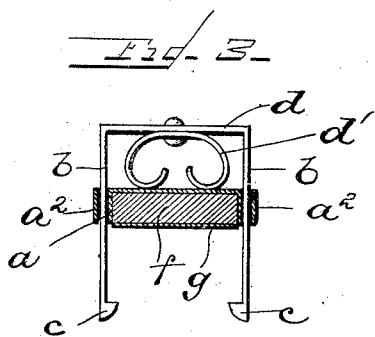
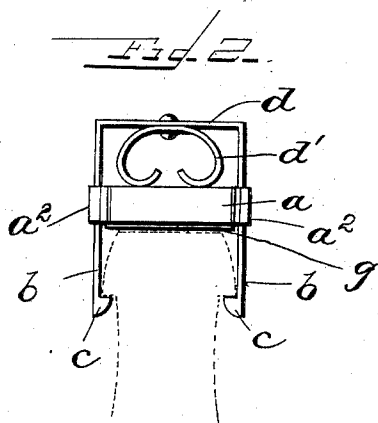
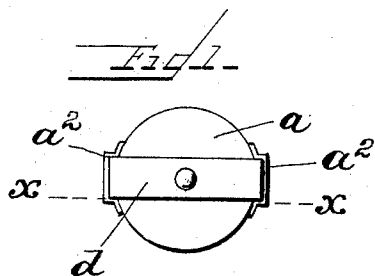


(No Model.)

H. SPRIEGEL.
BOTTLE STOPPER.

No. 503,333.

Patented Aug. 15, 1893.



Witnesses
O. Taubenschmitt,
Juni Kungberg

Inventor
By Hermann Spriegel
Whitaker, Prentiss & Co. Attorneys.

UNITED STATES PATENT OFFICE.

HERMANN SPRIEGEL, OF KÖNIGSBERG, GERMANY.

BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 503,333, dated August 15, 1893.

Application filed December 23, 1892. Serial No. 456,201. (No model.)

To all whom it may concern:

Be it known that I, HERMANN SPRIEGEL, of Königsberg, in the Kingdom of Prussia and German Empire, have invented new and useful Improvements in Bottle-Stoppers, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to stoppers for bottles, and has for its object to provide a stopper which shall be cleanly and simple in its application and at the same time effect an absolutely air tight closing of the bottle to which it is applied, and which may be applied to bottles without the necessity of employing any machine therefor.

For convenience of description, I will proceed to describe my invention with reference to the annexed sheet of drawings wherein it is illustrated.

Figure 1 is a top view of my improved bottle stopper. Fig. 2 is a side elevation of the same, and Fig. 3 is a sectional view of the device on line $x-x$ Fig. 1.

In the form of stopper shown in the drawings a represents the metal cap provided at opposite sides with guides $a^2 a^2$ which receive the spring arms $b b$ of the clip which arms are connected at their upper ends by a cross piece d . The cap a is thus permitted to slide up and down on the arms $b b$ and is held in position by the guides $a^2 a^2$. The cap a is provided with the elastic or rubber seating f as in the form shown in the other figures and also with the layer g of impervious material such as parchment to prevent the rubber from coming in contact with the bottle mouth. A spring d' secured to the cross piece d has por-

tions bearing down upon the top of the cap. The arms $b b$ have their lower ends provided with the hooks or projections $c c$ for engaging a shoulder on the bottle neck. The material g of the stopper is placed upon the mouth of the bottle and the cross piece and arms $b b$ are depressed until the hooks catch upon the shoulder of the bottle as indicated in Fig. 2 when the spring will have been compressed and will cause the cap to exert a constant pressure upon the bottle mouth. If the pressure in the bottle increases the cap will rise to allow a slight escape of the gases, and then be pressed down by the spring as soon as the pressure is relieved. The metallic portions of the stopper are preferably made of a metal not readily oxidized such as aluminum, aluminum bronze, nickel, silver, German silver or tin.

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

A bottle stopper comprising the metallic cap having a seating of elastic material, a covering layer of impervious material upon said elastic material, said cap being also provided with guides, a pair of arms movably engaging said guides having their upper ends connected by a cross piece above said cap and their lower ends provided with hooks for engaging a shouldered portion of the bottle and a spring interposed between the cross piece and said cap, substantially as described.

In witness whereof I have hereunto set my hand in presence of two witnesses.

HERMANN SPRIEGEL.

Witnesses:

VALDEMAR ANDERSEN,
R. SUTTKUS.