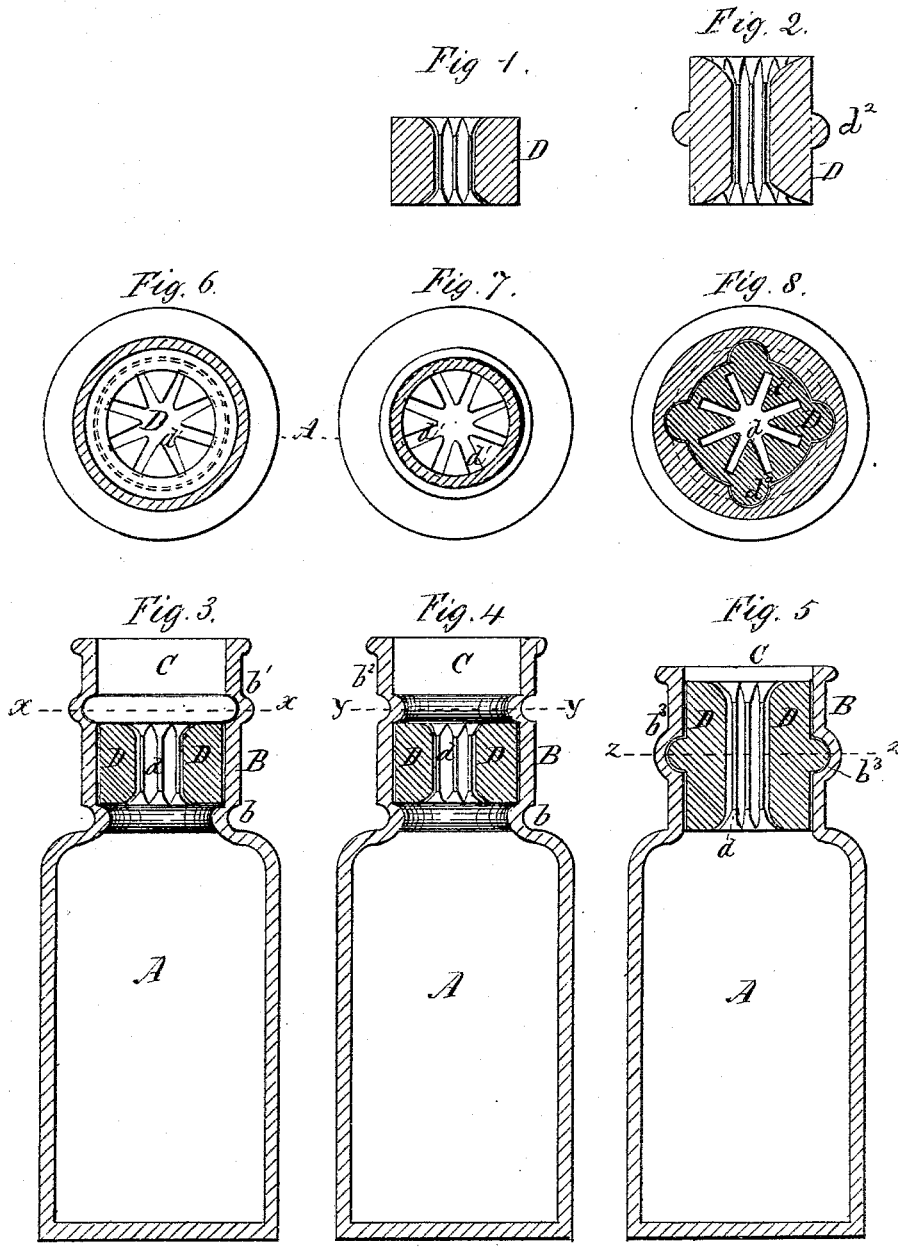


S. S. NEWTON.
Mucilage-Holder.

No. 210,872.

Patented Dec. 17, 1878.



Witnesses.
Henry Cobb
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UNITED STATES PATENT OFFICE.

STEPHEN S. NEWTON, OF BINGHAMTON, NEW YORK.

IMPROVEMENT IN MUCILAGE-HOLDERS.

Specification forming part of Letters Patent No. **210,872**, dated December 17, 1878; application filed May 17, 1878.

To all whom it may concern:

Be it known that I, STEPHEN S. NEWTON, of Binghamton, in the county of Broome and State of New York, have invented certain new and useful Improvements in Mucilage-Bottles; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in the bottles or vessels employed for holding mucilage, liquid blacking, and liquid bronze.

Its object is to prevent the withdrawal of too much of the liquid by the sponge or brush ordinarily employed with vessels of this class; and it consists in providing the neck of the bottle or vessel with an inner removable solid neck, having flutes or ribs continuous from the top to the bottom, to form a contracted throat, through which the sponge is drawn in its passage from the bottle, and having continuous grooves or channels for the return of the surplus liquid.

Figures 1 and 2 are vertical sections of the inner neck. Figs. 3, 4, and 5 illustrate methods of attaching the neck to the bottle. Figs. 6, 7, and 8 are horizontal sections, taken respectively on lines *x x*, Fig. 3, *y y*, Fig. 4, and *z z*, Fig. 5.

In the drawings, A represents the body of the bottle; B, the neck, and C the mouth. D is the solid inner removable neck, provided with the ribs or flutes *d d*, extending from top to bottom to form a contracted throat, and with continuous channels *d' d'*. This inner solid neck I prefer to make either of metal or of rubber, as these materials permit a ready manufacture by melting and pouring into a mold.

Removable necks of this sort can be manufactured much more cheaply and rapidly than the perforated sheet-metal necks now in use, and have, moreover, continuous grooves for the return of the surplus liquid.

Bottles have been made with corrugations blown or molded upon the inside of their necks; but, owing to the difficulties experienced in the blowing and molding of glass, it is found that the number of flutes or corrugations and the depth of the returning-grooves must be very limited, whereas by casting the inner neck separately I am at liberty to make them of any desired number and depth.

When a neck cast from metal is employed, the bottle is provided with an inwardly-projecting annular flange or rib, *b*, to support the inner neck, and with an annular groove, *b'*, to receive a wire which is sprung therein to prevent the withdrawal of the neck.

If the neck is molded from rubber its compressibility and elasticity may be used to retain it in place. Thus, it may be held up by the flange *b*, and held down by another inwardly-projecting flange, *b²*, beyond which it is forced by compression. After passing the upper flange it springs out and occupies the enlarged space between the flanges; or it may be provided with lugs or ears *d²*, adapted to be compressed, and then sprung into seats or recesses *b³ b³*, formed in the bottle-neck for their reception, or with an annular rib to be compressed and sprung into the groove *b¹*.

When the neck is formed with the lugs or ears upon its outer face the lower flange, *b*, will not be needed.

What I claim is—

1. A cast or molded solid removable inner neck for bottles, having vertical flutes or ribs and grooves, continuous from top to bottom, substantially as set forth.

2. In combination with a bottle-neck, a rubber inner neck having longitudinal ribs and grooves, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

STEPHEN S. NEWTON.

Witnesses:

W. H. HECOX,
DANIEL WHEELER.