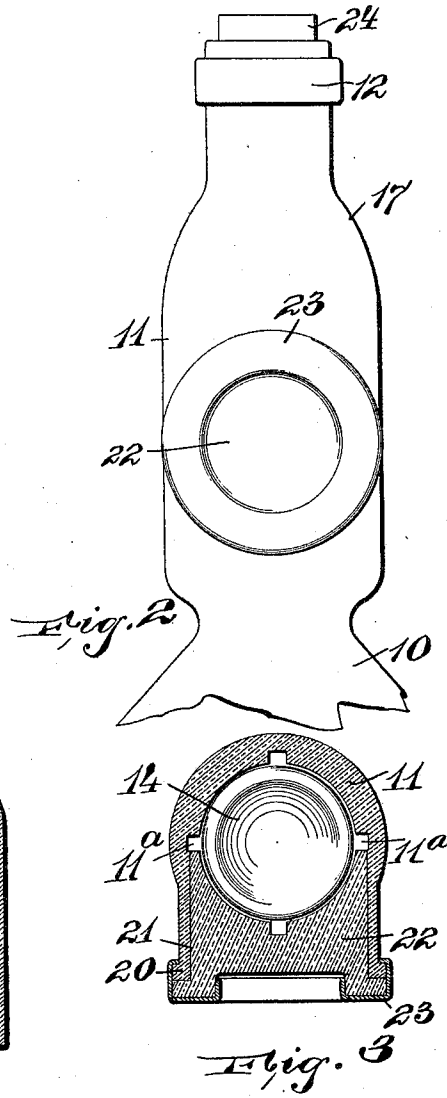
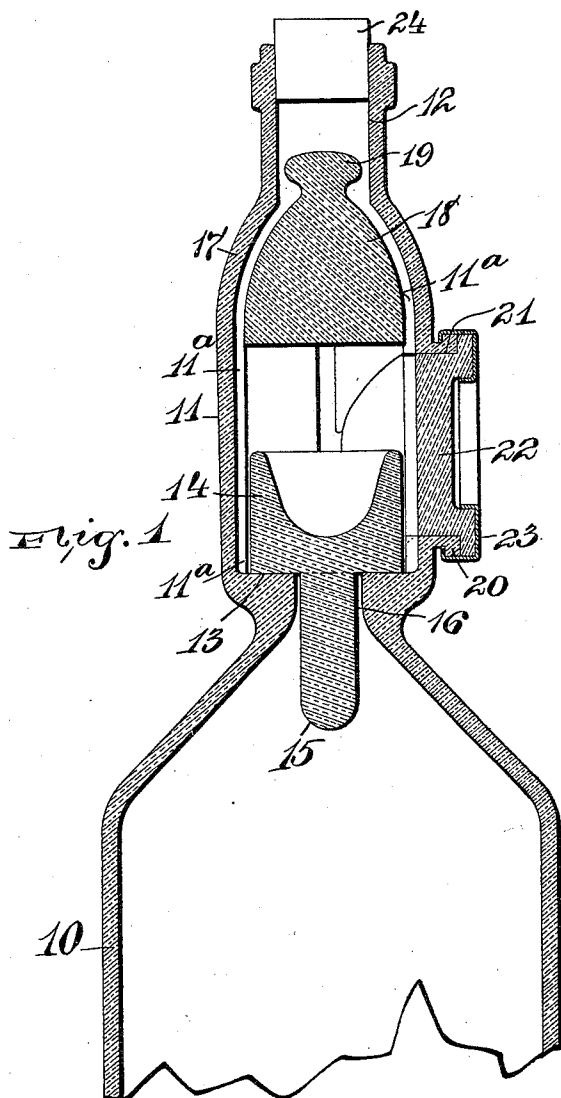


J. LALLI.
NON-REFILLABLE BOTTLE.
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1,029,809.

Patented June 18, 1912.



WITNESSES:
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JOHN LALLI, OF NEWARK, NEW JERSEY.

NON-REFILLABLE BOTTLE.

1,029,809.

Specification of Letters Patent.

Patented June 18, 1912.

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To all whom it may concern:

Be it known that I, JOHN LALLI, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Non-Refillable Bottles; and I do hereby 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, reference being had to the accompanying drawings, and to figures of reference marked thereon, which form a part of this specification.

This invention relates to a non-refillable bottle that consists of a bottle, the neck of which has an outlet, the neck having a swelled or enlarged part between the body portion of the bottle and the outlet, the swelled part being adapted to receive a valve which rests on a valve-seat, the valve-seat being formed in the neck of the bottle adjacent to the body portion, the valve having a flat under face to fit against the flat upper face of the valve-seat. Above the valve is a plug which is secured in the swelled portion of the bottle and extends preferably part way into the outlet portion. The neck of the bottle has an opening in its side through which the bottle can be filled in the first instance, and through which the plug and the valve can be inserted, the opening being inclosed by a closure which is sealed in place so that any tampering with the seal, which can be of any form, will be detected.

The bottle and its neck and the outlet are made in one piece, and the closure, the valve and the plug are separate pieces so that but four elements are necessary to complete the structure.

The invention is illustrated in the accompanying drawing, in which—

Figure 1 is a vertical section of the upper part of the bottle of my improved form. Fig. 2 is a side view of the neck of the bottle. Fig. 3 is a section on Fig. 1 taken just above the valve.

The bottle comprises a body portion 10 on which is mounted the neck 11 which is enlarged in diameter for its major portion and terminates in an outlet 12. The neck 11 is provided with recesses or channels 11^a of any suitable number, and the neck is formed at its bottom into a valve-seat 13 which is

preferably made flat and is adjacent to the juncture of the neck and the body portion. A valve 14 is seated with its flat bottom surface on the surface 13 of the valve-seat. The valve has a stem 15 which fits down through the opening 16 and extends part way into the bottle, passing down far enough below the valve-seat to remain in the opening when the valve is open so as to guide the valve on its return. The upper portion 17 of the enlarged portion tapers toward the outlet, the converging sides fitting a plug 18 which has a knob 19 at the top, the knob 19 being small enough in diameter so as not to engage the inner walls of the outlet, the plug being cemented or otherwise suitably fastened in its place, the plug being shown in position in Fig. 1, the plug acting as a shield to prevent the insertion of tools and the like to the valve to open the valve, and also acting as a stop, being engaged by the top side of the valve when the valve is open to the limit of its capacity.

The side of the neck is provided with a flange 20 surrounding an opening 21 into which fits a closure 22. When the bottle is filled in the first instance, the closure is not in place, and the plug 18 and the valve 14 can be inserted in their positions through the opening and the filling of the bottle can take place through this opening before the valve is put in place. This provides for a quick filling of the bottle, since the openings are large and the valve is inserted after the bottle has been filled. When the valve and the plug are in place, the closure 22 is put in its place and it can be sealed so that any opening of it will be evident, this sealing being accomplished by any method of making a fastening secure against opening without detection.

I have shown a metal band 23 as one form of fastening the closure in place, this band being crimped around the closure and around the flange surrounding the opening so that the metal band must be mutilated or destroyed in order to opening the closure so as to fill the bottle by raising the valve.

This bottle is made of but few parts that are not apt to stick and get out of order, and it is also designed to provide an easy and quick outlet for the liquid when the bottle is tilted. To prevent the settling of

dust and so forth on the neck of the bottle and on the plug, any usual form of cork 24 is inserted in the outlet.

Having thus described my invention, what I claim is:—

1. A non-refillable bottle consisting of a body portion and a neck having an outlet thereon, the neck having a valve-seat therein, a valve on the seat and movable therefrom, the neck having an opening above the valve-seat, and a closure for the opening, said closure being formed on its inner face so that it conforms to the neck of the bottle so that they coöperate to guide the valve, the inner wall of the neck having channels.

2. A non-refillable bottle consisting of a body portion and neck having an outlet thereon, the neck having an opening in its side and having a valve-seat below the opening, a closure in the opening, the closure and the neck having their inner walls coöperating to form a guide for a valve, a valve guided by said walls, said walls having

channels therein, and a plug extending across the neck and above the opening to limit the movement of the valve.

3. A non-refillable bottle consisting of a body portion and neck having an outlet thereon, the neck having an opening in its side and having a valve-seat below the opening, a closure in the opening, the closure and the neck having their inner walls coöperating to form a guide for a valve, a rigid valve guided by said walls, said walls having channels therein, a plug extending across the neck and above the opening to limit the movement of the valve, said opening permitting the installation of the plug and the valve, and a seal for said closure.

In testimony, that I claim the foregoing, I have hereunto set my hand this 16th day of March 1912.

JOHN LALLI.

Witnesses.

WM. H. CAMFIELD,
M. A. JOHNSON.

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