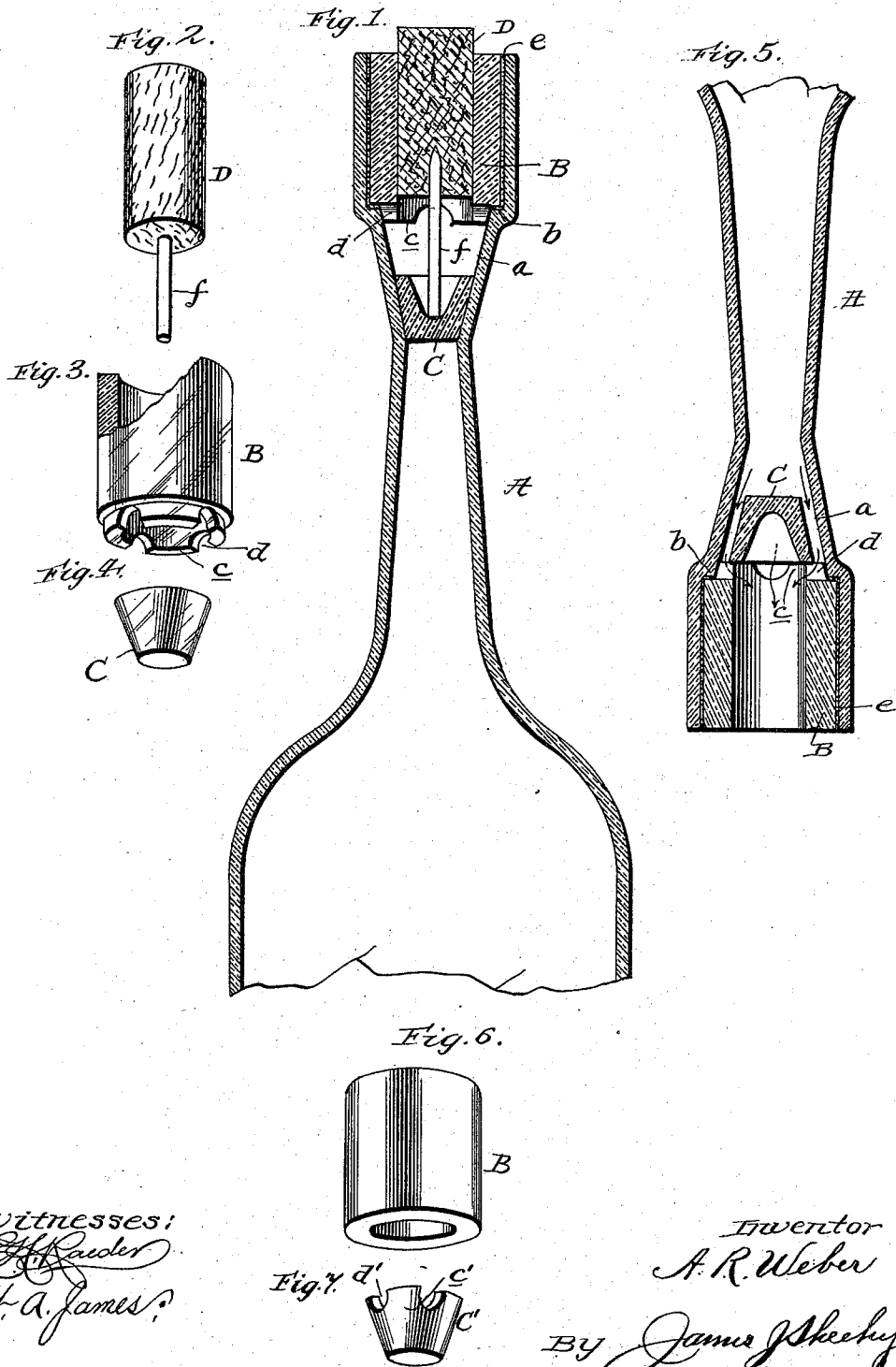


(No Model.)

A. R. WEBER.
NON-REFILLABLE BOTTLE.

No. 570,524.

Patented Nov. 3, 1896.



Witnesses:
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UNITED STATES PATENT OFFICE.

ALBERT R. WEBER, OF BROOKLYN, NEW YORK, ASSIGNOR TO JAMES GASCOINE, OF SAME PLACE.

NON-REFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 570,524, dated November 3, 1896.

Application filed April 4, 1896. Serial No. 586,210. (No model.)

To all whom it may concern:

Be it known that I, ALBERT R. WEBER, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Non-Refillable Bottles; and I do 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 relates to improvements in bottles; and it has for its object to improve that class of bottles used for containing high-grade wines, champagnes, liquors, cognes, and the like.

Many attempts have heretofore been made to construct a bottle which could not be refilled by fraudulent design after being once emptied of its original contents; but owing to their expensive construction and other objectionable characteristics such bottles have not up to the present time met with favor by the manufacturers or user of such articles.

With the foregoing ends in view my invention contemplates the making of a bottle, jug, or the like which cannot be filled after once being emptied, and the production of the same at a comparatively small expense is a further object of the present improvements.

The invention will be fully understood from the following description and claim when taken in connection with the accompanying drawings, in which—

Figure 1 is a vertical central sectional view of a part of a bottle with my improvements applied. Fig. 2 is a perspective view of the cork removed. Fig. 3 is a perspective view of the ring or annulus with a part in section and partly broken away. Fig. 4 is a view of the valve. Fig. 5 is a vertical sectional view of a part of a bottle, showing the same inverted. Fig. 6 is a perspective view of the ring or annulus as used in the modified construction, and Fig. 7 is a perspective view of the valve.

Referring by letter to said drawings, A indicates a bottle, which for the sake of cheapness in manufacture may be blown or molded in the ordinary manner and perfected without the addition of the usual and heretofore necessary strengthening-collar, as will be

hereinafter explained. The bottle is formed with a conical tapering or converging throat *a*, and in its mouth is provided with a ledge or annular shoulder *b*. The bottle may otherwise be of the ordinary or any fanciful configuration, according to the taste or dictation of the manufacturer. The bottle as thus constructed is less expensive than the cheapest bottle at present in use, for the reason that the collar which has heretofore been placed around the mouth is dispensed with, the increased thickness and strength heretofore necessary at this point being supplied by the ring or annulus which I employ on the inside of the mouth, as will be hereinafter more fully described.

B indicates the ring or annulus, which is preferably composed of glass, although it may be formed from metal, porcelain, or other suitable material. When glass is used, the amount of material employed will be about the same or less than the amount used in forming the collar on the outside of the mouth of the bottle, which will explain why the bottle and the annulus combined will make the bottle with a part of my improvements no more expensive than the bottles at present in use, the cost of production of the bottle being an important desideratum.

The ring or annulus, which is of a sufficient diameter and height, is placed in the bottle-mouth so as to rest on the ledge or shoulder *b* thereof and has its lower edge provided with depending flutes, ribs, or lugs *c*, which may be of any suitable shape, the object being to form channels or passages *d* for the discharge or outward passage of liquid from the bottle.

C indicates the valve, which may also be composed of glass or other suitable material. This valve is of a shape in cross-section to snugly engage the throat of the bottle when seated, so as to close communication with the interior of the bottle, and is preferably cupped or recessed on its upper side, so as to serve more effectively in seating the valve should a fraudulent attempt be made to fill the bottle. It is obvious, however, that good results can be had without the recess.

D indicates the cork for closing the bottle, which is placed in the annulus in the same

manner as the ordinary cork is placed in the mouth of a bottle and may be removed by the usual means.

5 As a modification of my invention, I would omit the flutes, lugs, or ribs at the lower end of the annulus, as shown in Fig. 6, and provide the upper side of the valve C' with ribs or projections *c'*, so as to form passages *d'*.

10 After the bottle has been properly filled and placed erect, the valve is dropped into its seat. The annulus is then placed in the mouth and seated on the shoulder, when it is permanently secured in such position by the cement *e* or other suitable material, when the
15 cork D is placed to close the annulus, as shown. It will be seen that by drawing the cork the contents of the bottle or any part thereof can be removed in the usual manner, while any attempt to place liquid in the bot-
20 tle will only tend to seat the valve and close the throat.

As there is a space left between the base of the annulus and the valve when seated, it is obvious that, the valve being allowed to
25 play on the shaking of the bottle, a harsh or rattling noise will result therefrom. To overcome this objection, I place a peg or small stick *f*, such as one-half of a tooth-pick, in the lower end of the cork, and which may de-

pend a sufficient distance to bear upon the 30 valve. This peg, which is very easily inserted in the cork D and does not increase the cost of the stopper, serves the additional function of keeping the valve to its seat and thereby prevents the escape of gases or scent from 35 the bottle and also prevents evaporation of the liquid when the same is of a volatile nature. When the stopper D is drawn, the peg *f* will be drawn with it, leaving the valve to freely operate, as before described. 40

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

The bottle having the inwardly-tapering or conical throat and the shoulder in the base 45 of the mouth thereof, in combination with the valve, the annulus having the grooves or channels at its base, a cork, and the peg inserted in and depending from the cork and bearing at its lower end upon the valve, sub- 50 stantially as specified.

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

ALBERT R. WEBER.

Witnesses:

C. H. RAEDER,

W. A. JAMES.