

No. 865,864.

PATENTED SEPT. 10, 1907.

E. H. CAMPBELL.
BOTTLE.

APPLICATION FILED OCT. 1, 1906.

Fig. 1.

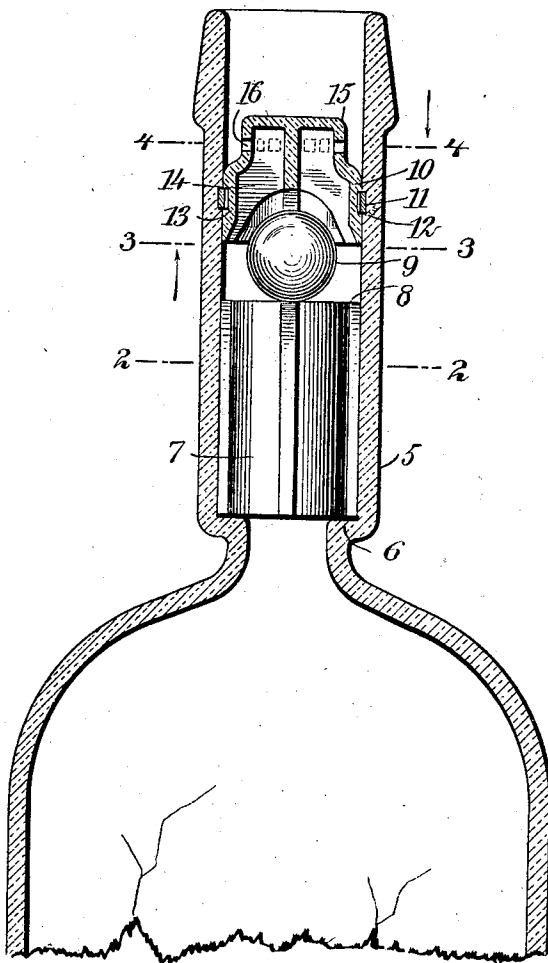


Fig. 2.

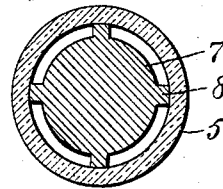


Fig. 3.

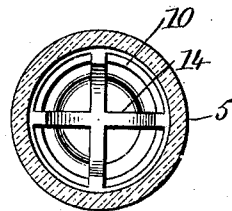
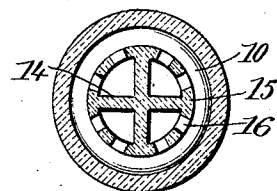


Fig. 4.



WITNESSES

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BOTTLE.

No. 865,864.

Specification of Letters Patent.

Patented Sept. 10, 1907.

Application filed October 1, 1906. Serial No. 336,920.

To all whom it may concern:

Be it known that I, EVAN HUGH CAMPBELL, 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 Bottle, of which the following is a full, clear, and exact description.

This invention relates to improvements in bottles of the non-refillable type, the object being to provide a novel, simple and inexpensive means in the neck of the bottle, that will permit liquid to flow readily out when the bottle is tilted, but will effectually prevent re-filling of the bottle; thus, not only insuring a purchaser that the liquid in the bottle is that originally placed therein, but protecting bottlers from fraudulent re-use of bottles.

I will describe a bottle embodying my invention and then point out the novel features in the appended claims.

Reference is to be had to the accompanying drawings forming a part of this specification in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a sectional elevation of a portion of a bottle with a protecting device embodying my invention, in the neck thereof; Fig. 2 is a section on the line 2—2 of Fig. 1; Fig. 3 is a section on the line 3—3 of Fig. 1; and Fig. 4 is a section on the line 4—4 of Fig. 1.

Referring to the drawings, 5 designates a neck of a bottle having an interior annular shoulder 6 on its lower end, which forms a seat for a float valve 7 formed of any suitable material. The float 7 has outwardly extended longitudinal ribs 8 which bear loosely against the interior surface of the bottle neck and will serve to keep the float centered. The spaces between the ribs 8 form passages or ports for the outflow of liquid when the bottle is tilted. Also arranged within the neck and serving to hold the float in its closed position, is a weight 9 of suitable metal or of glass. This weight is here shown as spherical, and above the weight a cap 10 is secured in the neck. As a means for securing the cap in the neck I employ a spring-ring 11 adapted to engage in an annular channel 12 formed in the neck and also in an annular channel 13 formed in the cap. Within the cap are plates 14, the lower edges of which are curved upward, or dome-shaped, to receive the

weight 9 when the bottle is tilted. The upper portion of the cap is reduced in diameter as indicated at 15; that is, the diameter of this reduced portion is considerably less than the interior diameter of the bottle neck, so that liquid may flow out into the space between the reduced portion and the neck, said liquid passing out of the cap through the openings 16 when the bottle is tilted.

In the operation, of course, the bottle must be filled by a bottler before the parts are placed in the neck thereof. After the filling, the float is to be placed in the neck, then the weight, and finally the cap; the locking rings obviously will prevent the cap from being drawn outward. After placing the cap in position an ordinary cork may be inserted above it.

In order to discharge liquid it is only necessary to tilt the bottle so that the weight will move into the dome-shaped portion of the plates in the cap, permitting the float to move off its seat so that liquid may pass over the same between the ribs.

The bottle cannot be re-filled, because should an attempt be made to do so, the weight will hold the float on its seat, thus preventing the passing of liquid into the bottle.

Having thus described my invention I claim as new and desire to secure by Letters Patent:

1. A bottle having an interior annular shoulder at the lower portion of its neck, a float in the neck adapted to rest on said shoulder, a weight above the float, a cap rigidly fixed in the neck above the weight, and having a contracted upper end with openings in the side thereof leading from the interior of the cap directly to the mouth of the bottle, and a spider in said cap dome-shaped on its under face for receiving said weight.

2. A bottle having an interior annular shoulder at the lower portion of its neck, a float in the neck adapted to rest on said shoulder, a weight above the float, a cap in the neck above the weight, a locking ring located in registering channels in the neck of the bottle and in the cap, said cap having a contracted upper end with openings in the side thereof leading from the interior of the cap directly to the mouth of the bottle, and means in the interior of said cap for limiting the movement of said weight therein.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

EVAN HUGH CAMPBELL.

Witnesses:

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