C. W. SIMMONS.

NON-REFILLABLE BOTTLE.

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1,087,840.

Patented Feb. 17, 1914.

Fig. 1.

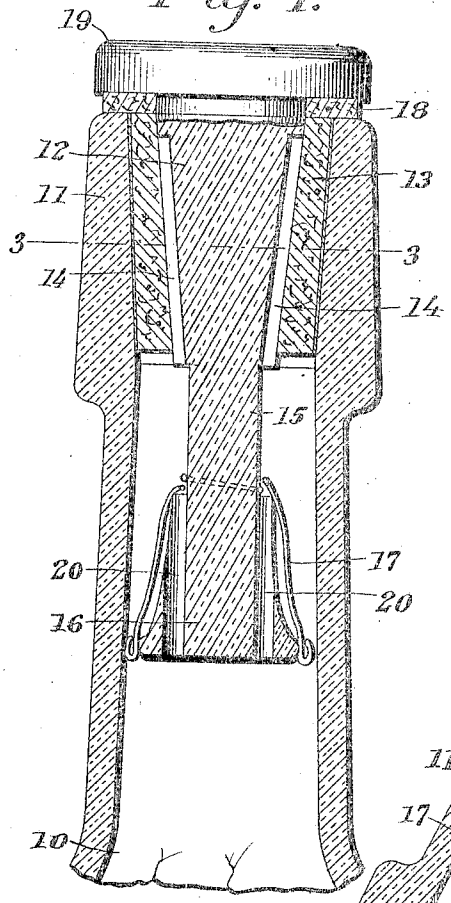
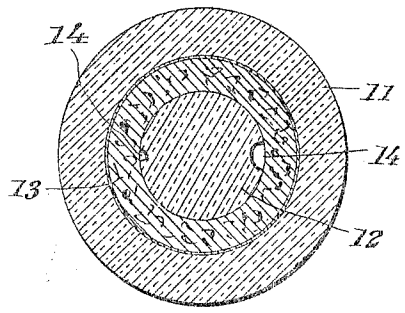


Fig. 2.



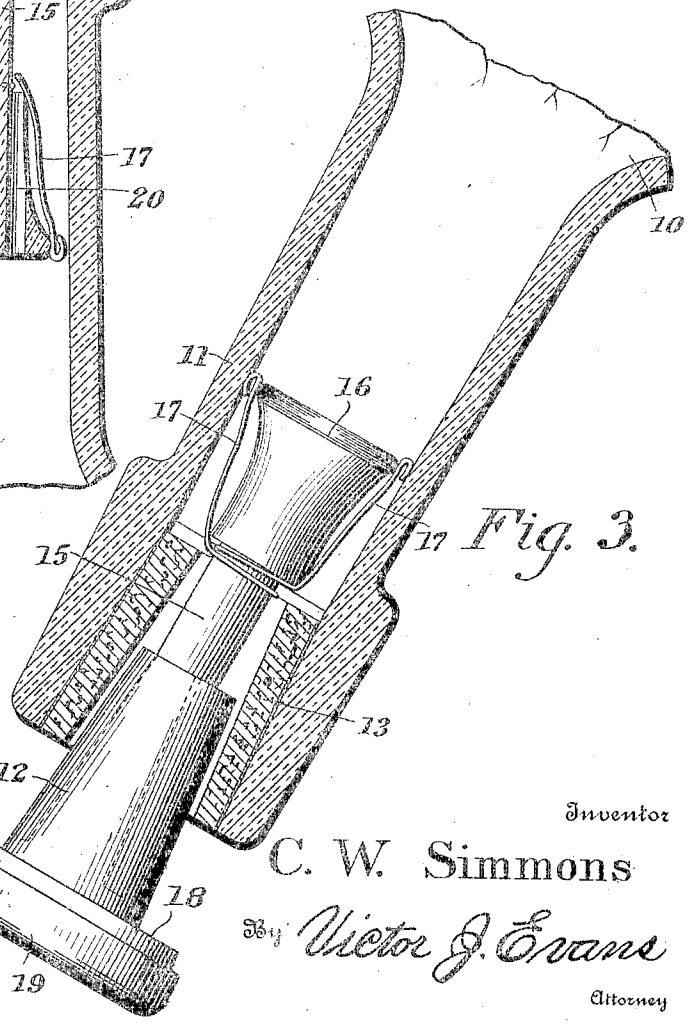


Fig. 3.

Witnesses

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NON-REFILLABLE BOTTLE.

1,087,840. Specification of Letters Patent. Patented Feb. 17, 1914.

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To all whom it may concern:

Be it known that I, CLIFTON W. SIMMONS, a citizen of the United States, residing at Norfolk, in the county of Norfolk and State of Virginia, have invented new and useful Improvements in Non-Refillable Bottles, of which the following is a specification.

The invention relates to bottles and more particularly to non-refillable bottles, and has for an object to provide a bottle of this type which cannot be conveniently refilled after the original contents have been withdrawn therefrom.

The invention embodies, among other features, a bottle of a simple and durable construction, consisting of few parts and which can be cheaply manufactured to accomplish the desired result.

In the further disclosure of the invention reference is to be had to the accompanying drawings, constituting a part of this specification, in which similar characters of reference denote corresponding parts in all the views, and in which:

Figure 1 is a fragmentary vertical sectional view of the bottle, showing the same in an upright and closed position; Fig. 2 is a fragmentary side elevation of the bottle body, showing the same in tilted and open position; and Fig. 3 is a horizontal sectional view taken on the line 3—3 in Fig. 1.

Referring more particularly to the views, I disclose a bottle body 10 including a neck 11 having the inner wall thereof tapered, as shown.

A stopper body 12 is arranged to depend in the neck 11 and when in closed position is encircled by a collar 13, preferably made of cork and adapted to be rigidly secured in the neck of the bottle body, the said collar having a tapered passage through which the stopper body 12 passes so that the stopper body is also tapered. A series of vertical grooves 14 are formed in the periphery of the stopper body and depending from the lower end of the stopper body is a shank 15 supporting a frusto-conical member 16 preferably made of solid glass and acting as a weight. A stop member 17 preferably formed of a single piece of wire looped around the shank 15 and depending adjacent the member 16 is provided for limiting the upward movement of the stopper body 12, the said stop member 17, when the stopper body 12 is in closed position, being spaced from the wall of the neck and adapted to engage the wall of the neck when the stopper body is pulled upwardly, thus through a binding action with the inner wall of the neck limiting the movement of the stopper body. A washer 18 preferably made of cork reposes upon the upper edge of the neck and also reposes on the upper edge of the collar 13 and a cap 19, preferably formed of glass, is formed integrally with the stopper body 12 at the upper end thereof and seats upon the washer 18 when the stopper body is in closed position.

In the use of the device described, the stopper body 12, the shank 15, the member 16 and cap 19 can all be cast from a single piece of glass or other material and the bottle body is filled with fluid prior to the insertion of the stopper body in the neck of the bottle. The collar 13 is arranged to encircle the stopper body prior to the insertion thereof in the neck of the bottle body and when the collar has been inserted in the neck, it is secured by a mucilaginous substance to the inner wall of the neck so as to remain rigidly therein. Therefore, when it is desired to remove some of the contents of the bottle body therefrom an upward pull is exerted on the cap and the bottle body is tilted, a plurality of passages 20 being formed in the member 16 to permit of the fluid in the bottle body passing through the grooves 14 and thence upwardly through the neck of the bottle body.

The stop member 17 is preferably formed of springlike wire and from the foregoing description it will be apparent that the device described is of a simple and durable construction and can be cheaply manufactured for the purpose of accomplishing the desired result.

Having thus described my invention, I claim:

In a non-refillable bottle, the combination with a bottle body including a neck, of a stopper body normally depending in the neck, a collar carried within the neck and encircling the stopper body, with the inner face of the collar tapered and the base of the stopper body tapered to conform to the taper of the collar, a shank depending from

the stopper body, a member supported on the shank, a stop member encircling the shank above the member and depending adjacent thereto to engage the wall of the neck when the stopper body is moved into open position, a cap carried by the stopper body and lying exteriorly of the bottle body to close the neck thereof, and a plurality of longitudinal passages formed on the periphery of the stopper body.

In testimony whereof I affix my signature in presence of two witnesses.

CLIFTON WYATT SIMMONS.

Witnesses:

PERCY S. STEPHENSON,

FANNY A. CAPPS.