No. 850,844. PATENTED APR. 16, 1907.

H. MORGAN.

BOTTLE STOPPER.

APPLICATION FILED JULY 19, 1906.

Fig. 1.

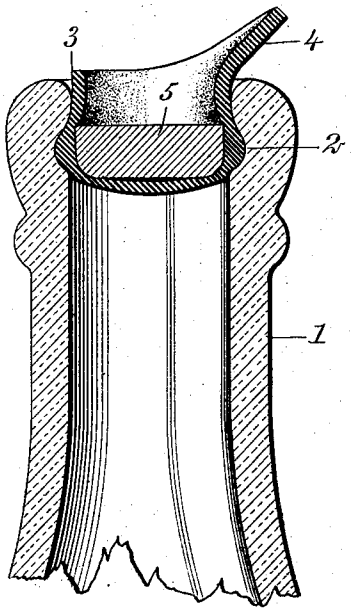


Fig. 2.

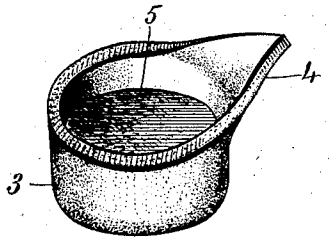


Fig. 4.

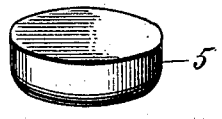
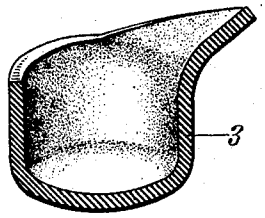


Fig. 3.



WITNESSES

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HENRY MORGAN, OF CRIPPLE CREEK, COLORADO.

BOTTLE-STOPPER.

No. 850,844. Specification of Letters Patent. Patented April 16, 1907.

Application filed July 19, 1906. Serial No. 326,847.

To all whom it may concern:

Be it known that I, HENRY MORGAN, a citizen of the United States, and a resident of Cripple Creek, in the county of Teller and State of Colorado, have invented a new and Improved Bottle-Stopper, of which the following is a full, clear, and exact description.

This invention relates to a closure for beer-bottles, mineral-water bottles, &c., and has for its object to provide a simple and inexpensive device easy to apply to the bottle and easy to remove, but in which there is no liability of its being accidentally displaced by internal pressure or rough handling.

Reference is to be had to the accompanying drawings, which form part of this specification, in which drawings like characters of reference indicate corresponding parts throughout the views, and in which—

Figure 1 is a vertical section through a portion of a bottle provided with my improved bottle-stopper. Fig. 2 is a perspective view of the bottle-stopper *per se*. Fig. 3 is a vertical section through the cup forming a portion of my bottle-stopper; and Fig. 4 is a perspective view of the button or disk used in connection with the cup.

In the drawings I have illustrated a bottle-neck 1, having an internal circumferential groove 2 adjacent the mouth thereof, which form of bottle my stopper is adapted to be used in connection with. The stopper comprises a cup or thimble 3, of soft rubber or other suitable elastic material, and is provided with a triangular tab or projection 4, constituting means whereby the cup or thimble may be removed from the bottle. For holding the cup or thimble in place I employ a disk or plate 5, of wood or metal, adapted to fit within the cup and force a portion thereof into the groove in the neck of the bottle. The button is made of a size to just neatly fit within the throat of the bottle itself and when placed in the rubber thimble requires force to drive it into the bottle-throat. In inserting the stopper the cup or thimble is first placed in position, and then the button or disk is inserted at an angle until the lower edge thereof is on a level with the groove in the neck of the bottle. The upper edge is then forced down, and as it reaches the position shown in Fig. 1 it forces the wall of the thimble out into the groove, and the parts are thus securely held in position. To remove the stopper, the tab 4 is taken between the thumb and finger and given an upward pull, whereupon the disk or button is tilted edgewise and may then be readily removed.

Many advantages of my new and improved stopper will be readily apparent; but special attention is called to the fact that it cannot be blown out by internal pressure in the bottle, as the outer diameter of the disk is but slightly less than the diameter of the mouth of the bottle above the groove. The only way in which it can be removed is by pulling upon the tab 4, as above described. As the stopper is injured in no way by being inserted or removed, it is evident that the same stopper may be used repeatedly and after being replaced seals the bottle as effectively as it did when first inserted. At the same time the stopper may be made so cheaply that it may be thrown away when the bottle is emptied, if so desired. There is no liability of the stopper being accidentally forced into the bottle or of its being accidentally tilted during shipment, as all parts of the stopper save the tab 4 are protected within the neck of the bottle. My closure has no rigid portions projecting out of the bottle-throat that may catch on other objects, and thus cause the displacement of the closure and the loss of the contents. The small lip or tab which does project outside the bottle-throat is of rubber and readily yields and bends down if it comes in contact with outside objects during rough handling. No instrument whatever is needed to insert or remove my improved stopper, and it forms a perfectly air-tight seal at all times, even though there may be slight imperfections and irregularities in the mouth of the bottle, as the soft rubber being compressed by the button or disk is forced to fill all such irregularities as may exist.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A bottle having a groove within the mouth thereof, a cup of elastic material fitting within the bottle and having a tab projecting therefrom, and a disk or plate of non-resilient material fitting within the cup and holding the walls thereof in contact with the groove of the body.

2. A bottle formed with an internal circumferential groove adjacent the mouth thereof, a cup of soft rubber fitting within the mouth of the bottle and having a triangular lip projecting therefrom by which the cup may be removed, and a flat circular disk of

non-resilient material fitting within the cup and adapted to spread the side of the cup into the groove.

3. A closure for bottles, comprising a cylindrical cup of soft rubber and having a tab or projection extending from the edge thereof, and a circular non-resilient disk or plate fitting within the lower end of the cup and adapted to slightly distend the same.

4. A closure for bottles, comprising a cylindrical cup of soft elastic material, the edge of said cup being provided with a tab or projection integral therewith, and a circular disk of non-resilient material fitting within the cup.

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

HENRY MORGAN.

Witnesses:

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RAYMOND D. HUSTED.