

(No Model.)

H. H. HIGHAM.
CORK.

No. 566,683.

Patented Aug. 25, 1896.

FIG. 1.

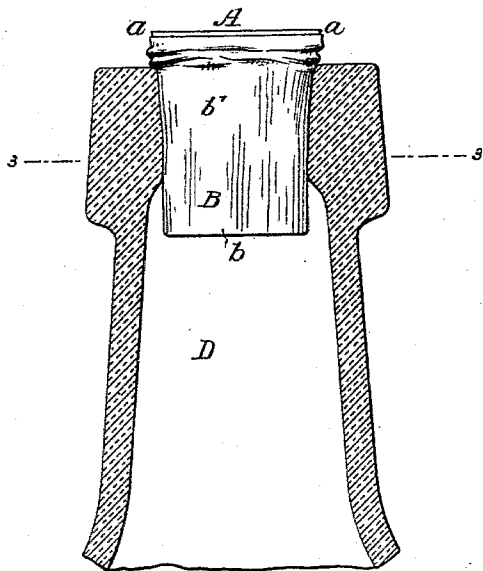


FIG. 2.

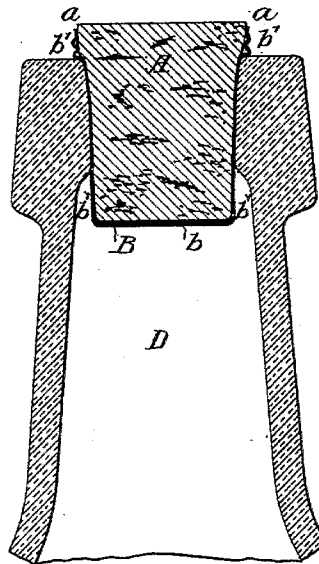


FIG. 3.

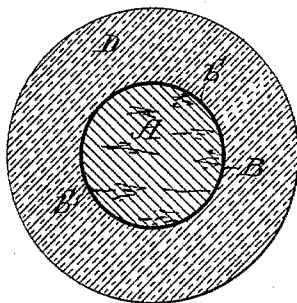


FIG. 4.

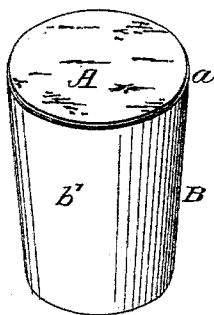


FIG. 5.

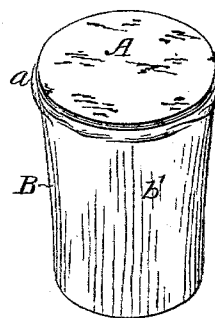
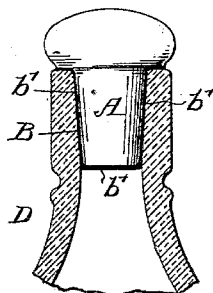


FIG. 6.



Witnesses:
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CORK.

SPECIFICATION forming part of Letters Patent No. 566,683, dated August 25, 1896.

Application filed October 30, 1895. Serial No. 567,451. (No model.)

To all whom it may concern:

Be it known that I, HOWARD H. HIGHAM, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain Improvements in Corks, of which the following is a specification.

The object of my invention is to manufacture a cork in such a manner that it will not be injuriously affected by the contents of the bottle or other receptacle and which will freely yield and expand and which can be readily driven into or removed from the mouth of the bottle. This object I attain in the following manner, reference being had to the accompanying drawings, in which—

Figure 1 is a view of a cork driven into the mouth of a carboy with the cork in outside view. Fig. 2 is a sectional view similar to Fig. 1, with the cork in section. Fig. 3 is a sectional plan view on the line 3 3, Fig. 1. Fig. 4 is a perspective view of the cork before being driven. Fig. 5 is a perspective view of the cork after being driven; and Fig. 6 is a view of a headed cork, illustrating my invention.

My invention relates especially to the corks of carboys and other bottles containing acids and other fluids which would eat away and destroy the ordinary wooden cork. Heretofore in bottling these acids the stoppers were made either of glass ground into the mouth of the carboy, or a clay plug was made, or a screw-cap was provided which screwed into the threaded mouth of the bottle.

The ground-glass stopper and screw-cap are very seldom used on account of the cost and owing to the fact that the stoppers are not interchangeable. Furthermore, the grinding of the stoppers in place is an expensive operation, and where a screw-thread is made in the mouth in such a large vessel as a carboy the expense of manufacturing is considerably increased, owing to the difficulties in handling the carboy before annealing. Consequently the old-fashioned method of using a lump of clay, bagging, pitch, and string is resorted to the present day.

By my invention the ordinary carboy can be tightly corked without using the cumbersome and ugly method now resorted to.

It will be noticed in the accompanying draw-

ings that A is a wood cork of one of the lower grades, and inclosing this cork is a cap B of soft metal, preferably lead, which is formed by a drawing process, the cork being tapered so that it will fit carboys having mouths of different shapes and diameters. The cap has a thick base *b* and its flange *b'* decreases in thickness as it nears the top *a* of the cork, so that while the heaviest portion of the cap is at the point where the acid will more readily attack the cork, the main portion of the cap is of such a thickness that it will readily yield and conform to the shape of the bottle D. Furthermore, the material being flexible, it can be used in combination with an expansible stopper as well as with the ordinary cork.

I have found that I can use the commonest grade of cork in the stopper and cover it for about the same cost as a first-grade cork which will last considerably longer than the high-grade cork and can be used over again.

By making the cap of flexible lead I can use the cork in vessels containing muriatic, sulfuric, and other acids, and ammonia. Furthermore, the cork is non-absorbent, as is the common cork made either of wood or rubber, and consequently will not decay in use.

Owing to the peculiarity of the drawn lead, the cork can be driven into the bottle with less resistance and the lead will condense without puckering and conform to the inner shape of the neck of the bottle, the cork yielding and expanding with the cap, thus making an air-tight stopper, a result not possible with ordinary sheet metal or lead.

The cork can be readily withdrawn, and if a corkscrew is used it need not be passed through the cork but simply into the wooden portion a short distance, when the entire cork can be withdrawn, as the lead will not adhere to the bottle as readily as the ordinary wooden or rubber cork.

I claim as my invention—

1. A cork having a compressible center and a flexible, drawn, metallic cap or casing inclosing the base and sides of the center.

2. A bottle-cork having a compressible center and a flexible, drawn, metallic cap having a thick base and having sides tapering from the bottom to the top of the cork, substantially as described.

3. The combination of the cork-wood center having tapering sides, with a cap of drawn, soft lead inclosing the base and sides of the cork-wood center and of such a thickness that
5 it will yield with the center, substantially as described.

In testimony whereof I have signed my

name to this specification in the presence of two subscribing witnesses.

HOWARD H. HIGHAM.

Witnesses:

FRANK E. BECHTOLD,
JOS. H. KLEIN.