G. W. GREEN.

LIQUID SOAP DISPENSER AND LATHER FORMER.

APPLICATION FILED JULY 10, 1917.

1,278,636.

Patented Sept. 10, 1918.

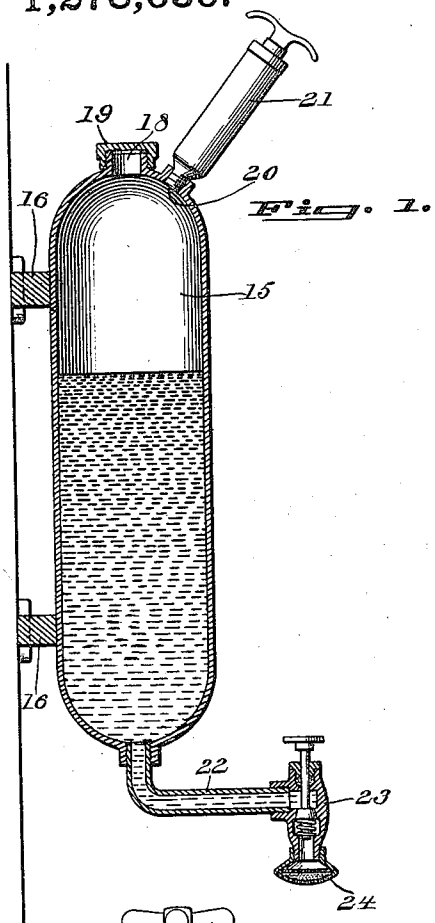


Fig. 1.

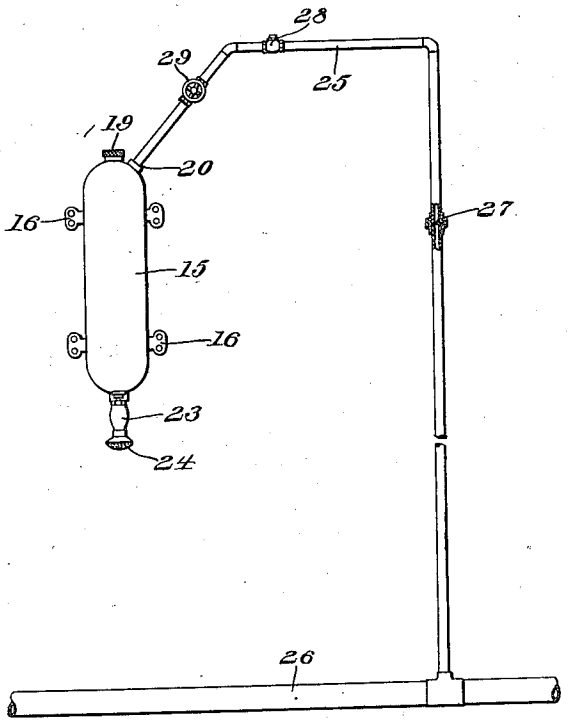
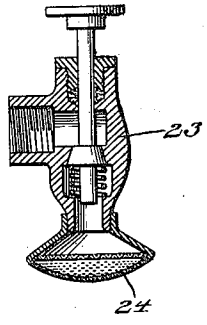
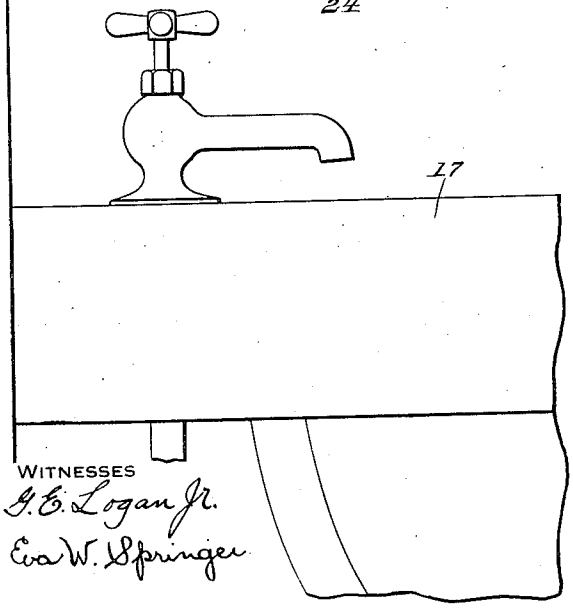


Fig. 2.





WITNESSES

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LIQUID-SOAP DISPENSER AND LATHER-FORMER.

1,278,636. Specification of Letters Patent. Patented Sept. 10, 1918.

Application filed July 10, 1917. Serial No. 179,737.

To all whom it may concern:

Be it known that I, GEORGE W. GREEN, a citizen of the United States, residing at Stockton, in the county of Daviess and State of Illinois, have invented new and useful Improvements in Liquid-Soap Dispensers and Lather-Formers, of which the following is a specification.

This invention relates to dispensing devices, and has for its object the provision of a liquid soap dispenser provided with means whereby the soap being discharged from the container will be converted into lather.

A further object of the invention is to provide a dispensing device for liquid soap comprising a stationary receptacle, a discharge valve for the same, a spraying nozzle through which the soap may be discharged, and means for maintaining the contents of the receptacle under heavy pressure so that, when forcibly discharged through the spray nozzle, it will be converted into suds as it strikes the hand of the recipient.

With these and other ends in view which will readily appear as the nature of the invention is better understood, the same consists in the improved construction and novel arrangement and combination of parts which will be hereinafter fully described and particularly pointed out in the claim.

In the accompanying drawing has been illustrated a simple and preferred form of the invention, it being, however, understood that no limitation is necessarily made to the precise structural details therein exhibited, but that changes, alterations and modifications within the scope of the claim may be resorted to when desired.

In the drawing,—

Figure 1 is a sectional elevation of the improved device.

Fig. 2 is a sectional detail view enlarged, of the discharge valve and spray nozzle.

Fig. 3 is a diagrammatic view showing the device installed in a railroad car and connected with the train pipe for the purpose of receiving the requisite air pressure.

Corresponding parts in the several figures are denoted by like characters of reference.

The tank or receptacle 15 which may be of any desired shape and dimensions has been shown as being equipped with brackets 16 whereby it may be mounted in proper position for operation with respect to a lavatory 17. The receptacle 15 is provided with a filling opening 18 having a tightly fitting closure 19 and in Fig. 1 the said receptacle is also shown as being provided near its upper end with an air inlet 20 with which an air pump 21 is connected. At its lower end the receptacle has a discharge pipe 22 provided with a suitably constructed discharge valve 23 and with a hose or spray nozzle 24 through which the contents of the tank may be discharged.

Under the modified construction illustrated in Fig. 3 the air pump 21 is dispensed with and in lieu thereof the air inlet 20 is connected with an air pipe 25 which is connected with the train pipe indicated at 26, said air pipe being equipped with a screen 27 to prevent any impurities from passing to the receptacle. The air pipe 25 is also provided with a check valve 28 and with a hand valve 29 whereby the air supply may be cut off.

In operation, the receptacle is partly filled with liquid soap. Air is then compressed in the upper portion of the tank either by means of the pump 21 which is connected directly with the tank or by means of a pump with which the air pipe is connected, the purpose being to maintain the contents of the tank under a pressure of approximately 70 lbs. The pressure may be raised from time to time either by means of the pump 21 or by opening the valve 29. By opening the valve 23 the soap will be forcibly discharged through the spray nozzle 24, and will thus be converted into suds as it strikes the hand of the recipient which is held beneath the spray nozzle. The lather thus produced will relieve the user of the soap from the unpleasant, greasy and sticky feeling accompanying the use of liquid soap in the ordinary manner. It is also well known that when liquid soap is dispensed from the ordinary tilting receptacles such receptacles quickly become externally coated with the soap, making it unpleasant to touch the same.

By the present invention this disadvantage is overcome because it is only necessary to press the stem of the valve 23 in order to induce a sufficient flow of the soap.

What is claimed, is:—

A device of the character described comprising a closed receptacle provided with a filling opening, said receptacle being adapted to contain liquid soap, means for

supplying air under pressure within said receptacle, an outlet pipe connected and communicating with the lower end of said receptacle, a valve casing secured to and communicating with the free end of said outlet pipe, a spring-pressed normally closed plunger-operated valve in said casing, and a spray nozzle on the bottom end of said valve casing, opening of said valve causing discharge of the contents of said receptacle through said spray nozzle in lather form.

In testimony whereof I affix my signature.

GEORGE W. GREEN.