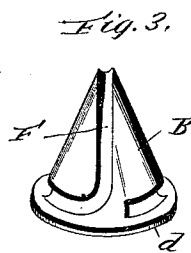
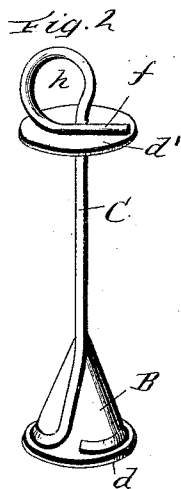
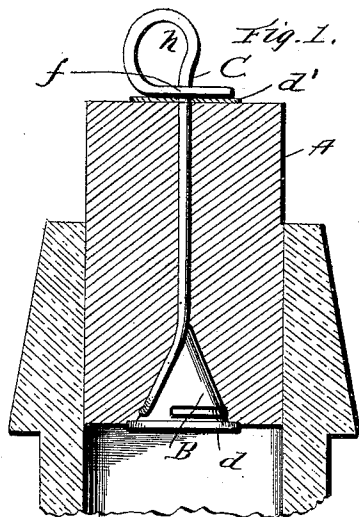


(No Model.)

G. F. ATWOOD.
BOTTLE STOPPER.

No. 479,045.

Patented July 19, 1892.



Witnesses:

(H. Raeder)

James J. Shuey

Inventor

George F. Atwood

By J. Clement Smith

Attorney

UNITED STATES PATENT OFFICE.

GEORGE FRENCH ATWOOD, OF MALDEN, MASSACHUSETTS, ASSIGNOR, BY
DIRECT AND MESNE ASSIGNMENTS, TO GEORGE M. FRENCH, OF SAME
PLACE.

BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 479,045, dated July 19, 1892.

Application filed September 4, 1891. Serial No. 404,772. (No model.)

To all whom it may concern:

Be it known that I, GEORGE FRENCH ATWOOD, a citizen of the United States, residing at Malden, in the county of Middlesex and State of Massachusetts, 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.

The drawings accompanying this specification represent the invention, in which—

Figure 1 is a vertical section showing the bottle-stopper in the neck of a bottle, and Figs. 2 and 3 are detail views.

This invention has relation to bottle-stoppers; and it consists in the novel construction and arrangement of devices hereinafter mentioned, whereby such stopper is efficiently clamped at its top and bottom between plates, disks, or other suitable equivalents, and a lifting-wire secured at its lower end to a button of wood or other suitable material below or near the bottom of the stopper and formed at its upper end above the cork into a loop and clamping-arm, substantially as hereinafter specified.

In the drawings, A represents the body of my stopper, which is of cork. In the bottom of this stopper I form a conical recess adapted to receive the button B, which in size and shape corresponds to the size and shape of the said recess.

The letter B represents a button, which is preferably formed of wood, but which may also be formed of any substance or composition that will not impart injury to the contents of a bottle nor receive injury therefrom. For this purpose any material will serve that will not be corroded nor oxidized by the contents of a bottle and will not impart bad taste or other injury to such contents. I make this button, preferably, in a conical shape, which is adapted to be drawn upward into a conical recess in the bottom of the body of the stopper; but it is obvious that a spherical, flat, or other shape would serve the same purpose almost equally as well.

This invention relates to bottle-stoppers; and it consists in the novel construction and arrangement hereinafter specified, and pointed out in the claim.

The button also has a flat bottom, which is of less diameter than the bottom of the stopper-body, and which when in position is drawn closely against the bottom of the stopper, so as to prevent any fluid in the bottle from coming in contact with the lifting-wire. This bottom of the button is marked *d* in the drawings and is integral with said button.

My lifting-wire is represented on the drawings by the letter C. It consists of a single wire, the lower end of which is attached to the button C by passing it into the groove F. From this groove it is passed upward through the main body of the stopper and a plate *d'* at its top, above which it is formed into a loop *h*, and then bent at a right angle, the arm of which rests closely upon the plate *d'*, thereby forming not only a lifting-loop, but also a clamping-arm for the body of the stopper. This arm is marked *f* on the drawings. The plate *d'* is preferably of metal and serves not only the function of a clamping-plate, but also as a card or tablet upon which the manufacturer may advertise his wares or give the date and number of his patent. It is obvious that in some cases this plate *d* may be dispensed with and the arm of the wire made to rest upon the top of the stopper. The plate, however, is necessarily ornamental as well as useful, and it is probable that it will be generally used in the manufacture.

In Fig. 1 of the drawings my stopper is shown in the neck of a bottle. To draw it, no cork-screw is needed. The operator passes a lead-pencil or other convenient or suitable bar through the loop of the lifting-wire and raises it upward and out of the bottle. By this construction it is obvious that the stopper is comparatively uninjured by use or removal and that it may be employed again in bottles.

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

A bottle-stopper of cork having a conical
recess in its bottom, a conical wooden button
B to fit closely within and against the walls
of said recess, and a lifting-wire C, the lower
5 end of which is secured to said button in the
groove, while the upper end is bent to form
both a loop and clamping-arm, substantially
as specified.

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

GEORGE FRENCH ATWOOD.

Witnesses:

JAMES J. SHEEHY,
HOLMES E. OFFLEY.