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BOTTLE CAP

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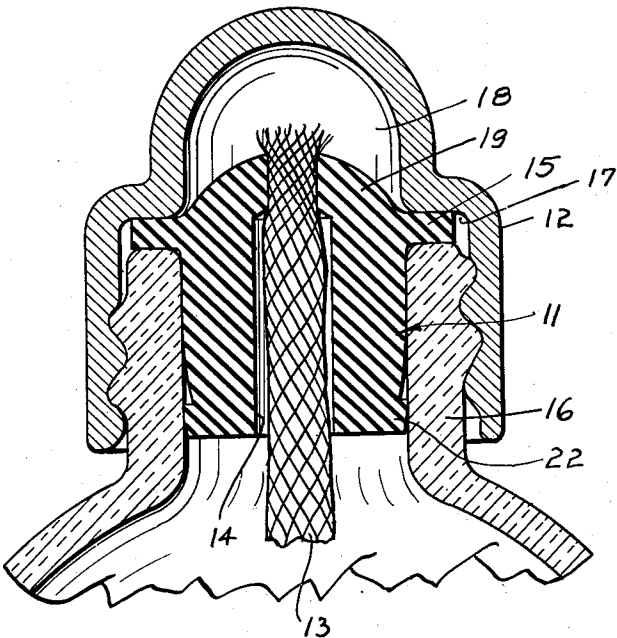


Fig. 1.

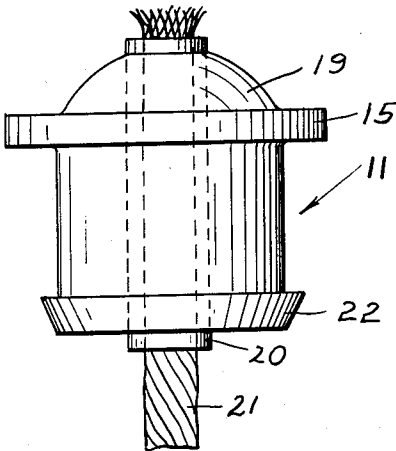


Fig. 2.

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BOTTLE CAP

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2 Claims. (Cl. 91—67.2)

This invention relates to a bottle closure and applicator which is particularly made to prevent evaporation of highly ethereal liquids, and to act as a dispenser.

Existing bottle caps or stoppers cannot prevent quick evaporation particularly if the bottle has to be opened to take some liquid out, nor is there any method of applying liquids directly from the bottle without using some outside instrument.

The stopper is bored in its centre, to hold an absorbent material, the upper part is extended as a washer, above which it ends as a hemisphere, and the lower part is projected to frictionally engage the inner wall of the container in which it is mounted. The cap is indented above its thread to press against the extended washer part of the stopper, and form a tight fit around the applicator part of the stopper to prevent evaporation.

In the stopper can also be inserted a small tube of glass or other material through which the absorbent or hollow material can be drawn. The purpose of the tube is to conduct the liquid more regularly. The longer the tube the smaller the emission of the liquid because the passage of the liquid through a long tube would be slower than through a short tube. In this way, by varying the length of the tube, the emission of the liquid can be regulated to whatever flow is ideal for the purpose on hand. The absorbent material can either be a wick or a hollow tubular tape.

If this material is a wick it would be immersed in the liquid and by its absorbent qualities would conduct the liquid to the exposed end where it could be applied. The wick could then be drawn out from time to time and the soiled end cut off, to give a fresh surface for application. A wick would be used in connection with quick-flowing liquids. On the other hand, a hollow tubular tape would be preferable for thick viscous liquids such as nail varnish. If a hollow tubular tape is used it need not be immersed in the liquid, but its depth need only be as long as the stopper itself, and it could extend out at the top and be frayed in a brush effect so that the liquid when conducted through could be applied as by a moist brush.

When nail varnish is used the emission of the quantity of the liquid can be regulated while the bottle is held upside down by closing the hand around the bottle, the hand generating sufficient heat to cause the liquid inside to develop gases, thus hastening the emission of the liquid.

For liquid with high boiling points it is advisable to use a bottle with a bent neck, so that

the liquid need not come in contact with the tubular tape during application. The tube which holds the tubular tape may be extended at its upper part to a ball which serves as an intermediate container, as the liquid stores in this ball, after the bottle has been held upside down, cannot flow back in the container because of the capillary action of tube.

The accompanying drawing illustrates the invention in which

Figure 1 is a front elevation in section showing the stopper forming the subject matter of my invention applied to the open end of a container.

Figure 2 is a front elevation showing a modified form of my stopper.

The stopper 10 is made of any elastic material and has a hollow 14 through which a wick of any absorbent material is drawn. The stopper is insertable in the neck 16 of a bottle, which represents the open end of a container, thus insuring that an absolute tight closure is obtained when the cap 12 is screwed down thereon.

The stopper 10 is extended at its upper part to form a disc 15. If the cap 12 is screwed on the bottle neck 16, the disc 15 of the stopper 10 will act as a closure, as it will be pressed by means of screwing tightly at the edge of the bottle neck, and at the interior surface 17 of the cap 12.

The inner part 18 of the cap 12 is so constructed that it fits exactly the part 19 above the disc 15 of the stopper 10.

The lower part 22 of stopper 10 is in the form of an annular sloping projection, which frictionally engages the inner wall of the bottle neck 16, to prevent the slipping of the stopper 10 out of the bottle neck, the sloping formation 22 being such that the stopper may be readily inserted into the bottle neck, but resists withdrawal.

In Figure 2, there is shown a modification of the stopper 10, wherein a glass tube 20 is inserted into the hollow 14 of the stopper, and a tubular tape 21 is drawn through the tube.

It is obvious that various changes and modifications may be made to the details of construction without departing from the general spirit of the invention as set forth in the appended claims.

I claim:

1. In a device of the class described, a container for liquids having an open end and a stopper mounted in said container at said open end, said stopper incorporating a longitudinally extending wick projecting from both ends thereof, and a plurality of resilient annular projections

spaced along the periphery of said stopper, one of said projections being disposed to rest on the wall defining the open end of the container, and the other annular projection being disposed to frictionally engage the inner wall of said container adjacent the open end thereof.

2. In a device of the class described, a container for liquids having an open end, and a stopper mounted in said container at said open end, said stopper having a longitudinally extending central

bore and a wick passing there through, and a plurality of resilient annular projections spaced along the periphery of said stopper, one of said projections being disposed to rest on the wall defining the open end of the container, and the other annular projection being disposed to frictionally engage the inner wall of said container adjacent the open end thereof.

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