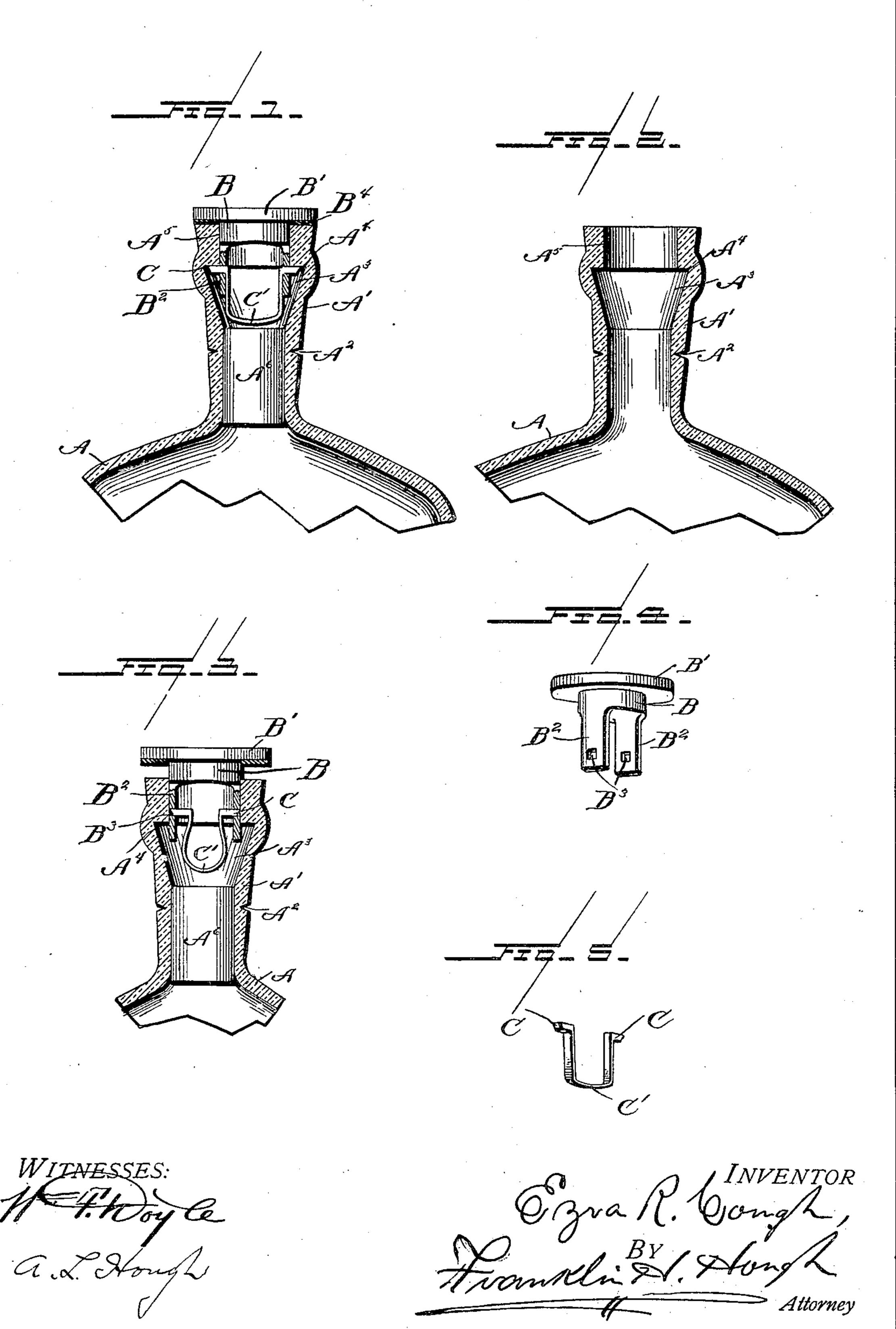
E. R. COUGH. STOPPER LOCK FOR BOTTLES.

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UNITED STATES PATENT OFFICE.

EZRA R. COUGH, OF BAR HARBOR, MAINE.

STOPPER-LOCK FOR BOTTLES.

No. 800,796.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, Ezra R. Cough, a citizen of the United States, residing at Bar Harbor, in the county of Hancock and State of 5 Maine, have invented certain new and useful Improvements in Stopper-Locks for Bottles; 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in stopper-locks for bottles.

The invention has for an object to provide a locking-stopper having depending walls within which spring-pressed bolts are sup-20 ported so as to automatically engage a flange or shoulder in the neck of the bottle when this stopper is inserted in position.

A further object of the invention is to provide a closing-stopper beneath the locking-25 stopper and adjacent to a breakable portion of the bottle-neck, so that the contents of the bottle are protected against contact with the locking-stopper when in position or from fragments of glass when this portion of the neck 3° is broken in opening the bottle, while the closing-stopper also provides a closure which can be inserted for use as long as any of the contents of the bottle are contained therein.

Other and further objects and advantages 35 of the invention will be hereinafter set forth and the novel features thereof defined by the appended claim.

In the drawings, Figure 1 is a vertical section of a bottle-neck showing the stoppers ap-4° plied. Fig. 2 is a similar view with these parts removed. Fig. 3 is a vertical section showing the locking-stopper partly in position, the bolts being retracted by contact with the walls of the neck. Fig. 4 is a detail per-45 spective view of the locking-stopper, and Fig. 5 is a similar view of the spring carrying the bolts.

Like letters of reference refer to like parts in the several figures of the drawings.

The letter A designates a bottle of any de-50 sired size or configuration, the neck A' of which is provided with a cut or break line A² at its lower portion and above this portion with an outwardly-tapering recess A³, having 55 a flange or shoulder A⁴ at its top. Above this flange a cylindrical opening A⁵ extends to re-

ceive the locking-stopper, and the diameter of this opening is greater than that of the lower portion of the neck, so that the closing-stopper A⁶ may be easily passed therethrough and 60 snugly fitted in the lower portion of the neck.

A locking-stopper B, as shown in Fig. 4, is provided with a cap portion B', adapted to extend over the top of the bottle-neck, and with depending walls B², each of which is suit- 65 ably apertured or slotted, as at B³, to receive the bolts C, which may be spring-actuated in any desired manner—for instance, by the Ushaped spring C', as shown in Fig. 5, wherein the bolts extend laterally from the opposite 7° free ends of the spring, which is inserted between the walls B² of the stopper. Between the cap portion B' and the top of the bottle a suitable elastic or cushioned washer B^{*} is inserted, which prevents rattling and also 75 provides for any variation in the depth of the locking-flange A⁴ within the bottle-neck, so that when the cap is forced into contact with the washer the bolts C are in position to be automatically thrown beneath the flange. 80 These stoppers may be formed of any desired material. For instance, the closing-stopper A⁶ may be of an ordinary cork, and the locking-stopper is preferably formed of metal, while the washer beneath the cap thereof may 85 be of rubber or cork, as found most desirable.

In the operation of the invention the closing-stopper is inserted through the top of the neck, which being larger than the portion adjacent to the break-line permits the free 9° passage of the cork, which is forced into position, so that a portion thereof extends above the line of breakage upon the neck of the bottle. The washer is then placed in position upon the top of the neck, and the locking- 95 stopper in which the spring carrying the bolts has been inserted is forced downward until the bolts expand outwardly beneath the shoulders, when the parts will be securely locked and the bottle can only be opened by break- 100 ing at the line indicated. Through the downward movement of the locking-stopper the spring and bolts are held under tension by means of the side walls of the portion A, as shown in Fig. 3.

It will be obvious that changes may be made in the details of construction and configuration without departing from the spirit of the invention as defined by the appended claim.

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Having thus fully described my invention, 110 what I claim as new, and desire to secure by Letters Patent, is—

A bottle, comprising a frangible neck, the inner surface of which has an inclined conical-outlined chambered portion, terminating in its upper end in a shoulder, a cork positioned below said chambered portion, a stopper having a flanged top, adapted to rest upon the top of the neck, and a shank portion made up of two arms which are spaced apart and provided with registering apertures, a U-shaped resilient locking member having its ends angled and its shank portion in the same parallel plane as its angled ends, the bow por-

tion of said locking member designed to hold the cork within the neck of the bottle below said conical-shaped chamber, and its ends passing through the apertures of said arms and engaging the shoulder formed in the inner surface of the neck, as set forth.

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

EZRA R. COUGH.

Witnesses:

A. Bert Cough,

O. K. Stevens.