No. 703,524.

Patented July 1, 1902.

H. S. BREWINGTON.

BOTTLE STOPPER.

(Application filed Aug. 27, 1901.)

(No Model.)

Fig. 1.

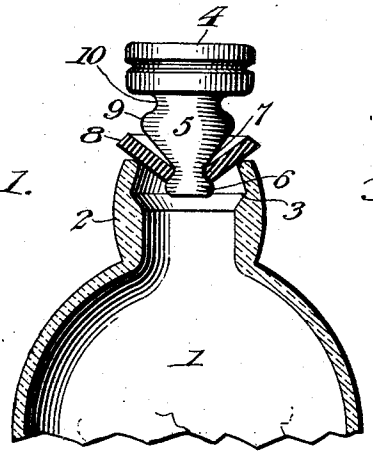
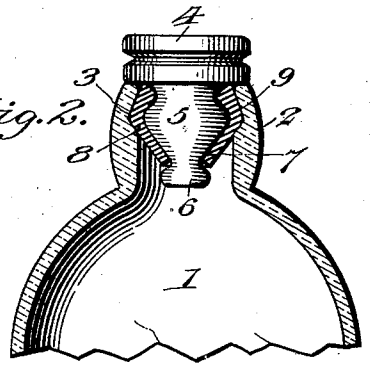


Fig. 2.



Witnesses

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UNITED STATES PATENT OFFICE.

HENRY S. BREWINGTON, OF BALTIMORE, MARYLAND, ASSIGNOR OF ONE-HALF TO WILLIAM SEIM, OF BALTIMORE, MARYLAND.

BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 703,524, dated July 1, 1902.

Application filed August 27, 1901. Serial No. 73,452. (No model.)

To all whom it may concern:

Be it known that I, HENRY S. BREWINGTON, a citizen of the United States, residing at No. 7 St. Paul street, Baltimore, in the State of Maryland, have invented new and useful Improvements in Bottle-Stoppers, of which the following is a specification.

This invention relates to bottle-stoppers; and the primary object thereof is to provide a cheap, durable, and efficient closure for bottles, &c., which may be applied and removed without the necessity of utilizing tools or stopper-pulling devices.

With this object in view the invention consists in such parts and combination of parts, as will described hereinafter, defined in the appended claims, and illustrated in the accompanying drawings, in which—

Figure 1 is a vertical longitudinal sectional view of a bottle, illustrating the stopper and fastener just previous to its being inserted. Fig. 2 is a similar view after the device has been applied.

Referring now to the drawings by reference-numerals, 1 designates a bottle of improved construction, having a restricted portion or neck 2 at its upper end, said neck being provided with an interiorly-arranged annular groove 3.

The stopper comprises a cylindrical head 4, from which depends a plug 5, which is approximately pear-shaped, with an enlarged button 6 at its lower extremity. At the point where this enlargement 6 connects with the plug 5 is a restricted portion or groove 7, in which is adapted to be seated a flexible and resilient disk 8, preferably of rubber or similar material, said disk being secured to the plug 5 through the medium of the button 6. It will be noticed that the sides of the plug 5 diverge upwardly and terminate in a rounded shoulder 9, which merges into a groove 10 at a point contiguous to the juncture of the plug with the cylindrical portion 4 of the stopper. The object of so constructing the stopper is to enable an air-tight closure to be made, which is accomplished in the following manner: As the plug is about to be inserted the disk 7 will bind against the upper edge of the bottle-neck. As the plug is forced into the neck the disk will be spread along the side walls of the pear-shaped portion and spread the superfluous material of the disk into the grooves 10, at which point the disk will be thickest. By employing the peculiar construction just described the shoulder 9 will rest at a point diametrically opposite the annular groove 2 and of the neck of the bottle, and the disk will be firmly packed between the bottle-neck and plug from this point upward toward the cylindrical portion 4.

It will thus be seen that I have provided a cheap, durable, and efficient fastening device having a bottle or closure and one which may be instantaneously removed and applied without the use of tools or other like devices.

What I claim is—

The combination with a bottle-neck having an internal annular groove of a plug inserted into said neck and having upwardly-diverging sides, a rounded shoulder at its upper end, a head connected to the plug by a restricted portion to form a groove, and a resilient fastening-disk carried by the plug and adapted to be spread along the sides of the plug and into the groove of the bottle-neck, the superfluous material of said disk entering the groove in the plug above the rounded shoulder.

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

HENRY S. BREWINGTON.

Witnesses:
ROBERT C. RHODES,
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