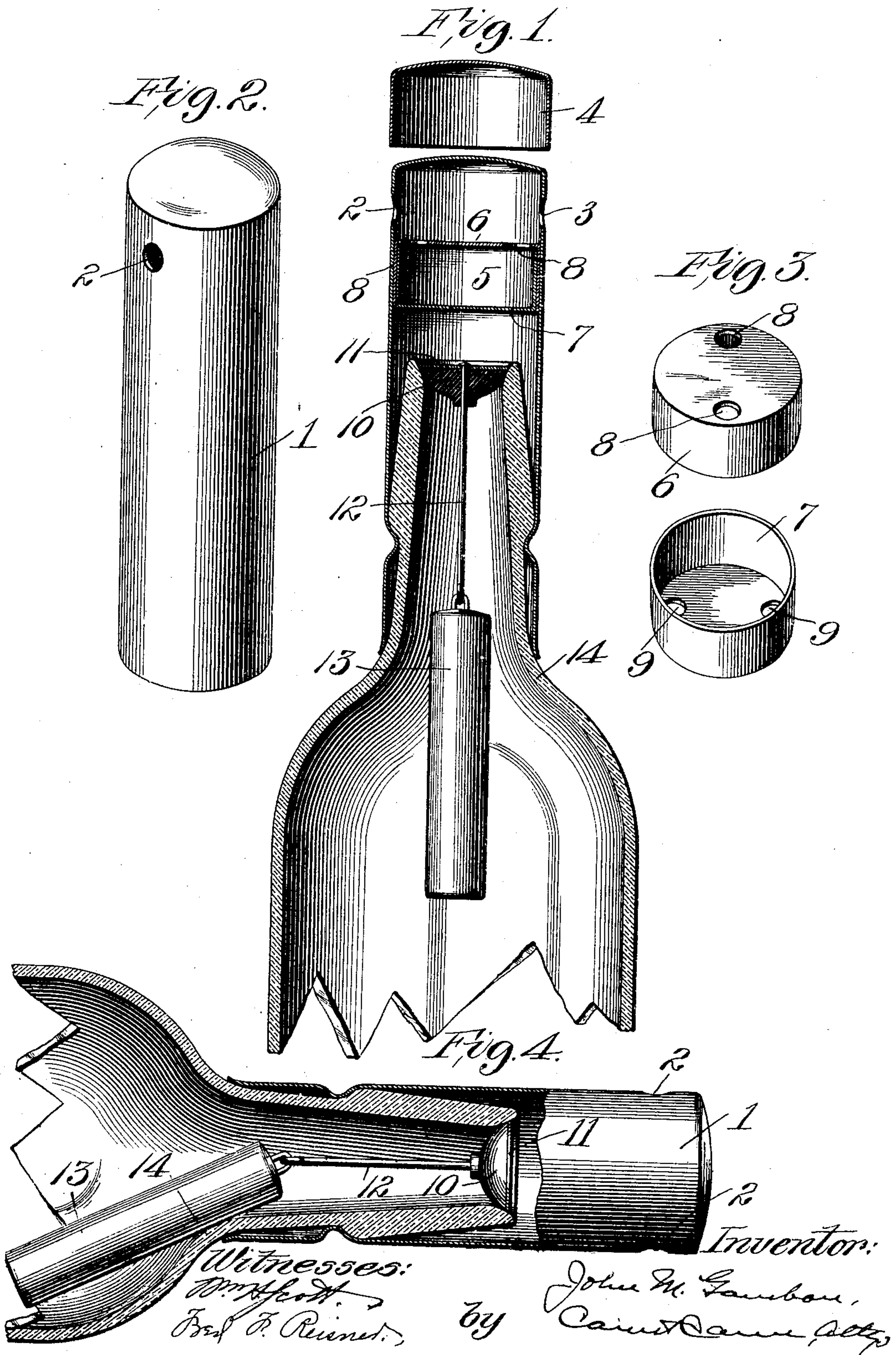


No. 810,480.

PATENTED JAN. 23, 1906.

J. M. GAMBON.  
NON-REFILLABLE BOTTLE.  
APPLICATION FILED NOV. 25, 1904.





# UNITED STATES PATENT OFFICE.

JOHN M. GAMBON, OF ST. LOUIS, MISSOURI.

## NON-REFILLABLE BOTTLE.

No. 810,480.

Specification of Letters Patent.

Patented Jan. 23, 1906.

Application filed November 25, 1904. Serial No. 234,108.

*To all whom it may concern:*

Be it known that I, JOHN M. GAMBON, a citizen of the United States, and a resident of the city of St. Louis and State of Missouri, have invented a new and useful Improvement in Non-Refillable Bottles, of which the following is a specification.

My invention relates to non-refillable bottles, and has for its principal objects to provide an attachment that may be permanently mounted upon ordinary bottles, to provide means to hold a valve in the neck of the bottle to its seat even when the bottle is turned on its side, to provide novel means for preventing tampering with the valve, and other objects hereinafter more fully appearing.

My invention consists in the parts and in the arrangements and combinations of parts hereinafter described and claimed.

In the accompanying drawings, forming a part of this specification, and wherein like symbols refer to like parts wherever they occur, Figure 1 is a vertical sectional view through a bottle equipped with the attachment. Fig. 2 is a perspective view of the case. Fig. 3 is a perspective view of the parts forming the cage separated from each other, and Fig. 4 is a sectional view showing the position assumed by the weight when the bottle is held in a horizontal position.

The subject of the present invention comprises attachments which may be applied to an ordinary bottle to render it non-refillable.

A case 1 is provided, which is of substantially cylindrical form in the particular case chosen to illustrate the invention. Generally speaking, the horizontal cross-section of the case should be similar to the cross-section of the neck of the bottle with which it is to be used. The case is closed at its upper end and is provided with diametrically opposite openings 2 3 near its upper end. It is preferred to make the case of material which can be crimped upon the neck of the bottle. A removable cap 4 fits over the top of the case and closes the openings therein.

A cage 5, consisting of telescoped parts 6 7, is arranged in the case 1 below the openings 2 3 in its side. The parts of the cage are cup-shaped and conform to the cross-section of the case. Diametrically opposite openings 8 9 are provided in the parts 6 7, respectively, near the peripheries of their closed ends. The parts 6 7 are put together in such a position that the lines joining the openings stand at a right angle to each other. They

may be arranged so that the lines joining the openings will stand at a smaller angle to each other; but they should in any case be arranged so that no part of the openings in the part 6 shall be alined with any part of the openings in the part 7. The cage is preferably arranged in the case 1 with the openings 8 beneath the openings 2 3 in the case.

Arranged in the neck of the bottle is a valve consisting of a segment-to-spherical portion 10, of rubber, and a thin metal disk 11. A stiff wire 12 extends through the valve, holding the disk and segment-to-spherical portion together and depending from the valve into the bottle. An elongated weight 13, which may be made of any material, as lead, glass, porcelain, and the like, is freely suspended from the wire 12. The length of the wire and the weight are such that when the bottle is turned into a horizontal position the shoulder 14 of the bottle will engage the weight above its center of gravity. The weight will thus turn on the shoulder of the bottle as a fulcrum and exert a force tending to hold the valve to its seat.

In use the bottle may be filled before the attachment is applied. Then the valve, with its weight, is put in place. The case, with its cage in place, is then slipped over the neck of the bottle and permanently secured thereon by crimping. The cap being applied, the bottle is sealed. When it is desired to empty the bottle, it is necessary to remove the cap and invert the bottle. The valve is thereby unseated, and the liquid can escape through the openings in the cage and the case. The bottle cannot be filled, as the weight will hold the valve to its seat except when the bottle is held at such an angle that the weight will slide longitudinally on the shoulder. In this position it will be impossible to fill the bottle, as the liquid could only reach the bottle by submergence, in which case the air confined in it could not escape. The cage will prevent tampering with the valve by means of a wire or like means, as such an instrument cannot be inserted through the non-alined openings.

Obviously my device is capable of modification within the scope of my invention, and therefore I do not wish to be limited to the specific construction shown and described. For example, the case may be made of glass or similar material and secured to the bottle by plaster-of-paris or the like. The cage may be made in the shape of a cylinder closed at both ends and having properly-located open-



ings in the ends instead of being made as described above.

What I claim as my invention, and desire to secure by Letters Patent, is—

5 1. A non-refillable bottle comprising a bottle-body provided with a neck, a valve in said neck, means to hold said valve in its seat except when the bottle is substantially inverted, a case closed at its upper end and secured to said neck and provided with openings in its side near its upper end, a cage in  
10 said case between said openings and said valve and provided with non-aligned openings.

2. An attachment for bottles comprising a  
15 case closed at its upper end and provided with lateral openings near its upper end and a cage in said case below said openings com-

prising diaphragms provided with non-aligned openings.

3. An attachment for bottles comprising a 20 case closed at its upper end and provided with lateral openings near its upper end, a cap arranged to fit on the closed end of said case and close said openings, and a cage in said case below said openings provided 25 with substantially parallel diaphragms corresponding in area to the area of the cross-section of said case and provided with non-aligned openings.

JOHN M. GAMBON.

Witnesses:

FRED F. REISNER,  
J. B. MEGOWN.