W. H. ROSE.

LIQUID SOAP DISPENSER.

APPLICATION FILED MAY 6, 1919.

1,308,258.

Patented July 1, 1919.

Fig. 1.

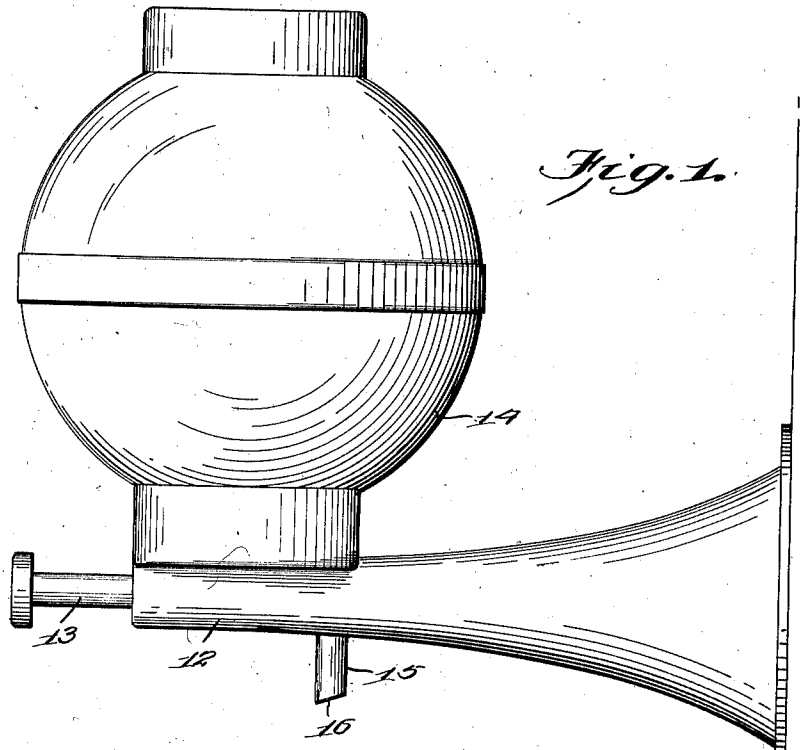
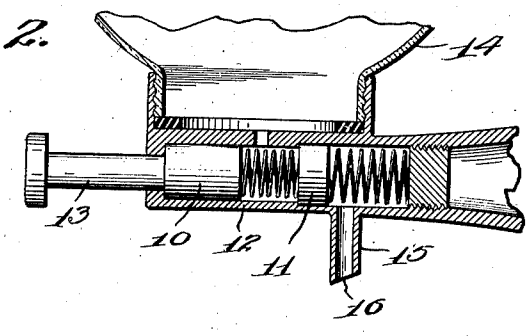


Fig. 2.



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UNITED STATES PATENT OFFICE.

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

LIQUID-SOAP DISPENSER.

1,308,258. Specification of Letters Patent. Patented July 1, 1919.

Application filed May 6, 1919. Serial No. 295,054.

To all whom it may concern:

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

This invention relates to liquid soap dispensers of the positive intermittent discharge type and has for its object to provide an improved discharge outlet tube or duct therefor.

In liquid soap dispensers in which the soap is discharged under pressure, as for instance in dispensers of the type described in my Patent No. 1,164,745 of December 25, 1915, the discharge outlet is usually at the end of a downwardly directed tube or duct. Hitherto the lower end surfaces of these discharge tubes have been disposed substantially in horizontal planes and the user of the dispenser holds his hand beneath the orifice to receive the measured quantity of soap discharged under pressure when the machine is operated. It is found in devices of this character that soap often accumulates and dries around the circumference of the outlet nozzle or tube and when the dispenser is used the soap is discharged at an angle to the tube instead of axially, often toward the user, and sometimes with sufficient force to squirt onto his or her clothing.

To remedy these defects I have provided a discharge tube or duct for devices of this character in which the lower end surface of the outlet tube is in a plane inclined to the horizontal with the lowest edge of the end surface toward the user, that is, toward the front of the dispenser, and the higher edge of this lower end surface on the side toward the rear of the dispenser or away from the user.

When soap under pressure is discharged from a dispenser having my improved discharge tube there is no possibility of its squirting in the direction of the user even when a considerable quantity of the liquid soap has gathered and dried or partially dried around the end of the tube. In all cases the discharge, if it is not truly axial, will be toward the rear of the dispenser and away from the user.

In the accompanying drawings I have illustrated the particular form of dispenser described and claimed in my patent above mentioned, but it will be understood that the invention is applicable to all forms of liquid soap dispensers in which the soap is positively and forcibly discharged from a downwardly extending tube.

Figure 1 is a side elevation of a soap dispenser having my improved discharge tube; and

Fig. 2 is a vertical section through the lower portion of the same.

By means of plungers 10 and 11 which are reciprocable within the cylinder 12 by a person standing in front of the dispenser and operating the plunger stem 13, a measured quantity of soap will pass from the reservoir 14 and out of the discharge tube 15 with each rearward movement of the plunger stem, as fully explained in my prior patent. The soap is discharged under considerable pressure through the outlet tube or duct 15 and so long as its lower end has no soap congealed around its edges, passes vertically downward into the hand of the user. An accumulation of dry soap around the lower end of the discharge tube causes the soap to squirt in various directions in an uncertain manner if the lower end surface of the tube is horizontal, and I have, therefore, constructed this tube with an inclined lower end surface 16, the lower edge of the said surface being toward the front of the dispenser and the higher edge being toward the rear of the dispenser. By this construction the danger of the soap squirting forward is obviated no matter what amount of dried soap may have collected at the lower end of the tube 15, and any deviation of the soap from a vertical path will be toward the rear of the dispenser and away from the user.

It has been found in practice that the construction above described completely does away with the objectionable features mentioned in prior devices of this character and that the invention constitutes a material step forward in the art.

Having thus described the invention what

is claimed as new and desired to be secured by Letters Patent is:

In a liquid soap dispenser of the positive intermittent discharge type, a downwardly directed discharge tube or duct disposed with its axis substantially vertical and having its lower end surface inclined to the horizontal, the lower edge of this end surface being toward the front of the dispenser and the high edge toward the rear thereof, whereby the normal discharge of soap will be vertically downward and abnormal discharge in a forward direction will be prevented.

In testimony whereof I affix my signature.

WILLIAM H. ROSE.