May 6, 1941. M. SIERAD ET AL 2,241,022

BOTTLE CLOSURE

Filed March 8, 1940

Fig. 1

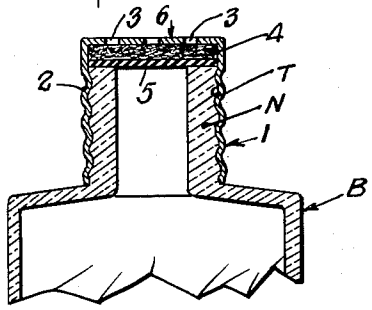


Fig. 2

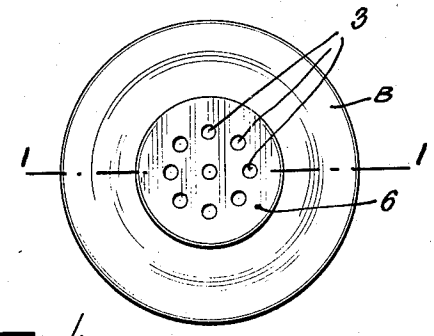


Fig. 3

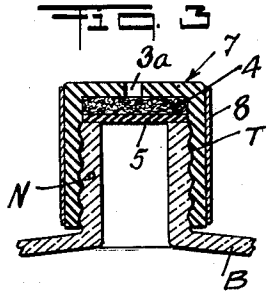


Fig. 4

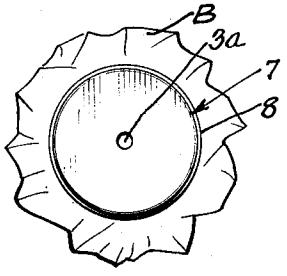


Fig. 5

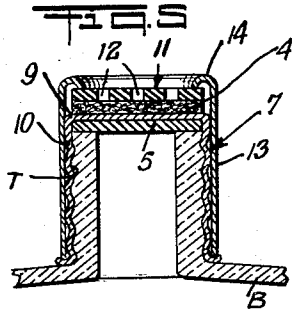


Fig. 6

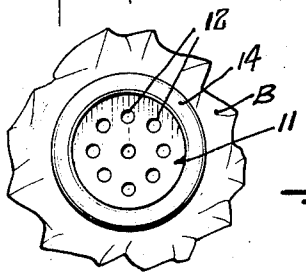


Fig. 7

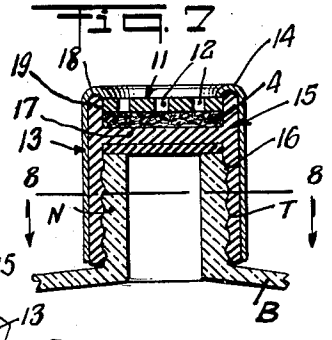
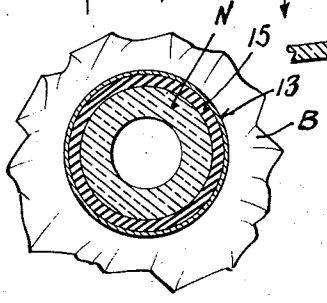


Fig. 8



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BOTTLE CLOSURE

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Application March 8, 1940, Serial No. 322,910

2 Claims. (Cl. 215—38)

This invention relates to improvements in bottle closures and more particularly to an improved cap for bottles or vials containing perfumes and similar volatile liquids.

The principal object of the invention is the provision of a novel cap or closure for perfume bottles whereby a purchaser may be enabled to ascertain the odor of the perfume contained within the bottle without the necessity of removing the cap from the bottle, thus obviating the possibility of any loss of the liquid contents which may result from spillage or evaporation.

Another object of our invention is to provide a novel cap for bottles containing perfumes and similar volatile liquids which will efficiently seal the liquid contents of the bottle and at the same time permit the particular odor of the perfume to be determined without the necessity of removing the cap from the bottle.

Other objects of the invention will be set forth in the following description and drawing, which illustrate preferred embodiments thereof, it being understood that the above statement of the objects of the invention is intended generally to explain the same without limiting it in any manner.

Fig. 1 is a sectional view along line 1—1 of Fig. 2, the bottom part of the bottle being shown broken away.

Fig. 2 is a top plan view of one embodiment of the invention.

Fig. 3 is a sectional view of another embodiment of the invention.

Fig. 4 is a top plan view thereof.

Fig. 5 is a sectional view of still another embodiment of the invention, and

Fig. 6 is a top plan view thereof.

Fig. 7 is a sectional view of another embodiment.

Fig. 8 is a sectional view along line 8—8 of Fig. 7.

Referring to the drawing, the reference letter B designates any ordinary type of bottle having the neck-portion N. A thread, designated by the reference letter T is formed on the outer face of said neck N.

Referring specifically to the embodiment of the invention shown in Figs. 1 and 2, 1 designates a metal cap or closure having the thread 2 formed in the cylindrical face thereof, said thread being adapted to engage thread T of the neck N of the bottle. A plurality of perforations or openings 3 are formed in the top wall 6 of cap 1. Liners 4 and 5 are located below the inner surface of the top wall 6 of cap 1. Liner 4, positioned below and adjacent the perforations 3, may be made of any suitable absorbent material such as absorbent paper, absorbent cotton, blotting paper, etc. Located below and adjacent to liner 4 is disc 5, said disc being formed of an impermeable material such as metal foil or cork. Members 4 and 5 may be secured to each other or a single liner having its upper part porous and its lower part non-permeable, may be employed.

When cap 1 is in closed position on bottle B, top wall 6 of said cap presses disc 5 against the top wall of the neck N of the bottle, thus effectively sealing the contents of said bottle. Absorbent liner 4 may be saturated with material similar to the contents of the bottle thereby enabling a person to ascertain the scent or odor of said contents without removing the cap from the bottle. The openings in the top wall of the cap permit the vapors of the material impregnated in liner 4 to pass therethrough.

The embodiment of the invention illustrated in Figs. 3 and 4 differs from the embodiment just described principally in that the cap 7 is made of a plastic or other similar material and has a thread formed on its inner cylindrical face and secondly, instead of a plurality of perforations, only one perforation or opening 3a is formed in the top wall of said cap. Liners 4 and 5 are similarly located as in the first embodiment, illustrated in Figs. 1 and 2. Absorbent liner 4 is impregnated with a sample of the liquid in the bottle so that a purchaser can determine the scent or odor of the contents of the bottle, without removing the cap.

In addition, a cylindrical sleeve 8 may be provided said sleeve fitting snugly over the cap 7, said sleeve being adapted to receive any type of design, ornamentation or printed matter. Sleeve 8 may be made from any suitable material and may be secured to cap 7 by any suitable means.

A third embodiment of the invention is illustrated in Figs. 5 and 6. This embodiment comprises a stamped metal cap 7, having a thread 10 formed in the cylindrical wall thereof, said thread being adapted to engage the thread T formed on the neck of the bottle. Positioned between the top wall of the neck of the bottle and the inner surface of the top wall 9 of cap 7 is the non-permeable disc 5, said disc being firmly and snugly held against the top wall of the neck of the bottle by said cap 7, thus effectively sealing the liquid contents of the bottle. An absorbent liner 4 is positioned on the outer surface of top wall 9 of cap 7, and disc 11, having perforations or open-

ings 12 formed therein, is positioned atop said liner 4.

Members 4 and 11 are snugly held against the outer surface of top wall 9 of cap 7 by means of a sleeve 13, said sleeve fitting snugly around the cap and having an inwardly formed bead 14 located at its upper edge. The inner edge of said bead presses downwardly against the top of disc 11 and holds said disc 11 and absorbent liner 4 securely in place. Absorbent liner 4 is impregnated with a sample of the liquid contents of the bottle, so that the particular odor or scent of the material contained within the bottle may be ascertained without the necessity of removing the cap from the bottle. Printed matter or any design or ornamentation may be carried by the outer face of sleeve 13 and said sleeve may be made from any desired material.

The embodiment illustrated in Figs. 7 and 8 shows substantially the same arrangement as the last described embodiment as it would be applied where the cap is made of a plastic or similar material. Cap 15 has a thread 16 formed in its inner cylindrical wall adapted to engage the thread T on the neck of the bottle. Extending above the top 17 of cap 15 is the cylindrical peripheral wall 18 forming the circular recess 19. Located in said recess are the absorbent liner 4 and perforated disc 11. In this embodiment there is also provided a sleeve 13 having a bead 14 formed along its top edge, said bead being adapted to hold the members 11 and 4 snugly within recess 19.

We have shown preferred embodiments of our invention, but it is obvious that numerous changes and omissions may be made without departing from its spirit.

The invention may be applied to any type of bottle, vial or container.

We claim:

1. In combination, a bottle having a neck-portion, a closure cap fitting over said neck-portion, an impermeable liner member adapted to seal the liquid contents of the bottle positioned on the top wall of the neck-portion and abutting the inner surface of the top wall of the cap, a porous liner positioned on the outer surface of the top wall of the cap, a perforated disc superimposed on said porous liner, a sleeve member adapted to snugly fit over the cylindrical wall of the cap, said sleeve member having an inwardly formed bead located at its upper edge, the inner edge of said bead adapted to exert downward pressure against the top of the perforated disc and hold the said disc and porous liner securely in place when the cap is applied to the neck of the bottle.

2. In combination, a container having a neck-portion, a closure cap having a top wall and a cylindrical wall fitting over said neck-portion, an impermeable liner member adapted to seal the liquid contents of the container positioned on the top wall of the neck-portion and abutting the inner surface of the top wall of the cap, the cylindrical wall of said cap extending above the top wall thereof thus forming a recess, a porous liner positioned on the outer surface of the top wall of said cap within said recess, a perforated disc superimposed on said porous liner within said recess, a sleeve member adapted to snugly fit over the cylindrical wall of the cap, said sleeve member having an inwardly formed bead located at its upper edge, the inner edge of said bead adapted to exert downward pressure against the top of the perforated disc and to hold said disc and porous liner securely in place within the recess where the cap is applied to the neck of the container.

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