

(No Model.)

W. J. CUNNINGHAM.
BOTTLE STOPPER.

No. 558,722.

Patented Apr. 21, 1896.

Fig. 1.

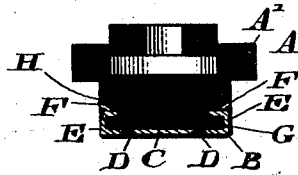


Fig. 2.

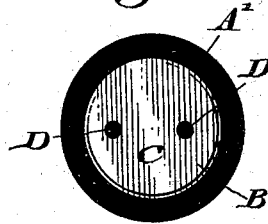


Fig. 3.

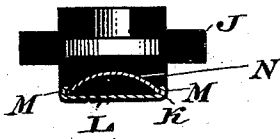
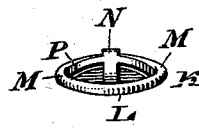


Fig. 4.



WITNESSES:

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WILLIAM J. CUNNINGHAM, OF PHILADELPHIA, PENNSYLVANIA.

BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 558,722, dated April 21, 1896.

Application filed October 17, 1895. Serial No. 565,930. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. CUNNINGHAM, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Bottle-Stoppers, which improvement is fully set forth in the following specification and accompanying drawings.

My invention relates to bottle-stoppers; and it consists of a novel construction of stopper, made of rubber or other material, in which provision is made for preventing the rubber of which the stopper is made from coming in contact with the liquor or liquid contained in the bottle, whereby the contents of the latter are not impaired, a plate being attached to the body of the stopper so as to be interposed between the latter and the contents of the bottle.

It further consists of novel details of construction, all as will be hereinafter set forth.

Figure 1 represents a vertical sectional view of a bottle-stopper embodying my invention. Fig. 2 represents a plan view of the under side of the same. Fig. 3 represents a vertical sectional view of a modification. Fig. 4 represents a perspective view of a device shown in Fig. 3, to be hereinafter referred to.

Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings, A designates a bottle-stopper, the same consisting of the body portion A', which is usually made of rubber or similar material, and which has attached to its lower extremity the plate B, the same being provided with the countersunk holes D, the upturned flanges E, and the inwardly-turned flange F, said latter flange being embedded between the flange G of the stopper and neck H of the same, wherefrom it will be seen that the contents of the bottle cannot be impaired.

In Fig. 3, J designates the body of the stopper, to the under side of which is attached the plate K, the latter consisting of the body portion L, having the upturned lip or flange M, into which are sprung the limbs P of the spider N. (Best seen in Fig. 4.)

The operation is as follows: In the manufacture of the stopper, reference being had first to Fig. 1, the rubber or other material from which the body A' is made is poured in a molten or plastic condition upon the plate B, the latter being placed in the bottom of

a mold or form, the molten or plastic material thus passing through the countersunk holes D and the flange F, becoming embedded in the neck H, whereby the plate B and the stopper are firmly locked or united together. In the construction shown in Figs. 3 and 4 the plate K, having the spider N mounted thereupon, is placed in the mold and the rubber or other material employed in a molten or plastic condition is poured thereupon, the parts uniting, as shown in Fig. 3, and the rubber setting when cold and interlocking with the limbs P and holding the plate K firmly in juxtaposition to the under side of the stopper.

It will thus be seen from the foregoing that in both the constructions seen in Figs. 1 and 3 provision is made for preventing the contents of the bottle from coming in contact with or being acted upon by the material composing the stopper by reason of the interposition of the plates B or K, and an effective and durable stopper is produced.

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

1. A bottle-stopper having a body portion, a neck, and a plate secured to the under side thereof, said plate having an upwardly-turned portion and an inwardly-turned flange, the latter entering and being embedded in said neck, substantially as described.

2. A bottle-stopper having a body portion, a neck depending therefrom and provided with a flange, a plate having an upwardly and inwardly turned flange embedded in said neck, said plate being provided with a countersunk hole and in contact with the flange of said neck, and said hole being engaged and interlocked by the material composing the stopper, substantially as described.

3. A bottle-stopper having a suitable body portion, a plate K having an upwardly and inwardly turned flange or lip M, and a spider N mounted therein, said plate and spider being embedded in said stopper and being adapted to be interposed between the bottom of the latter and the liquid in the bottle, substantially as described.

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Witnesses:

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