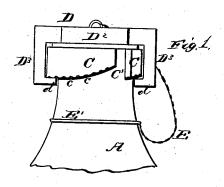
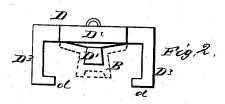
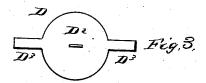
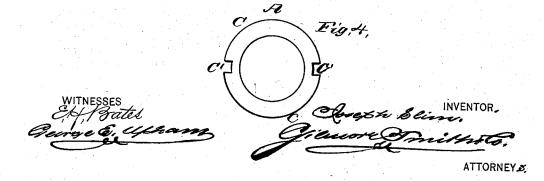
No. 189,801.

Patented April 17, 1877.









## UNITED STATES PATENT OFFICE.

JOSEPH SLIM, OF LOCKPORT, NEW YORK.

## IMPROVEMENT IN BOTTLE-STOPPERS.

Specification forming part of Letters Patent No. 189.801, dated April 17, 1877; application filed February 24, 1877.

To all whom it may concern:

Be it known that I, JOSEPH SLIM, of Lockport, in the county of Niagara and State of New York, have invented a new and valuable Improvement in Bottle-Stoppers; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a side elevation of my bottle-stopper applied, and Fig. 2 is a side view of the same. Figs. 3 and 4 are detail views thereof.

This invention relates to fastenings for bottle-stoppers, and consists in the construction and combination hereinafter set forth and claimed.

In the accompanying drawings, A designates a bottle, in the neck of which is inserted a hollow rubber stopper, B, shown in detail in Fig. 2. Around the mouth of said bottle are two broad tapering beads or rimpieces, C C, which are provided on the under side with notches or corrugations cc, and separated from one another by two opposite vertical passages, C'C', shown in Figs. 1 and 4. D designates a metallic clamp, consisting of central downwardly extending and expanding plug or block D¹, broad main part D², and side arms D³ D³. These side arms extend outward beyond rim-pieces C C, then downward outside of the same, and finally inward under them.

All the parts of said clamp are made (preferably cast) in one piece. When said clamp is turned so that the inwardly-extending horns d d at the bottom of side arms  $D^3$  come under the thick parts of rim-pieces C C, plug D<sup>1</sup> is forced down into the interior of stopper B, expanding the same, and the main part D2 of said clamp is drawn tightly down upon the top of said stopper, holding it firmly in place. Corrugations e e prevent said clamp from being casually displaced. When said clamp is turned until the inwardly-extending pieces d d come under vertical passages O' O', the said elamp can be removed from said bottle and stopper without difficulty. To prevent said clamp from being mislaid and lost it is secured by small chain E to a wire, E', wound around the neck of said bottle.

This invention is applicable to fruit-jars and similar articles as well as to bottles.

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

Clamp D, having plug  $D^1$ , in combination with tapering screw or rim-pieces C C, having corrugations c c and a hollow rubber stopper, substantially as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOSEPH SLIM.

Witnesses:
JABEZ S. WOODWARD,
LEWIS HARMONY.