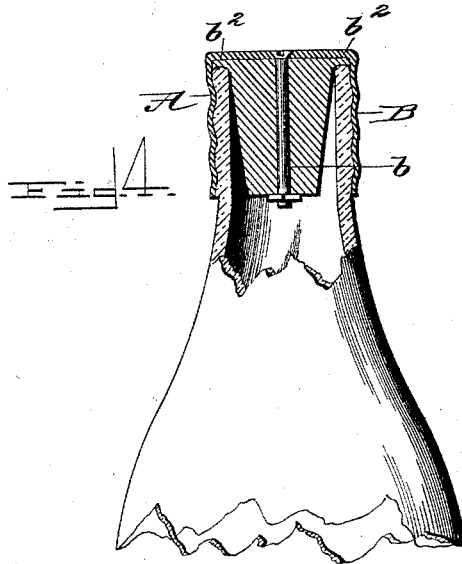
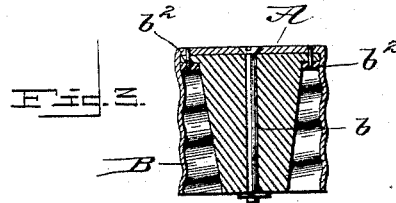
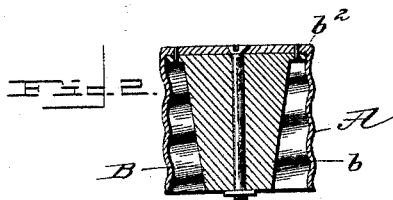
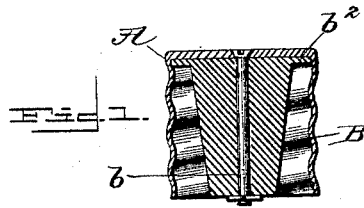


(No Model.)

M. CZINER.
BOTTLE STOPPER.

No. 456,480.

Patented July 21, 1891.



Witnesses
W. H. Humphrey.
E. H. Parry.

Inventor,
Matyas Cziner,
by A. S. Wylenforth,
his Attorney.

UNITED STATES PATENT OFFICE.

MATYAS CZINER, OF NEW YORK, N. Y.

BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 456,480, dated July 21, 1891.

Application filed April 21, 1891. Serial No. 389,810. (No model.)

To all whom it may concern:

Be it known that I, MATYAS CZINER, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Bottle-Stoppers; and I do hereby 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.

This invention relates to bottle-stoppers.

The object is to produce a bottle-stopper which in and of itself shall supply at once a cork, a cork-inserter, and a cork-extractor.

The invention consists in a close screw-cap designed to receive, inclose, and of itself hold upon the screw-threaded neck of a bottle, the cap being provided with a yielding or elastic plug, of less width, fixed within it, depending from its top, and having a flaring base, supplying in use a packing-ring or gasket confined against lateral spread by the cap, thus avoiding possibility of leakage from underneath by lateral extension and consequent vertical yielding of the packing, with capability of adjustment of pressure, according to need, and maintainment of a tight joint even when the plug has been forcibly held in position for a great length of time, whereby a bottle-stopper is presented by which a cork—that is, a yielding stopper of any suitable kind—may be readily inserted, securely retained, easily removed, and reinserted at pleasure in a suitable bottle-neck, and by which an adjustable and perfect or hermetic seal is furnished by the stopper itself.

The invention consists, furthermore, in a screw-cap designed to receive, inclose, and of itself hold upon the screw-threaded neck of a bottle, the cap being provided with a suitable plug fixed within it, depending from its top and having an extension or a flaring base, in combination with a yielding or elastic annulus placed over and fastened upon that surface of the extension which in use will be the lower surface and serving as a gasket or additional packing.

In the accompanying drawings, forming part of this specification, and in which like letters of reference indicate corresponding parts, Figure 1 is a longitudinal sectional

view of a bottle-stopper embodying one form of my invention, showing the cap, a yielding plug with its flaring base, and a central fastening for the plug to the cap. Fig. 2 is a similar view showing, additionally, rivets fastening the flaring base to the cap. Fig. 3 is a longitudinal sectional view embodying another form of my invention, showing the cap, a plug centrally fastened and with a flaring base, and the yielding annulus secured upon the flaring base. Fig. 4 is a longitudinal sectional view showing one of my improved stoppers applied to the neck of a bottle, the cap being screw-corrugated and the neck of the bottle having an external screw-thread.

In the drawings, A represents a cap, which is preferably of metal and designed to receive and inclose the neck of a bottle. In use this cap is designed to be forced down upon the neck of a bottle, and for that purpose is a screw-cap to engage a corresponding screw-thread on the neck of the bottle and retain it there until removed by hand. Arranged within the cap A and attached to the under side of the top thereof is a plug or stopper B, which is preferably of rubber, cork, or of some other yielding or elastic substance or material. This plug or stopper is preferably conical or tapering in form, the preferred form being that of a truncated cone. It is attached to the cap A in any suitable way, as by a pin or screw *b* passing through the top of the cap and then down through the stopper or plug, being secured in this position in any suitable way, as by a washer and nut placed on the lower end of the pin or screw and bearing against the lower end of the plug or stopper. Instead of attaching this plug or stopper in this way, cement or the like may be used for the purpose.

The plug or stopper B has a flaring base or extension *b*², which fills the inner face of the cap between the plug or stopper and the inner walls of the cap. Such base or extension will in itself form a gasket, insuring a tight joint between the top of the bottle and the stopper. In addition to the gasket formed by a yielding flaring base or extension, a supplemental gasket *b*³, as shown in Fig. 3, may be employed.

From the foregoing it will be clear that by

my improved stopper ready and efficient means for introducing a device for effecting a perfect closure of the bottle is provided, and also that such means may readily be removed without requiring more manipulation than is ordinarily required for displacing the usual screw-cap, while at the same time a yielding packing is provided which is held against lateral displacement, and by the device the pressure can be adjusted to suit requirement. Thus if there be little or no pressure from within, the plug need not be forced down so hard, or, after the stopper has been on some time, it should be desirable to tighten the joint, this can readily be done by merely screwing down the cap.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

- 20 1. A close screw-cap designed to receive, inclose, and of itself hold upon the screw-threaded neck of a bottle, the cap being provided with a yielding or elastic plug, of less

width, fixed within it, depending from its top, and having a flaring base, supplying in use a packing-ring or gasket confined against lateral spread by the cap, substantially as and for the purpose described. 25

2. A close screw-cap designed to receive, inclose, and of itself hold upon the screw-threaded neck of a bottle, the cap being provided with a yielding elastic plug, of less width, fixed within it, depending from its top, and having a flaring base, supplying in use a packing-ring or gasket confined against lateral spread by the cap, in combination with a yielding or elastic annulus placed over and fastened upon that surface of the extension which in use will be the lower surface, substantially as described. 35

In testimony whereof I affix my signature in presence of two witnesses. 40

MATYAS CZINER.

Witnesses:

R. G. DYRENFORTH,

F. B. KEEFER.