(Model.)

C. L. MOREHOUSE.

BOTTLE STOPPER.

No. 343,647. Patented June 15, 1886.

Fig. 1.

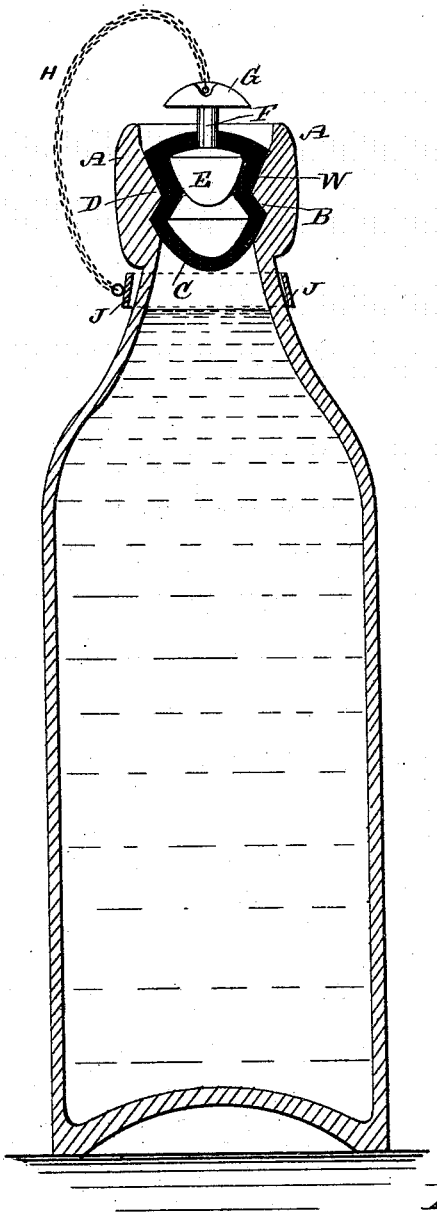


Fig. 2.

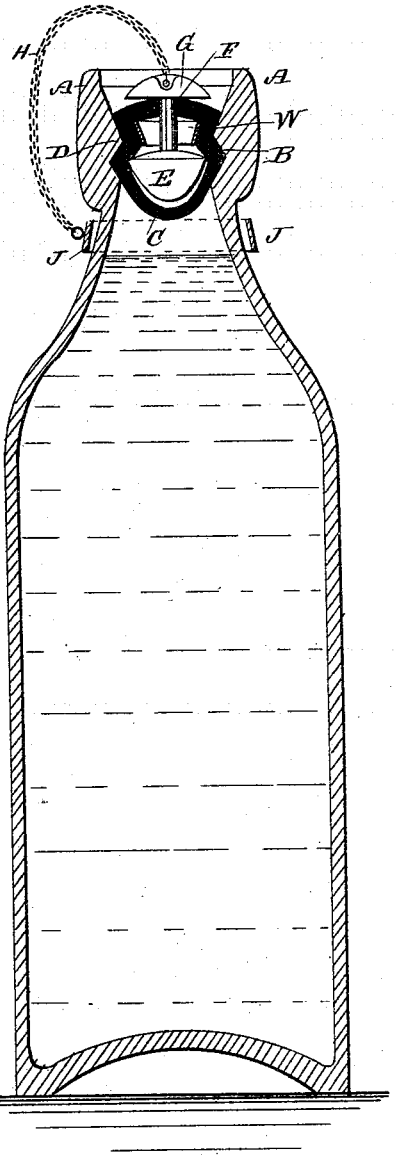
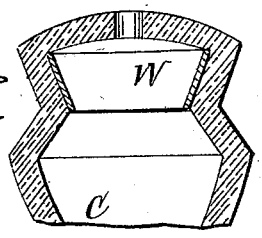


Fig. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

CHARLES L. MOREHOUSE, OF BROOKLYN, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE MOREHOUSE BOTTLE STOPPER COMPANY, OF NEW YORK, N. Y.

BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 343,647, dated June 15, 1886.

Application filed September 23, 1885. Serial No. 177,969. (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 a new and Improved Bottle-Stopper, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved bottle-stopper which is simple in construction, effective in use, and which can be used on bottles for receiving plain and effervescent liquids.

The invention consists in the construction of parts and details and combinations of the same, as will be fully described and set forth hereinafter, and then pointed out in the claims.

Figure 1 is a vertical section of a bottle and of my improved stopper as applied to the latter, the plug being shown in its upper position. Fig. 2 is a similar view of the same, showing the plug in its lower position; and Fig. 3 is an enlarged detached view of the stopper, showing more fully the ring W, a portion of the stopper, including the plug, being broken away.

The bottle-neck A is tapered on the inside from the top downward and inward, and in the inside of said neck an annular V-shaped groove, B, is formed.

The stopper C, which is hollow, is made of pure rubber, has a rounded bottom, an annular V-shaped groove, D, in its side, and an aperture in its top, and in said stopper a metal ring, W, is placed, which is split to enable it to give or yield, more or less.

The plug E, which is made of metal or any other hard substance, has a rounded bottom, and has its top edges rounded or beveled, and is provided with an upwardly-projecting stem, F, on the upper end of which a disk or other handle-piece, G, is secured, said handle-piece being connected by a chain, H, with a spring or strip of wire, J, encircling the bottle-neck.

The operation is as follows: When the stopper is not in the bottle, the plug E is in the upper part of the stopper, as shown in Fig. 1, and then the stopper is forced into the neck of the bottle, the lower part being contracted until it has passed the annular shoulder D, when it expands, and fits snugly in the groove under the shoulder. The stopper is quite tight; but when it is desired to have it absolutely tight the plug E is forced down into the position shown in Fig. 2. The ring W causes the plug to slide easily in the stopper and prevents binding.

In case the bottle contains effervescent fluid the gas pressing against the bottom part of the rubber stopper forces the same still more against the side of the bottle-neck.

The stopper can be pressed into the bottle neck or head or withdrawn from the same very easily and rapidly. Beveling the top edge of the plug facilitates pulling the plug up.

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

1. The combination, with a soft-rubber stopper tapered toward its lower end and provided in its upper end with an interior projection a short distance below the top of said stopper, of a plug held loosely in said stopper, which plug is of a diameter greater than the internal diameter of the stopper at its annular projection, and which plug is provided with a stem permanently secured to said plug and projecting up through an aperture in the top of the stopper, substantially as herein shown and described.

2. A soft-rubber stopper made hollow and provided with an internal annular projection a short distance below the top of the stopper and with an external annular groove near its top, the stopper being tapered from its external groove downward, substantially as herein shown and described.

CHARLES L. MOREHOUSE.

Witnesses:

OSCAR F. GUNZ,

EDGAR TATE.