

(No. Model.)

C. A. STAHLIN.

BOTTLE STOPPER.

No. 288,885.

Patented Nov. 20, 1883.

Fig. 1.

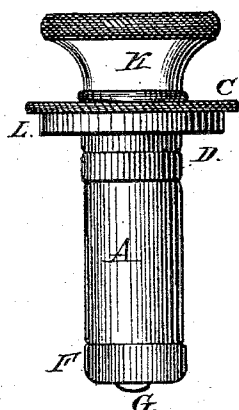


Fig. 2.

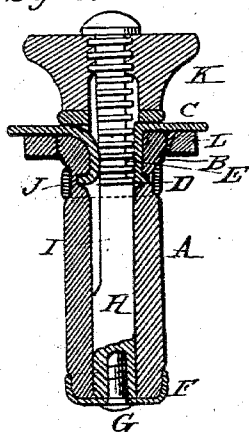
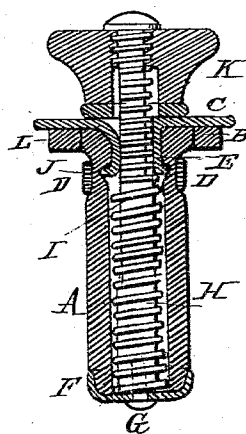


Fig. 3.



WITNESSES:

Fred. L. Dieterich
Spillfacher

Carl Anton Stahlin
INVENTOR.

By Louis Ragger & Co.

ATTORNEYS.

UNITED STATES PATENT OFFICE.

CARL ANTON STAHLIN, OF STOCKHOLM, SWEDEN.

BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 288,885, dated November 20, 1883.

Application filed May 23, 1883. (No model.) Patented in England November 4, 1882, No. 5,260.

To all whom it may concern:

Be it known that I, CARL ANTON STAHLIN, a citizen of the Kingdom of Sweden, residing at Stockholm, in the Kingdom of Sweden, have invented certain new and useful Improvements in Bottle-Stoppers; and I do declare the following to be a full, clear, and exact description of the invention, such as 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 the letters and figures of reference marked thereon, which form a part of this specification.

Figure 1 is a side view of my improved bottle-stopper. Fig. 2 is a vertical section of the same, and Fig. 3 is a similar view of a slight modification of the stopper.

Similar letters of reference indicate corresponding parts in all the figures.

My invention has relation to that class of bottle-stoppers which consist of a rubber tube, through which a screw-threaded stem is passed, which is secured in the lower end of the tube, and is provided with a nut at its upper end, by tightening which the tube may be contracted longitudinally, thereby expanding it laterally, and it contemplates certain improvements upon the stopper for which Letters Patent of the United States were issued to me on the 12th day of June, 1883, consisting, to that end, in the detailed construction and combination of parts of the same, as hereinafter more fully described and claimed.

In the accompanying drawings, the letter A indicates a rubber tube, the upper end of which is slipped over a downwardly-projecting sleeve, B, upon the top plate, C, which is of the same shape and performs the same functions as the top plate in my former patent. A ring, D, is slipped over the top of the tube, and serves to press the sides of the upper end of the tube against a laterally-projecting flange, E, upon the lower end of the sleeve B, serving to clamp that end of the tube upon the said sleeve. The lower end of the rubber tube is provided with a cap, F, having a central perforation, through which a headed screw, G, passes, fitting into a female-threaded bore in the lower end of the screw-threaded stem H, and turning in the said aperture. This threaded stem is of the same construction as

in my former patent, having a flat side, I, against which the inwardly-bulging portion J of sleeve B bears, and which prevents the screw-threaded stem from turning when the nut K, which fits upon the threaded upper end of the stem, bearing against the upper surface of the top plate, and which may either have a milled edge or be provided with a flanged top, is turned. An annular elastic disk, L, is fastened to the under side of the top plate, fitting around the upper end of the elastic tube, and serves to bear against the upper edge of the mouth of the bottle, preventing the escape of gases, if a carbonaceous fluid is contained in the bottle, and the access of air to the contents of the same. It will be seen that when the rubber tube is worn out, or has become useless for other reasons, the small screw at the lower end of the threaded stem may be removed and the cap removed, whereupon the tube may be slipped off from the sleeve B and another tube placed upon the same, the ring, which has been slipped over the top of the tube down upon the lower portion of the same, being drawn up toward the top of the tube, there serving to press the sides of the tube against the flange upon the lower end of the sleeve, when the cap may be put in place and the small screw inserted, keeping the same in place.

In Fig. 3 is shown a stopper having the same construction as the one just described, with the exception of a spiral spring, N, which is wound around the threaded stem, at its lower end, bearing against the cap at the lower end of the tube and against the lower screw-thread of the upper threaded portion of the stem, aiding in extending the tube longitudinally when the nut is unscrewed, in the same manner as the spring described in my former patent.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. The combination of a top plate having a downwardly-projecting sleeve provided with a laterally-extending flange, a screw-threaded stem passing through said top plate and sleeve, having a nut upon its upper end bearing against the top plate, and a small screw fitting in its lower end, an elastic tube fitting with its upper end around the sleeve of the top plate,

and having a cap at its lower end provided with a central aperture, through which the small screw passes, and a ring slipped over the top of the tube, and serving to press the sides of the tube against the flange upon the lower end of the sleeve, as and for the purpose shown and set forth.

2. The combination of a top plate having a downwardly-projecting sleeve provided with a laterally-projecting flange, an elastic tube fitting with its upper end over the sleeve, an annular elastic disk fastened to the under side of the top plate, fitting around the upper end of the elastic tube, a screw-threaded stem pass-

ing through the top plate, the sleeve, and the tube, having a nut upon its upper end and a small screw at its lower end, a cap fitting over the lower end of the tube, having a central aperture for the passage of the small screw, and a ring fitting around the tube, near its upper end, as and for the purpose shown and set forth.

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

CARL ANTON STAHLIN.

Witnesses:

FREDRIK L. ENQUIST,
N. LJUNGBERG.