(No Model.)

C. L. MOREHOUSE.

BOTTLE STOPPER.

No. 368,228. Patented Aug. 16, 1887.

Fig. 1.

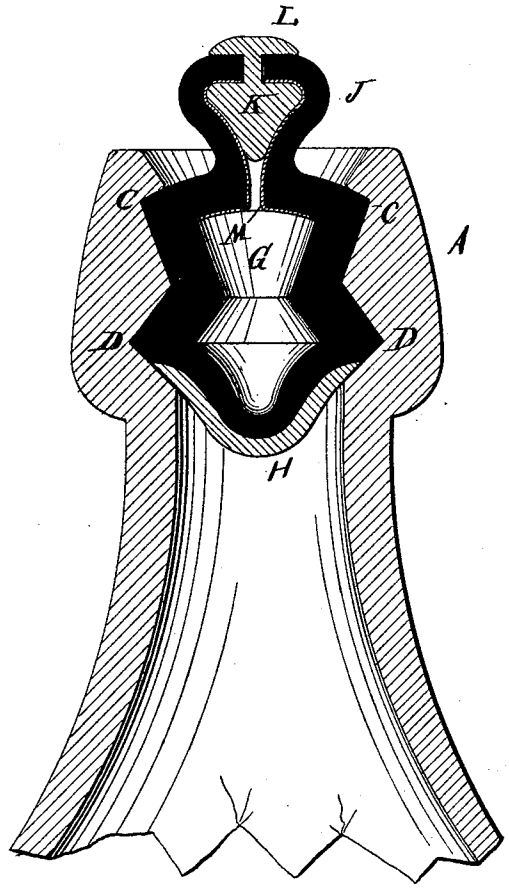
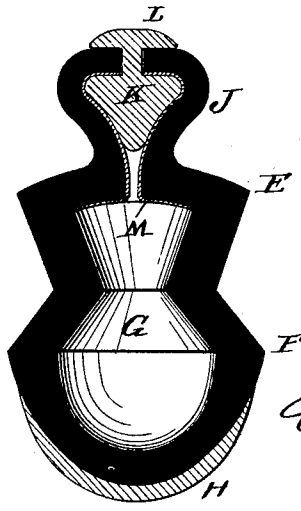


Fig. 2.



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UNITED STATES PATENT OFFICE.

CHARLES L. MOREHOUSE, OF BROOKLYN, NEW YORK.

BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 368,228, dated August 16, 1887.

Application filed December 16, 1886. Serial No. 221,741. (No model.)

To all whom it may concern:

Be it known that I, CHARLES L. MOREHOUSE, of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Bottle-Stoppers, of which the following is a specification.

This invention relates to certain new and useful improvements in rubber bottle-stoppers; and the object of my invention is to provide a bottle-stopper of this kind in which the liquid does not come in contact with the rubber.

The invention consists of a bottle-stopper made of soft rubber and formed so as to fit in grooves in the inside of the head of the bottle, the bottom of the stopper being covered with a thin layer of cork, which is vulcanized to the rubber.

The invention consists, also, of certain details of construction, which will be fully described and set forth hereinafter, and finally pointed out in the claims.

In the accompanying drawings, Figure 1 is an enlarged cross-sectional elevation of the bottle neck and head containing my improved stopper. Fig. 2 is an enlarged cross-sectional view of the stopper as it appears out of the bottle.

Similar letters of reference indicate corresponding parts.

The bottle-head A is provided with two V-shaped grooves, C and D, for receiving the parts E and F of the hollow stopper G, made of soft rubber. The bottom of the stopper is rounded and preferably slightly tapered. A piece of cork, H, shaped to conform to the stopper, is placed into a suitable recess formed in the bottom of the stopper, and the cork united firmly to the bottom of the stopper by the vulcanizing process. On the top of the stopper a neck, J, is formed, which contains a metal plug, K, having a stem projecting through an aperture in the top of the neck. On the top of the stem the plate L is formed. The neck J is provided with an interior lining, M, of linen or muslin, for the purpose of preventing the stretching of said neck when the stopper is to be extracted. The plug K is tapered toward its lower end, thus keeping the top of the neck J expanded, and thus permit of getting a firm grip and hold on said neck. The stopper is placed on the top of the neck, which is beveled inward, as shown, and driven home by means of a blow. The parts E and F of the stopper enter the beveled annular grooves C and D in the bottle-head and form a tight joint.

The cork bottom of the stopper is pressed into the shape shown in Fig. 1. It is thus clear that no liquid can come in contact with the rubber, but only with the cork bottom of the same, thereby preventing any contamination of the contents of the bottle by the rubber.

When it is desired to withdraw the stopper from the bottle, the neck J is taken hold of and pulled upward. As the stopper is made hollow, the parts E and F can give inward sufficiently to permit of withdrawing the stopper.

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

1. The combination, with a rubber stopper having a curved bottom, and a recess in said curved bottom, of a flexible piece of cork vulcanized to the under side of said stopper within the recess in said under side, substantially as shown and described.

2. The combination, with a rubber stopper having a curved bottom, of a flexible layer of cork vulcanized to said curved bottom of the stopper, substantially as shown and described.

3. The combination, with a hollow rubber bottle-stopper having a neck, of a metal plug held in said neck, substantially as shown and described.

4. The combination, with a soft-rubber bottle-stopper having a rubber neck, of a tapered plug in said neck, a stem on the plug, and a plate on the upper end of the stem and above the top of the neck, substantially as shown and described.

5. A soft-rubber bottle-stopper having a hollow neck lined with muslin or linen, substantially as shown and described.

6. The combination, with a soft-rubber bottle-stopper having a hollow neck, a lining of muslin or linen in said neck, and a tapered metal plug in said neck, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

CHARLES L. MOREHOUSE.

Witnesses:

HENRY W. ROZELL,

OSCAR F. GUNZ.