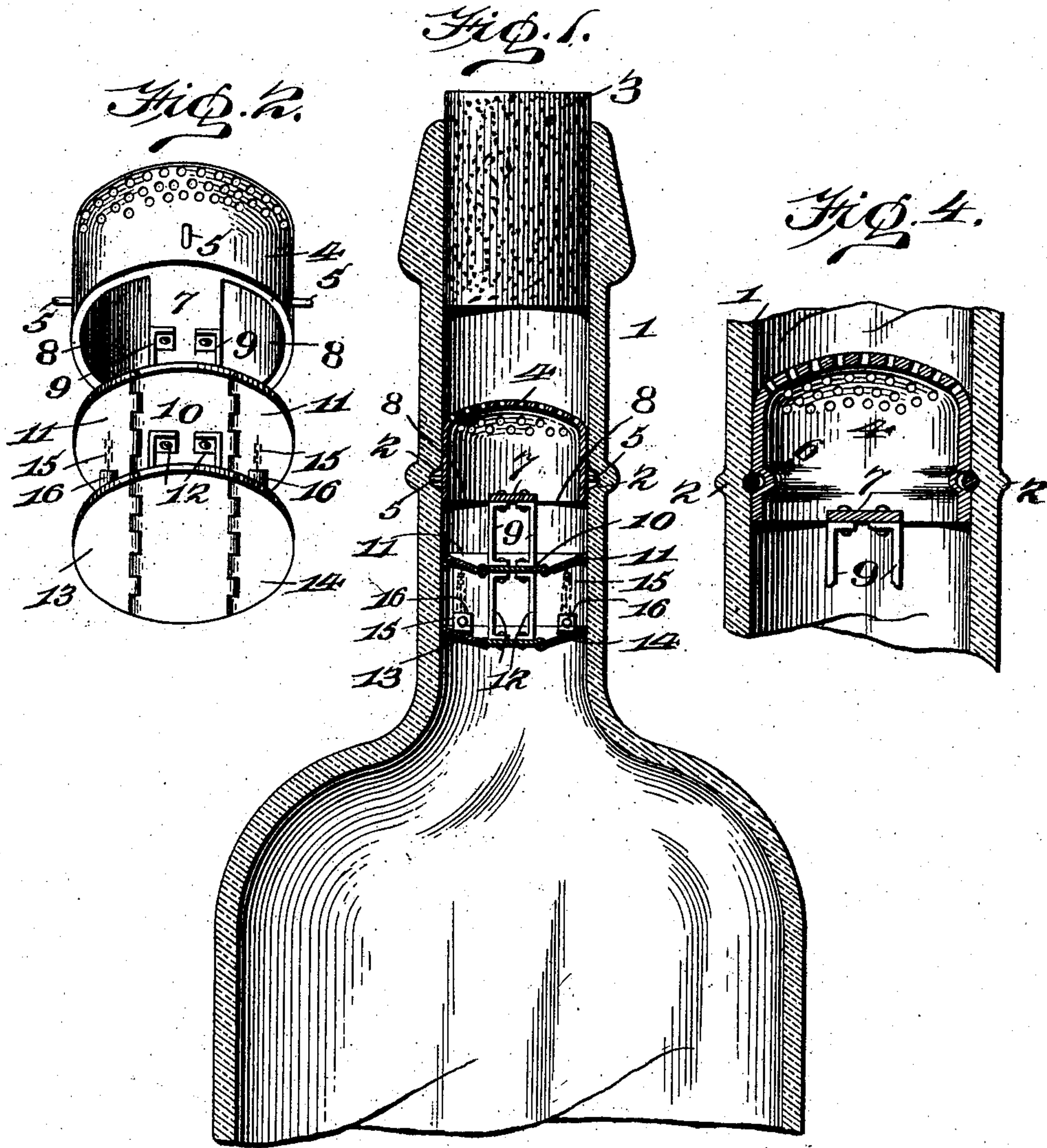


No. 744,674.

PATENTED NOV. 17, 1903.

W. S. BARNETT.  
NON-REFILLABLE BOTTLE.  
APPLICATION FILED OCT. 7, 1902.

NO MODEL.



Witnesses  
C. S. Dieterich  
Harold Lewis

Inventor  
William S. Barnett  
By  
R. S. Jackson  
Attorney



# UNITED STATES PATENT OFFICE.

WILLIAM S. BARNETT, OF JACKSONVILLE, FLORIDA, ASSIGNOR TO NON-REFILLABLE BOTTLE AND CORK COMPANY, OF JACKSONVILLE, FLORIDA, A CORPORATION OF FLORIDA.

## NON-REFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 744,674, dated November 17, 1903.

Application filed October 7, 1902. Serial No. 126,333. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM S. BARNETT, a citizen of the United States, residing at Jacksonville, in the county of Duval and State of Florida, have invented certain new and useful Improvements in Non-Refillable Bottles, of which the following is a specification.

My invention relates to improvements in non-refillable bottles; and it consists of a valve locked in the neck of a bottle.


The object of my invention is to produce a bottle of this character that will combine simplicity, cheapness, and efficiency; and with these objects in view my invention consists of the parts and combination of parts, as will be more fully hereinafter pointed out.

In the drawings, Figure 1 is a central vertical sectional view of a bottle with my invention applied. Fig. 2 is a perspective view of my improved valve detached. Fig. 3 is a top plan view of one of the valves. Fig. 4 is a sectional view of a slight modification.

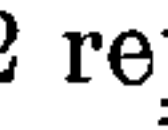
1 represents a bottle which may be of any desired style or shape, in the neck of which is formed as the bottle is being made an annular groove 2.

3 is the usual cork. 4 is an annular semi-spherical cap having a perforated top, as shown in the drawings. This cap is provided on its sides with locking lugs or projections 5 diametrically opposite each other. It is obvious that there may be four of these lugs on the cap, all adapted to engage the annular groove in the neck of the bottle. It is also obvious that I may form an annular groove in the cap, as at 6, in which a split spring-ring is secured and adapted to be compressed by the neck of the bottle as the cap is being pushed into the bottle, and as soon as the ring is opposite the groove in the neck of the bottle it will snap into the groove 2 in the neck of the bottle and hold said cap against displacement, as will be readily understood by those skilled in the art.

7 is a guard disposed across the bottom of the cap, on each side of which is a space 8 for the flow of liquid into the cap.

9 represents -shaped frames, of which there are four in each valve, two of said frames being riveted or otherwise suitably secured

to the under face of the guard 7 of the cap. To the lower ends of these two frames I rivet a central support 10, disposed transversely of the neck of the bottle, and upon each side of said support I secure flap-valves 11, which with the support 10 entirely close the neck of the bottle, as will be seen in the drawings.

12 represents -shaped frames riveted to the under face of the support 10, to the lower ends of which I rivet another support, exactly like the support 10, on each side of which are secured flap-valves 13 and 14, which, like the valves 11, entirely close the neck of the bottle when inserted therein. These flap-valves 11, 13, and 14 are connected together in pairs by means of a chain or wire 15, and upon this wire or chain I slidably mount a weight 16, which may be of any desired shape; but I prefer that it be rectangular. After the valve is secured in the neck of the bottle and the bottle is inverted to pour out its contents the weights 16 slide down upon their chains and strike against the under side of the flap-valves 11, thereby opening them, and at the same time pull the valves 13 and 14 down, and thereby open them, whereupon the liquid is free to pass through said valves from the bottle into the cap, from whence it flows through the perforations in the top of the cap, and as the cap is some distance below the mouth of the bottle the liquid will form again into a solid stream and issue from mouth of the bottle in that form.

It is obvious that many slight changes may be made in the details of construction without departing from the spirit of my invention. Hence I would have it understood that I do not desire to be limited to the details shown.

The object of making the frames 9 separate is that they may be readily spaced different distances apart, according to the diameter of neck of the bottle in which they are to be used. For wide necks they are spaced some distance apart, for narrow necks they are positioned closer together, thus dispensing with the necessity of having different sizes of frames on hand.

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

1. In a non-refillable bottle, the combina-

100



tion with the neck having an annular groove therein, of a cap suspended from said groove, and a series of hinged valves depending from said cap.

5 2. In a non-refillable bottle, the combination with the neck having an annular groove, a cap suspended from said groove, of a series of hinged valves depending from said cap, and means to operate said valves.

10 3. In a non-refillable bottle, the combination with a bottle having an annular groove in the neck thereof, of a cap suspended from said groove, a series of valves depending from said cap and suitably-disposed weights for operating said valves.

15 4. In a non-refillable bottle, the combination with the neck of the bottle having a groove of a perforated cap suspended from said groove, a series of valves depending from said cap, and weights connected to said valves to control their movement.

20 5. In a non-refillable bottle, the combination with the neck of the bottle having a groove, of a support suspended from said groove, a series of valves depending from the support and means for controlling the movement of the valves.

25 6. In a non-refillable bottle, the combination with the neck of the bottle having a groove, of a support suspended from said groove, a series of valves depending from said

support, and weights connected to said valves to control their movement.

7. In a non-refillable bottle, the combination with the neck of the bottle having a groove, of a support suspended from said groove, flap-valves depending from said support, means connecting said valves, and weights slidably mounted on said connecting means to control the movement of the valves. 35 40

8. In a non-refillable bottle, the combination with the neck of the bottle having a groove, of a support suspended from said groove, flap-valves depending from said support, chains connecting said valves, and weights slidably mounted on said chains to control the movement of the valves. 45

9. In a non-refillable bottle, the combination with the neck of the bottle having an annular groove, of a perforated cap constructed to engage the groove, a support secured transversely of the cap, a series of frames depending from the support, flap-valves secured to said frames, chains connecting said valves in pairs, and weights slidably secured on said chains to control the movement of the valves. 50 55

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM S. BARNETT.

Witnesses:

CHARLES E. SMITH,  
M. D. PATTERSON.