H. T. CUSHMAN.

Mucilage Bottle Stopper.

No. 205,247. Patented June 25, 1878.

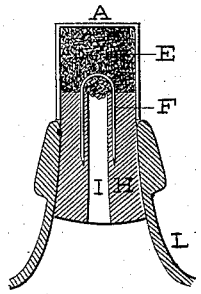

FIG. 1.

FIG. 2.

WITNESSES.

L. B. Newton

Joseph H. Lottridge

INVENTOR.

Henry T. Cushman

by Franklin Scott,

his Attorney

UNITED STATES PATENT OFFICE.

HENRY T. CUSHMAN, OF NORTH BENNINGTON, ASSIGNOR TO HENRY C. BABCOCK AND NATHAN O. WILCOX, OF BENNINGTON, VERMONT.

IMPROVEMENT IN MUCILAGE-BOTTLE STOPPERS.

Specification forming part of Letters Patent No. **205,247**, dated June 25, 1878; application filed March 11, 1878.

To all whom it may concern:

Be it known that I, HENRY T. CUSHMAN, of North Bennington, in the county of Bennington and State of Vermont, have invented a new and Improved Bottle-Stopper; and I do hereby declare the following to be an explicit description of the same, and of its mode of use and operation; and for a clear elucidation and understanding thereof reference is herein made to the drawing accompanying this specification, and which forms a part thereof, wherein—

Figure 1 exhibits a vertical longitudinal section taken through the axis of the stopper and neck of the bottle, to which the same is applied; and Fig. 2 presents an exterior view of the stopper and attachments, with the cap removed.

At the present time there are in use a variety of stoppers adapted to close the mouths of bottles and other analogous vessels, having the top or exterior end thereof equipped with material adapted to saturation with the contents of the bottle, and to which the fluid contents of the bottle find access through a hole or channel extending through the stopper proper. Stoppers of this character are commonly provided with a cap designed to close down over the saturated extremity of such stoppers, and to closely fit the exterior of the mouth or nozzle of the bottle, vial, or jar, as the case may be. A serious objection to this system of construction consists in the fact that when the cap or cover is in place on the bottle there frequently exists an annular chamber just at the bottom edge of the saturated tip, and just above the mouth of the bottle, into which chamber any superfluous fluid contents of the bottle readily drip when the bottle is at rest in an upright position, which accumulation so formed whenever the cap is next removed runs down the outside of the bottle, or else adheres around and about the mouth of the bottle, where the cap, when applied, finds its seat, thus seriously interfering with the proper use of the cap, either by causing the same to adhere to the mouth of the bottle whenever left to stand any length of time, or, by accumulating and hardening on the mouth of the bottle, prevents the cap being applied at all.

To overcome these defects and obviate the foregoing objections, I have constructed the stopper shown in the drawings, in which L is the neck of an ordinary bottle or jar; H, a piece of cork, rubber, or other suitable material, fitted to fill the mouth of the bottle, and having attached to its top by means of the staple F, or any analogous or suitable substitute therefor, a piece of any elastic, porous, or spongy material, E, between which and the contents of the bottle (which are of a fluid character) communication exists through the axial channel I. That portion of the cork or stopper which projects above the top of the mouth of the bottle and the interior of the lower or bottom end of the cap A are mutually adapted or fitted to each other, so that when the cap is pressed down over the sponge and cork to its seat the same shall closely fit the top of the cork, and at the same time so compress or collapse the porous or spongy tip E that the same will fill the interior of the cap A, as shown in Fig. 1, to the exclusion of any air, which frequently remains in the caps of ordinary construction, the presence of which tends to facilitate evaporation or drying up, as well as of any superfluous fluid, which is forced back into the interior of the bottle through duct I.

Cap A is integral in character—that is, when applied to its seat, no perforation or communication exists between its interior and exterior, and when in use it depends for its seat or fitting exclusively upon its adaptation to the exterior cylindrical surface of the projecting portion of the cork or stopper, independent of the neck or mouth of the bottle, or other vessel to which it is applied.

By this mode of construction the cap-seat is always dry and clean, and the control of the superfluous contents of tip E so brought under control as always to keep the mouth of the bottle and the cap-seat clean and in condition for close sealing.

This invention is designed to afford a ready and convenient means of applying and using such fluids or materials as are ordinarily applied with a brush or sponge.

I claim as new and desire to secure by Letters Patent—

A bottle-stopper constructed of appropriate

material, as described, tipped with an elastic, porous, or spongy material capable of being saturated with the contents of the bottle, having one or more ducts for the free access of the contents to the tip, and the upper portion thereof projecting above the top of the mouth of the bottle, for the purposes described, in combination with a close cap adapted to fit said projecting portion, all substantially as described and set forth.

In testimony whereof I have hereto set my hand, at North Bennington, Vermont, this 15th day of April, A. D. 1878.

HENRY T. CUSHMAN.

In presence of—
FRANKLIN SCOTT,
J. C. HOUGHTON.