

A. SACCA.
BOTTLE CLOSURE.
APPLICATION FILED APR. 11, 1912.

1,053,225.

Patented Feb. 18, 1913.

Fig. 1.

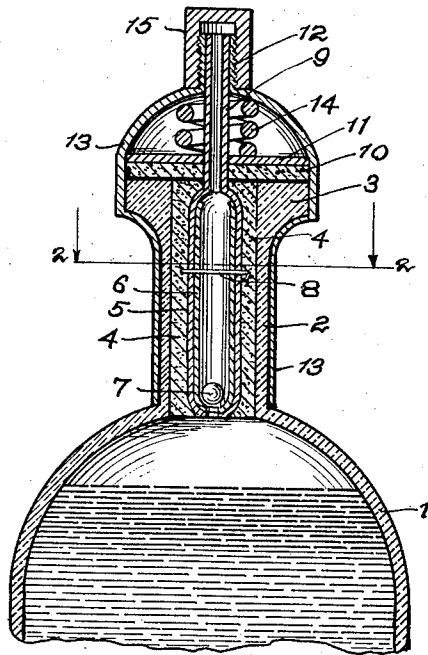
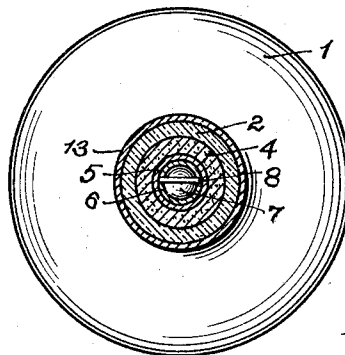


Fig. 2.



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UNITED STATES PATENT OFFICE.

ANTHONY SACCA, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO
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BOTTLE-CLOSURE.

1,053,225.

Specification of Letters Patent.

Patented Feb. 18, 1913.

Application filed April 11, 1912. Serial No. 690,026.

To all whom it may concern:

Be it known that I, ANTHONY SACCA, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Bottle-Closures, of which the following is a specification.

My invention relates to improvements in bottle closures, and more particularly to a closure for bottles designed for dispensing cologne, bay-rum, and other articles of a similar nature, which prevents re-filling of the bottle, and also prevents evaporation of the liquid when the cap is removed.

A further object is to provide an improved closure of this character which holds under tension a spring, whereby if the device is tampered with, the spring will destroy it so effectually as to prevent its reuse.

A further object is to provide a closure of this character which, if tampered with, will be destroyed for further use.

With these and other objects in view, the invention consists in certain novel features of construction and combinations and arrangements of parts, as will be more fully hereinafter described and pointed out in the claims.

In the accompanying drawings: Figure 1, is a view in longitudinal section illustrating my improvements, and Fig. 2, is a view in section on the line 2—2 of Fig. 1.

1, represents a bottle and 2 a neck thereon having the ordinary enlarged outer end 3. Located centrally within the neck 2, and inclosed within a sleeve 4 of cork is a tube 5. This tube 5 is of two different diameters. The larger diameter has rounded or restricted ends, and between these rounded or restricted ends, an inner tube 6 is located, and also has rounded or restricted ends. In the inner tube, a ball valve 7 is provided and is of appreciably less diameter than the internal diameter of the inner tube, yet large enough to close the open ends of the tube, and it is of course to be understood that the tube is open at both ends. A cross pin 8 is projected through both tubes, and serves to hold them against independent longitudinal movement, and also limits the movement of the ball 7 when the bottle is inverted. The smaller diameter 9 of tube 5 extends beyond the end of the bottle neck, and projects

through a cork disk 10 and a metal disk 11, and into an externally screw-threaded sleeve 12 on a sheet metal casing 13. This sheet metal casing 13 confines a coiled spring 14 between the same and the metal disk 11. This coiled spring 14 is positioned around the smaller diameter 9 of tube 5, and the said metal casing is positioned around the bottle neck and by some suitable mechanism is restricted in diameter around the lower portion of the neck, so as to hold itself in position on the neck. The coiled spring is, of course, hid from view, but if any one should attempt to remove the casing 13, the spring will throw the casing off the bottle neck, and render it impossible for any one to re-assemble the parts without the proper machinery.

An ordinary cap 15 is screwed onto the sleeve 12 to close the bottle if desired. In ordinary use, however, this cap is left off, because the ball 7 sufficiently closes the bottle to prevent undue evaporation.

When it is desired to pour out the contents of the bottle, it is simply necessary to invert the same, when the ball will roll down and strike the pin 8, leaving ample space around the ball for the passage of the liquid. If any one inserts a wire or other tool through the tube and breaks pin 8, ball 7 will, when the bottle is inverted, move to the other end of the tube and close the same, so that the liquid in the bottle cannot be poured out.

Various slight changes might be made in the general form and arrangement of parts described without departing from my invention, and hence I do not limit myself to the precise details set forth, but consider myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of the appended claims.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. The combination with a bottle and a neck thereon, of an imperforate tube secured within the bottle neck, and having restricted open ends, a ball valve in said tube, and a pin projected through said tube confining the ball in the lower end of the tube, substantially as described.

2. The combination with a bottle, and a neck thereon, of a tube positioned in the bottle neck, a filler in said neck around the

tube, said tube of two diameters, the larger diameter having restricted open ends, an inner tube located within the larger diameter of the outer tube and having restricted open ends, a ball valve in the inner tube, and a pin projected through both of said tubes, substantially as described.

3. The combination with a bottle and a neck thereon, of a tube secured within the bottle neck and having restricted open ends, a ball valve in said tube, a pin projected through said tube confining the ball in the lower end of the tube, a disk on the end of the bottle neck having a central opening, a

tube of smaller diameter projecting through the central opening in the disk and communicating with the first-mentioned tube, a spring around said last-mentioned tube, and a covering inclosing the spring and secured around the neck of the bottle, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ANTHONY SACCA.

Witnesses:

ALFONSO DE PAUL,
CHAS. E. POTTS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."