F. ADAMS.

NON-REFILLABLE BOTTLE.

APPLICATION FILED NOV. 19, 1908.

952,400.

Patented Mar. 15, 1910.

FIG. 1

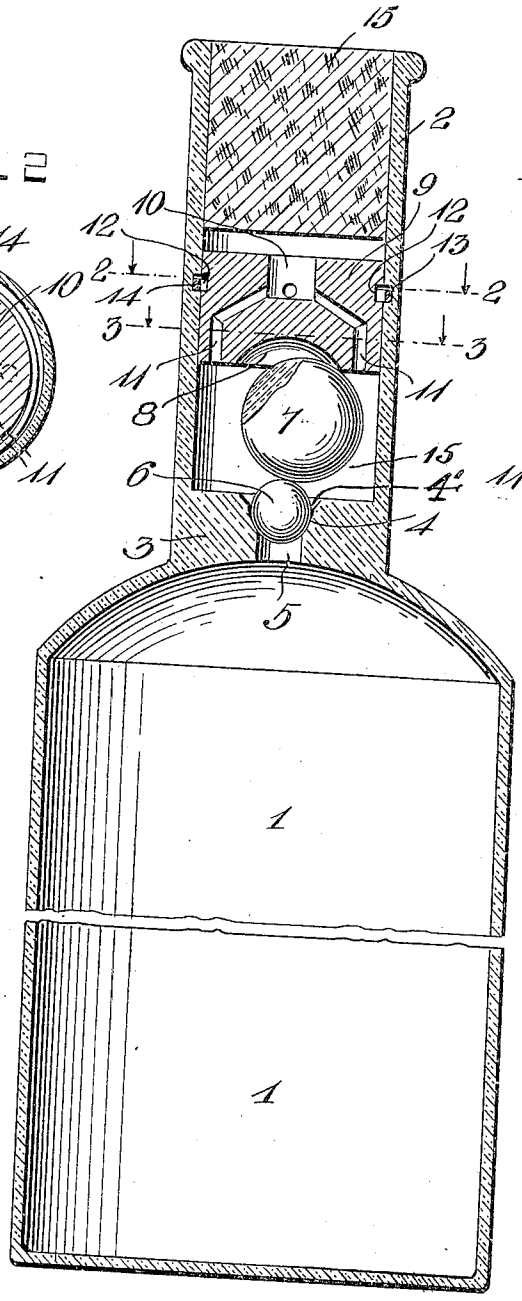


FIG. 2

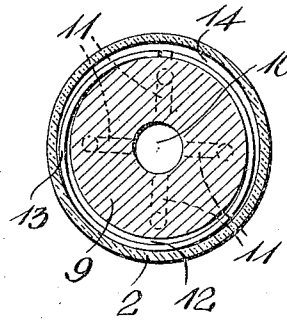
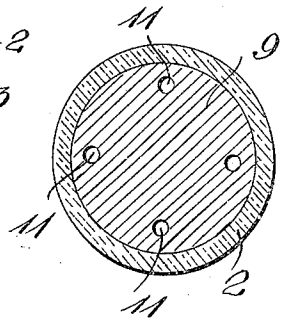


FIG. 3



Witnesses

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NON-REFILLABLE BOTTLE.

952,400. Specification of Letters Patent. Patented Mar. 15, 1910.

Application filed November 19, 1908. Serial No. 463,429.

To all whom it may concern:

Be it known that I, FRANCIS ADAMS, a citizen of the United States, residing at Pawtucket, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Non-Refillable Bottles; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to non-refillable bottles, and has for its object the provision of a simple, efficient and cheap structure of this type which after once being emptied of its original contents cannot be refilled without damaging the neck of the bottle so that it would be immediately detected.

With these and other objects in view, the invention consists of certain novel features of construction, combination and arrangement of parts, as will be more fully described and particularly pointed out in the appended claim.

In the drawing, Figure 1 is a vertical section; Fig. 2 is a section on the line 2—2 of Fig. 1; and Fig. 3 is a section on the line 3—3 of Fig. 1.

Referring to the drawing, the numeral 1 represents the bottle and 2 the neck thereof which is provided at its junction with the interior of the body of the bottle with an enlarged annular partition 3, having an opening which is constructed part way of its length with a vertical portion 5, which merges into a curved seat 4, said curved seat merging into a curved passage-way 4′ leading to said seat. A glass ball valve 6 is adapted to be mounted into the curved seat by means of said passage-way 4′, and held thereto by a large glass ball 7, which will be hereinafter known as a weight. The weight is loosely mounted in a compartment 15, which is arranged between the shoulder 3, and a locking cap 9, said locking cap having on its underside a curved socket 8, so as to permit of the weight contacting therewith, when the bottle is turned upside down, this is caused by the movement of the weight in said compartment 15. The locking cap is also provided with a plurality of diagonally and vertically arranged channels 11, leading from an aperture 10, in said cap, said channels communicate with the compartment 15.

Formed in the periphery of the cap is an annular recess 12 adapted to receive the locking ring 13 which seats when the cap is in locked position in the annular recess 14 formed in the neck of the bottle. This ring 13 is preferably constructed of spring steel and is split as is shown, so as to be compressed in the recess 12 when the cap is forced into the neck of the bottle. When the ring registers with the recess 14 it springs outwardly thereinto and locks the cap 9 in the bottle neck. The cap is preferably constructed of some material which is not affected by tools and it will be seen that the apertures are so constructed therein that it is impossible to use a tool for holding the valve 6 off its seat. The neck of the bottle is further closed by a suitable cork stopper 15.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Having thus described and ascertained the nature of my invention, what I claim as new and desire to secure by Letters-Patent, is:—

A non-refillable bottle comprising the body with a neck having an enlarged annular shoulder formed at the intersection of the body and neck, said neck having an opening therein which is constructed vertical part way of its length and merges into a curved valve seat having a cone-shaped passageway leading thereto, a glass ball adapted to be mounted in said seat by means of said cone-shaped passageway, a locking cap mounted in the neck and above said shoulder, so as to provide a compartment between said shoulder and said cap, a spherical glass weight constructed of a size greater than the ball for the valve seat and mounted in said compartment, said locking cap having a central aperture therein provided with a plurality of diagonally and vertically arranged channels leading therefrom and communicating with said compartment, means connected to the cap and neck for securing the cap in the neck, said cap having a socket formed on its under surface to permit of the weight having lateral

movement in the compartment and beyond the socket so that said weight will bear against the circumferential edge of the socket to permit of its contacting with the glass ball at different angles to hold the same to its seat.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

FRANCIS ADAMS.

Witnesses:
THOS. DYSON,
GEORGE H. MITCHELL.