(No Model.)

F. P. SIVITER.

NON-REFILLABLE BOTTLE.

No. 572,456. Patented Dec. 1, 1896.

FIG. 1.

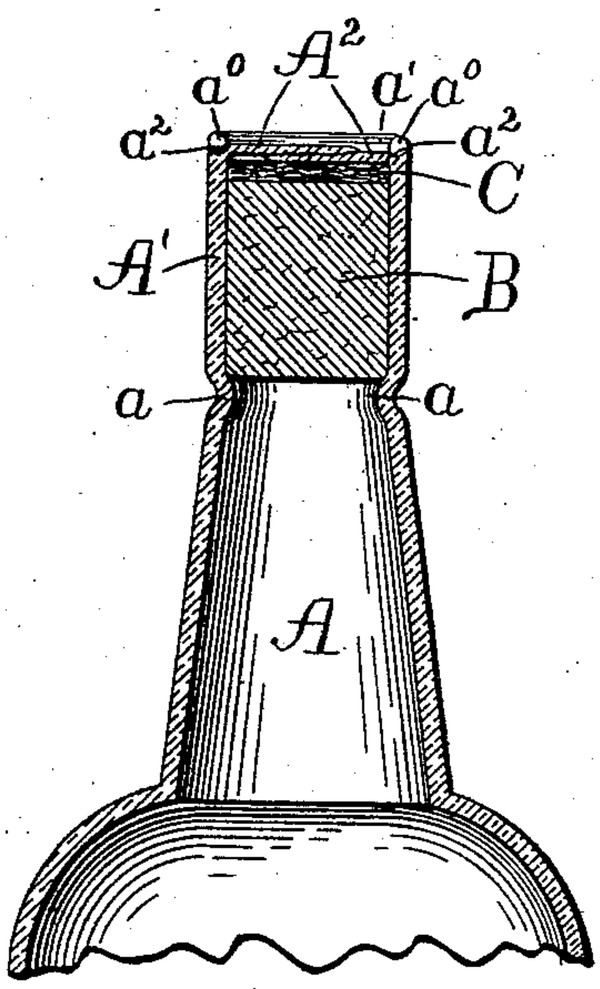


FIG. 2.

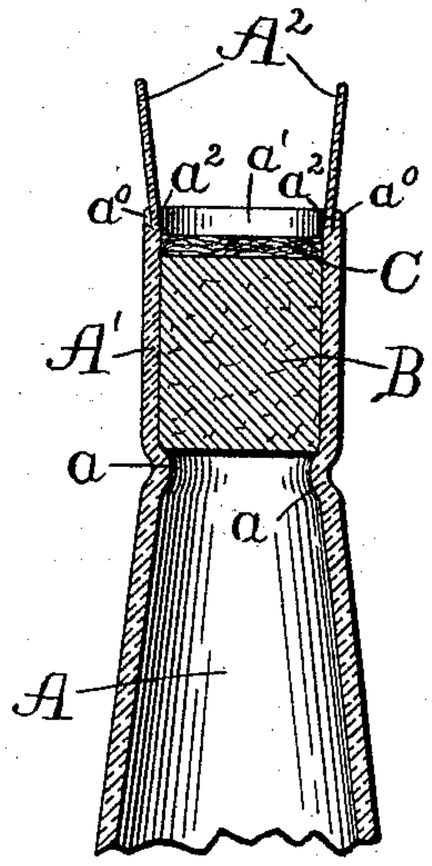


FIG. 3.

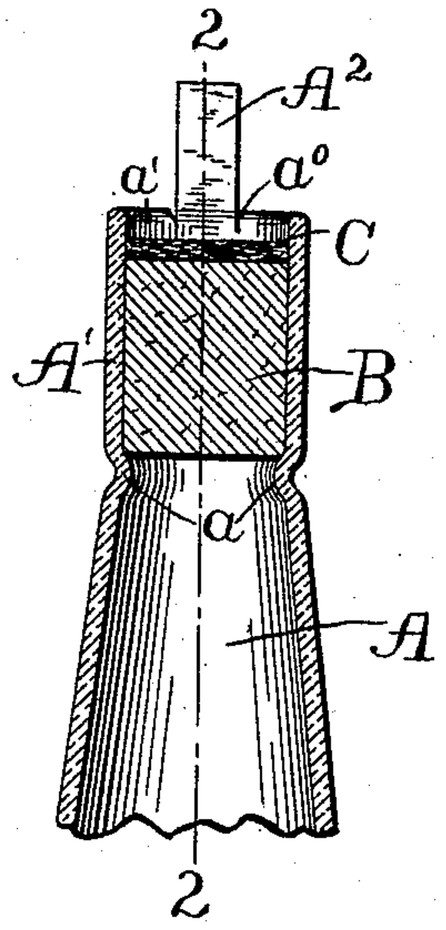


FIG. 4.

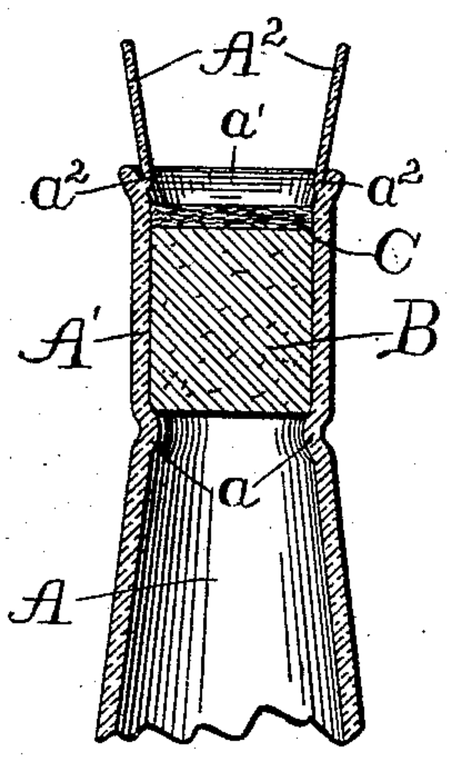


FIG. 5.

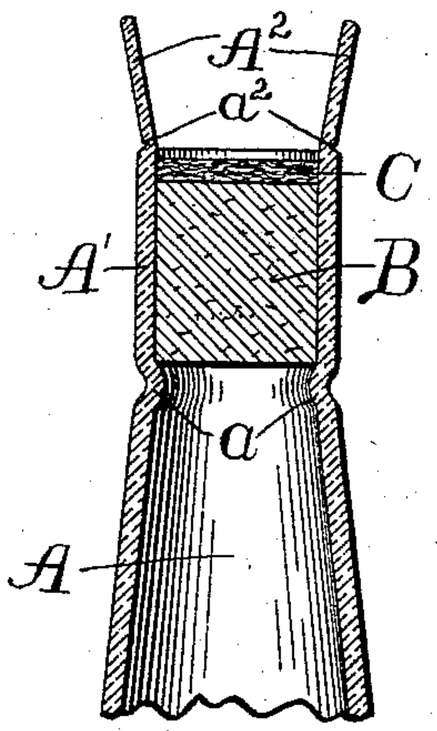
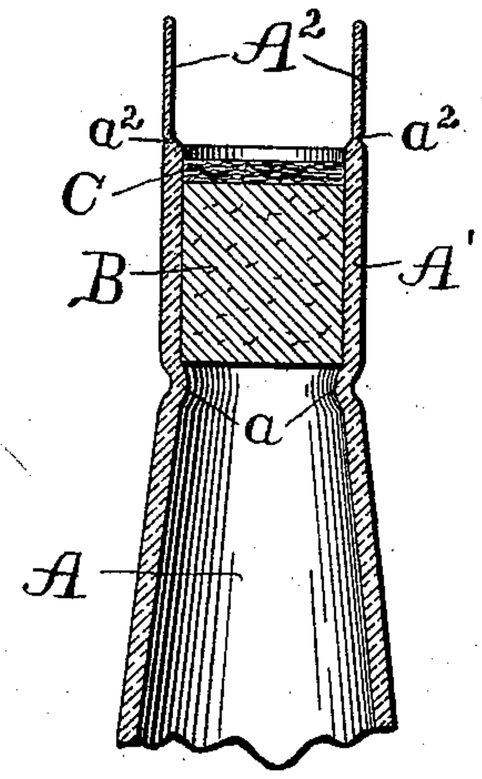


FIG. 6.



Witnesses
D. H. Blakelock.
John C. Wilson.

Inventor
Francis P. Siviter,
by Whitman & Wilkinson,
Attorneys

UNITED STATES PATENT OFFICE.

FRANCIS P. SIVITER, OF THE UNITED STATES ARMY.

NON-REFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 572,456, dated December 1, 1896.

Application filed April 7, 1896. Serial No. 586,540. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS P. SIVITER, lieutenant United States Army, a citizen of the United States, stationed at Fort Niobrara, State of Nebraska, 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.

My invention relates to improvements in seals or closures for bottles, jugs, jars, and similar vessels or receptacles, and has for its object to provide a seal or closure which must be broken in order to get at the contents of the vessel or receptacle, and which cannot be readily replaced, thus indicating that the seal has once been broken and preventing fraud in refilling the vessel or receptacle.

My invention will be understood by reference to the accompanying drawings, wherein the same parts are indicated by the same letters throughout the several views.

Figure 1 is a central vertical section through the neck of a bottle provided with my improved closure or seal and shows the same in the closed or sealed condition. Fig. 2 is a section taken on the line 2 2 of Fig. 3. Fig. 3 is a central vertical section taken at right angles to the section shown in Fig. 2. Figs. 4, 5, and 6 are views similar to that shown in Fig. 2, illustrating modifications of my invention.

A represents the neck of a bottle, the upper portion A′ of which forms the seat for the stopper. A rib *a* is preferably formed in the neck A, just below the portion A′, to prevent the stopper being pushed into the bottle.

The upper portion of the part A′ of the neck is provided with a flange *a′*, which may be either straight, as shown in Figs. 1 to 3, or may be flaring slightly, as shown in Fig. 4.

A^2 represents strips which are formed at the mouth of the portion A′ of the neck of the bottle. These strips are formed integral with the neck of the bottle by drawing out portions of the glass thereof while in a soft state, or by stamping or cutting, and should be drawn out thin enough to be easily bent when sufficient heat is applied, and yet be easily broken when it is desired to open the bottle.

B represents the stopper, and C represents a disk, preferably of asbestos, which is fitted over the ordinary cork stopper in order to prevent injury thereto when the strips A^2 are fused together over the stopper in sealing the bottle.

The operation of sealing the bottle is as follows: The cork or stopper is first inserted and then the asbestos disk C, as shown in the drawings. Heat is then applied to one of the strips along its portion a^2 where it connects with the bottle-neck, by means of a blow-pipe or other suitable means, until that portion becomes soft, when the strip is bent over upon the disk C. The other strip is then heated and bent in the same manner over upon the first strip, as shown in Fig. 1. The ends of the two strips are then fused together and a perfect seal is formed. These strips may be joined by any other method, if preferred. This seal will have to be broken in order to withdraw the cork from the bottle and cannot be replaced so as to restore the same to its original appearance without great expense.

In the form of bottle shown in Figs. 1 to 3 the strips A^2 are joined to the bottle-neck in recesses a^0 a^0 in the flange *a′*, in order to prevent the jagged edges of the glass from cutting the lips should a person drink from the neck of the bottle.

In the form of bottle shown in Fig. 4 the strips are joined to the neck of the bottle on the inner side of the flange *a′*, which also acts as a shield against injury by the jagged edges of the glass.

In Figs. 5 and 6 the strips are formed directly upon the top of the mouth of the neck, and this form of bottle may be used wherever the same is not likely to be applied to the lips in drinking.

I do not wish to limit myself to the glass bottle herein described and shown, as my invention is applicable to many sorts of vessels of many kinds of material; but

What I claim, and desire to secure by Letters Patent of the United States, is—

1. The combination, with a bottle having a neck adapted to receive a cork or stopper, and having a pair of thin strips formed integral therewith on opposite sides of the mouth thereof in the manufacture of the same,

of a stopper fitting in said neck, and the said strips being adapted to be softened by heat and bent over upon each other above said stopper, and to be easily broken when the stopper is to be removed, substantially as described.

2. The combination, with a bottle having a neck adapted to receive a cork or stopper, and having a pair of thin strips formed in recesses on opposite sides of the mouth thereof, by drawing out the glass in the manufacture of the said bottle, of a stopper fitting in said neck, and a protective disk imposed upon said stopper, the said strips adapted to be softened by heat and bent over upon said protective disk, and then fused together, substantially as described.

3. A bottle provided with a pair of thin strips extending upward from opposite sides of the mouth thereof and formed thereon by drawing out the glass in the manufacture of the bottle, the said strips being adapted to be bent over across the mouth of the bottle and overlap each other and to be fused together, by the application of heat, after the insertion of the cork, substantially as described.

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

FRANCIS P. SIVITER.

Witnesses:
GLENN H. DAVIS,
F. W. SMITH.