

(No Model.)

C. BEECHER.
BOTTLE STOPPER.

No. 254,528.

Patented Mar. 7, 1882.

Fig. 1.

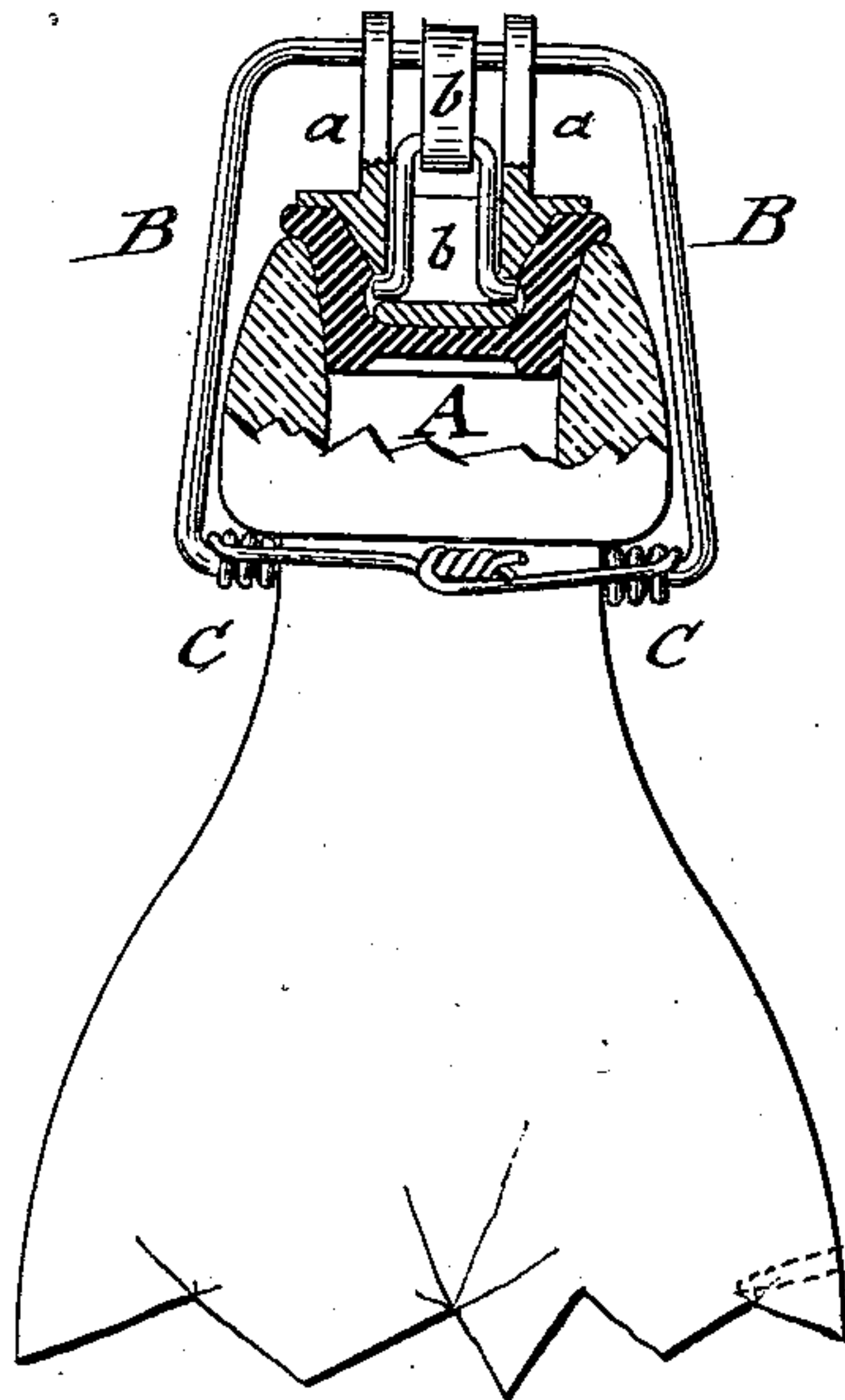


Fig. 2.

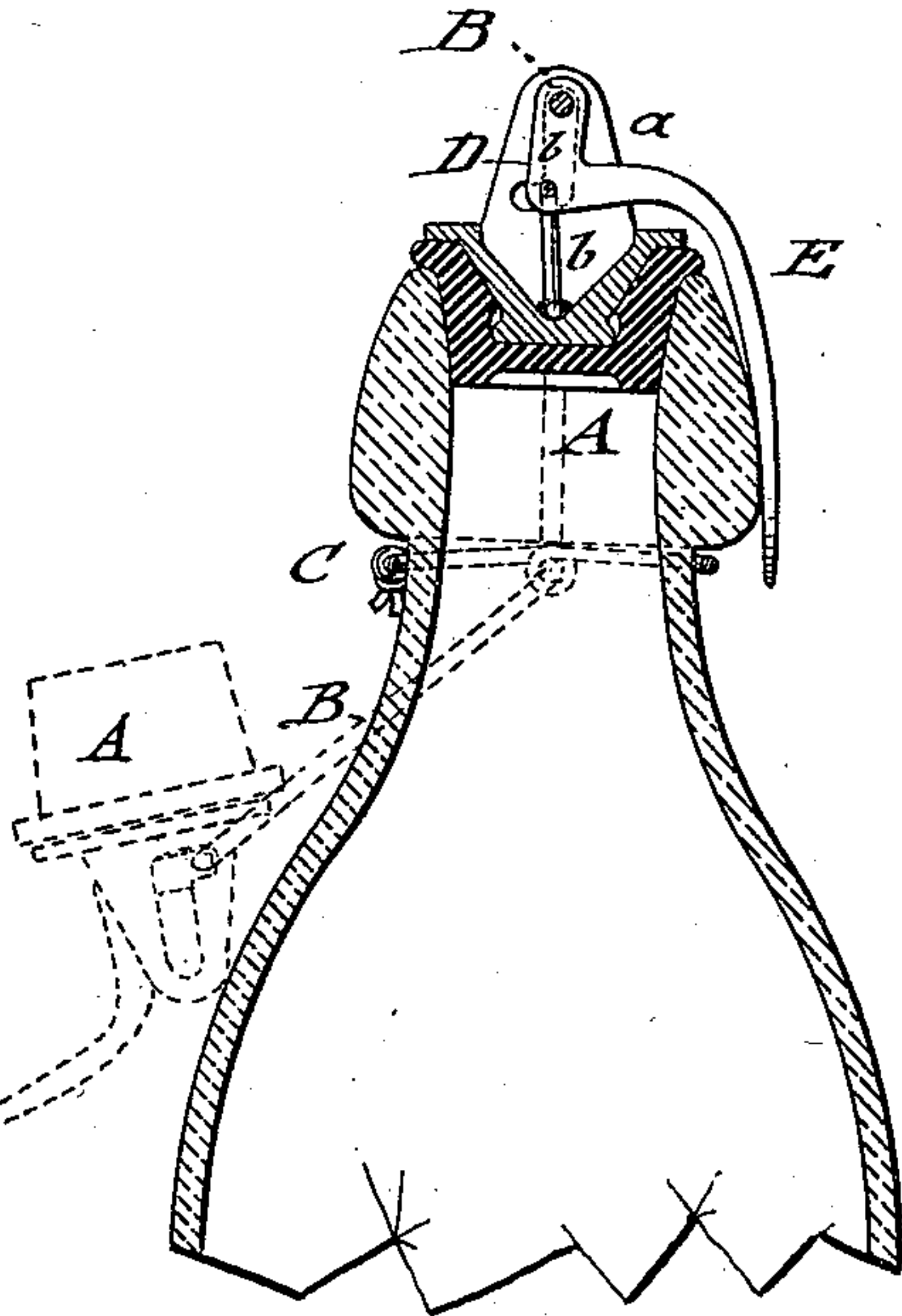


Fig. 3.

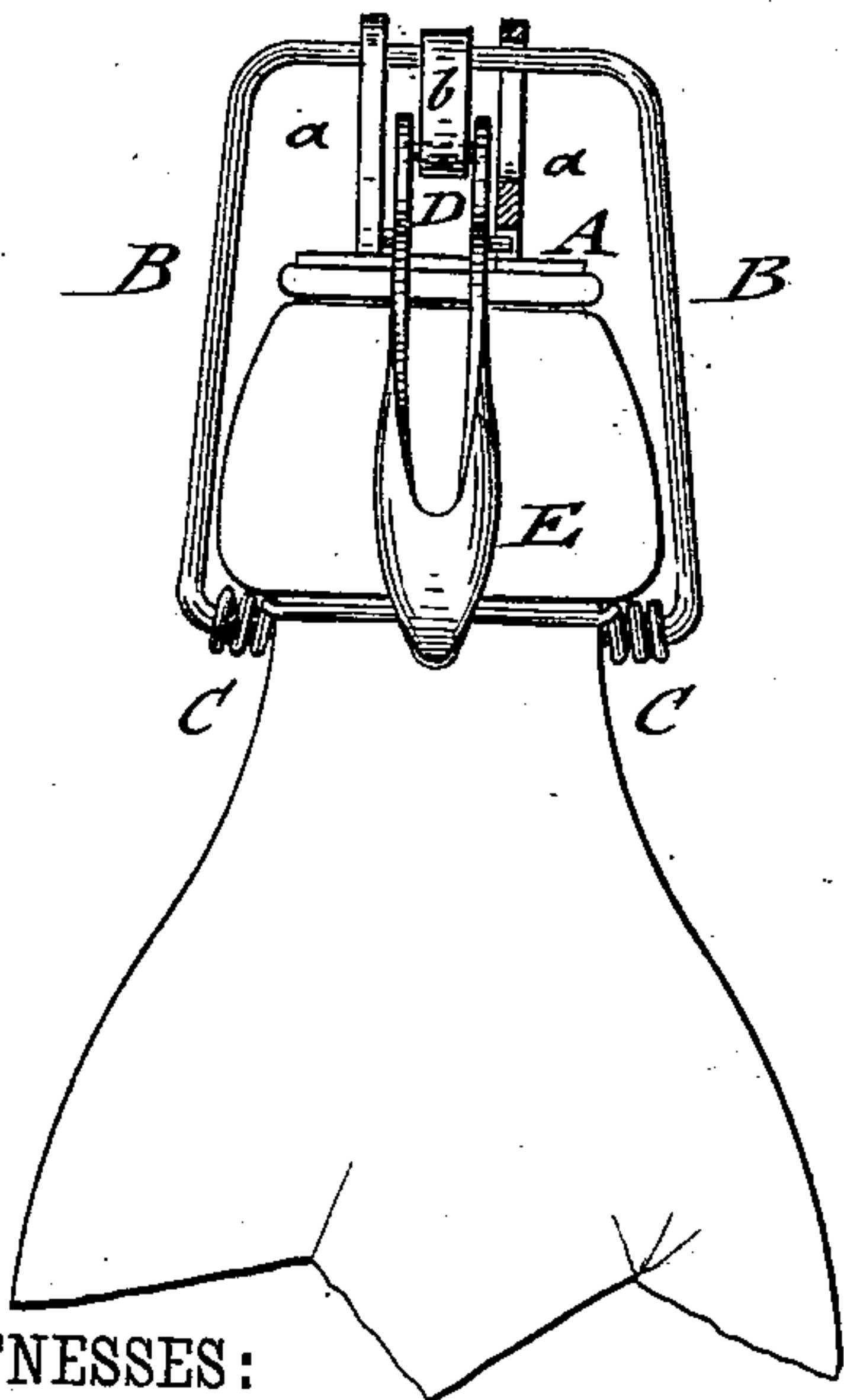
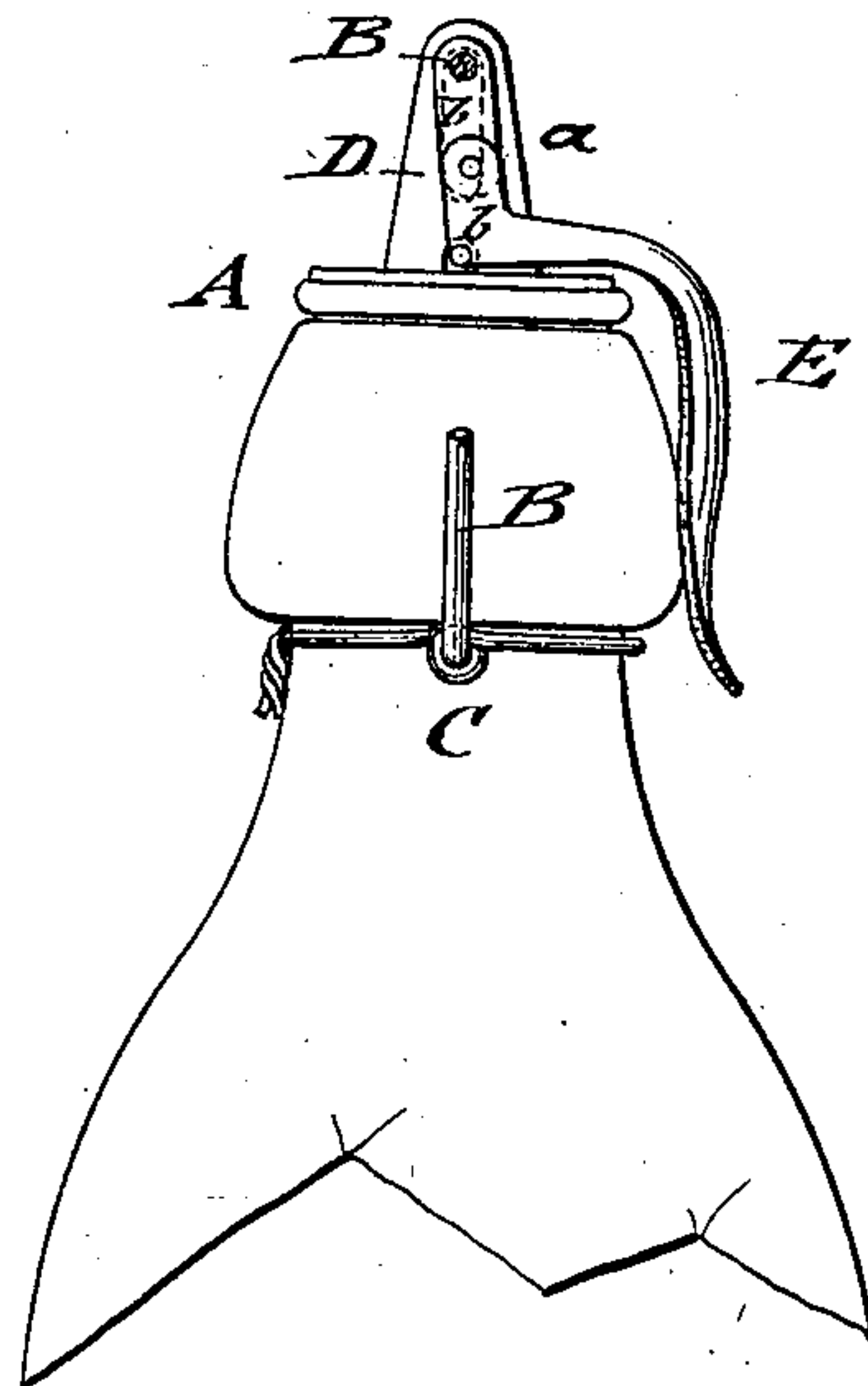


Fig. 4.



WITNESSES:

J. H. N. Rosenbaum.
Otto F. Pisch.

INVENTOR

Charles Beecher

BY

Paul Goepel.

ATTORNEY

UNITED STATES PATENT OFFICE.

CHARLES BEECHER, OF MERIDEN, CONNECTICUT.

BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 254,528, dated March 7, 1882.

Application filed January 23, 1882. (No model.)

To all whom it may concern :

Be it known that I, CHARLES BEECHER, of Meriden, in the county of New Haven and State of Connecticut, have invented certain
5 new and useful Improvements in Bottle-Stoppers, of which the following is a specification.

This invention relates to improvements in bottle-stoppers of that class in which the stoppers are forced into the mouth of the bottle and
10 withdrawn therefrom for opening the bottle without disconnecting the closing devices from the bottle, the locking devices of the stopper being arranged in such a manner as to firmly close the bottle without any possibility of acci-
15 dentally opening the same while being shipped or handled.

The invention consists of an elastic stopper having a cap-piece with vertically-slotted up-
right lugs, through which the bail or yoke
20 by which the stopper is connected to the fastening device on the bottle-neck is passed, a toggle-joint being interposed intermediately between the yoke and stopper, and operated and locked by a lever connected to either link
25 of the toggle-joint.

In the accompanying drawings, to which reference is made, Figures 1 and 2 represent vertical central sections, taken on planes at right angles to each other, of my improved
30 bottle-stopper; and Figs. 3 and 4 are an end and a side view of a modified construction of the same.

Similar letters of reference indicate corresponding parts.

35 Referring to the drawings, A represents the stopper, which is composed of a rigid cap-piece and an elastic bottom portion of any approved construction, which is forced into the mouth of the bottle, so as to tightly close the same.
40 Cast in one piece with the cap-piece are two vertical lugs, *a a*, which are slotted at their upper ends. Through the slots of the lugs extends a bail or yoke, B, which passes downward to the neck of the bottle, being bent in-
45 wardly at the lower ends and applied to a neck-band or other fastening device, C, at the neck of the bottle. The yoke thus straddles the stopper, and assumes a vertical position when the stopper is closed. The slots of the up-

right lugs *a* of the cap-piece have to be of suffi- 50
cient length to provide for the play of the yoke in opening or closing the stopper.

The stopper A is forced into the mouth of the bottle and retained therein in locked posi-
tion by means of a toggle-joint, D, interposed 55
between the middle portion of the yoke B and the cap-piece of the stopper, the toggle-joint being formed of two links, *b b*, of which one is pivoted to the yoke, while the other is pivoted to the end piece of the stopper A. 60

To either one of the links *b b* may be applied the operating and locking lever E, which extends at right angles, or nearly so, from the link *b*, the lever being curved so as to extend
65 over the cap-piece downward along the head of the bottle toward the neck of the same.

The slots of the lugs *a a* are preferably made of L shape, the side extensions being at the lower parts of the slots and away from the lever when closed, so as to facilitate the opening and clos- 70
ing of the stopper.

The cap-piece of the stopper A may be recessed between the lugs, which admits the piv-
oting of the lower member of the toggle-joint below the top surface of the cap-piece, whereby 75
the height of the lugs may be diminished and the entire stopper mechanism be brought within a smaller compass, as shown in Figs. 1 and 2. In Figs. 3 and 4 the cap-piece is not recessed,
80 and both members of the toggle-joint pivoted above the same to the lugs.

For opening the stopper the lever is carried away from the neck of the bottle and swung up, whereby the members of the toggle-joint
85 are made to approach each other, so that the stopper is withdrawn from the mouth of the bottle, it being then thrown, with the yoke and lever, to one side and retained alongside of the neck of the bottle, as shown in dotted lines in Fig. 2. In closing the bottle the stopper is 90
placed in position above the bottle-mouth and then forced down into the mouth by pressing down the operating and locking lever, whereby the members of the toggle-joint are straight-
95 ened and the middle pivot thrown somewhat beyond the vertical line until the lever strikes against the neck of the bottle, so as to lock thereby the toggle-joint and retain the stopper

securely in the mouth of the bottle by the action of the lever and toggle-joint upon the yoke and cap-piece of the stopper.

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

1. The combination of a stopper having a cap-piece with vertically-slotted lugs, of a bail or yoke passing through the slotted lugs and being applied to supporting devices on the bottle-neck, and of a toggle-joint interposed between the yoke and cap-piece of the stopper, and provided with an operating and locking lever applied to one member of the toggle-joint, substantially as set forth.

15 2. The combination of a stopper having vertically-slotted lugs and a recess or indentation

between the lugs, of a bail or yoke passing through the slotted lugs and being applied to supporting devices on the bottle-neck, and of a toggle-joint the upper member of which is piv- 20
oted to the yoke and provided with an operating and locking lever, while the lower member is pivoted into the recess of the cap-piece, substantially as set forth.

In testimony that I claim the foregoing as 25
my invention I have signed my name in presence of two subscribing witnesses.

CHARLES BEECHER.

Witnesses:

PAUL GOEPEL,
CARL KARP.