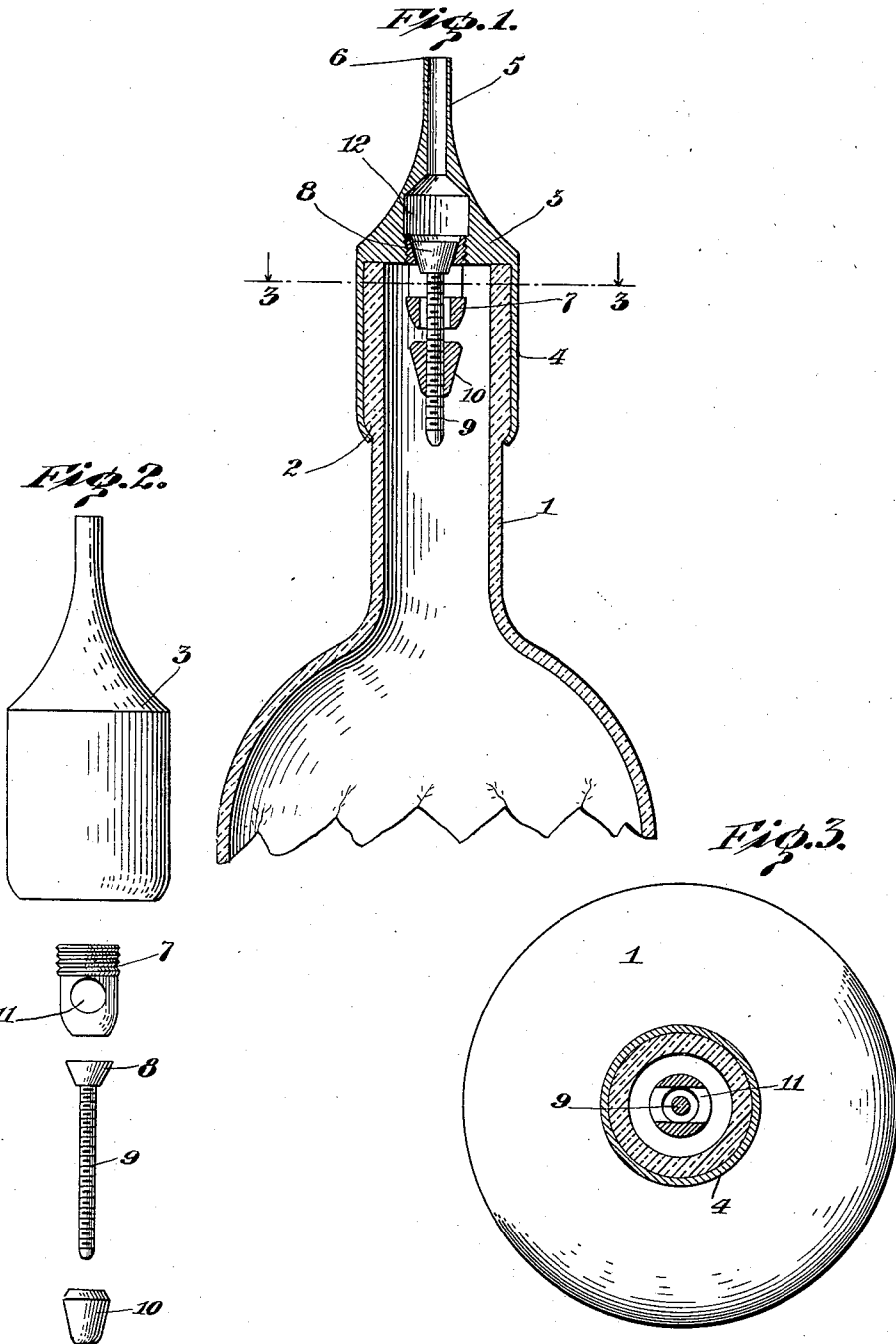


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NON-REFILLABLE BOTTLE.
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1,065,612.

Patented June 24, 1913.



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UNITED STATES PATENT OFFICE.

GAETANO IMPELLITTERI AND ANTONINO IMPELLITTERI, OF NEW YORK, N. Y.

NON-REFILLABLE BOTTLE.

1,065,612.

Specification of Letters Patent.

Patented June 24, 1913.

Application filed January 3, 1913. Serial No. 739,991.

To all whom it may concern:

Be it known that we, GAETANO IMPELLITTERI, a citizen of the United States, and ANTONINO IMPELLITTERI, a subject of the King of Italy, both residing in the city, county, and State of New York, have invented certain new and useful Improvements in Non-Refillable Bottles, of which the following is a full, clear, and complete disclosure.

Our invention relates to bottles of the kind comprising check valves arranged to permit the liquid to flow in only one direction, and has for its object the construction of a bottle of this kind, which will be reliable in operation, which will comprise but few parts, and which may be cheaply constructed and will be neat in appearance.

In the drawing accompanying and forming a part of this specification we have illustrated one embodiment of our invention and our improvements and their advantages will be readily understood from a description of this embodiment.

Figure 1 of this drawing is a vertical section of the device. Fig. 2 is an external view of the cap, valve-cage, valve-stem and adjustable stop, shown separately for clearness of illustration. Fig. 3 is a sectional view taken on the line 3—3 of Fig. 1.

In the drawing, the numeral 1 designates the neck of a bottle, provided with an outer annular shoulder 2.

The numeral 3 designates a cap fitted on the neck and having a depending skirt or wall 4 fitting snugly around the neck and turned in behind the shoulder 2, so as to hold the cap in position. The cap comprises a vertical tubular discharge extension 5, having an opening 6 therein, through which the liquid is discharged. The opening 6 may be provided with a stopper or cap of any ordinary kind. At its lower end the opening 6 communicates with an enlarged opening 12, the walls of which are threaded so as to receive the threaded removable valve cage 7. The valve 8 is mounted in the cage 7 and has a screw-threaded stem 9 having an adjustable stop 10 mounted thereon.

This stop regulates the distance which the valve may open and is adjusted when the cap is put in position. This adjustability is a desirable feature, since, by adjusting the stop 10 before applying the cap to the bottle any desired rate of discharge may be obtained. In practice the size of the discharge orifice 6 and the tubular extension may be varied with different uses but we prefer to have the opening elongated and contracted as it makes it more difficult for those attempting to refill the bottle to interfere with the normal operation of the valve. The side wall 4 in practice is made to extend below the valve cage and valve mechanism so as to obscure these parts and make a more sightly arrangement.

In operation, when the bottle is inverted, the valve opens and the liquid flows out through openings 11, and through the valve port and opening 6. When the bottle is seated normally in an upright position, the valve is closed and liquids cannot be poured into the bottle. When the bottle is inclined or laid on its side, the slightest effort to cause liquid to flow into the bottle will close the valve and prevent the bottle being filled. After the contents of the bottle has been used, the cap may be destroyed while the valve and valve cage can be screwed out and used in a new cap.

In practising our invention, the body of the cap may conveniently be made in one piece of britannia metal or other similar composition, as may also the valve mechanism, though the latter parts should preferably be made of harder material.

While we have described only one embodiment of our invention, we are aware that this may be modified by those skilled in the art without departing from the scope of our claim.

What we claim is:—

In a non-refillable bottle, the combination of a cap having a side wall engaging the outer surface of the bottle neck, a contracted tubular discharge orifice, a valve cage located in and having a screw-threaded engagement with the inner walls of said cap

and having a valve orifice in its upper end communicating with intake orifices located on the sides of said cage, a valve adapted to close said valve orifice and open outwardly
5 and having a stem arranged to extend through said cage and an adjustable stop mounted on and having a screw-threaded

engagement with said stem, substantially as described.

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