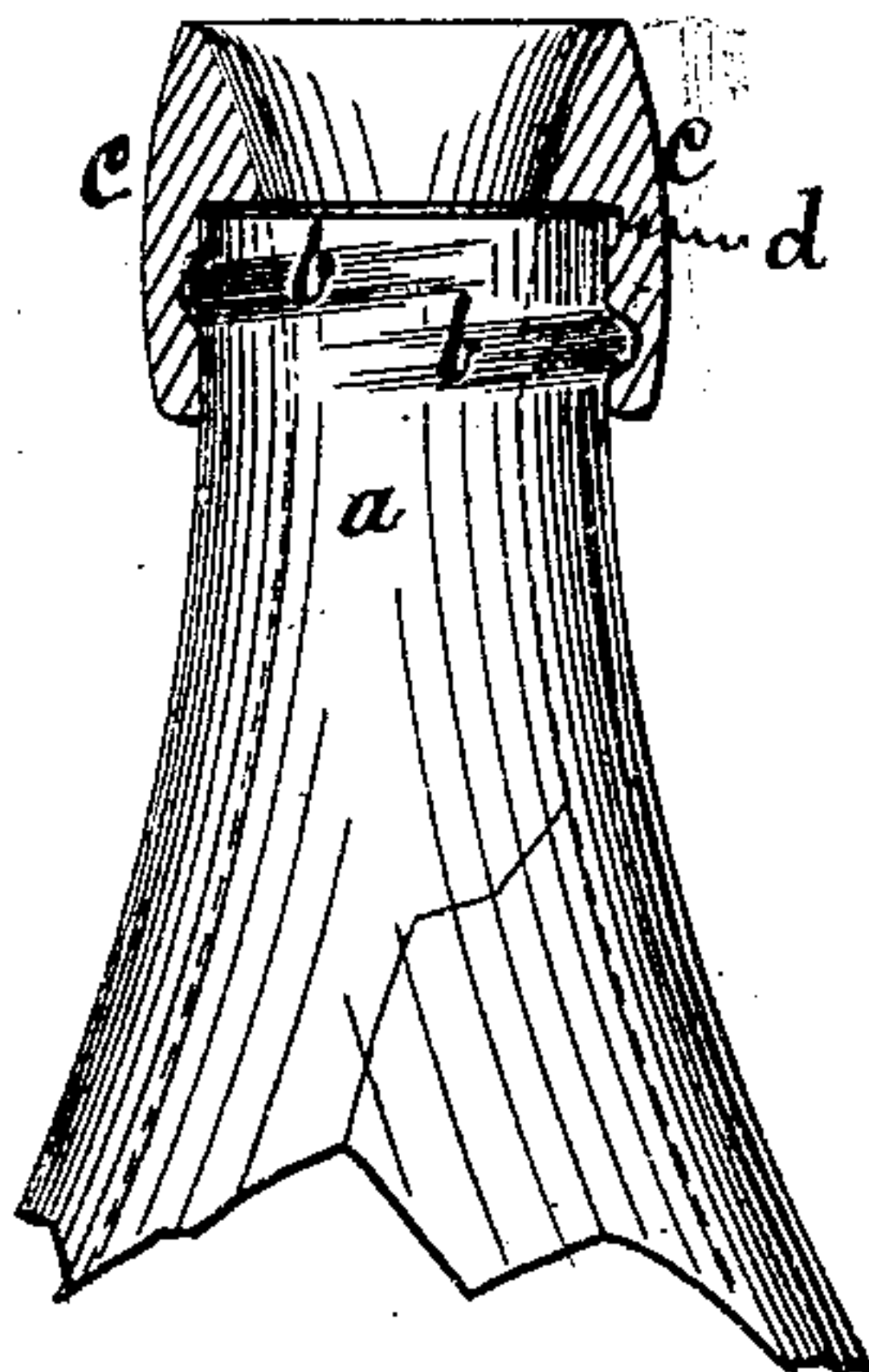


J. BORDEN & J. L. TRIMBLE.

Glass Bottles.

No. 144,885.

Patented Nov. 25, 1873.



Witnesses.

Joseph Borden &  
Henry Carigan

Inventors.

Joseph Borden  
James L. Trimble

# UNITED STATES PATENT OFFICE.

JOSEPH BORDEN AND JAMES L. TRIMBLE, OF MEDFORD, NEW JERSEY.

## IMPROVEMENT IN GLASS BOTTLES.

Specification forming part of Letters Patent No. 144,885, dated November 25, 1873; application filed November 10, 1873.

*To all whom it may concern:*

Be it known that we, JOSEPH BORDEN and JAMES L. TRIMBLE, both of Medford, Burlington county, New Jersey, have invented an Improvement in Glass Bottles, of which the following is a specification:

Owing to the want of uniformity in the effect of the annealing process, and also from other causes, the heads of bottles are liable to break when the bottles are being corked. Our invention has for its object the prevention of such breakage. Our invention consists of a metallic removable head, fastened to the neck of the bottle by screw-threads, a cushion of cork or other like elastic substance, being inserted into the joint between the metal and the glass.

Our improvement is especially applicable in the case of bottles for mineral water, porter, ale, acids, and in other cases where secure corking is required; and it is also applicable to all bottles.

The drawings represent a vertical section of the upper part of a bottle, showing the several

devices above alluded to in their proper relative positions.

*a* is the neck of the bottle, which has formed on it by the mold a screw-thread, *b*. *c* is a detachable head, which is a casting of iron or other metal or metallic composition, furnished with a screw-thread corresponding to the thread *b*. *d* is a washer-shaped cushion of cork or other like elastic substance, interposed between the neck *a* and a shoulder of the head *c*.

We claim—

1. The metallic head *c*, constructed substantially as set forth.

2. The combination of the glass neck *a*, the metallic head *c*, and the interposed elastic cushion *d*, in the manner and for the purpose substantially as set forth.

JOSEPH BORDEN.  
JAMES L. TRIMBLE.

Witnesses:

JOS. C. BORDEN, Jr.,  
STACEY CARIGAN.