No. 824,661. PATENTED JUNE 26, 1906.

J. C. KIMSEY.

BOTTLE CLOSURE.

APPLICATION FILED MAR. 20, 1906.

Fig. 1.

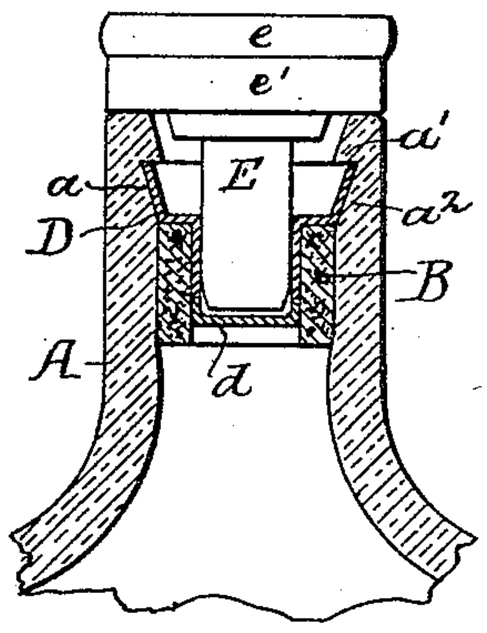


Fig. 3.

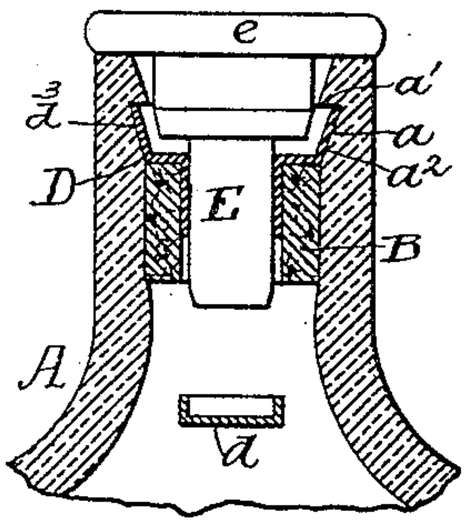


Fig. 4.

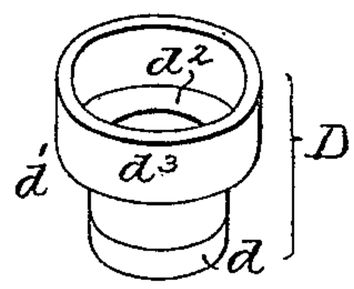


Fig. 5.

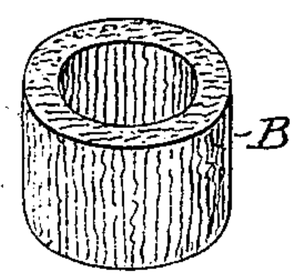


Fig. 2.

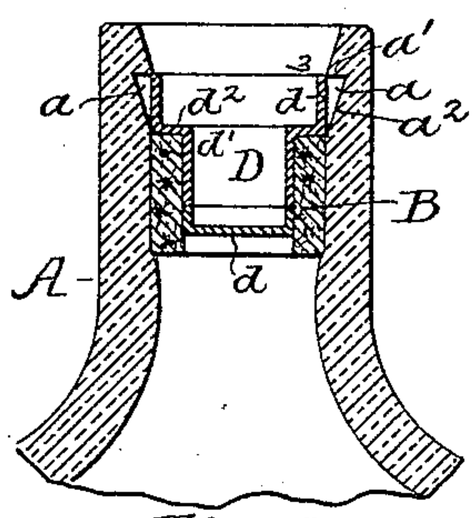
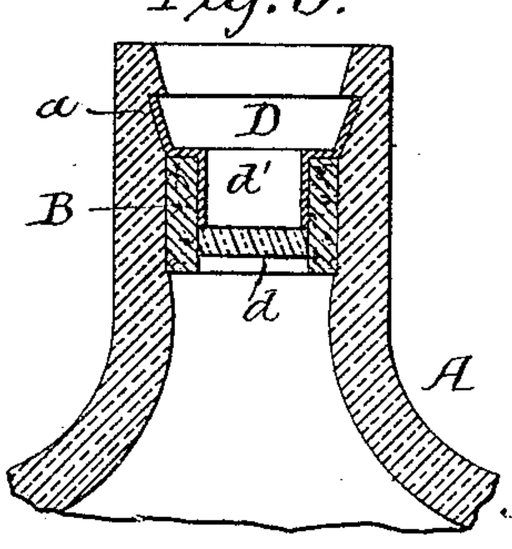


Fig. 6.



Witnesses:-
Augustus B. Coppes
Titus H. Jones.

Inventor:
James C. Kimsey.
by his Attorneys;
Howson & Howson

UNITED STATES PATENT OFFICE.

JAMES C. KIMSEY, OF PHILADELPHIA, PENNSYLVANIA.

BOTTLE-CLOSURE.

No. 824,661. Specification of Letters Patent. Patented June 26, 1906.

Application filed March 20, 1906. Serial No. 307,109.

To all whom it may concern:

Be it known that I, JAMES C. KIMSEY, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain Improvements in Bottle-Closures, of which the following is a specification.

The object of my invention is to make a closure for a bottle so that liquid can be delivered in the original package and as soon as the bottle is opened the original closure is broken and the bottle cannot readily be filled without detection unless the entire closure is removed and a new one placed in its stead. This object I attain in the following manner, reference being had to the accompanying drawings, in which—

Figure 1 is a sectional view showing a portion of a bottle, illustrating my improved closure ready for shipment. Fig. 2 is a view showing the method of attaching the closure to the bottle. Fig. 3 is a view showing the inner seal of the closure destroyed, so that the contents of the bottle can be removed. Fig. 4 is a perspective view showing the inner seal. Fig. 5 is a perspective view of the cork, and Fig. 6 is a view illustrating a modification of the inner seal.

It is desirable in certain classes of liquids to provide means whereby they can be delivered to the purchaser in the original package in order to prevent refilling the bottles with inferior liquids and closing them without detection. By my invention I am enabled to bottle liquids in the original package, and as soon as the bottle is opened the closure is destroyed, and a new closure cannot be placed in position without considerable trouble and expense.

A is the bottle, having an internal groove a, forming an upper shoulder a' and a beveled portion a^2.

B is a cork adapted to fit the bottle. This cork is made with an opening through it, and mounted in the opening is a metallic inner seal D, preferably made of aluminium and in two parts d and d'. Both these parts fit tightly in the cork. The part d' has a flange d^2 resting above the cork and a flange d^3, which is driven into the annular groove in the neck of the bottle, as indicated in Fig. 1, so that when the metallic inner seal is in place it is impossible to either remove the seal or the cork without destroying the inner seal. This makes a complete seal for the bottle, the cork tightly fitting the neck of the bottle, preventing leakage at this point, and the portion d of the inner seal tightly fitting the opening in the cork, also preventing leakage, and as the portion d is of the same diameter as the portion d' of the inner seal it is impossible to remove the portion d without destroying it and, in fact, destroying the entire closure.

When it is desired to open the bottle, all that is necessary is to push the portion d of the inner seal into the body of the bottle. The moment this is done the seal is broken and the contents of the bottle can be readily poured out. The portion d of the inner seal remains in the bottle as an indicator that the seal has been broken, so that it would be impossible to refill the bottle and use a cork to close it without detection, as the portion d in the bottle would be a telltale.

The section d of the inner seal instead of being made of metal may in some instances be made of glass, earthenware, or other material, as shown in Fig. 6, the seal snugly fitting the opening in the cork.

I preferably provide an opening device for the bottle consisting of a plunger E, which fits snugly in the passage of the inner seal, as shown in Fig. 1. This plunger has a head e, and between the head of the plunger and the end of the bottle is a spacing-washer e', preferably of wood or other material, which can be removed when it is desired to open the bottle. This spacing-disk prevents the plunger coming in contact with the portion d of the closure, so that the plunger can be carried by the bottle; but as soon as the spacing-disk is removed the bottle can be opened by forcing the plunger into the neck of the bottle, and as it strikes the portion d of the inner seal it will force it into the bottle, as shown in Fig. 3.

In manufacturing the closure I make a cork with a central opening, as in Fig. 5, and make the inner seal by spinning, as indicated in Fig. 4, the flange d^3 being parallel with the body of the inner seal, so that it can be readily inserted in the bottle. The portion d is then cut from the main portion of the inner seal, the cut being at a point a sufficient distance above the end to leave a flange on the portion d, as illustrated, so that it will make a tight seal and be more difficult to remove. In some instances it may not be necessary to entirely sever the part d from the body of the inner seal; but it is preferable, as otherwise it may be difficult to remove the bottom section d without considerable force.

I claim—

1. The combination in a bottle having an internal annular groove in the neck thereof, a cork arranged to fit the neck and having an open center, an inner seal made in two parts, one part being flanged and closing the opening through the cork, the other part extending through the cork and having a flange arranged to enter the groove in the neck of the bottle, substantially as described.

2. The combination in a bottle having an internal annular groove in the neck thereof, a cork arranged to fit the neck and having an open center, an inner seal made in two parts, one part closing the opening through the cork, the other part extending through the cork and having a flange arranged to enter the groove in the neck of the bottle, substantially as described.

3. A closure for the neck of a bottle consisting of a cork having an opening therein, an inner seal consisting of a metallic cap closing one end of the said opening and a portion fitting the balance of the opening and having a flat portion extending over the end of the cork, and a flange arranged to be forced in the groove in the neck, substantially as described.

4. The combination of a bottle, a cork, an inner seal in the cork, a plunger mounted in the bottle, and a removable spacing-disk on the plunger, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JAMES C. KIMSEY.

Witnesses:
WILL. A. BARR,
JOS. H. KLEIN.