(No Model.)

I. N. HALEY.

SPONGE TOP BOTTLE.

No. 395,564. Patented Jan. 1, 1889.

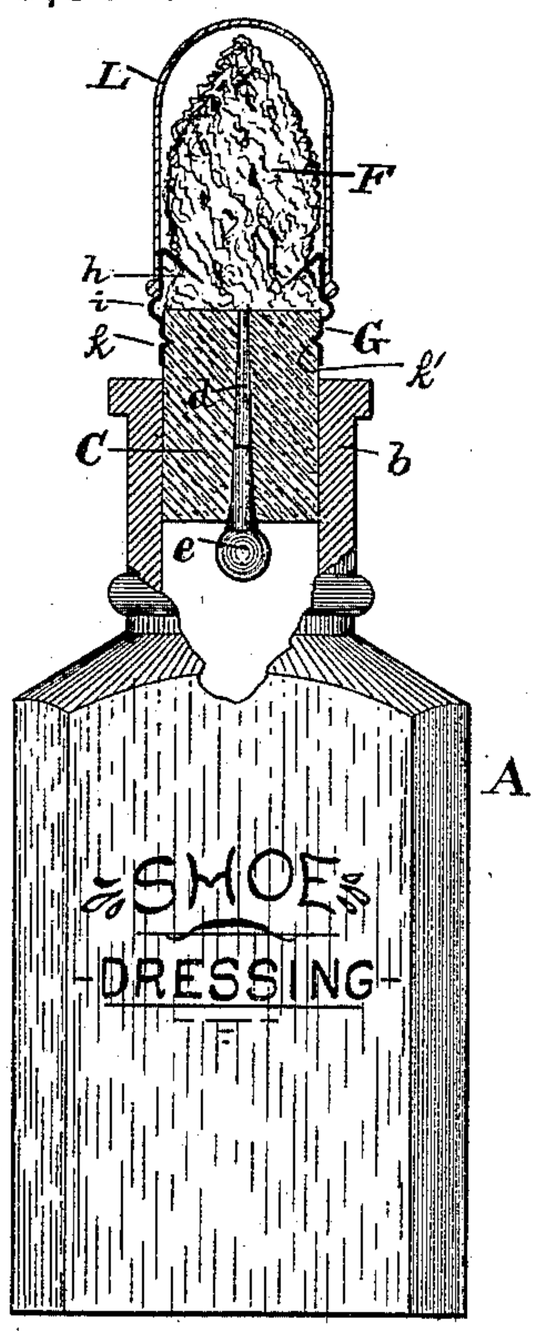

Fig. 1.

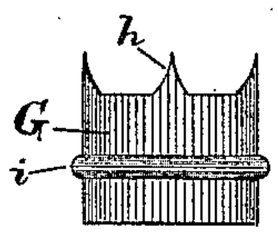

Fig. 2.

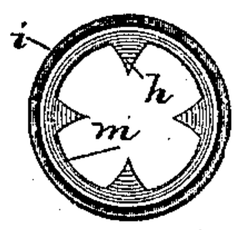

Fig. 3.

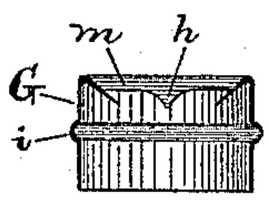

Fig. 4.

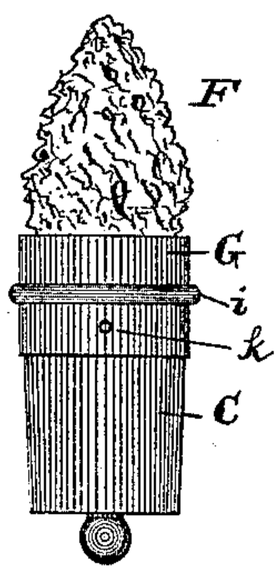

Fig. 5.

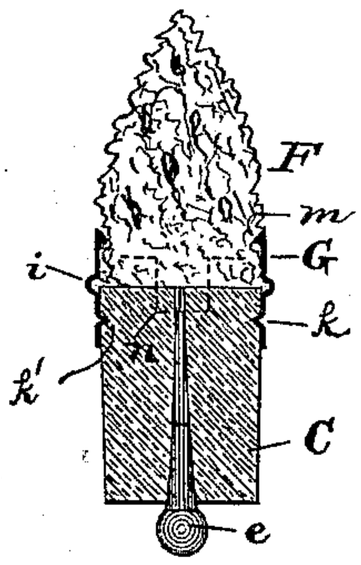

Fig. 6.

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ISAAC N. HALEY, OF BALTIMORE, MARYLAND.

SPONGE-TOP BOTTLE.

SPECIFICATION forming part of Letters Patent No. 395,564, dated January 1, 1889.

Application filed November 1, 1888. Serial No. 289,727. (No model.)

To all whom it may concern:

Be it known that I, ISAAC N. HALEY, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Sponge-Top Bottles, of which the following is a specification.

This invention relates to an improvement in that class of bottles which have sponges attached to the neck for applying and spreading the contents—such as mucilage and shoe dressing.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a view of a bottle, the neck, cork, and sponge parts being in section to show the improvement. Figs. 2, 3, and 4, are side, top, and sectional views, respectively, of the metal union connecting the sponge and cork. Fig. 5 is a side view of the sponge, cork, and union embracing my invention. Fig. 6 is a sectional view, and differs from the others only in that stitches are used to connect the sponge to the cork instead of the prongs.

The bottle A may be an ordinary bottle of any shape. The neck *b* is not provided with screw-thread or any other special device, as commonly required in this class of bottles.

One object of my invention is to provide an improved construction for uniting the sponge and cork, as seen in Fig. 5, in order to allow the use of an ordinary bottle.

The cork C has a passage, *d*, extending through it, and a tapered plug, *e*, is employed for insertion into said passage. The sponge F is connected directly with the cork, and a metal union, G, acts as a coupling for the sponge and cork.

The metal union is first shaped as shown in Fig. 2. It is tubular or ring-shaped, and at one end has prongs *h*, which are turned from the position shown in Fig. 2 inward to the position shown in Figs. 3 and 4. An annular bead or swell, *i*, projects outwardly. The sponge F projects from the top of the metal union and the prongs *h* confine it. The cork C has one end inserted in the lower side of the union, and the union and cork are fastened together in some suitable manner to prevent their separation. In the present instance the fastening is effected by forcing the point of a prick-punch from the outside into the metal union, as at *k*, so as to form an inwardly-projecting burr, *k'*, which is pressed into the sides of the cork, as shown in Figs. 1 and 6. Two, three, or four of these prick-punch burrs will fasten the union to the cork.

The cap L, which covers the sponge, fits close and tight about the union and rests on the annular bead *i*.

The top rim of the union G is inturned sufficiently to form an inward flange, *m*, which serves, when the bottle is standing upright, as a sort of drip-cup to catch any liquid flowing down the outer surface of the sponge.

The parts shown in Figs. 1 to 5 are assembled or united by drawing a part of the soft sponge F down through the top of the metal union G and allowing the portion thus drawn to expand below the prongs *h*. The cork C is then forced up into the lower side of the metal union against the said expanded part of the sponge, and is fastened, as stated. The manner of uniting the parts shown in Fig. 6 is obvious.

The prongs *h* are dispensed with in Fig. 6, and instead of this device to confine the sponge a thread is used to stitch the sponge directly to the cork, as at *n*. The upper portion of the union G surrounds the sponge, however, as it does where prongs are used, and assists to confine it. When the bottles are filled at the factory, the plug *e* is inserted in the passage *d* at the bottom of the cork, as shown, and when the cork thus plugged is in the neck of the bottle it is impossible for the liquid contents to escape. Thus, with the plug, the filled bottles may be shipped or handled. When a consumer purchases a bottle, he will withdraw the cork and remove the plug and then return the cork to the neck of the bottle, whereupon the bottle is ready for use.

Having described my invention, I claim—

A sponge-spreader for bottles having, in combination, a cork for insertion in the neck of a bottle and provided with a passage, *d*, a tapered plug, *e*, inserted in the cork-passage, a sponge, F, connected directly to the top of the cork, and a tubular metal union, G, which surrounds both sponge and cork and is fastened to the cork to prevent separation.

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

ISAAC N. HALEY.

Witnesses:

JOHN E. MORRIS,

ARTHUR O. BABENDREIER.