

W. F. A. BOYENS.
NON-REFILLABLE BOTTLE CAP.
APPLICATION FILED APR. 20, 1909.

936,082.

Patented Oct. 5, 1909.

Fig. 1.

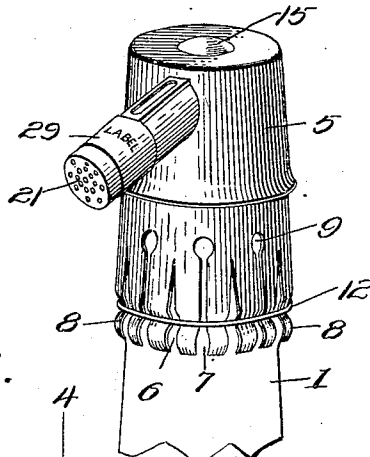


Fig. 2.

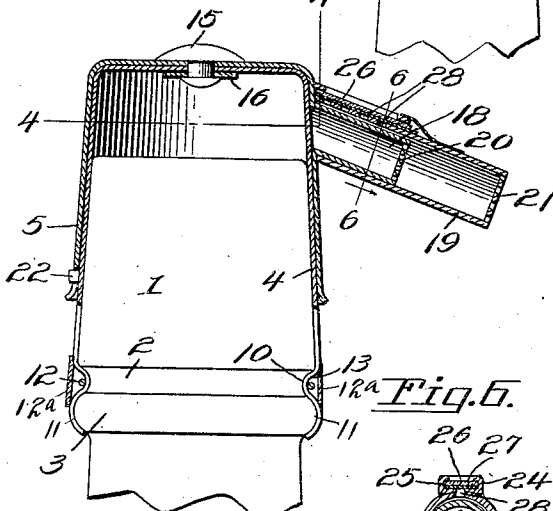


Fig. 3.

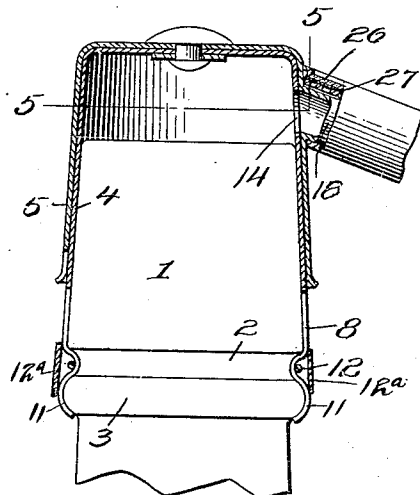


Fig. 4.

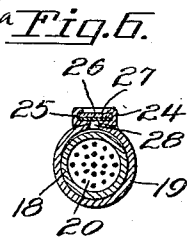
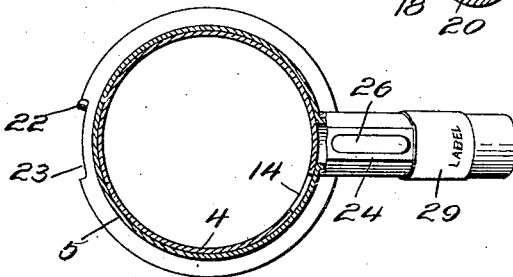
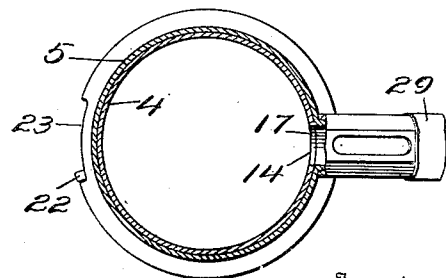


Fig. 5.



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WILLIAM F. A. BOYENS, OF BROOKLYN, NEW YORK, ASSIGNOR OF ONE-THIRD TO WILLIAM J. DOOLEY AND ONE-THIRD TO EDWARD D. JOHNSON, OF WASHINGTON, DISTRICT OF COLUMBIA.

NON-REFILLABLE-BOTTLE CAP.

936,082.

Specification of Letters Patent.

Patented Oct. 5, 1909.

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To all whom it may concern:

Be it known that I, WILLIAM F. A. BOYENS, a subject of the Emperor of Germany, residing at Brooklyn, in the county of Kings and State of New York, have invented new and useful Improvements in Non-Refillable-Bottle Caps, of which the following is a specification.

My invention relates to improvements in closures for bottles and containers of a like nature.

The primary object of the invention is the provision of a closure which will prevent the bottle from being refilled without detection, the invention comprehending a main cap secured to the neck of the bottle and provided with a pouring opening, an auxiliary cap movably mounted upon the main cap and provided with a pouring opening adapted to be moved into and out of registration with the pouring opening of the main cap, a label holder secured to the auxiliary cap, and a label located in the holder and having printed thereon a word of caution, such word being printed in ink only visible on the application of moisture.

A further object of the invention is the provision of a bottle closure which shall be simple, durable and efficient, which may be applied to bottles of conventional types, and which may be manufactured and sold at a comparatively low cost.

With the above and other objects in view, the invention consists in the construction, combination and arrangement of parts hereinafter fully described and claimed, and illustrated in the accompanying drawing, wherein:—

Figure 1 is a perspective view illustrating the application of a bottle closure constructed in accordance with my invention. Fig. 2 is a sectional view taken on a plane extending vertically and centrally through the bottle closure, the closure being shown closed. Fig. 3 is a view similar to Fig. 2, the closure being shown opened. Fig. 4 is a sectional view taken on the horizontal plane indicated by the line 4—4 of Fig. 2. Fig. 5 is a sectional view taken on the horizontal plane indicated by the line 5—5 of Fig. 3, and Fig. 6 is a sectional view taken on the plane indicated by the line 6—6 of Fig. 2.

Referring to the drawing by reference numerals, 1 designates the upper portion of

the neck of a bottle of a conventional type, 55 and it is provided with an annular groove 2 and an annular bead 3.

My improved bottle closure comprises a main cap 4 which is secured to the bottle neck 1 against movement thereon, and an auxiliary cap 5 which is rotatably mounted upon the main cap. The main cap 4 is provided with a plurality of slots 6 and 7 which open out through the lower end thereof and which provide a plurality of attaching strips or elements 8. The slots 6 are of inverted V-shape and the slots 7 are elongated and terminate at their upper ends in circular openings 9, the constructions of the slots permitting the attaching strips 8 to be moved inwardly or outwardly in applying and securing the main cap 4 to the bottle neck 1. The attaching strips 8 are formed to provide ribs 10 which fit in the annular groove 2, and recesses 11 which receive the bead 3, the groove, bead, ribs, and recesses establishing an interlocking connection between the attaching strips 8 and the bottle neck 1. The attaching strips 8 are secured in interlocking engagement with the bottle neck 1 by a wire band 12 which encircles the attaching strips and which is located in the recesses 13 provided by the formation of the ribs 10. At a point adjacent its upper end the main cap 4 is provided with its side with a pouring opening 14.

The auxiliary cap 5 is secured to the main cap 4 by a rivet 15 which passes through the tops of the caps, a washer 16 preventing leakage about the rivet. The auxiliary cap 5 is provided with a pouring opening 17 which is adapted to be thrown into and out of registration with the pouring opening 14 of the main cap 4. A downwardly and laterally extending pouring spout 18 is secured to the auxiliary cap 5 and surrounds the pouring opening 17. An auxiliary pouring spout 19, which is greater in length and diameter than the main pouring spout 18, is secured to the auxiliary cap 5 and incloses the main pouring spout. The outer ends of the main and auxiliary pouring spouts are closed by reticulated members 20 and 21 respectively, said members preventing insects from entering and the insertion of instruments into the spouts. The auxiliary spout 19 provides means by which the auxiliary cap 5 may be rotated upon the main cap 4 to move the

pouring opening 17 into and out of registration with the pouring opening 14. The movement of the auxiliary cap 5 upon the main cap 4 is limited by a pin 22 which projects laterally from the main cap and which fits in an elongated recess 23 formed in and opening out through the lower edge of the auxiliary cap. When it is desired to pour the contents of the bottle the auxiliary cap 5 is rotated upon the main cap 4 until the pouring opening 17 registers with the pouring opening 14, then the bottle is canted, the contents of the bottle flowing freely through the spouts.

The auxiliary spout 19 is provided with a label holder 24 which is open at its upper side and which includes guide grooves or ways 25, said grooves or ways only opening out through the lower end of the holder. A glass panel 26 and a label 27 are mounted in the guide grooves or ways 25. On the label 27 the word "Refilled" is printed in ink which is only rendered visible on the application of moisture. To permit the label 27 to be moistened during the pouring of the contents of the bottle, the auxiliary tube 19 is provided with a plurality of openings 28. During the pouring of the contents of the bottle, some of the liquid will find its way through the openings 28 into the label holder 24. The liquid entering the label holder will moisten the label contained therein. As the word "Refilled" will appear upon the label after the contents of the bottle has been poured, it should be apparent that it is impossible to refill the bottle without detection. To prevent the unauthorized removal of the label 27 without detection, a label 29 is applied to the auxiliary spout 19 in a manner to close the open end of the label holder 24. To prevent the unauthorized removal of the wire 12 without detection, a label 12^a shown in Figs. 2 and 3 of the drawing, is applied to the strips 8 in a manner to inclose the wire 12.

It should be apparent from the above description, taken in connection with the accompanying drawing, that I provide a bottle closure which will prevent the bottle from being refilled without detection, which is simple durable and efficient, and which may be manufactured and sold at a comparatively low cost.

Having thus described the invention, what is claimed as new is:—

1. A bottle closure having a pouring opening, a moisture conducting opening, and a label, affected by moisture, over said moisture conducting opening, and in communication therewith.

2. A bottle closure having a pouring opening, a moisture conducting opening, and a label holder with which said moisture conducting opening communicates.

3. A bottle closure having a pouring open-

ing, a moisture conducting opening communicating with said pouring opening, a label, affected by moisture, over said moisture conducting opening, and means to open and close said pouring opening.

4. A bottle closure comprising a main cap provided with a pouring opening, an auxiliary cap mounted on the main cap and provided with a pouring opening and also with a moisture conducting opening, and a label, affected by moisture, closing said moisture conducting opening.

5. A bottle closure comprising a main cap having a pouring opening, an auxiliary cap mounted for movement on the main cap and having a pouring opening, which by movement of said auxiliary cap may be put into or out of register with the pouring opening of the main cap, said auxiliary cap having also a moisture conveying opening communicating with the pouring opening of said auxiliary cap, and a label, affected by moisture, on said auxiliary cap and closing said moisture conveying opening.

6. A bottle closure comprising a cap provided with a pouring spout having an opening, and a label secured to the spout over said opening and adapted to be moistened during the pouring of the contents of the bottle.

7. A bottle closure comprising a cap provided with a pouring opening, and a label holder secured to the cap and communicating with the interior thereof.

8. A bottle closure comprising a cap provided with a plurality of openings, one of said openings being a pouring opening, and a label secured to the cap over the other of said openings, to be moistened during the pouring of the contents of the bottle.

9. A bottle closure comprising a cap provided with a pouring opening, a label holder secured to the cap and having an entrance opening communicating with the interior thereof, and a label secured to the cap and inclosing the entrance opening of the label holder.

10. A bottle closure comprising a main cap having a pouring opening, an auxiliary cap mounted for movement on the main cap and having a pouring spout for movement into and out of register with the pouring opening of the main cap, and an auxiliary spout on the said pouring spout, said auxiliary spout having a label, affected by moisture, and also having an opening to convey moisture from said auxiliary spout to said label, when liquid passes through said spout.

11. A bottle closure comprising a main cap having a pouring opening, an auxiliary cap mounted for movement on the main cap and having a pouring spout for movement into and out of register with the pouring opening of the main cap, and an auxiliary spout on said pouring spout, said auxiliary

spout having a label holder and also having
a moisture conducting opening establishing
communication between said auxiliary spout
and said label holder, and a label in said
5 label holder, said label being affected by
moisture and closing said moisture conduct-
ing opening.

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

WILLIAM F. A. BOYENS.

Witnesses:

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H. A. FICKEN.