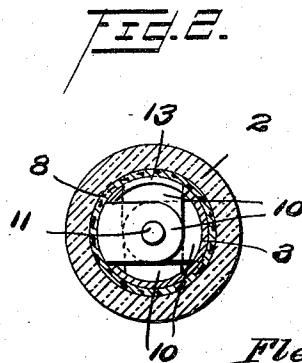
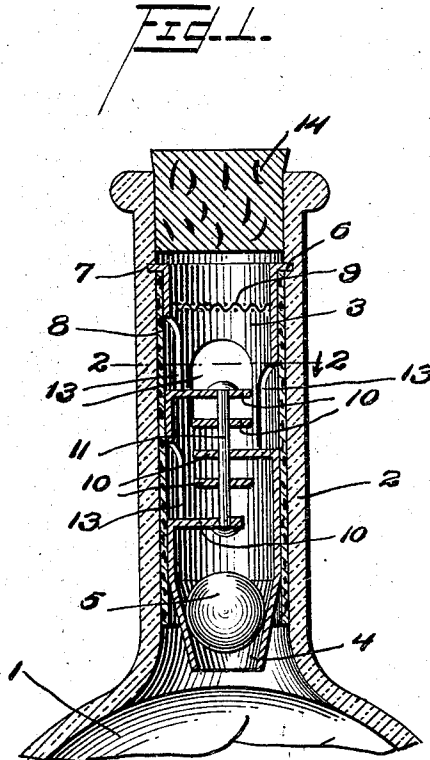


F. B. CLARK.
NON-REFILLABLE BOTTLE.
APPLICATION FILED MAR. 5, 1912.

1,043,903.

Patented Nov. 12, 1912.



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UNITED STATES PATENT OFFICE.

FLETCHER B. CLARK, OF PITMAN GROVE, NEW JERSEY.

NON-REFILLABLE BOTTLE.

1,043,903.

Specification of Letters Patent.

Patented Nov. 12, 1912.

Application filed March 5, 1912. Serial No. 681,725.

To all whom it may concern:

Be it known that I, FLETCHER B. CLARK, a citizen of the United States, residing at Pitman Grove, in the county of Gloucester and State of New Jersey, have invented certain new and useful Improvements in Non-Refillable Bottles, of which the following is a specification.

My invention relates to improvements in non-refillable bottles, the object of the invention being to provide an improved construction of device which may be secured in a bottle neck, and which, while permitting the liquid to flow out of the bottle when the bottle is inverted or inclined, will prevent re-filling.

A further object is to provide an improved device of this character which may be manufactured and sold at an extremely low price, and which embodies in its construction simplicity, strength and durability.

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 cross section on the line 2—2 of Fig. 1.

1, represents a bottle having an ordinary neck 2 thereon, and in this neck 2 my improved attachment is secured, and comprises a metal tube 3 having a conical lower end 4. This conical lower end is adapted to be closed by a ball 5, and of appreciably less diameter than the diameter of tube 3, yet large enough to close the conical end 4 so as to prevent liquid from being poured into the bottle. The upper end of the tube 3 is flared outwardly forming a flange 6 which is adapted to be forced into a groove 7 in the bottle neck. This operation may be performed by any suitable tool provided for the purpose, and a thin lining 8 preferably of sheet cork is provided around tube 3 between the same and the bottle neck, so as to form a tight juncture and prevent leakage.

To baffle the entrance of a tool to dislodge the ball valve 5, a wire screen 9 is secured in the upper portion of the tube in any approved manner, and also a plurality of inwardly projecting tongues 10 are struck from the tube 3. In other words, the

tongues 10 are cut out of the tube 3 in circular series, but in different elevations, so that when said tongues are bent inwardly, they form a series of walls or obstructions to prevent the entrance of a tool to manipulate the ball. These tongues are preferably secured together by a pin or rivet 11 so as to prevent them from being moved after once bent into operating position. The inner of these tongues 10 serves to limit the movement of ball 5 when the bottle is inverted, and while, of course, the bending of these tongues 10 leave openings 13 in the wall of tube 3, said openings are closed by the cork lining 8.

The device is intended, of course, to be used with an ordinary stopper 14 which is removed when liquid is to be poured out of the bottle.

When the bottle is inverted, the ball valve will roll down against a tongue 10, and the liquid will flow through the tube 3, around the several tongues 10. When the bottle is returned to normal position, the ball valve will automatically close by reason of the weight, and cannot be tampered with because the screen 9 and tongues 10 will effectually exclude any tool inserted through the bottle neck.

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. A non-refillable bottle having a neck thereon, a metal tube secured in said neck, and having a conical inner end, a ball valve in said tube adapted to close the conical end, a circular series of inwardly bent tongues positioned at different elevations, and a longitudinal pin projected through said tongues and securing them together, substantially as described.

2. A non-refillable bottle having a neck thereon, a metal tube secured in said neck, and having a conical inner end, a ball valve in said tube adapted to close the conical end, a circular series of inwardly bent tongues positioned at different elevations, and a lon-

itudinal pin projected through said tongues
and securing them together, a screen secured
in the upper end of said tube, and a flange
on the upper end of said tube secured in a
5 groove in the bottle neck, substantially as
described.

In testimony whereof I have signed my

name to this specification in the presence of
two subscribing witnesses.

FLETCHER B. CLARK.

Witnesses:

R. H. KRENKEL,
CHAS. E. POTTS.

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