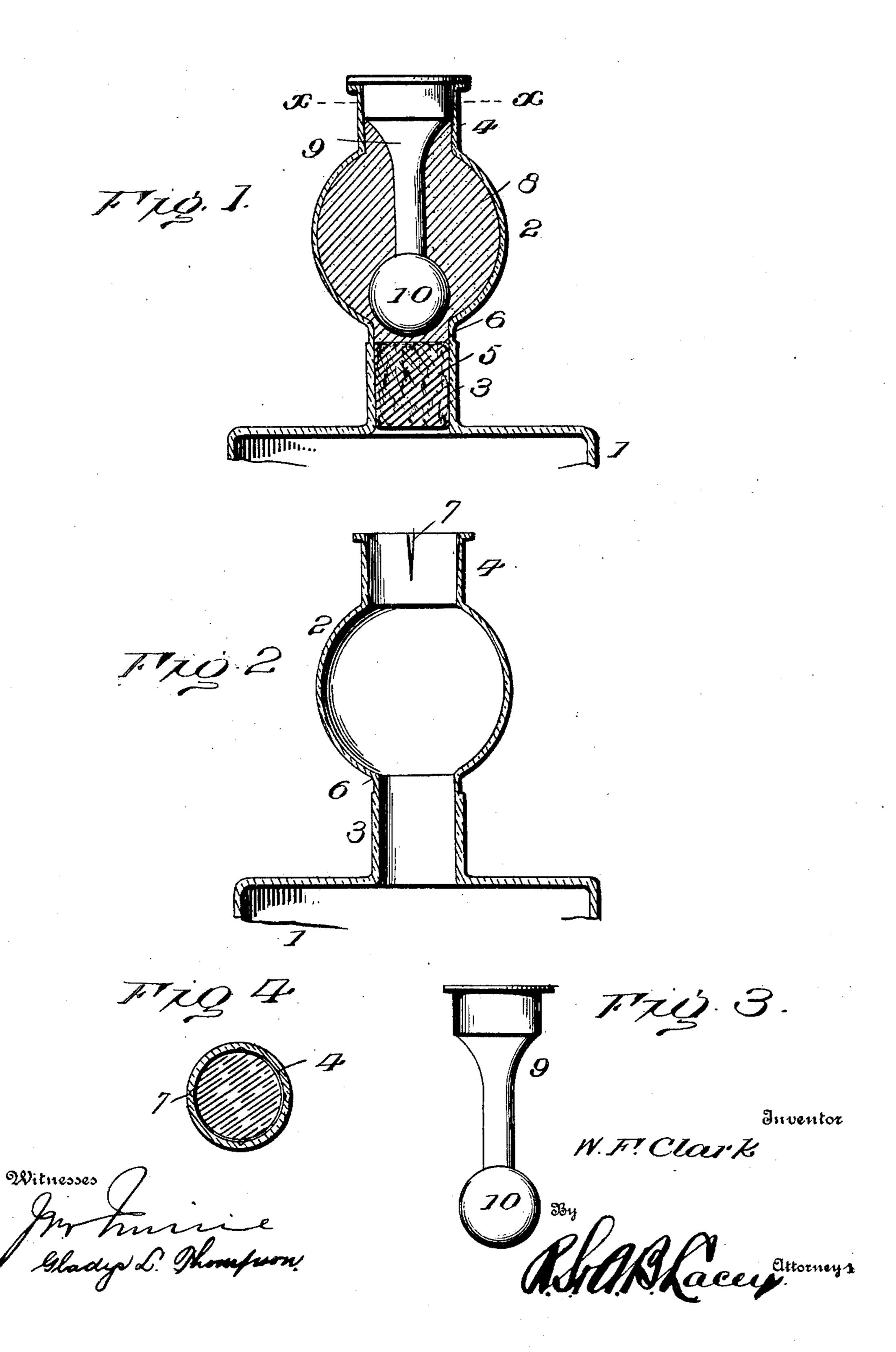
Patented July 30, 1901.

## W. F. CLARK.

## NON-REFILLABLE BOTTLE.

(Application filed Apr. 16, 1901.)

(No Model.)



## UNITED STATES PATENT OFFICE.

WILLIAM F. CLARK, OF KIDWELL, WEST VIRGINIA.

## NON-REFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 679,415, dated July 30, 1901.

Application filed April 16, 1901. Serial No. 56,113. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM F. CLARK, a citizen of the United States, residing at Kidwell, in the county of Tyler and State of West Virginia, 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.

This invention has relation to means for preventing the further use of a bottle or analogous receptacle after the same has once been opened without detection, thereby throwing about a particular brand of goods a measure of protection which is beneficial to the proprietor and the consumer.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and drawings hereto attached.

While the essential and characteristic features of the invention are necessarily susceptible of modification, still the preferred embodiment of the invention is illustrated in the accompanying drawings, in which—

Figure 1 is a vertical central section of the upper portion of a bottle embodying the invention. Fig. 2 is a view similar to Fig. 1 with the cement, cork, and plug removed. Fig. 3 is a side view of the plug. Fig. 4 is a section on the line X X of Fig. 1.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The body portion 1 of the bottle, package, or receptacle for receiving the goods may be of any design and size and is provided with a neck which is swelled or enlarged intermediate of its ends, as shown at 2, the lower portion 3 of the neck being slightly less in diameter than the upper portion 4, so as to admit of the cork 5 passing readily through the part 4 preliminary to being forced into the inner end portion 3 of the bottle. The part 6, adjacent the enlarged portion 2 and between it and the outer end of the part 3,

when the part 2 or 4 is struck a smart blow or is subjected to extraordinary lateral pressure. This reduced portion 6 extends en- 55 tirely around the neck of the bottle and constitutes the break-line between the parts 2 and 3. Vertical grooves 7 are formed in the inner sides of the part 4 at opposite points for the admission of air into the part 2. The 60 part 2 is bulged or swelled and is adapted to receive a cementing substance 8 for securing the plug 9 within the parts 2 and 4 of the neck and at the same time preventing outward displacement of the sealing-cork 5. 65 The plug 9 is contracted intermediate of its ends to receive the cement 8, which when set enveloping the inner end 10 of the plug prevents removal thereof. The outer end of the plug is of a size to close the outer end of 70 the neck of the bottle and is formed with an outer flange 11 to overlap the outer end of the neck and prevent the introduction thereinto of an instrument or liquid of any kind which may have a tendency to dissolve or 75 liquefy the cement 8. This plug 9 is preferably formed of glass, although it may be constructed of material of any nature.

After the bottle or receptacle has been filled the cork 5 is placed in position and enough 80 cement is filled into the part 2 of the neck so that when the plug 9 is placed in position the cement will quite fill the portions 2 and 4 of the neck without overflowing, thereby completely closing the neck and preventing 85 removal of the cork 5 after the cement has once set and hardened. The cement may be plaster-of-paris, mortar, rosin, or any selfsetting material which will preclude the removal of the stopper 9 when placed in posi- 90 tion and secured in the neck by means of the cement. When it is required to break the seal of the bottle or package or to open the same, the upper portion of the neck, including the parts 2 and 4, is broken off on line 6 95 either by striking the neck a smart blow or pressing laterally thereon with sufficient force to effect a separation. After the upper part of the neck has been broken off the cork 5 can be removed in the usual way and the 100 contents of the bottle drawn off or removed as desired.

between it and the outer end of the part 3, Having thus described the invention, what is reduced in thickness, so as to break readily is claimed as new is—

A bottle or like receptacle having the middle portion of its neck swelled or enlarged and separable from the inner portion by a break-line, and having the outer end portion of larger internal diameter than the inner end and provided in its inner sides with vertical grooves, a cork fitted into the inner end portion of the neck below the break-line, a plug having its middle portion reduced and its upper end snugly fitting within the outer end portion of the neck and formed with an

outer flange to overlap the end of the neck, and a cement filling the swelled portion of the neck and the contracted part of the plug, substantially as described.

In testimony whereof I affix my signature

in presence of two witnesses.

WILLIAM F. CLARK. [L. S.]

Witnesses:

S. G. PYLE, P. H. ENGLE.