

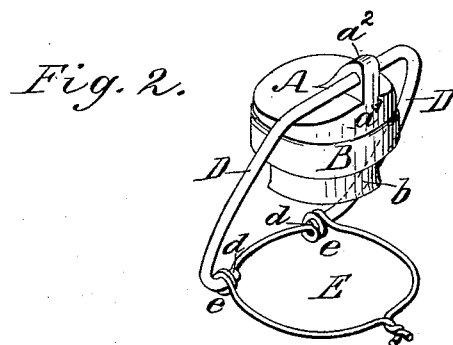
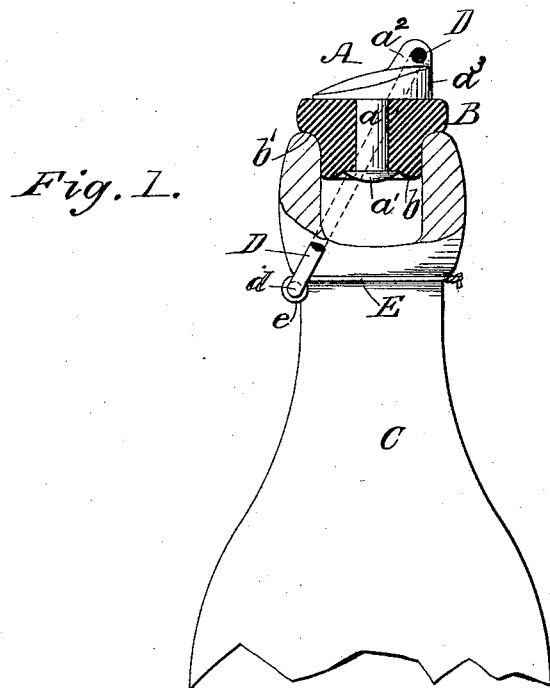
(No Model.)

M. I. DOUGHERTY.

BOTTLE STOPPER.

No. 306,908.

Patented Oct. 21, 1884.



WITNESSES:

John K. Deemer
C. Sedgwick

INVENTOR:

M. I. Dougherty

BY

Wm. H. [Signature]

ATTORNEYS.

UNITED STATES PATENT OFFICE.

MICHAEL I. DOUGHERTY, OF CARBONDALE, PENNSYLVANIA, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO EDWARD McHALE, OF SAME PLACE, WILLIAM WALKER, OF GLENWOOD, AND THE SCRANTON GLASS COMPANY, (LIMITED,) OF SCRANTON, PENNSYLVANIA.

BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 306,908, dated October 21, 1884.

Application filed July 25, 1884. (No model.)

To all whom it may concern:

Be it known that I, MICHAEL I. DOUGHERTY, of Carbondale, Lackawanna county, Pennsylvania, have invented a new and Improved Bottle-Stopper, of which the following is a full, clear, and exact description.

The object of my invention is to provide a simple, inexpensive, and efficient stopper for bottles, and one so constructed that worn or damaged parts may be replaced by new ones, and one which may be quickly applied to or removed from the bottle by one hand.

The invention consists in a bottle-stopper constructed with a head-piece or cap having a fixed shank provided with an end button, over which a rubber or other elastic stopper may be forced so as to be held to the head-piece, and said head-piece being pivoted at its front, or near one side of the bottle-neck, to a bail which is pivoted to the neck-wire at the rear or other side of the bottle-neck, so that the bail shall take a diagonal position when the stopper is applied to close the bottle, all as hereinafter fully described and claimed.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in both figures.

Figure 1 is a sectional side elevation showing my improved bottle-stopper in place on the mouth of a bottle, and Fig. 2 is a perspective view of the stopper removed from the bottle.

The letter A indicates the head-piece or cap of my improved stopper, which, preferably, is made of some non-corrosive metal, and has a central shank, *a*, provided with a fixed button or plate, *a'*, at its end. B is a rubber or elastic stopper, which has a smaller portion, *b*, to enter the neck of the bottle C, and an annular shoulder, *b'*, to rest on the top of the neck of the bottle when the stopper is applied to it for closing it. The central hole made through the elastic stopper B is of such size that the said stopper may be forced onto the shank *a* over the button *a'*, and inside of it, so that the stopper B will be confined between the inside shoulder of the button *a'* and

the inner face of the head-piece A, which face may be slightly smaller than the top of the stopper B and larger than the opening in the neck of the bottle. The stopper B thus will be held securely to the head-piece A, yet so as to be removed from it by forcing it off, or by cutting it away from the headed shank *a* when it is worn out, thus allowing the elastic stopper to be renewed on the same head-piece as often as may be required. The head-piece A has one or more lips or lugs, *a''*, (one being shown,) in which is pivoted the cross-bar of a bail, D, which is pivoted by its inturned ends *d d* in eyes *e e*, formed in or connected to the neck-wire E of the stopper, said neck-wire being attached to the bottle-neck in the usual way. The bail D connects with the head A at the front or one side of the stopper and bottle-neck, and with the eyes *e e* of the bail E at the rear or other side of the bottle neck, so that when the stopper is applied to close the bottle, by resting the rear part of the shoulder *b'* on the top of the bottle-neck and forcing the stopper forward over the center to the position shown in Fig. 1, the bail D will take a diagonal position across the stopper B and bottle-neck, and will hold the stopper tightly in the bottle against any pressure of gases rising from the contents of the bottle within the limit of the strength of the neck-wire and bail. To throw back the stopper for opening the bottle, it only is necessary to press backward on the front side or edge, *a''*, of the stopper-head A, as will readily be understood.

It will be seen that the stopper may quickly be applied to or removed from the mouth of the bottle by one hand, and that if any one part of the stopper is overworn or injured it can be replaced without throwing aside the whole stopper, and as the bail can fall to only one side no adjustment of the stopper is required before applying it to close the bottle, and the stopper is cheap, simple, and effective, and may be used for all bottles that are stoppered on the outside.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—
As an improved article of manufacture, a

bottle-stopper consisting of the cap A, provided on its upper surface, near its front edge, a^3 , with an apertured lug, a^2 , and on its lower face with the headed shank $a a'$, adapted to
5 receive a stopper, B, the neck-wire E, and the bail D, passing through the apertured lug a^2 and pivoted to the neck-wire on its side op-

posite the apertured lug a^2 , as shown and described.

MICHAEL I. DOUGHERTY.

Witnesses:

A. S. BALLU,

HENRY A. KNAPP.

It is hereby certified that Letters Patent No. 306,908, granted October 21, 1884, upon the application of Michael I. Dougherty, of Carbondale, Pennsylvania, for an improvement in "Bottle Stoppers," was erroneously issued to "Edward McHale, of same place, William Walker, of Glenwood, and the Scranton Glass Company, (limited,) of Scranton, Pennsylvania;" that the Letters Patent should have been granted to the said *Michael I. Dougherty*, assignor of *three-fourths* interest in said invention, *and to the several assignees* above named; and that the proper correction has been made in the files and records pertaining to the case in the Patent Office, and should be read in the Letters Patent to make it conform thereto.

Signed, countersigned, and sealed this 11th day of November, A. D. 1884.

[SEAL.]

M. L. JOSLYN,
Acting Secretary of the Interior.

Countersigned:

BENJ. BUTTERWORTH,
Commissioner of Patents.