

(No Model.)

A. J. ROBINSON & J. C. DORAN.
STOPPER ATTACHMENT FOR BOTTLES.

No. 565,392.

Patented Aug. 4, 1896.

FIG. 1.

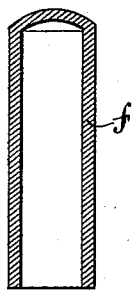


FIG. 2.

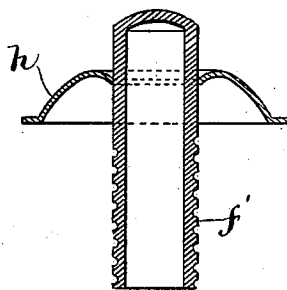


FIG. 3.

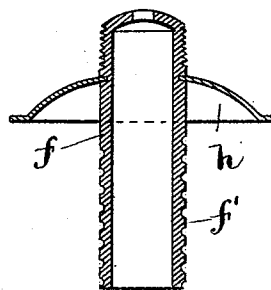


FIG. 4.

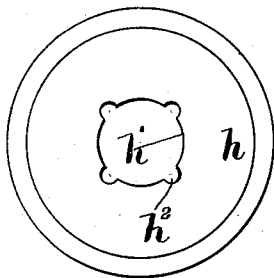
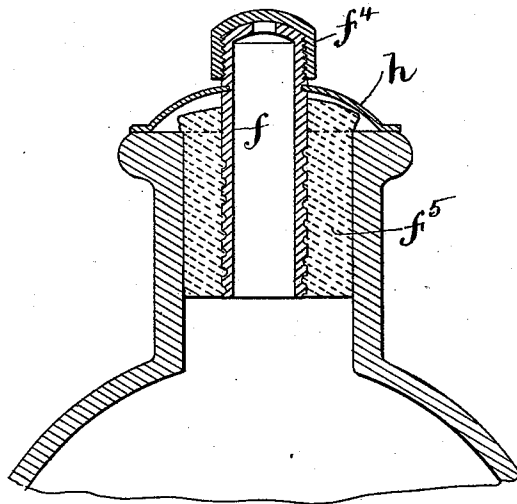


FIG. 5.



WITNESSES:

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UNITED STATES PATENT OFFICE.

ANDREW J. ROBINSON, OF BOSTON, MASSACHUSETTS, AND JAMES C. DORAN,
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STOPPER ATTACHMENT FOR BOTTLES.

SPECIFICATION forming part of Letters Patent No. 565,392, dated August 4, 1896.

Application filed October 25, 1895. Serial No. 566,864. (No model.)

To all whom it may concern:

Be it known that we, ANDREW J. ROBINSON, of Boston, in the county of Suffolk and State of Massachusetts, and JAMES C. DORAN, of Pawtucket, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Stopper Attachments for Bottles, of which the following is a specification.

This invention relates to a new and improved stopper attachment for bottles; and it consists in the novel features of construction and relative arrangement of parts hereinafter fully described in the specification, clearly illustrated in the drawings, and particularly pointed out in the claim.

Reference is to be had to the accompanying sheet of drawings, forming a part of this application, in which like characters are used to indicate like parts wherever they occur.

Figure 1 represents a longitudinal section of a tube that forms one of the members of our improved attachment. Fig. 2 represents a longitudinal section of the tube and the washer arranged thereon, but before the parts are locked together. Fig. 3 represents a washer and tube locked together. Fig. 4 represents a top plan view of the washer. Fig. 5 represents a sectional view showing the attachment in a bottle.

f represents a tube which is preferably provided at its lower end with screw-threads *f'*.

h represents a washer arranged to be slipped on said tube. This washer is formed with inwardly-projecting lips *h'*. These lips may be formed by cutting the washer away at intervals, as at *h*². The washer with its in-

wardly-projecting lips is slipped upon the tube *f*, as shown in Fig. 2. A mandrel is then inserted in the tube *f*, and by means of a suitable tool the lips *h'* are straightened into a position substantially at right angles to the tube, thereby forcing the lips into the material of said tube, as shown in Fig. 3. By this construction the flange is securely and permanently locked to the tube and prevented from twisting.

The top of the tube is provided with a suitable opening and screw-threads to receive a cap *f*⁴, while the screw-threads at the bottom of the tube engage the cork *f*⁵.

Having thus explained the nature of our invention and described a way of constructing and using the same, though without attempting to set forth all of the forms in which it may be made or all the modes of its use, what we claim, and desire to secure by Letters Patent, is—

A stopper attachment for bottles, comprising in its construction, a tube composed of soft material, a washer arranged thereon, and lips upon said washer adapted to be driven into said tube to lock said tube and washer together at any desired point on said tube.

In testimony whereof we have signed our names to this specification, in the presence of two subscribing witnesses, this 19th day of October, A. D. 1895.

ANDREW J. ROBINSON.
JAMES C. DORAN.

Witnesses:

HORACE BROWN,
A. D. HARRISON.