W. H. ROSE.

SOAP DISPENSER.

APPLICATION FILED MAR. 8, 1915.

1,164,754. Patented Dec. 21, 1915.

FIG. 1.

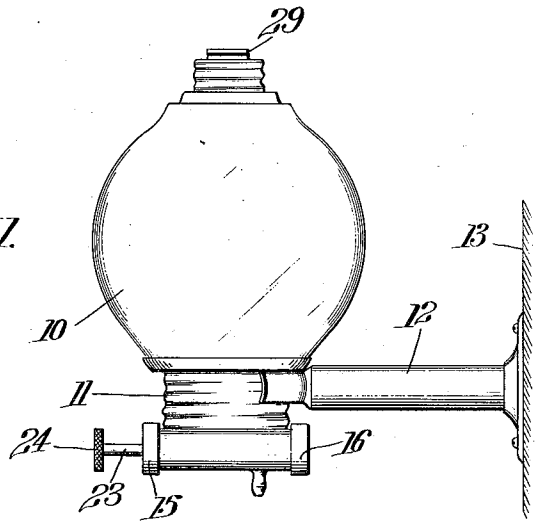


FIG. 2.

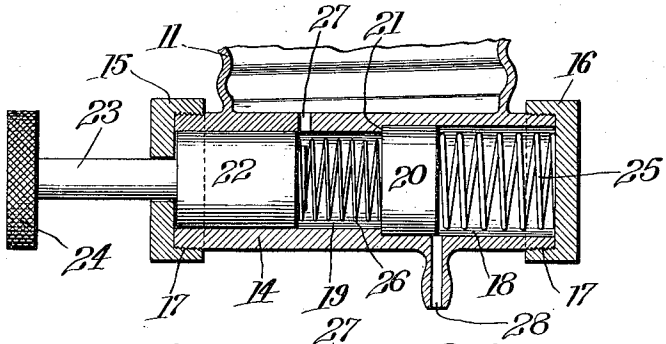
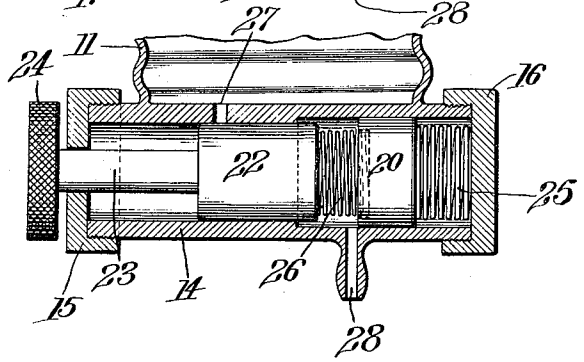


FIG. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM H. ROSE, OF JERSEY CITY, NEW JERSEY.

SOAP-DISPENSER.

1,164,754. Specification of Letters Patent. Patented Dec. 21, 1915.

Application filed March 8, 1915. Serial No. 12,892.

To all whom it may concern:

Be it known that I, WILLIAM H. ROSE, a citizen of the United States, residing at Jersey City, Hudson county, State of New Jersey, have invented certain new and useful Improvements in Soap-Dispensers, of which the following is a specification.

This invention relates to liquid soap dispensers and has for its objects the provision of a simple device which will be adapted to conveniently dispense measured quantities of the soap and the parts of which are so arranged as to avoid waste of the soap due to leakage.

Other objects and the features of novelty will be apparent from the following description taken in connection with the accompanying drawings, in which,

Figure 1 is a side elevation of a soap dispenser embodying my invention; Fig. 2 is an enlarged longitudinal section through the dispensing cylinder; and Fig. 3 is a similar view with the parts in a different position.

Referring to the drawings, 10 designates a soap container which is secured in a hollow member 11, the latter being carried by a bracket 12 which is adapted to be secured to a wall or other support 13. Below the member 11 and preferably formed integral therewith is a horizontally arranged cylinder 14 provided with removable heads 15 and 16 at its opposite ends, these heads being connected with the cylinder by screw threads 17. The cylinder 14 preferably has two different sized bores or plunger chambers 18 and 19. A plunger 20 is fitted in the bore 18 and normally bears against a shoulder 21. A plunger 22 is arranged in the bore 19 and is provided with an actuating rod 23 which has a knob 24 on the end thereof. A comparatively stiff spring 25 is arranged between the plunger 20 and the head 16 and a weaker spring 26 is arranged between the plungers 20 and 22 and normally tends to separate the plungers. The spring 25 normally holds the plunger 20 against the shoulder 21, in opposition to the spring 26.

The member 11 constitutes the bottom of the container 10 and the wall of the cylinder 14 is provided with an opening 27 which serves as an outlet for the container, this outlet normally communicating with the space between the plungers 20 and 22, as indicated in Fig. 2. The cylinder 14 has an outlet 28 which normally communicates with the space between the plunger 20 and the head 16 and serves as a drain for this space. At the top of the container 10 there is a removable cover or plug 29 which may be removed to permit the container to be filled. The plug 29 may be provided with a vent opening.

The operation of the device is as follows: By pressing on the knob 24 the plunger 22 is moved toward the right in the cylinder and compresses the spring 26. A slight movement of the plunger 22 covers the outlet 27 and the plunger 20, being held against the shoulder 21 by the spring 25, causes the liquid soap between the plungers to act as a liquid piston which coöperates with the spring 26 to overcome the tension of the spring 25 and move the plunger 20 to the position shown in Fig. 3. The plunger 20 uncovers the outlet 28 and permits a definite quantity of the liquid soap to be discharged from the space between the plungers. It will be observed from Fig. 3 that the outlet 27 is covered by the plunger 22 so as to prevent the liquid soap from flowing into the space between this plunger and the head 15. When the knob 24 is released the springs 25 and 26 restore the plungers to the position shown in Fig. 2 and the separation of the plungers by the spring 26 produces a suction in the space between the plungers which draws some of the liquid soap from the container into the space between the plungers.

Having thus described the invention what is claimed and desired to be secured by Letters Patent is:

1. In a liquid soap dispenser, the combination of a horizontally disposed cylinder, two independently movable plungers fitting and sliding therein, a soap container above the cylinder, said cylinder having an inlet from the soap container located between the plungers when the latter are in their normal positions and an outlet normally closed from communication with the space between said plungers by one of the plungers, an actuating rod projecting from one of the plungers through the cylinder wall, a spring between and bearing on both of said plungers, and a spring between one of the plungers and an end wall of the cylinder.

2. In a liquid soap dispenser, the combination of a cylinder having two bores of different size forming a shoulder in the cylinder, an independently movable plunger

within and fitting each of said bores, a spring between one of the plungers and an end wall of the cylinder, said spring normally holding said plunger against said shoulder, a lighter spring arranged between and bearing on both of said plungers and normally tending to separate the same, a soap container having an outlet normally in communication with the space between the plungers, an outlet from said cylinder normally adapted to drain the space occupied by the first mentioned spring and normally closed from communication with the space between the plungers, and an actuating rod secured to one of the plungers.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM H. ROSE.

Witnesses:
PAUL T. KRAUSE,
CELIA L. MENDELWAGER.