W. T. BROOK.
BOTTLE STOPPER.
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1,065,211.

Fig. 1

Fig. 2

Fig. 3

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WITNESSES.

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BOTTLE-STOPPER.

1,065,211.


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To all whom it may concern:

Be it known that I, WILLIAM T. BROOK, a citizen of the United States, residing at Arlington, in the county of Baker and State of Georgia, have invented new and useful Improvements in Bottle-Stoppers, of which the following is a specification.

The invention relates to bottles, and more particularly to the class of bottle stoppers.

The primary object of the invention is the provision of a stopper which will be securely anchored within the bottle neck, so as to close the same and enable a person to detect when the stopper has been once extracted from the bottle, thus assuring the genuineness of the original contents of the said bottle.

Another object of the invention is the provision of a stopper or closure for a bottle wherein on the extracting of the same the said bottle will disclose the fact that the same has been un corked or unsealed, thereby preventing the refilling of the bottle or tampering with the original contents without detection.

A further object of the invention is the provision of a stopper which is simple in construction, readily and easily secured within the neck of a bottle for the closing thereof, and one which is thoroughly reliable and efficient in its purpose and inexpensive in manufacture.

With these and other objects in view the invention consists in the construction, combination and arrangement of parts as will be hereinafter more fully described, illustrated in the accompanying drawing and pointed out in the claims hereunto appended.

In the drawing: Figure 1 is a fragmentary vertical sectional view through a bottle showing the stopper constructed in accordance with the invention secured therein. Fig. 2 is a sectional view on the line 2—2 of Fig. 1. Fig. 3 is a perspective view of the stopper removed from the bottle neck, the same being partly in section.

Similar reference characters indicate corresponding parts throughout the several views in the drawing.

Referring to the drawings by numerals 5 designates a portion of the body of a bottle and 6 the neck of any ordinary well-known construction, preferably constructed from glass, although it may be made from any other suitable material. Suitably anchored in diametrically opposite points in the neck 6 and spanning the bore therein spaced from the mouth edge is a frangible anchoring wire 7 for cooperation with a securing device connected with the stopper or cork 8 when inserted within the neck 6 for the closing of the bottle, the securing device being hereinafter more fully described.

The stopper 8 is of less diameter than the internal diameter of the neck 6, and is preferably constructed from metal, although it may be made from any other suitable material and surrounding the major portion thereof is a cork sleeve 10, the same being of a size to permit the stopper 8 to tightly fit within the bottle neck when inserted therein for the positive closing of the said bottle.

Embedded in the inner end of the stopper 8 and projecting outwardly therefrom is the inner closed end of an inverted U-shaped yoke 11, the respective limbs 12 and 13 thereof being of different lengths with respect to each other and the limb 13 which is longer of the two has suitably fixed thereto near its free end a spring latch formed from a leaf spring bar having a portion 14 at right angles to the axis of the bottle, and an angular portion 15 with respect thereto, the said angular portion being fixed at its free end to the limb 13 while the portion 14 has its free end portion slidably mounted in a guide aperture 16 formed in the limb 13.

The right or juncture 17 between the portions 14 and 15 of the latch is designed to normally engage in a notch 18 formed in the limb 12 so as to close the open end of the yoke 11 and the portion 14 of the said latch is formed with an upper knife edge 19 which is designed to sever the frangible cross wire 7 should the stopper 8 be extracted from the bottle neck 6 after the said stopper has been fully inserted therein, and in this manner indicating that the said bottle has been once opened.

When inserting the stopper 8 in the bottle 6 said stopper is forced inwardly and the yoke 11 straddles the cross wire 7 so that on the inward movement of the stopper the inclined portion 15 of the latch will contact with the said wire 7, thus tripping the latch thereover, whereby the portion 14 of the latter will lie in a plane beneath the frangible wire and the latch will automatically close the open end of the yoke 11 so that the frangible wire 7 will overlie the knife edge 19 of the portion 14 of said latch, so that on extracting the stopper 8 the said knife
edge 19 will sever the wire 7 and thus indicate that the stopper has been once extracted. In this manner a person may readily detect the fact that the bottle has been once opened and in this manner determine whether or not the original contents of the bottle has been tampered with. The stopper 8 at its outer end is formed with a flange 20 which enables the ready removal of the stopper when it is desired to open the bottle.

From the foregoing description, taken in connection with the accompanying drawing it is thought that the construction and operation of the invention will be clearly understood, and therefore a more extended explanation has been omitted.

What is claimed is:—

1. The combination with a bottle neck of a stopper inserted therein, a yoke carried by the inner end of the stopper and projected within the neck, a frangible cross wire anchored within the neck and passed between the limbs of the yoke, and a displaceable spring latch carried by one arm of the yoke and normally lying within the path of the frangible wire the other limb of said yoke being formed with a notch for the engagement therein of the latch.

2. The combination with a bottle neck of a stopper inserted therein, a yoke carried by the inner end of the stopper and projected within the neck, a frangible cross wire anchored within the neck and passed between the limbs of the yoke, a displaceable spring latch carried by one arm of the yoke and normally lying within the path of the frangible wire the other limb of said yoke being formed with a notch for the engagement therein of the latch, and a knife edge formed on the latch for severing the frangible wire on extracting the stopper from the bottle neck.

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

WILLIAM T. BROOK.

Witnesses:

J. W. TAYLOR,
P. W. BROOKS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."