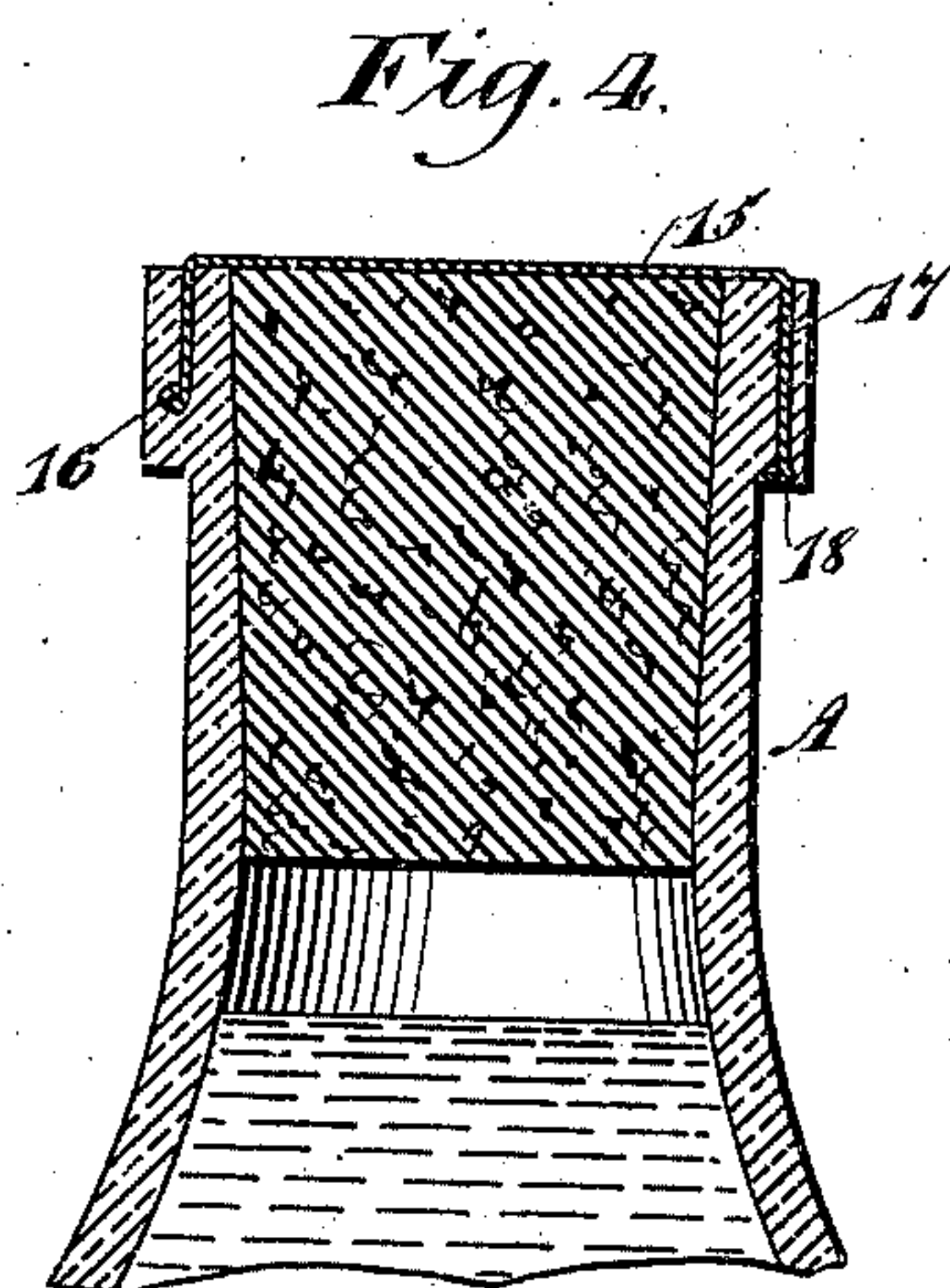
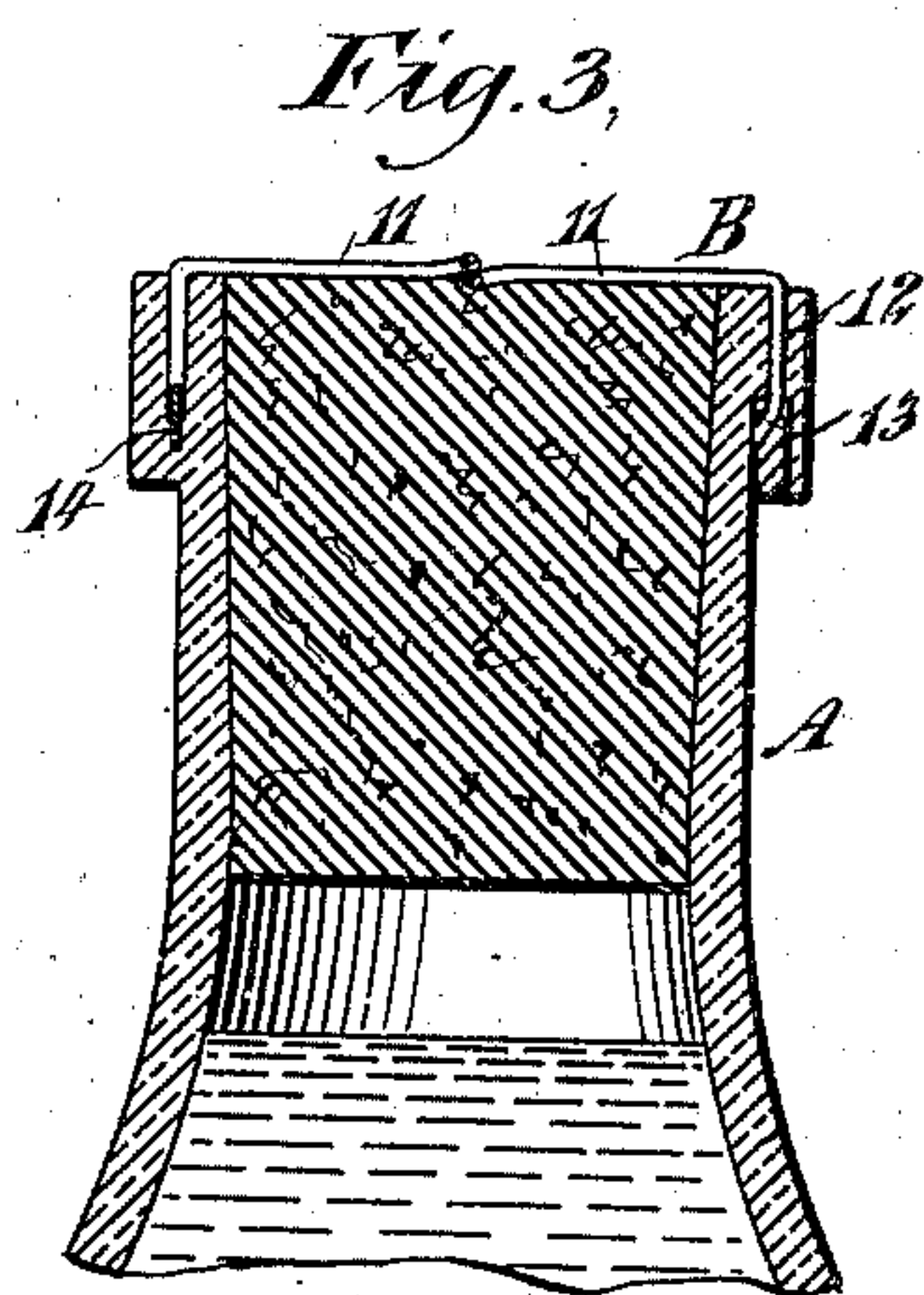
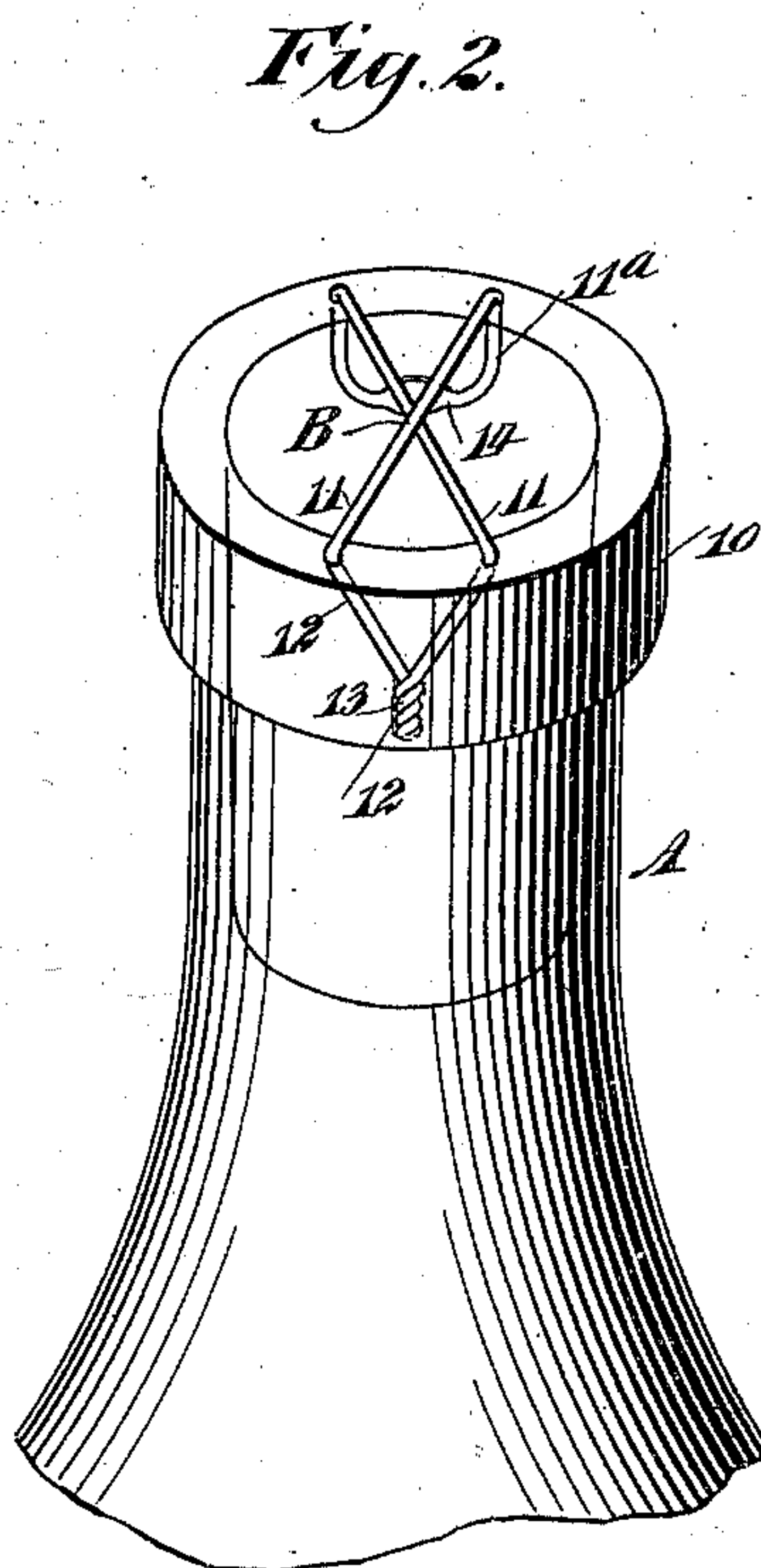
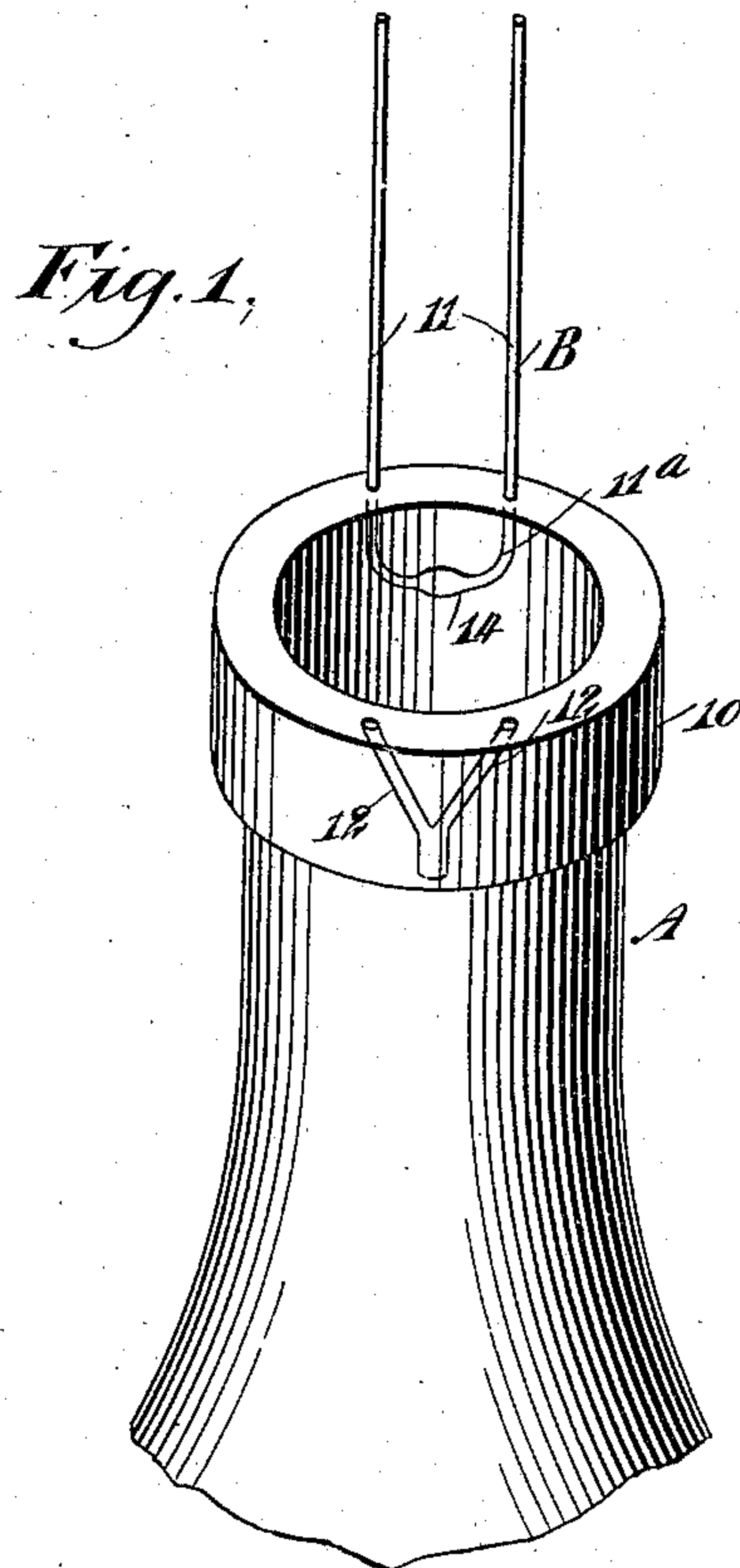


(No Model.)

J. A. WOODWORTH.
BOTTLE STOPPER.

No. 567,874.

Patented Sept. 15, 1896.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN A. WOODWORTH, OF WINDSOR, CANADA.

BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 567,874, dated September 15, 1896.

Application filed November 8, 1895. Serial No. 568,340. (No model.)

To all whom it may concern:

Be it known that I, JOHN A. WOODWORTH, of Windsor, in the Province of Nova Scotia and Dominion of Canada, have invented a new and useful Improvement in Bottles and Stoppers Therefor, of which the following is a full, clear, and exact description.

My invention relates to an improvement in bottles and stoppers therefor; and the object of the invention is to provide a means whereby after the bottle is once corked it cannot be opened without destroying the seal for the cork, which sealing medium cannot be restored, thereby preventing the bottle from being refilled and presented to the public as an original package.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

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

Figure 1 is a perspective view of the neck of a bottle, illustrating the sealing medium applied to the said bottle. Fig. 2 is also a perspective view of the neck of a bottle, illustrating the cork in place and the sealing medium applied to prevent the cork from being withdrawn or disturbed without the said medium being in a measure destroyed. Fig. 3 is a vertical section through the neck of the bottle and the cork and the sealing medium or device applied thereto, and Fig. 4 is a view similar to Fig. 3 in which a modified form of the sealing medium is illustrated.

In carrying out the invention the neck A of the bottle is enlarged at the mouth to form a collar or rim 10, and in casting or manufacturing the bottle a fastening device or sealing medium B is secured in the said bottle at its mouth. Preferably this fastening device or sealing medium consists of a wire 11, bent upon itself to form two strands, and the bow portion 11^a of the wire is cast in the rim or collar 10, being a fixture with the bottle.

Opposite the aforesaid sealing medium or fastening device the rim is provided with two openings 12, and these openings extend from top to bottom of the aforesaid rim. Prefer-

ably a Y-shaped opening is employed, as shown in Fig. 1, the two upper branches being of less diameter than the lower or main branch, and the latter branch is carried through to the bottom of the rim, as shown in Fig. 3.

In operation the cork is placed in the neck of the bottle in the usual manner after the aforesaid bottle has been filled, and also preferably the strands 11 of the fastening device or sealing medium are crossed one over the other, being carried over the cork, as shown in Fig. 2, and the said strands are then passed downwardly through the upper branches of the opening 12 into the main branch, through which both of the strands are carried, a single strand of wire being passed through each of the upper branches of the said Y-opening. The strands of wire are then twisted, knotted, or otherwise connected, being preferably, however, twisted, as shown at 13 in Fig. 2, the twist, knot, or other tie for the two strands practically filling up the lower or straight branch of the aforesaid opening 12. The wire is then cut off on a level with the lower edge of the rim 10, and if in practice it is found desirable any space that may occur between the tie of the strands of wire and the wall of the opening in which the said tie is located may be filled up with a cement of any approved character.

It is not absolutely necessary that the strands of the fastening device or sealing medium should be crossed one over the other, since they may be carried directly over the cork, and preferably the bow portion of the fastening device or sealing medium is provided with a flattened surface 14, as shown in Figs. 1 and 2, in order that this portion of the device may more readily be held firmly in the material of which the bottle is made.

It is evident that after the bottle is so sealed or tied pliers or other implements cannot be employed to untwist the strands or untie a knot made therein, therefore necessitating the strands being severed or broken over the cork, and consequently after the bottle is emptied, should an attempt be made to present the same as an original package, the strands of the fastening device or sealing medium would be too short to enter the keeper-

opening 12 in the rim of the neck, and the absence of the peculiar lock for the cork would be evidence that the bottle had been refilled or was not an original package.

5 In Fig. 4 I have shown a slight modification of the fastening device or sealing medium in which a strap 15 is substituted for the wire, and the said strap at that end where it is to be cast into and permanently secured
10 within the rim or collar of the bottle is provided with an upturned lower edge 16, and the keeper-opening in the said rim or collar adapted to receive the opposite end of the strap will be practically straight, while the extrem-
15 ity of the strap entering the keeper-opening which is designated as 17 will be bent upon itself to form a rib 18, or will be otherwise enlarged, and will fit closely in an enlargement of the keeper-opening, fitting so tightly in this
20 enlargement of the said opening that it cannot be manipulated by pliers or an equivalent tool; but the two strands of wire shown in Figs. 1 and 2 are preferred as the sealing medium.

25 A lead or other sealing may be attached to the strands of wires on the strap where it length of the said strands or the strap; and crosses the cork, or at any other point in the in the event a form with a distinctive mark
30 is required a metal tag may be fastened in the bight of the wire, carrying a seal or a monogram which would be visible through the glass.

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

1. In a bottle and a stopper therefor, a bottle provided with a sealing device forming an integral portion thereof and arranged to
40 extend over the mouth of the same, the said bottle being provided with a keeper at the opposite side of its mouth to receive the said sealing device, said sealing device having an enlargement formed thereon within the

keeper-opening, as and for the purpose set forth. 45

2. In a bottle and stopper therefor, a sealing device substantially integral with the bottle at a point in its length having one of its ends free, and a keeper-opening formed in
50 the bottle to receive the said free end of the sealing device, the said keeper-opening having an enlarged portion, as and for the purpose set forth.

3. In bottles and stoppers therefor, a bottle having an enlargement of the neck at the mouth thereof, a sealing device secured in the said enlargement at one side of the mouth, being capable of extending over to the opposite side, a keeper-opening located within
60 the aforesaid enlargement on the neck, through which opening the sealing device is passed, and an enlargement formed upon the said sealing device within the said keeper-opening, as and for the purpose set forth. 65

4. In bottles and stoppers therefor, a neck-section provided with strands of wire integrally attached to the said neck and adapted to cross the mouth of the same, and a bifurcated opening formed at the mouth portion of the
70 neck, adapted to receive the said strands, which strands are enlarged below the branches of the said opening, as and for the purpose set forth.

5. In bottles and stoppers therefor, a neck
75 provided with a collar or rim at the mouth, and a fastening device for the cork, secured permanently at one of its ends within the said rim and adapted to pass over said mouth, the said rim being furthermore provided
80 with a keeper-opening adapted to receive the free end of said fastening device, the said free end being enlarged within said keeper, as and for the purpose specified.

JOHN A. WOODWORTH.

Witnesses:

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