

A. G. WISE.  
 SOAP DISPENSING MACHINE.  
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1,260,501.

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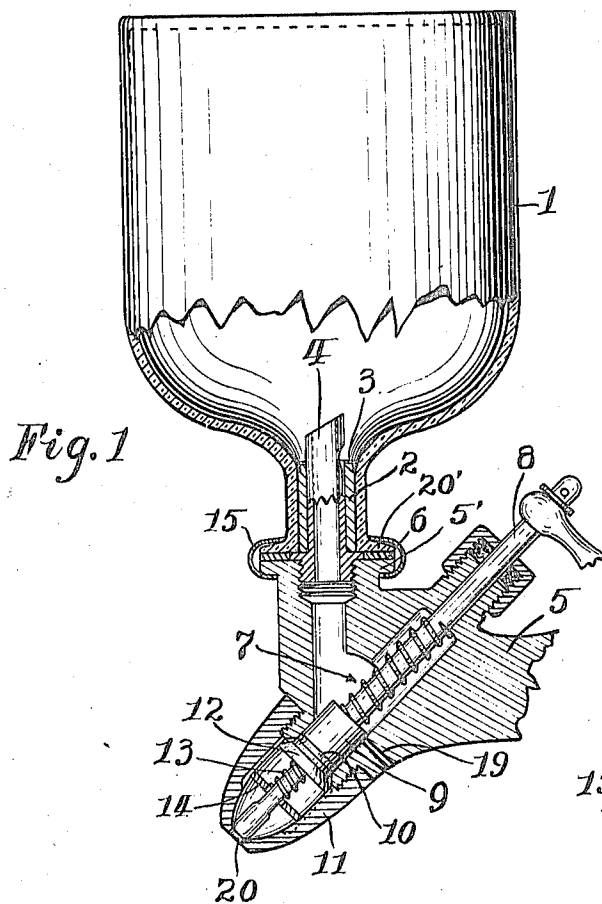


Fig. 3

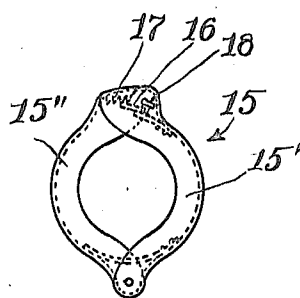
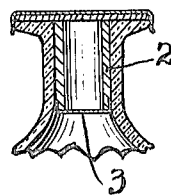
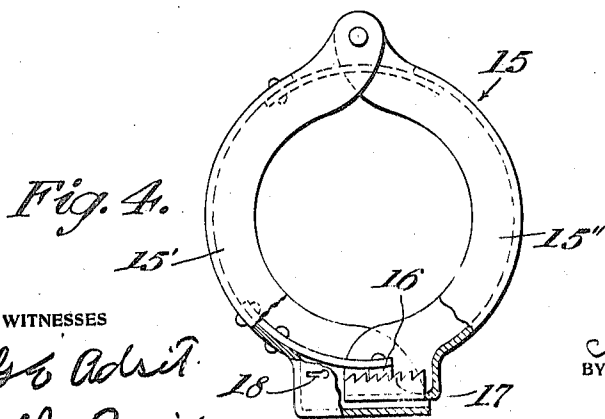


Fig. 2



WITNESSES

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# UNITED STATES PATENT OFFICE.

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## SOAP-DISPENSING MACHINE.

1,260,501.

Specification of Letters Patent.

Patented Mar. 26, 1918.

Application filed March 11, 1915. Serial No. 13,732.

*To all whom it may concern:*

Be it known that I, ANTHONY GEORGE WISE, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented a new and useful Soap-Dispensing Machine, of which the following is a specification.

My invention relates to improvements in soap dispensers in which a liquid soap is carried in a container, and fed out by any suitable means which may be operated either manually, or by means of a foot lever.

One of the objects of my invention is to allow the liquid soap to be carried in stock in the container, sealed in such a way as to be absolutely sanitary, and so as to prevent the loss of liquid by evaporation, and yet allow the container filled with the liquid to be readily attached to the dispenser without loss of any liquid.

Another object of my invention is to provide means whereby the container can be securely locked to the dispenser, so that only parties carrying a key will be able to remove the container.

I attain these objects by the mechanism illustrated in the accompanying drawing, in which—

Figure 1 is a vertical section of the mechanism of the machine;

Fig. 2 is a view showing the means of attaching and locking the container to the dispenser;

Fig. 3 shows a manner of sealing the container to obtain the results desired.

Fig. 4 is an enlarged detail of the locking members of the clamping device.

Similar letters and similar figures refer to similar parts throughout.

The numeral 1 designates a container preferably formed in the shape of a bottle having an annular cork 2 closely fitting the neck of the container, the inner end of the cork being closed by a membrane seal of any suitable material, preferably cork.

A cutting stem 4 is screwed into the support 5 and adapted to cut or break the membrane 3 when the bottle neck containing the annular cork 2 is slipped over the stem and forced down upon the gasket 6 seated upon the shouldered portion 5' of the support 5.

When the container 1 is thus positioned upon the support 5 a locking clamp 15 is

utilized to securely fasten the container to the support. It will be noted that the segmental members 15' and 15'' of my improved locking member are substantially V-shaped in cross section thus adapting them to snugly receive the flange 20' and shoulder 5' respectively of the bottle neck and support. A spring dog 16 carried by segment 15' is adapted to engage the teeth 17 on the segment 15'' in an obvious manner.

The support 5 has a chamber 7 in connection with the container into which the stem 8 and piston valve 9 extend. Grooves 10 formed in the piston valve are provided for a purpose which will be hereinafter explained. A detachable cap 11 screwed on to the support 5 incloses a retaining valve 12 a spring 13 and retaining washer 14.

The clamp 15 may be removed for the purpose of exchanging containers by inserting a key in the key-hole 18 and turning it in an anti-clock-wise direction which releases the dog 16 and allows the open ends of the clamp to be spread apart.

When the container 1, full of liquid, is placed on a dispenser of the type shown, the action is as follows:

A certain amount of liquid will be fed down into the chamber 7 by gravity and when the piston valve 9 is drawn upward this liquid will flow down against the head of the retaining valve 12, which seated itself as soon as the piston valve left it and thus opened the aperture 20.

When the piston valve returns, the pressure exerted on the valve 12 through the liquid will open it from its seat and certain amount of liquid will be forced beyond the head and out through the aperture 20 until the further travel of the piston valve causes the stem of the valve to close the aperture 20.

When a certain amount of soap has been fed out, a partial vacuum would be created in the top of the container, if it were not for the position of the hole 19. This hole, however, registers with the groove 10 of the piston head of the plunger when the plunger is withdrawn, and allows air to enter, which will find its way to the container 1, and thus prevent the formation of a vacuum in the container.

I am aware that prior to my invention, soap dispensers have been made, of various types,

using different kinds of containers for carrying the supply of liquid soap. I therefore do not claim the use of a container broadly. But:

5 I claim:

10 In a liquid dispenser, the combination of a support, a container, an annular stopper for said container, said container and said support each having a flange thereon adapted to register together, and a locking member to unite said container and said support, said locking member comprising two semi-

circular elements having a substantially V shaped cross section, one of said elements carrying ratchet teeth, the other of said elements carrying a spring dog adapted to engage with said ratchet teeth when said two elements are pressed together, and means for releasing said spring dog.

ANTHONY GEORGE WISE.

Witnesses:

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