No. 703,523. Patented July 1, 1902.

H. S. BREWINGTON.

BOTTLE STOPPER.

Application filed Aug. 27, 1901.

(No Model.)

Fig. 1.

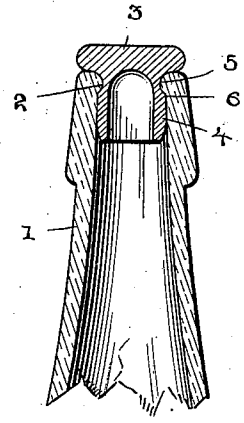
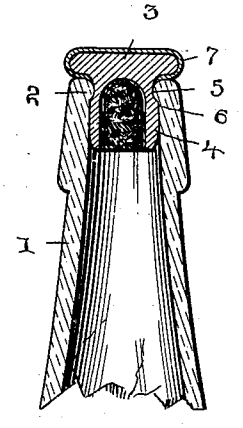


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

HENRY S. BREWINGTON, OF BALTIMORE, MARYLAND.

BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 703,523, dated July 1, 1902.

Application filed August 27, 1901. Serial No. 73,451. (No model.)

To all whom it may concern:

Be it known that I, HENRY S. BREWINGTON, a citizen of the United States, residing at Baltimore city, State of Maryland, have invented new and useful Improvements in Bottle-Stoppers, of which the following is a specification.

My invention relates to bottle-stoppers, the primary object being to provide a simple and inexpensive closure especially adapted for bottles containing beer or other beverages.

A further object of the invention is to provide a bottle-stopper which may be readily secured within the mouth of the bottle-neck automatically by the mere insertion of the stopper within the mouth of the bottle.

A further object of the invention is to provide a stopper which will automatically secure itself in place when inserted by the contraction and expansion thereof and which will seal and close the bottle hermetically and which will be so protected by a coating or covering impervious to liquids as to prevent the escape of the gases contained in the liquid.

The construction of the improvement will be fully described hereinafter in connection with the accompanying drawings, which form a part of this specification, and its novel features will be defined in the appended claims.

In the drawings, Figure 1 is a vertical section of a bottle neck and stopper embodying the invention. Fig. 2 is a similar view showing the stopper coated with a protecting-covering of enamel and provided with a plug filling or packing of yielding material.

The reference-numeral 1 designates the neck of the bottle formed with a rounded internal annular rib 2.

The stopper comprises a cap 3 and a depending hollow plug 4, formed integral with the cap 3 and provided with an annular groove 5 just below the cap to form an annular shoulder 6, said groove 5 conforming to the rounded shape of the rib 2 of the bottle-neck.

The stopper is preferably formed of light wood, and the hollow plug is sufficiently resilient to adapt it to contract while being inserted into the mouth of the bottle and to expand after passing the annular rib 2 within the bottle-neck to spring the shoulder 6 under the rib. The construction of the hollow plug with this annular groove is such as to avoid splitting or slotting of the plug, and the required expansion to engage the shoulder 6 with the annular rib within the bottle-neck is effected entirely through the inherent resiliency of the material of which the plug is formed.

The stopper constructed as above described may be firmly attached to the mouth of the bottle by pressing it down within the bottle-neck and may be readily removed by the use of a suitable extractor—such, for instance, as is employed for removing the ordinary crimped metal caps from bottles.

To protect the stopper and prevent the escape of gases from the bottle, the cap 3 is coated on its upper surface around its edge and on its under surface with a suitable enamel or other material 7 (see Fig. 2) to render the cap impervious to liquid. Thus the entire stopper, with the exception of the depending hollow plug, is protected from the action of gases contained within the liquid in the bottle, which serves the double purpose of retaining the gases within the bottle and rendering the stopper durable.

In Fig. 2 I have shown the hollow plug 4 filled with a packing 8 of cork or equivalent yielding material which will not prevent the contraction of the wooden plug and aids in retaining the gases contained in the liquid contents of the bottle.

I claim—

1. The combination with a bottle-neck formed with an internal annular rib adjacent to its upper end, said rib having a rounded surface, of a wooden stopper comprising a cap resting on the top edge of the bottle-neck, and a depending hollow plug formed at its juncture with the cap with an annular groove conforming to the rounded surface of the rib, and forming an annular shoulder to engage below said rib.

2. The combination with a bottle-neck formed with an annular rib adjacent to its upper end, said rib having a rounded surface, of a wooden stopper comprising a cap resting on the top edge of the bottle-neck, and a depending hollow plug formed at its juncture with the cap with an annular groove conforming to the rounded surface of the rib, and forming an annular shoulder to engage below said rib, said cap having a protecting-coating of some

material impervious to liquids, the coating covering the top, the edge, and the under surface of the cap which rests on the bottle-neck.

3. The combination with a bottle-neck, provided with an internal annular rib adjacent to its upper end, of a wooden stopper comprising a cap adapted to rest on the top edge of the bottle-neck, and a depending hollow plug formed below the cap with an annular groove forming an annular shoulder engaging below the rib, said plug having a filling or packing of cork or other yielding material.

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

HENRY S. BREWINGTON.

Witnesses:
ROBERT C. RHODES,
G. D. WITTER.