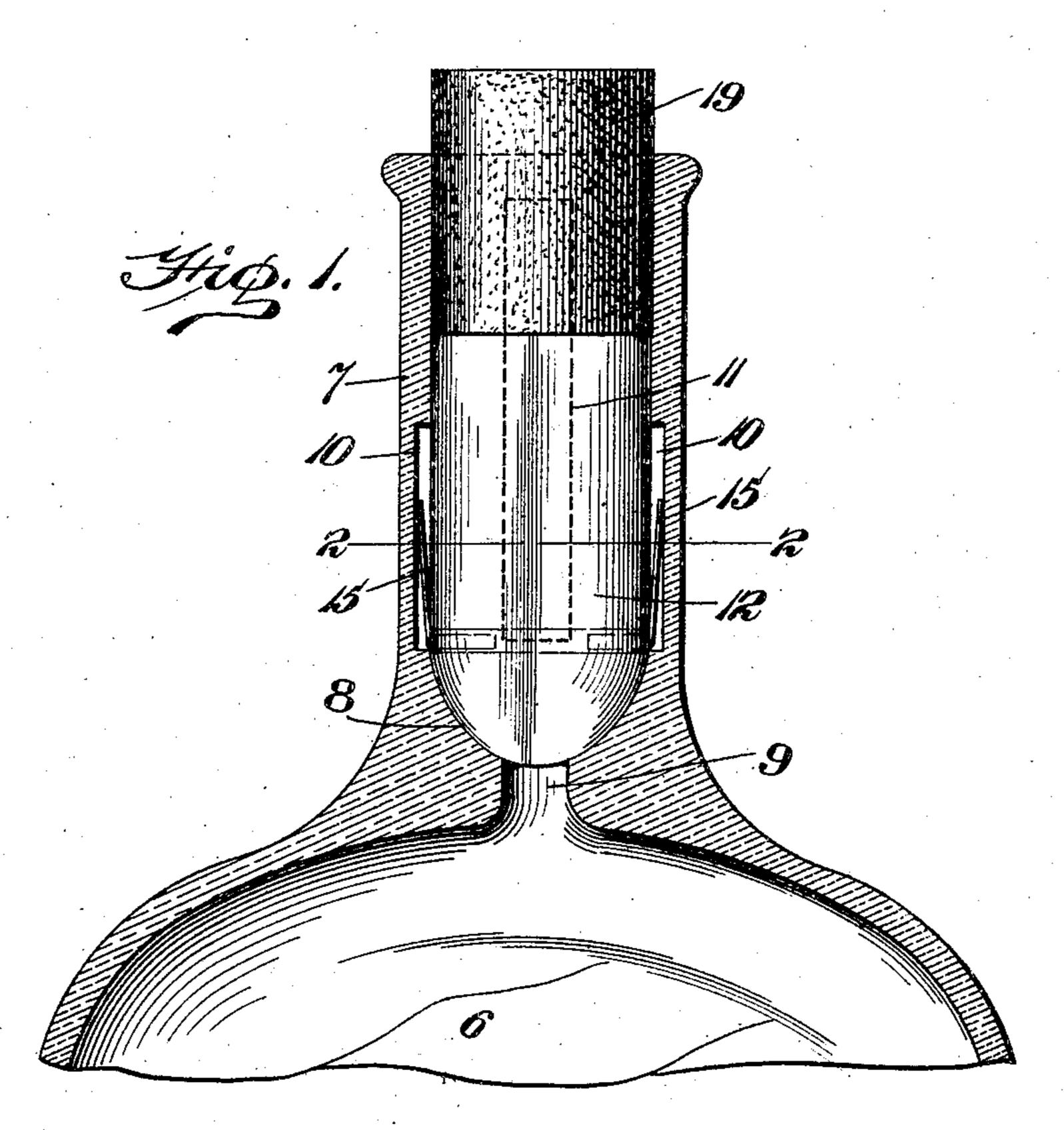
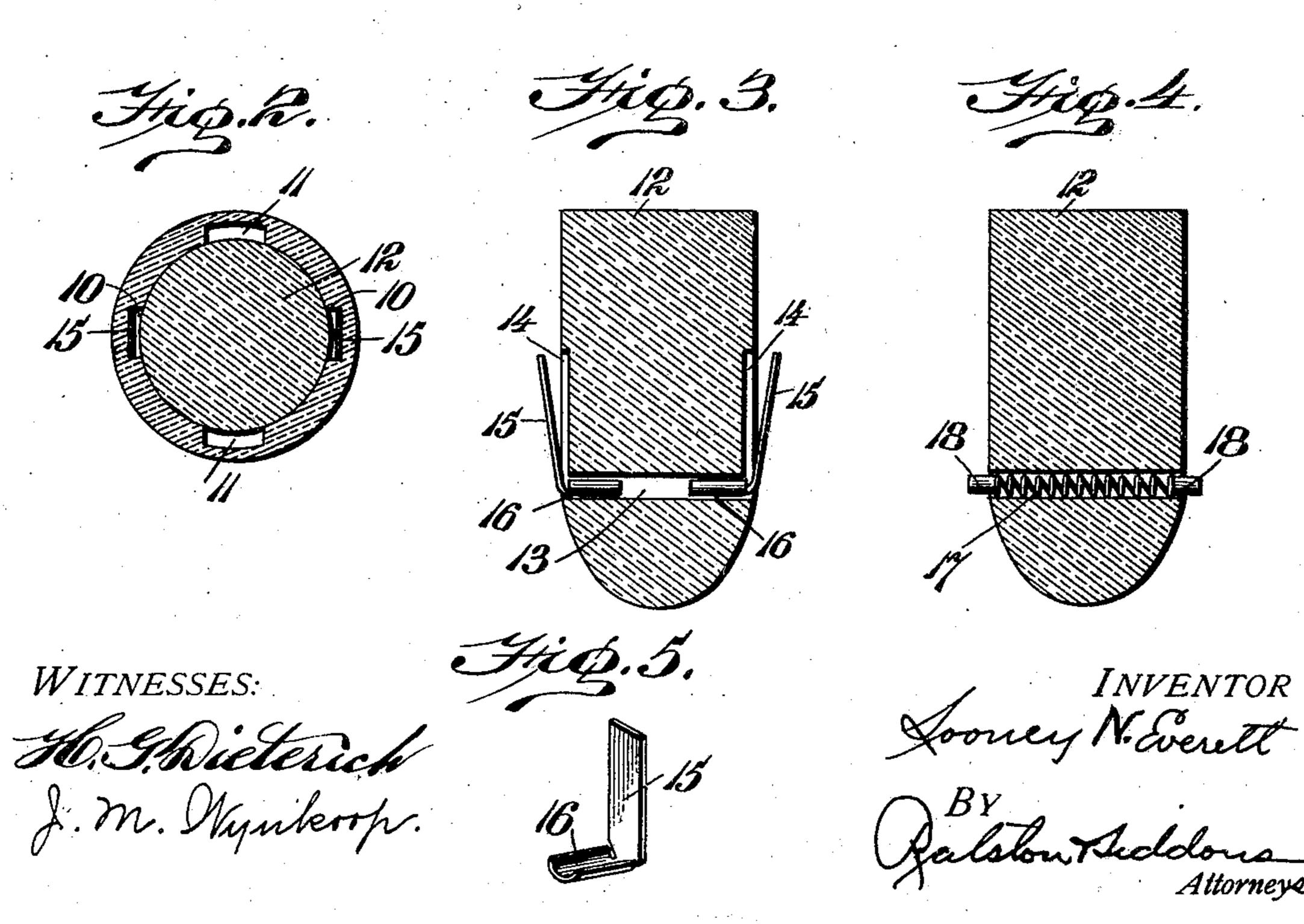
L. N. EVERETT.

NON-REFILLABLE BOTTLE.

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LOONEY N. EVERETT, OF HORNBECK, LOUISIANA, ASSIGNOR OF ONE-HALF TO B. H. LYONS, OF LEESVILLE, LOUISIANA.

NON-REFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 789,213, dated May 9, 1905.

Application filed October 21, 1904. Serial No. 229,446.

To all whom it may concern:

Be it known that I, LOONEY N. EVERETT, a citizen of the United States, residing at Hornbeck, in the parish of Vernon and State of Louisiana, have invented certain new and useful Improvements in Non-Refillable Bottles, of which the following is a specification.

This invention relates to improvements in non-refillable bottles, the objects of which are to produce a simple, cheap, and readily-applied device designed to operate in the neck of a bottle and effectually prevent the bottle from being refilled, the invention being especially useful to manufacturers of fine wines,

15 medicines, and perfumes.

With these general objects in view the invention consists in a bottle the neck of which is uniform in diameter on the inside with a smooth basin or cup at its juncture with the bottle. Upon the inside of the neck are two short and two long grooves, a glass plug which fits snugly in the bottle-neck with a smooth convex lower end to fit the basin or cup in the bottle-neck, the movement of said plug being limited by means attached thereto and engaging the short grooves whereby said plug is permanently locked in the neck of the bottle.

In the drawings, Figure 1 is a vertical central section of a portion of a bottle with my invention applied. Fig. 2 is a transverse section on the line 2 2, Fig. 1. Fig. 3 is a vertical central section of the plug, showing the attaching-springs in elevation. Fig. 4 is a similar view of the plug with a modified form of attaching or securing means. Fig. 5 is a detail perspective view of one of the springs shown in Fig. 3.

6 represents the bottle broken away, provided with the neck 7, having a straight bore of equal diameter throughout its length.

8 is a concave seat or cut formed at the juncture of the bottle and its neck, there being a restricted opening 9 at the bottom of the cut or seat whereby communication is established between the bottle and its neck. The neck is provided with diametrically opposite

short grooves 10 and diametrical long grooves 11 of greater width than the short grooves, said long grooves 11 being positioned ninety 5° degrees from the short grooves 10.

The plug 12 is designed of glass and is provided with an opening 13 and grooves 14, said grooves 14 being formed diametrically opposite each other in two sides of said plug.

15 represents springs having a concave anchoring extension 16, which is adapted to fit within the opening 13 in the plug 12. Said opening 13, if it be desired, may be convex upon one of its faces, so as to correspond with 60 the shape of the anchoring extension 16.

In the modification shown in Fig. 4 the securing means consists of a coiled spring 17, positioned in the opening in the plug, said coiled spring being provided on each end with 65 locking lugs or extensions 18, which correspond with the springs 15 of Fig. 3.

After the bottle is filled the glass plug is pushed into the neck of the bottle, the springs 15 being forced into the grooves 14 of the 7° plug until the major portion of the plug has passed below the top of the grooves 10, at which time the springs 15 are free to snap into said short grooves, as shown in Fig. 1, under which conditions it is impossible to 75 again remove the plug from the bottle, inasmuch as an attempt to do this would result in the contact or abutment of the upper ends of said springs against the upper end of the short grooves. In the construction shown in 80 Fig. 4 the extensions or lugs 18 engage in the short grooves 10 to prevent the removal of the plug. The convex end of the plug makes a tight fit on the seat 8 and is held in this position by the insertion of the cork 19. To 85 empty the bottle of its contents or any portion thereof, the cork is removed and the bottle turned up with a slight jar, which causes the glass plug to slide from its seat along the short grooves until the top of the springs 9° strike the upper end of said short grooves, and while it is impossible to further move the plug at the same time it has been moved sufficiently to permit the liquid to escape through

the restricted opening into the seat 8, from which it flows into the long grooves 11 and thence from the mouth of the bottle.

Having thus described my invention, what

5 I claim as new therein is—

The combination with a bottle having in its neck a concave seat provided with a restricted opening, grooves for the flow of the liquid, and grooves for locking means on the stopper; of a stopper closely fitting the walls of the neck and a spring-pressed locking means disposed

entirely below the upper end thereof and adapted to enter the locking-grooves and permit a slight movement of the stopper in the neck, to and from the seat.

In testimony whereof I affix my signature

in presence of two witnesses.

LOONEY N. EVERETT.

Witnesses:

C. L. Rutt, L. L. Rutt.