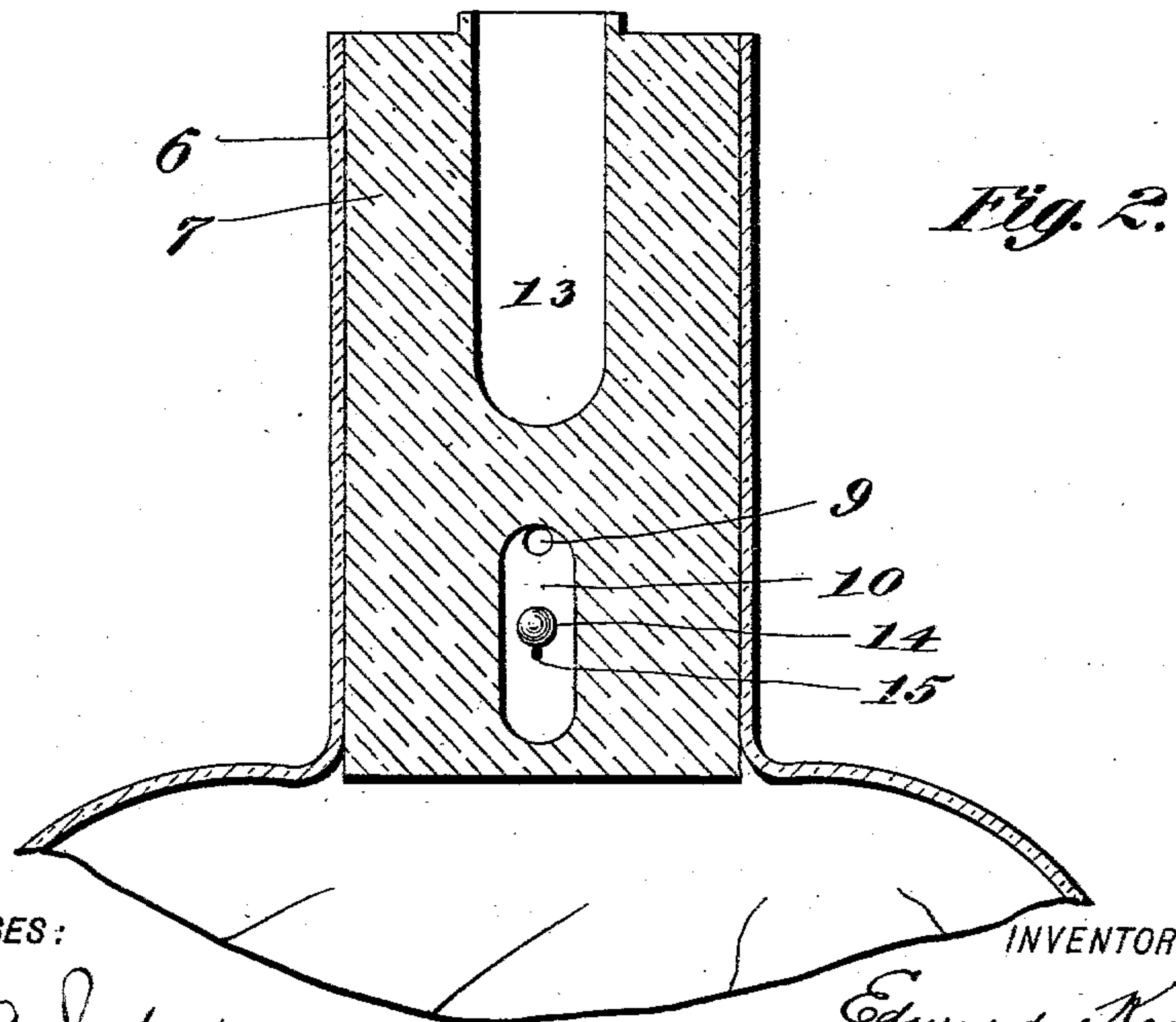
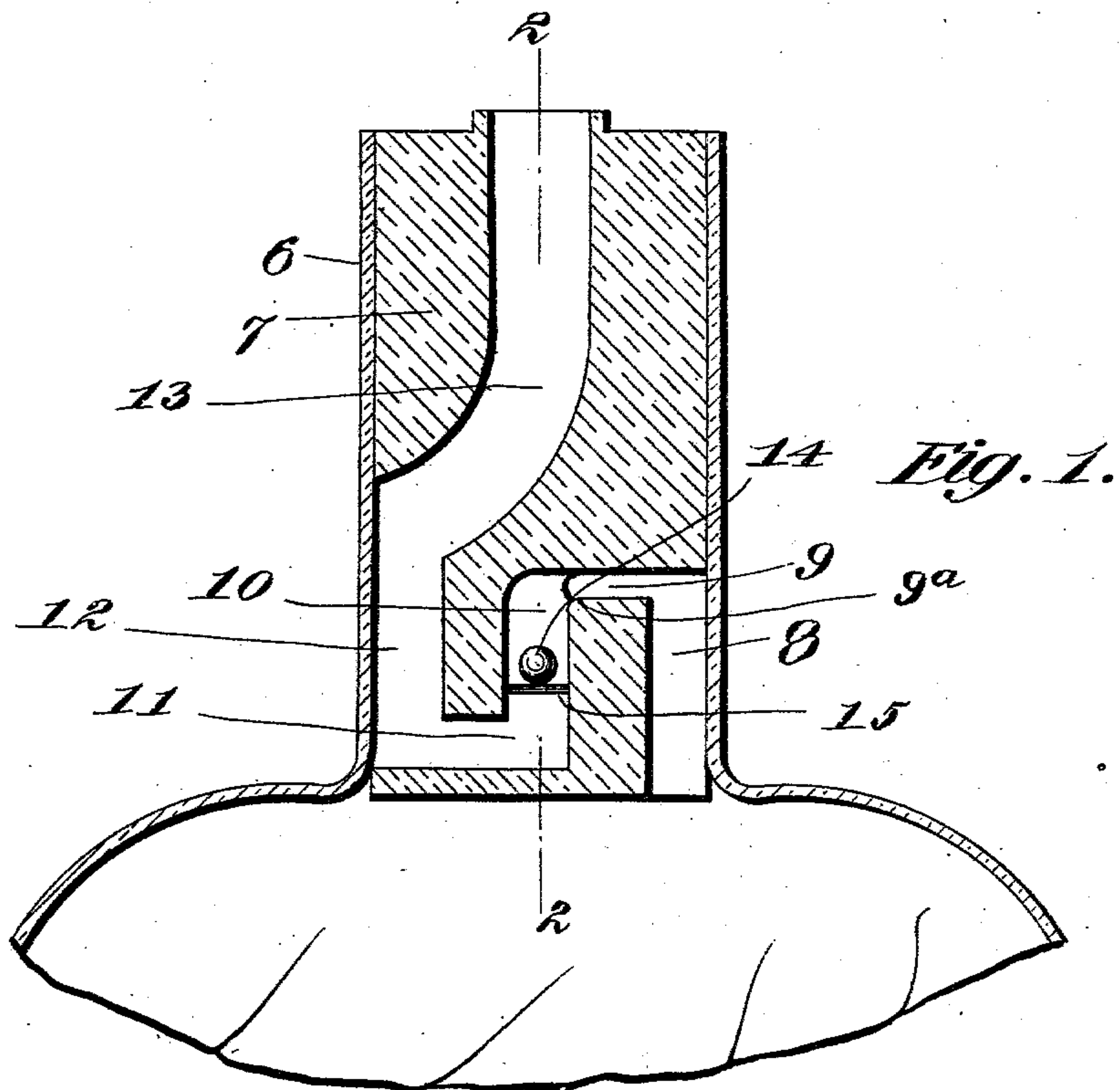


No. 715,389.

Patented Dec. 9, 1902.

E. KERSEY.
NON-REFILLABLE BOTTLE.
(Application filed May 10, 1902.)

(No Model.)



WITNESSES:

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UNITED STATES PATENT OFFICE.

EDWARD KERSEY, OF CHICAGO, ILLINOIS.

NON-REFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 715,389, dated December 9, 1902.

Application filed May 10, 1902. Serial No. 106,726. (No model.)

To all whom it may concern.

Be it known that I, EDWARD KERSEY, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Non-Refillable Bottles; and I do hereby 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 figures of reference marked thereon, which form a part of this specification.

This invention relates to non-refillable bottles, and particularly to that class thereof having a float-valve which will open to allow liquid to be poured from the bottle, but which will close at an attempt to refill the bottle.

Generally speaking, the invention comprises a stopper having a tortuous passage a part of which is vertical and has therein a float which will rise and close the passage at an attempt to refill.

In the accompanying drawings, Figure 1 is a vertical section of the upper portion of a bottle and of the improved stopper therein. Fig. 2 is a similar section on the line 2 2 of Fig. 1.

Referring particularly to the drawings, 6 indicates the neck of the bottle, in which the stopper 7 is secured so that it cannot be removed, as by cement or otherwise. This stopper is preferably formed of glass or other molded material and has therethrough a tortuous passage comprising a part 8, which opens into the interior of the bottle and extends part way up one side of the stopper, a horizontal cross part 9, a downwardly-extending vertical part 10, a horizontal part 11,

leading from the bottom of the part 10 to a vertical part 12 on the opposite side of the stopper from the part 8, and a curved part 13, leading from the top of the part 12 out through the top of the stopper. The part 9 of the passage is smaller than the passage 10, with which it connects, and at the junction a valve-seat 9^a is formed to receive a float-valve 14, which is contained loosely within the passage 10. 15 indicates a bar across the passage 10 to retain the float therein. The valve is preferably a hollow ball and may be formed of rubber or other suitable material.

When the bottle is inverted to empty it, the valve remains away from its seat and the liquid escapes through the passage and around the valve. If an attempt be made to refill the bottle, the float will rise and lodge at the valve-seat, thus blocking the passage.

What I claim is—

1. A bottle-stopper having therein a vertical passage containing a float-valve, a tubular connection from the top of such passage to the interior of the bottle, and a tubular connection from the bottom of such passage out through the top of the stopper, and a seat for the valve at the junction of the passage and the connection with the interior of the bottle, substantially as described.

2. A bottle-stopper having a tortuous passage including a vertical part containing a float-valve, and a contracted horizontal part at the top thereof having a seat for the valve at the junction.

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

EDWARD KERSEY.

Witnesses:

NELLIE FELTSKOG,
H. G. BATCHELOR.