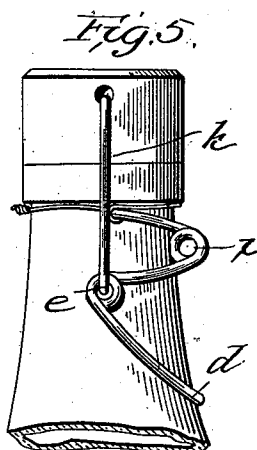
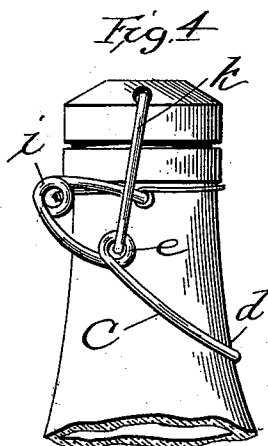
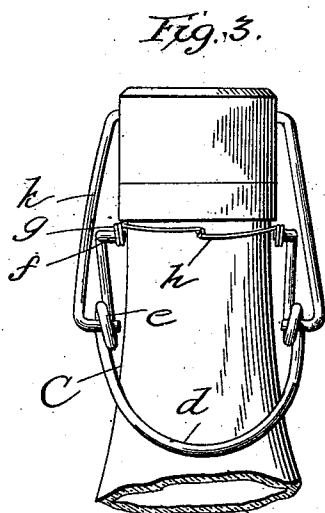
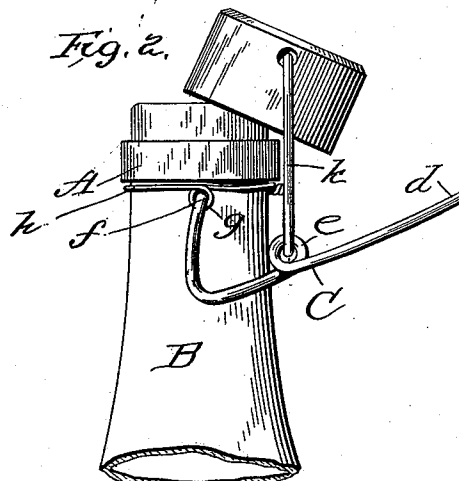
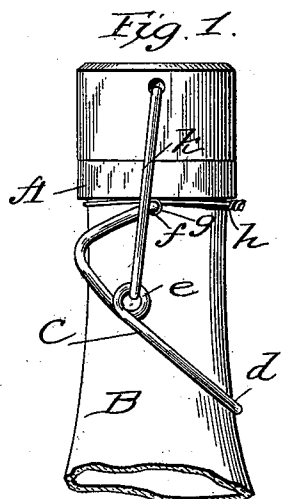


(No Model.)

J. ROSENFELD & S. W. MACKEY.
BOTTLE STOPPER.

No. 533,087.

Patented Jan. 29, 1895.



Attest
Patented
J. L. Madden

Inventors
Jesse Rosenfeld
Samuel W. Mackey
by *Ellis Spar*
ATTY

UNITED STATES PATENT OFFICE.

JESSE ROSENFELD AND SAMUEL W. MACKEY, OF BALTIMORE, MARYLAND.

BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 533,087, dated January 29, 1895.

Application filed June 7, 1894. Serial No. 513,784. (No model.)

To all whom it may concern:

Be it known that we, JESSE ROSENFELD and SAMUEL W. MACKEY, citizens of the United States of America, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Bottle-Stoppers, of which the following is a specification.

Our invention relates to that class of bottle stoppers, in which the cap for closing the mouth of the bottle is forced down and held by means of a swing lever.

The objects sought by us, in this invention are first, to relieve the strain upon the cap, or to hold it by more elastic pressure against the glass, and further to render the opening of the bottle easier, all as hereinafter explained.

Our invention consists of a spring arm in the bail, interposed between the bail fulcrum on the bottle neck, and the point of connection between the bail and the arms which connect the bail with the cap.

Our invention is illustrated in the accompanying drawings, in which—

Figure 1, shows a bottle provided with our improved stopper in side elevation and in closed position. Fig. 2, shows the same with the lock released. Fig. 3, shows in side elevation the same form and position in Fig. 1, one quarter turned. Figs. 4 and 5 show side elevations of modified forms of the bail.

The improvement in our said invention lies wholly in the bail. The cap A, of the bottle B is, or may be, of ordinary form, in such stoppers. It may be made of glass, porcelain or any suitable material, being formed with a cavity fitting over the mouth of the bottle and provided with suitable lining such as a disk of cork, or other elastic or yielding material, not calculated to impair the flavor of the contents of the bottle.

The bail C has the ordinary loop or bend *d*, fitted when the bottle is closed, to lie against the neck of the bottle. Near the ends or at suitable points, are two eyes formed by bends in the wire, one of which is shown plainly at *e*. These eyes receive the ends of the arms which connect the bail to the cap. From these eyes the bail arms extend in substantially unchanged direction, a short distance, and then are turned upward, and bent to form pivots

f, which enter the eyes *g* in the wire or band *h*, which holds the bail to the bottle. These bent extensions from the bail eyes to the ends of the bail may be made with any form of bend, either on a gradual curve or at a more defined angle; but, the extension is such as to form an indirect connection between the bail eye, and the bail pivot and this is the part which gives the elastic effect. In Fig. 4, we have shown this extension with a coil shown therein at *i*, this coil increasing the elasticity of the extension, and thereby the extension may be made shorter without decreasing the elastic effect.

The parts are so arranged that when locked with the cap down, the eye of the bail passes the vertical line through the pivoted part of the bail and thus locks the bail in place. At the same time the spring of the extension prevents any crushing effect on the glass and permits the bottle to be opened readily and easily, the elasticity of the extension allowing the eyes of the bail to pass the dead point with facility.

The arms *k* are connected to the cap and to the bail in the ordinary manner.

The bottle neck has the ordinary shoulder as shown, and we do not confine ourselves to the means for pivoting the bail upon the bottle, nor to the form of the stopper. We prefer to use a cap fitting over the mouth.

As shown in Fig. 5, the spring extension may be on the same side of the arm *k* upon which the loop portion *d* is situated.

We claim—

In combination with a bottle cap, the arms K connected therewith, the bail having eyes pivoted to the lower ends of the arms K which extend below the pivotal points of the bail and the angular spring extension between the eyes and the pivotal points of the bail, said angular spring extensions being arranged so that its arms will be compressed toward each other when the cap is in closing position.

In testimony whereof we affix our signatures in presence of two witnesses.

JESSE ROSENFELD.
SAMUEL W. MACKEY.

Witnesses:

THOS. M. DOBBIN,
WILLIAM H. BERRY.