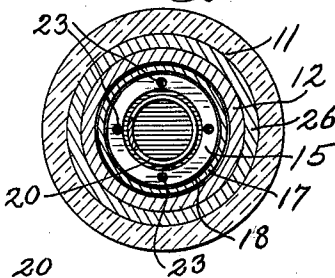


Fig. 7.

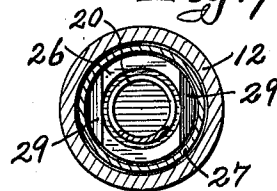


Fig. 4.

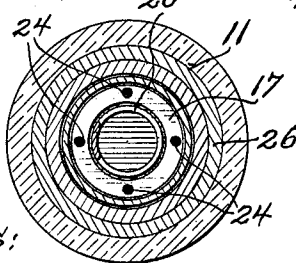
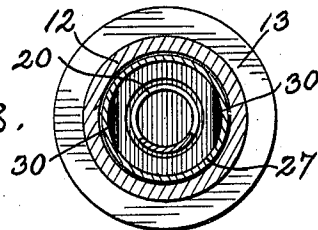


Fig. 8.



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UNITED STATES PATENT OFFICE.

AUGUST VOGES, OF CHICAGO, ILLINOIS, ASSIGNOR TO ANTISEPTOL LIQUID SOAP COMPANY, OF CHICAGO, ILLINOIS.

LIQUID-VENDER.

1,046,408.

Specification of Letters Patent.

Patented Dec. 3, 1912.

Application filed April 25, 1910. Serial No. 558,083.

To all whom it may concern:

Be it known that I, AUGUST VOGES, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Liquid-Vender, of which the following is a specification.

My invention relates to liquid vending devices to vend a predetermined quantity of liquid at each operation and the objects of my improvements are first, to make a simple device to operate; second, to automatically reset the parts after each operation; third, to make a simple, cheap and durable device and other objects which will become apparent from the following description.

This liquid vender is particularly designed for vending liquid soap but may be used for any desired purpose and is made to fit in the opening of a bottle or similar receptacle.

The vender comprises a metallic cylinder into which is fitted a stationary block and a sliding block, the latter provided with a stem extending to the exterior of the cylinder by means of which it is operated. A coiled expanding spring is interposed between the two blocks to normally hold the sliding block in position to prevent discharge.

To describe my invention so that others versed in the art to which it pertains can make and use the same I have illustrated it on the accompanying sheet of drawing forming a part of this specification in which:

Figure 1, is a central vertical section through a device embodying my invention; Fig. 2 is a section on line 2—2 of Fig. 1, viewed in the direction indicated by the arrows; Fig. 3 is a section on line 3—3 of Fig. 1, viewed in the direction indicated by the arrows; Fig. 4 is a similar view looking in the opposite direction; Fig. 5 is a central vertical section through a modification; Fig. 6 is a plan of Fig. 5; Fig. 7 is a section on line 7—7 of Fig. 5, looking in the direction indicated by the arrows and Fig. 8, is a similar view looking in the opposite direction.

Similar reference characters refer to similar parts throughout the several views.

The liquid receptacle 10 is made in the form

of a bottle with its open end 11 extending downward so that the liquid will by gravity tend to flow out of the receptacle. Into the open end 11 of the receptacle is removably fitted the cylindrical sleeve 12 provided with the lower end plate 13 having the concentric perforation 14. A block 15 is secured in the upper end of sleeve 12 preferably by the screw threaded connection at 16, and a cup shaped block 17 is mounted within the sleeve 12 free to slide but fitting snugly in the space between the block 15 and the end plate 13, a portion of the block 15 being reduced as seen at 18 to enter the cup shaped block 17 and act as a piston therein. The lower side of the block 17 is provided with a concentric pin 19 extending down through the perforation 14 in plate 13 and a coiled expanding spring 20 is interposed between the block 17 and the block 15 to yieldingly press the block 17 down against the rubber gasket 21 inserted between the block 17 and end plate 13. As clearly shown in the drawing Fig. 1, holes 22 and 23 are provided in the block 15 to permit the liquid from the receptacle above to gravitate into the hollow portion of the block 17 and these holes are so located that the first upward movement of block 17 will substantially close the holes 23 and shut off communication between the interior of receptacle 10 and the hollow portion of block 17. The lower side of block 17 is provided with holes 24 which form communication between the hollow portion of block 17 and the slotted portion 25 of the pin 19 as soon as the block 17 is lifted from the gasket 21. A rubber or cork sleeve 26 may be placed about the sleeve 12 to form a liquid tight joint.

In operation the receptacle 10 is secured in proper position filled with the required liquid and the pin 19 is forced up by the hand against the tension of spring 20, which of course forces the block 17 upward and the liquid from within the hollow portion thereof out through the holes 24 and the slotted portion 25 of pin 19 onto the hand. It will be noted that the quantity of liquid discharged at each operation will equal the amount of liquid contained in the hollow portion of block 17.

In Figs. 5, 6, 7 and 8 is shown a modified

form of my invention in which the stationary block 26 and the sliding block 27 have the required holes 28, 29 and 30 formed therein by cutting off a segment of the blocks.

5 It will be understood that there may be still other modifications made in the device without in the least departing from the spirit of my invention as particularly specified in the appended claims.

10 Having thus fully described my invention what I claim as new and desire to secure by Letters Patent of the United States is:

1. In a device of the class described, in combination with a suitable receptacle, a suitable sleeve provided with a closing plate at its lower end which plate is provided with a concentric perforation and a suitable block closing the other end of the sleeve, and a movable chambered block, provided with a perforation and a central slotted stem which stem extends through said central perforation in the closing plate, mount-

ed to move within the sleeve and arranged to cooperate with said first named block. 25

2. In a device of the class described, in combination with a suitable receptacle, a sleeve having one end closed by a plate provided with a central perforation, a block closing the other end of the sleeve, a movable block mounted in said sleeve provided with a perforation and a slotted central stem extending through the central perforation in the plate arranged to cooperate with said first named block to act as a valve and a coiled spring to retain said movable block in a position to prevent discharge. 30 35

In testimony whereof I have signed my name to this specification in presence of two subscribing witnesses this 10th day of March, 1910, at Chicago, Illinois. 40

AUGUST VOGES.

Witnesses:

R. J. JACKER,

W. R. RAY.