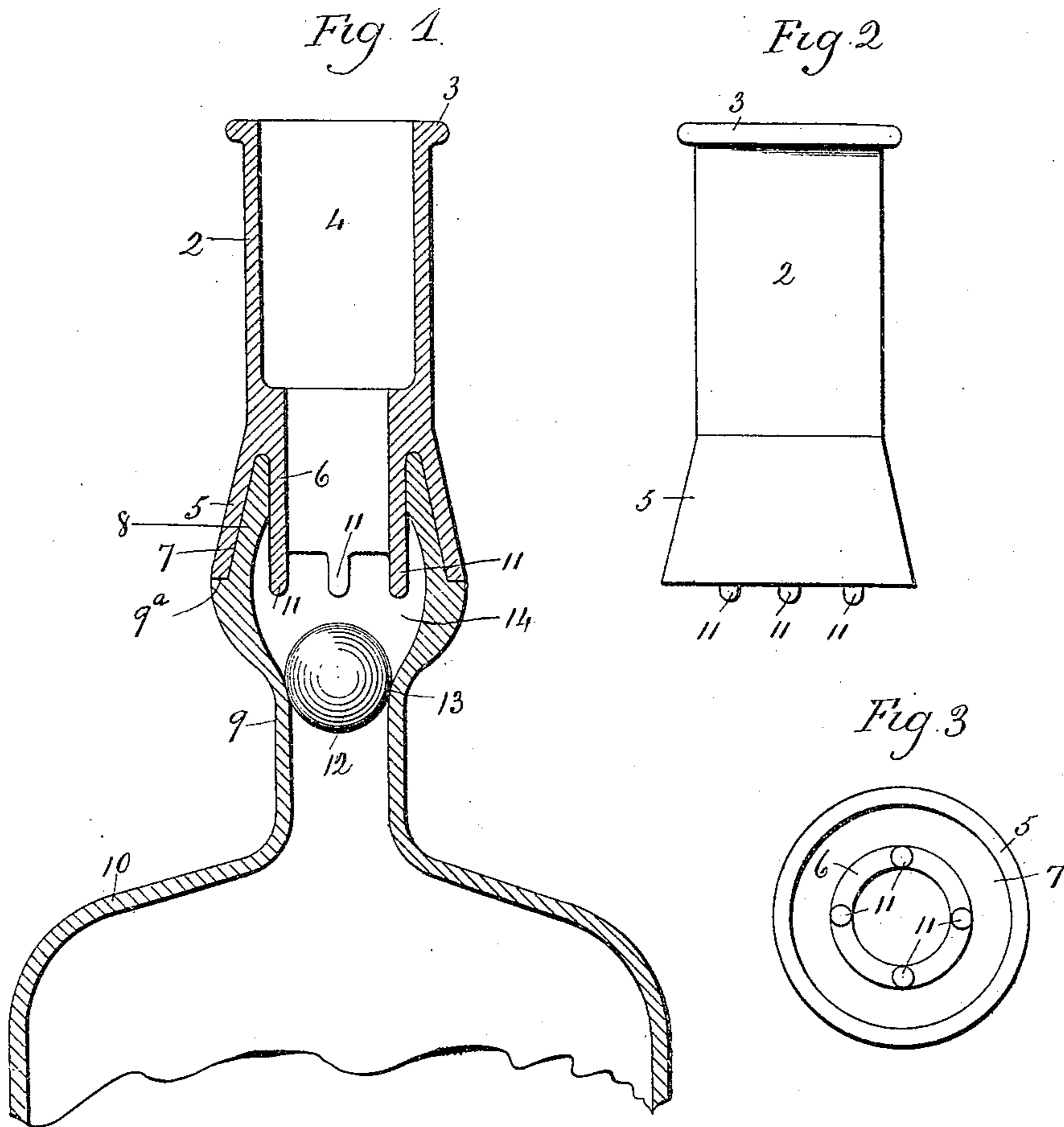


No. 800,997.

PATENTED OCT. 3, 1905.

O. EMMERTHAL.  
NON-REFILLABLE BOTTLE.  
APPLICATION FILED MAR. 25, 1905.



Witnesses.

J. H. Shumway  
Clara L. Reed.

Otto Emmertal  
Inventor.

By atty Seymour & Carey

# UNITED STATES PATENT OFFICE.

OTTO EMMERTHAL, OF ANSONIA, CONNECTICUT.

## NON-REFILLABLE BOTTLE.

No. 800,997.

Specification of Letters Patent.

Patented Oct. 3, 1905.

Application filed March 25, 1905. Serial No. 251,930.

*To all whom it may concern:*

Be it known that I, OTTO EMMERTHAL, a citizen of the United States, residing at Ansonia, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Non-Refillable Bottles; and I do hereby declare the following, when taken in connection with the accompanying drawings and the figures of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a broken view, in vertical section, of a non-refillable bottle constructed in accordance with my invention; Fig. 2, a detached view, in side elevation, of the independently-formed neck-piece; Fig. 3, a reverse plan view thereof.

My invention relates to an improvement in non-refillable bottles, the object being to produce at a low cost for manufacture a simple, effective, and convenient non-refillable bottle composed of few parts, presenting a neat and attractive appearance, and precluding surreptitious refilling.

With these ends in view my invention consists in a bottle having certain details of construction, as will be hereinafter described, and pointed out in the claims.

In carrying out my invention I employ an independently-formed neck-piece 2, made of cast or blown glass, having at its outer end a lip or flange 3 and containing a cylindrical cork-chamber 4 of suitable diameter and depth. The lower end of the said piece 2 is enlarged and shaped to form a flaring skirt-like fastening-flange 5, a sleeve 6, located concentrically within the same, and a tapering annular recess 7, adapted to receive a correspondingly-tapered fastening-flange 8, made integral with the neck 9 of the bottle 10, the outer face of the flange 8 being beveled to conform to the pitch of the inner face of the flange 5 and the inner face of the flange 8 being made straight to conform to the outer face of the sleeve 6. A close joint is thus formed between the inclined inner face of the flange 5 and the inclined outer face of the flange 8, as well as between the straight inner face of the flange 8 and the straight outer face of the base of the sleeve 6. At the base of the flange 8 the neck 9 is formed with a shoulder 9<sup>a</sup>, upon which the extreme edge of the flange 5 rests, so as to form a tight joint and make a smooth finish at the point where the independent neck-piece 2 merges into the

neck 9. The inner end of the sleeve 6 is formed with four parallel fingers 11, located quartering with respect to each other and forming points for the ball-valve 12 to rest upon when the bottle is turned downward on its side or partially or entirely inverted in position, so as to cause the valve to leave its seat 13 in the neck 9. Of course when the valve 12 is engaged with any or all of the fingers 11 ample opportunity is given for the fluid in the bottle, whatever its character may be, to escape between the fingers 11 into the sleeve 6 and then out through the cork-chamber 4 if the cork has at the time been removed.

The neck 9 of the bottle is formed with a valve-chamber 14 enough larger in diameter than the diameter of the sleeve 6 to form a chamber encircling the free end thereof, so as to provide for the lateral passage of the fluid from the chamber into the sleeve when the ball-valve 12 is resting upon the ends of the fingers 11. As shown, the chamber 14 extends into the inner face of the integral fastening-flange 8.

In using my improved bottle it is first filled through its neck 9, after which the ball-valve 12 is dropped thereinto. The supplemental neck-piece 4 is now cemented upon the flange 8 of the neck 9 by means of a film of any suitable cement applied to the outer and inner faces, either or both, of the flange 8, after which the supplemental neck-piece 2 is set down over the same. The cork may be introduced into the chamber 4 either before or after the supplemental neck-piece 2 has been applied to the neck-piece made integral with the bottle.

It is apparent that in carrying out my invention some changes from the construction herein shown and described may be made. I would therefore have it understood that I do not limit myself thereto, but hold myself at liberty to make such departures therefrom as fairly fall within the spirit and scope of my invention.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination with a bottle having its neck formed with an integral fastening-flange, a valve-seat and a valve-chamber; of a ball-valve located in the said chamber; and an independently-formed neck-piece having a fastening-flange fitting over the flange aforesaid and also having a sleeve entering the said chamber which encircles it and from which the

fluid passes laterally into it, and the said fastening-flange and sleeve of the neck-piece being separated by an annular recess conforming to and receiving the fastening-flange upon  
5 the neck of the bottle.

2. The combination with a bottle having its neck formed with an integral fastening-flange, a valve-chamber, and a valve-seat; of a ball-valve located within the said neck; and an independently-formed neck-piece having a cork-chamber and provided at its lower end with a flaring skirt-like fastening-flange, and with a sleeve located concentrically within the said flange from which it is separated by an annular recess receiving the fastening-flange made  
10 integral with the neck of the bottle, and the said sleeve being formed with fingers for co-  
15 action with the said ball-valve.

3. The combination with a bottle having its  
20 neck formed with an integral fastening-flange, a shoulder at the base thereof, a valve-cham-

ber, and a valve-seat; of a ball-valve located in the said chamber; and an independently-formed neck-piece having a flaring skirt-like fastening-flange fitting over the flange afore-  
25 said and making a joint with the said shoulder, and also having a sleeve entering the said chamber than which it is smaller in diameter and adapted at its lower end for the lateral passage of fluid into it from the said chamber,  
30 and the said flange and sleeve of the neck-piece being separated by an annular recess conforming to and receiving the flange upon the neck of the bottle.

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

OTTO EMMERTHAL.

Witnesses:

FREDERIC C. EARLE,  
GEORGE D. SEYMOUR.