

No. 781,041.

PATENTED JAN. 31, 1905.

R. S. WIESENFELD.  
NON-REFILLABLE BOTTLE.  
APPLICATION FILED FEB. 2, 1904.

FIG. 1.

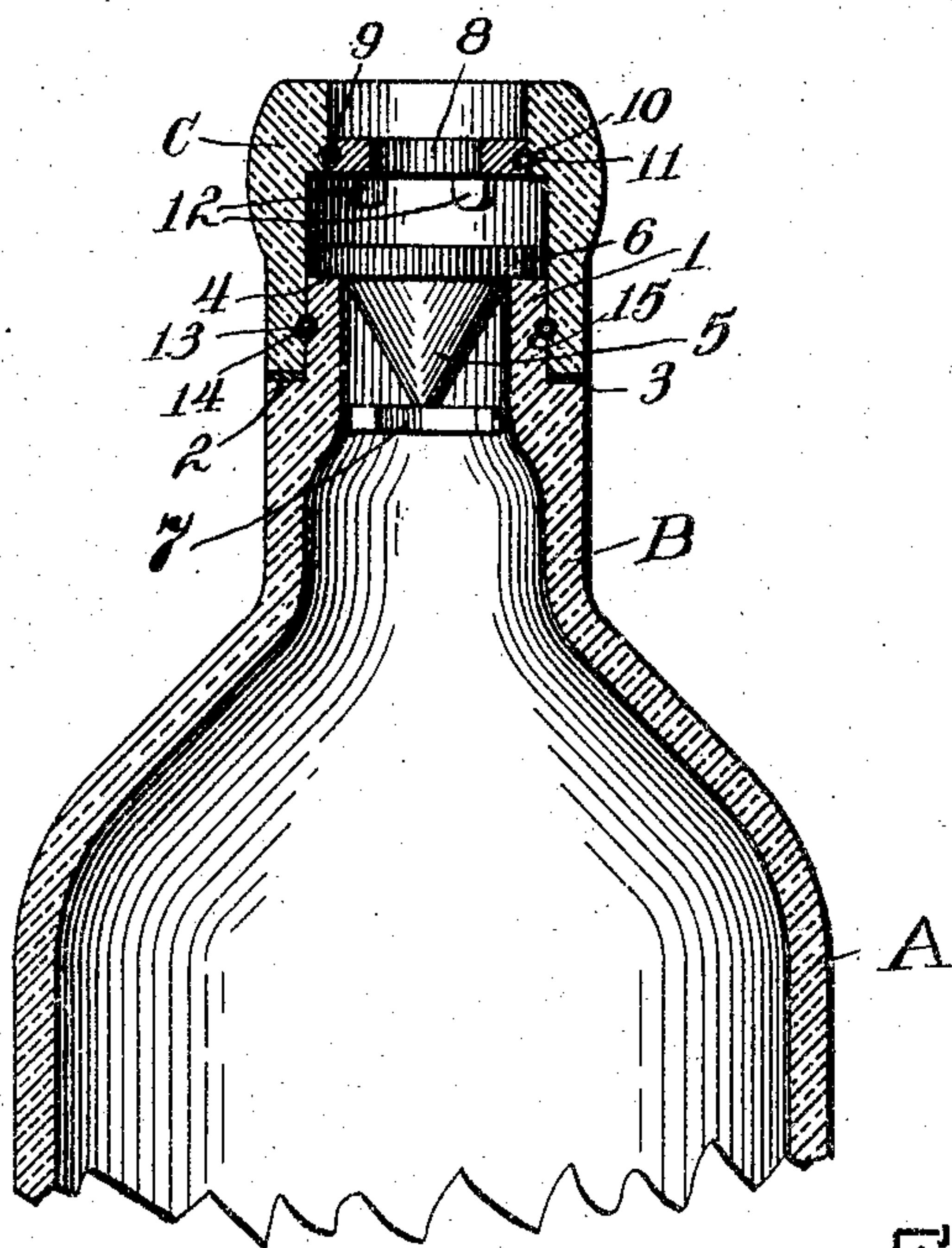


FIG. 2.

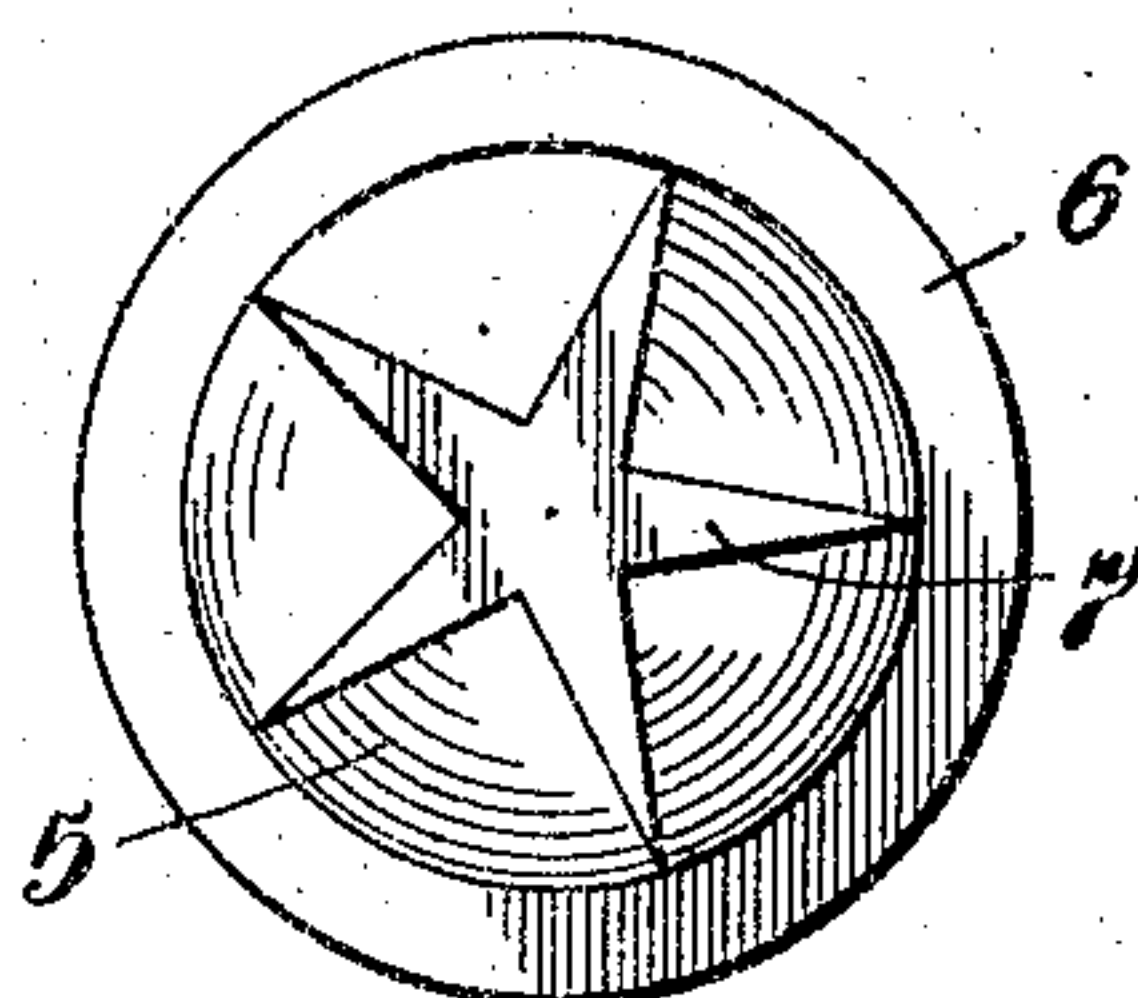


FIG. 3.

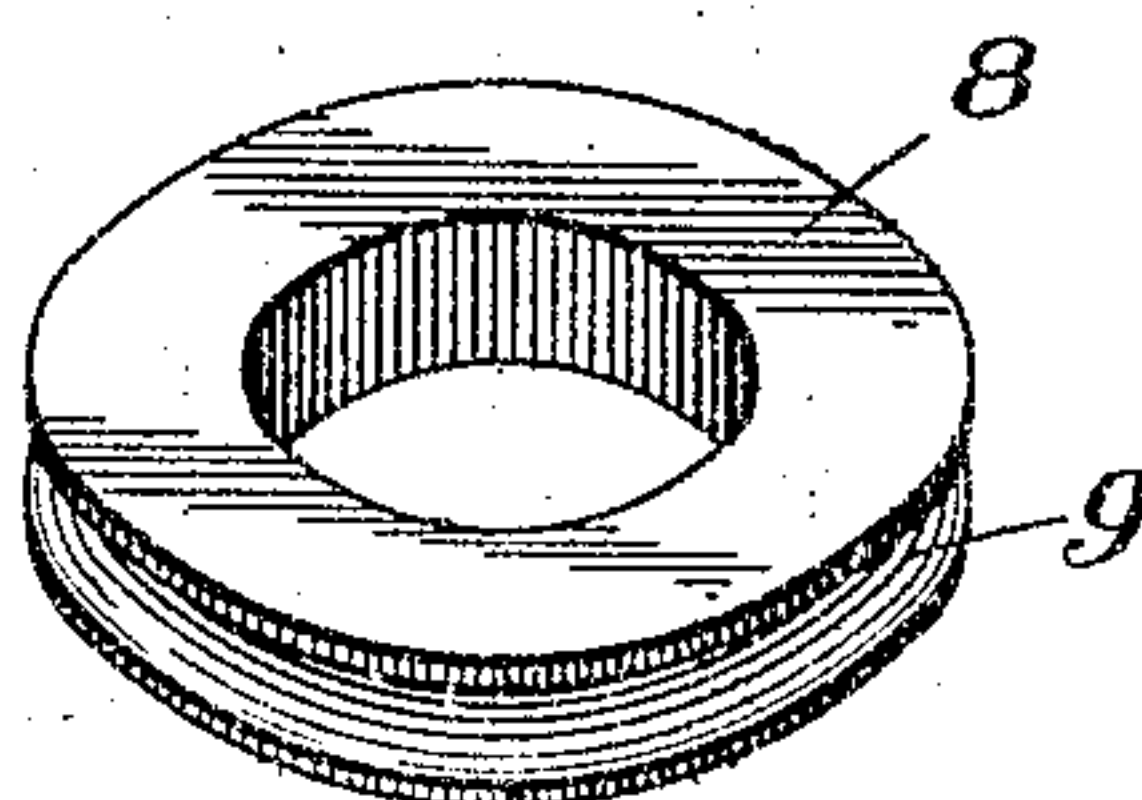


FIG. 5.

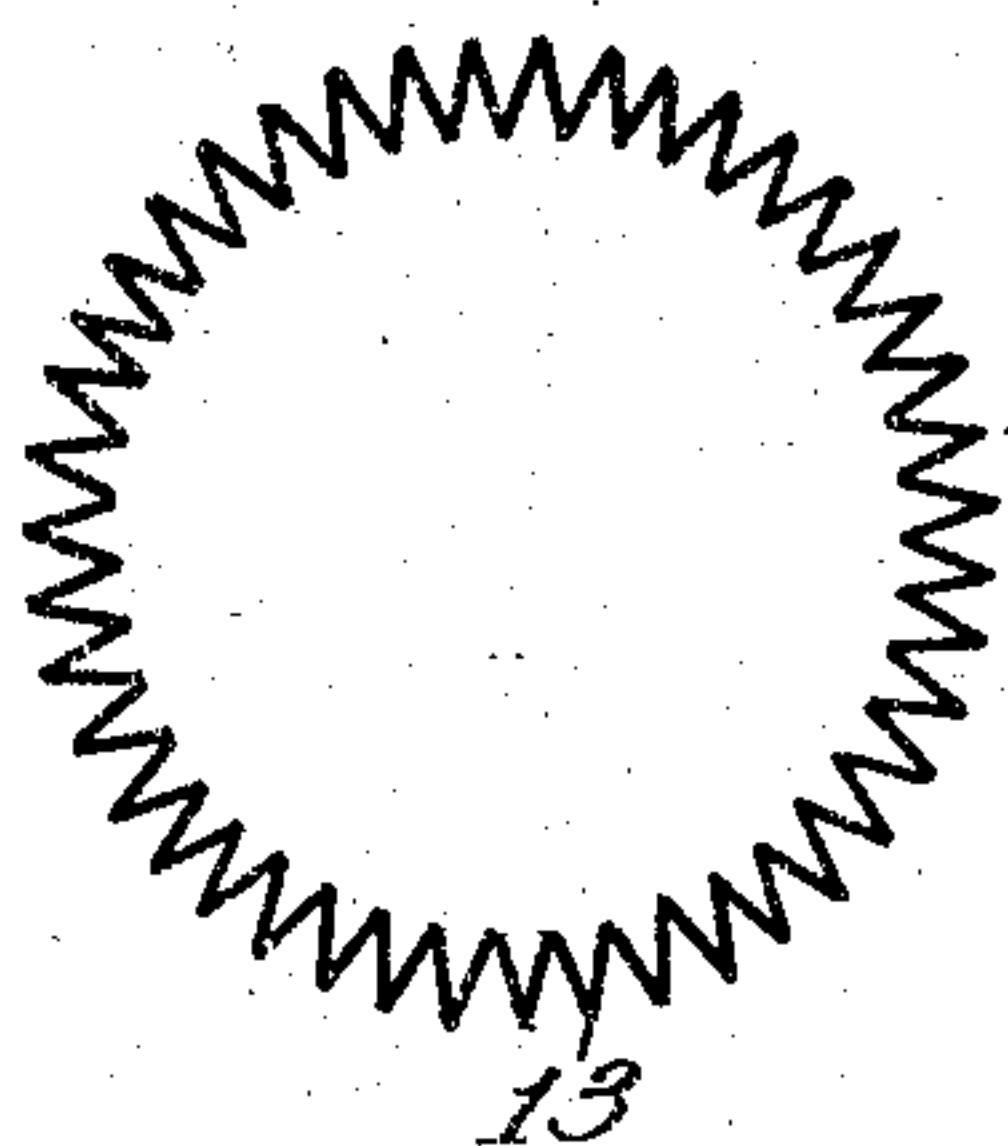
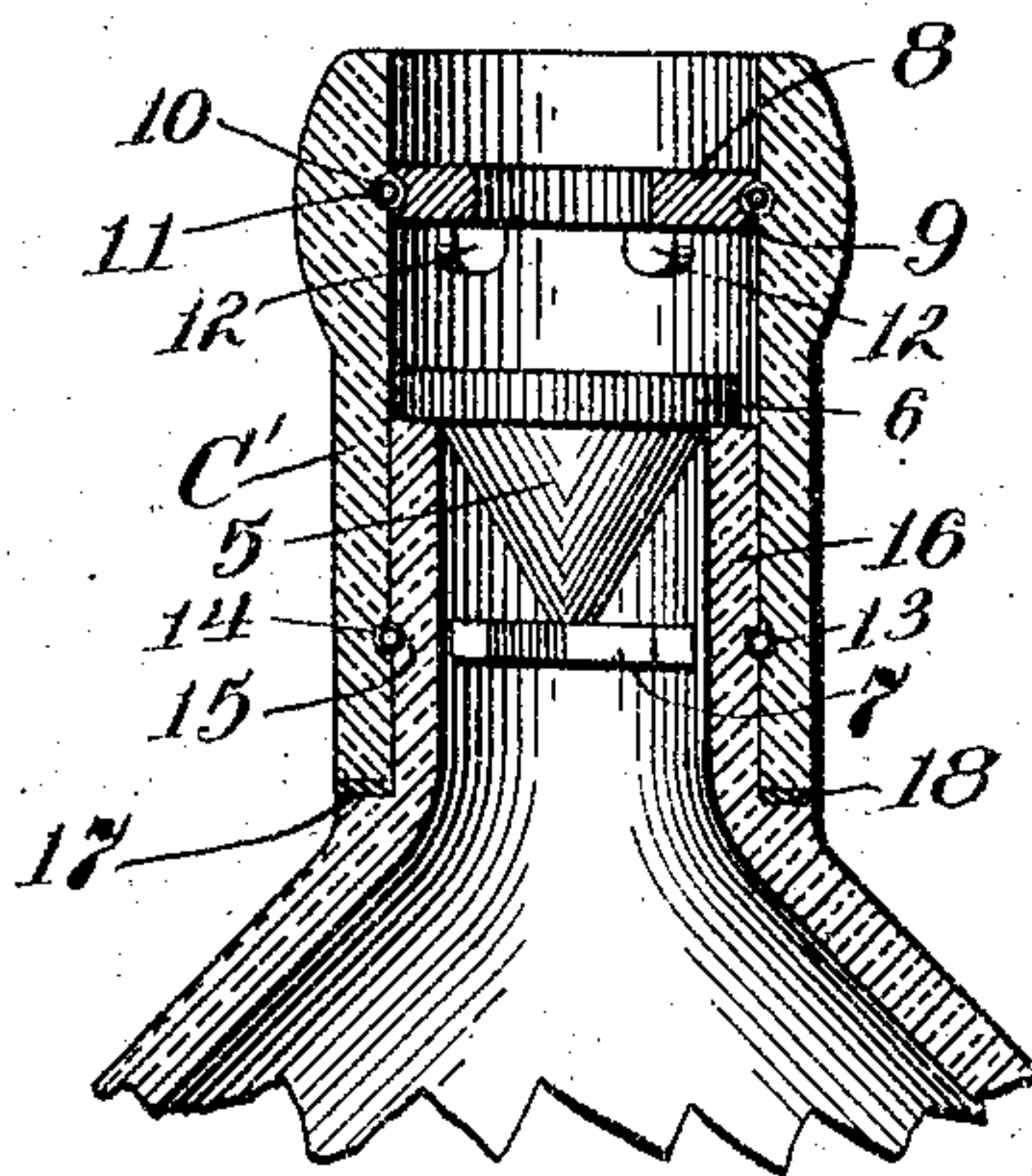


FIG. 4.



Witnesses.  
Milton Lenoir.  
Damon E. H. J. & Co.

Inventor  
Robert S. Wiesenfeld  
by H. S. Brewington  
his Attorney



# UNITED STATES PATENT OFFICE.

ROBERT S. WIESENFELD, OF BALTIMORE, MARYLAND.

## NON-REFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 781,041, dated January 31, 1905.

Application filed February 2, 1904. Serial No. 191,726

*To all whom it may concern:*

Be it known that I, ROBERT S. WIESENFELD, a citizen of the United States, residing at Baltimore city, State of Maryland, have invented certain new and useful Improvements in Non-Refillable Bottles, of which the following is a specification.

My invention relates to an improvement in non-refillable bottles, the object being to provide a simple and inexpensive means for preventing bottle refilling; and the invention consists in a neck adapted to be secured to the bottle and retained permanently attached in connection with a valve and means for permanently retaining the valve in position with a limited movement which provides for emptying the bottle, but prevents its being refilled.

In the accompanying drawings, Figure 1 is a section. Fig. 2 is a bottom plan view of the valve. Fig. 3 is a detached view of the fastening-ring for retaining the valve in position within the chamber provided for it in the bottle-neck. Fig. 4 is a modification, and Fig. 5 is a detail view showing the spring 10.

A represents a bottle, and B is the neck integral therewith, while C is a separable neck fitted thereto upon the ring 1, molded in the neck and offset from the part B of the neck, forming a shoulder 2. The separable neck C embraces this ring 1 and is rendered liquid-tight by the packing 3 between its lower end and the shoulder 2. The outer surface of the lower end at least of the separable neck C is preferably flush with the surface of neck B, so that one appears to be a continuation of if not an integral part of the other.

The upper end of ring 1 forms a shoulder, as at 4, and a valve 5, of inverted-cone shape, having a flange 6 at the upper end, is supported by this flange upon the shoulder or valve-seat 4 at the upper end of the ring 1. The lower end of valve 5 is provided with a star 7, the points of which are adapted to center the valve by engaging and sliding upon the inner wall of the ring 1 as the valve moves outward or inward.

A fastening-ring 8 is provided with a circumferential groove 9 in its periphery, and a spiral band or spring 10 is adapted to fit in the groove 9 and a groove 11 in the separable neck, whereby to lock the fastening-ring 8 therein. Depending lugs 12 limit the outer

movement of the valve, insuring space between them for the discharge of liquid contents of the bottle. It will thus be seen that the valve-flange 6 and consequently the valve are confined in movement between the shoulder or seat 4 and the depending lugs 12 12.

The separable neck C may be locked permanently to the ring 1 by a spiral spring 13, retained in grooves 14 and 15 in the ring and separable neck, respectively, in a manner similar to that in which the fastening-ring 8 is retained in place.

The only difference in the modification of consequence is that in lieu of a neck a ring 16 is molded directly upon the bottle similar to ring 1 of the construction just described, and the separable neck C' in this instance extends down to a shoulder 17 on the bottle adjacent to the ring, where a packing ring or gasket 18, similar to the one 3 of the former construction, may be interposed between the separable neck and the bottle, the separable neck thus embracing the entire ring and constituting the sole neck of the bottle.

Other slight changes might be resorted to, of course, in the form and arrangement of the several parts described without departing from the spirit and scope of my invention, and hence I do not wish to limit myself to the exact construction herein set forth; but,

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

The combination with a bottle-neck having a valve-seat formed at its upper end, of an inverted-cone-shaped valve having a flange at the upper end adapted to rest upon the valve-seat, and a star at the lower end which guides and centers the valve in the bottle-neck, a separable neck, a spring for locking the separable neck permanently to the bottle-neck, a fastening-ring having an orifice therethrough and provided with depending lugs, and a spring for permanently locking the fastening-ring in the mouth of the separable neck.

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

ROBERT S. WIESENFELD.

Witnesses:

ROBERT C. RHODES,  
E. WALTON BREWINGTON.