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CLOSURE FOR BOTTLES

Filed Oct. 11, 1922

1,473,540

Fig. 1,

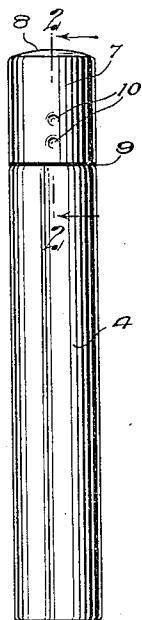


Fig. 2,

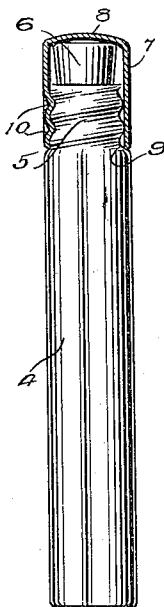
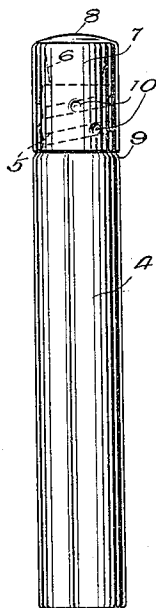


Fig. 3.



WITNESSES

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CHARLES L. BERNARDO, OF NEW YORK, N. Y.

CLOSURE FOR BOTTLES.

Application filed October 11, 1922. Serial No. 593,887.

To all whom it may concern:

Be it known that I, CHARLES L. BERNARDO, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Closure for Bottles, of which the following is a full, clear, and exact description.

This invention relates to improvements in bottle closures, and has particular reference to locking means therefor.

An object of the invention is to provide a closure or cap for bottles or vials, particularly adapted to contain perfumes and which is so constructed that the same will be securely maintained in its closing position and will present a neat and attractive appearance when in place.

Another object is to provide a closure or cap of extremely simple construction, which may be easily and cheaply manufactured.

The above and other objects will appear more clearly from the following detail description when taken in connection with the accompanying drawing which illustrates different embodiments of the inventive idea.

In the drawing—

Figure 1 is an elevational view of the invention;

Figure 2 is a sectional view on the line 2—2 of Figure 1; and

Figure 3 is an elevational view showing a slightly different form of the invention.

Referring more particularly to the drawing, the numeral 4 indicates a small bottle or a vial of cylindrical formation, which is particularly used for containing perfumes and which is provided at its open end with a slightly reduced and externally threaded neck 5, into which a cork or stopper 6 may be inserted.

The cap or closure 7 which comprises the essential features of the present invention, is preferably made of thin material and formed with a rounded end 8 adapted to engage the stopper 6 to securely maintain the same in closing position. The closure 7 is also of cylindrical formation and its exterior diameter is preferably equal to that of the vial 4 so that when the closure is in closing position on the neck 5, the inner end of the closure will engage the annular shoulder 9 formed by the reduced neck and thus,

in the effect, present a smooth exterior surface which forms a continuation of the body of the vial, thereby producing an article of neat and artistic appearance.

To maintain the closure 7 securely on the neck of the vial, said closure is preferably provided with one or more in-punched locking projections 10 which are rounded and designed to be positioned in the spaces between the external threads on the neck 5 and engage adjacent surfaces of said threads to prevent displacement of the closure with respect to the vial until said closure is unscrewed from the neck.

In the form of the invention shown in Figures 1 and 2 the in-punched locking projections 10 are aligned with respect to a plane extending through the longitudinal axis of the vial, while in the embodiment shown in Figure 3, one of these projections may be arranged in said plane while the other is offset with respect thereto. In both instances, the projections are longitudinally spaced to receive the threads of the neck 5 therebetween so that said projections will effect a binding action upon adjacent surfaces of the threads and thus securely maintain the closure in its closing position. With the projections arranged as shown in Figure 3, this binding action will be so distributed by reason of the offset relation of the projections 10 that the closure when being applied or removed will be prevented from being shifted laterally with respect to the longitudinal axis of the neck, which shifting might otherwise result in a buckling or distortion of the closure.

What is claimed is:

As a new article of manufacture, a bottle closure of cylindrical formation having a closed end engageable with a stopper mounted in the open threaded end of a container to retain said stopper in position, said closure being of substantially the same diameter as said container and having its wall in-punched to provide spaced locking projections, said closure and container forming a cylindrical surface of uniform external diameter free of external projections, said locking projections engaging adjacent threads formed at the open end of said container to maintain the closure in closing position.

CHARLES L. BERNARDO.