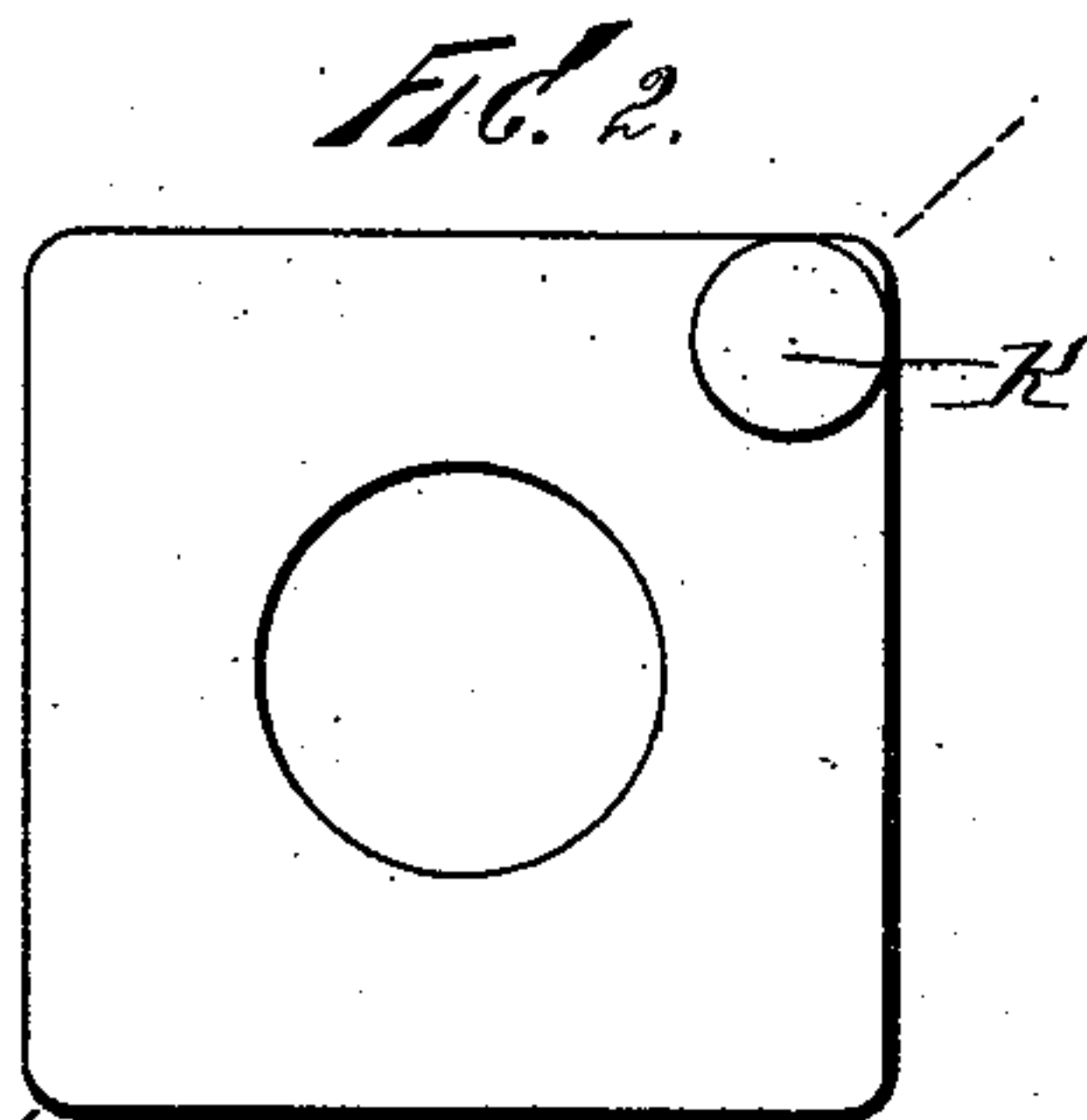
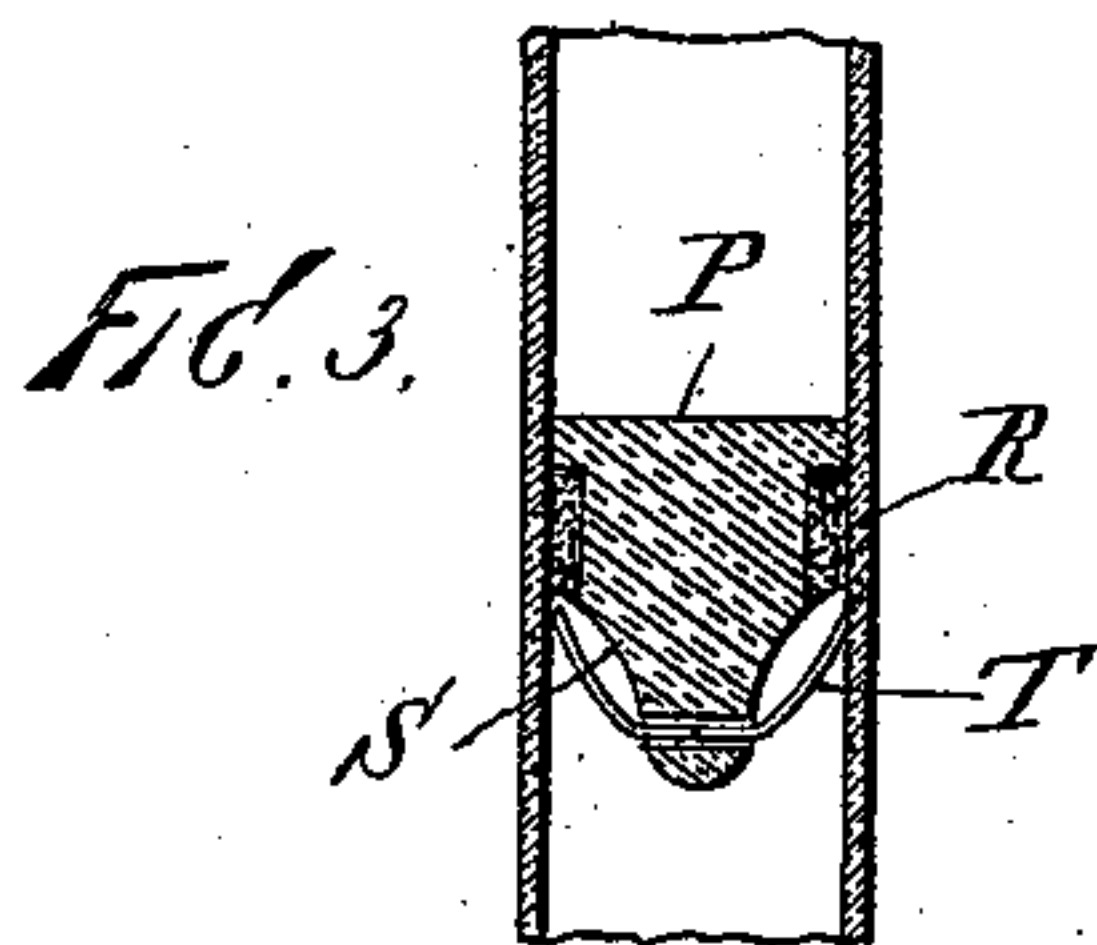
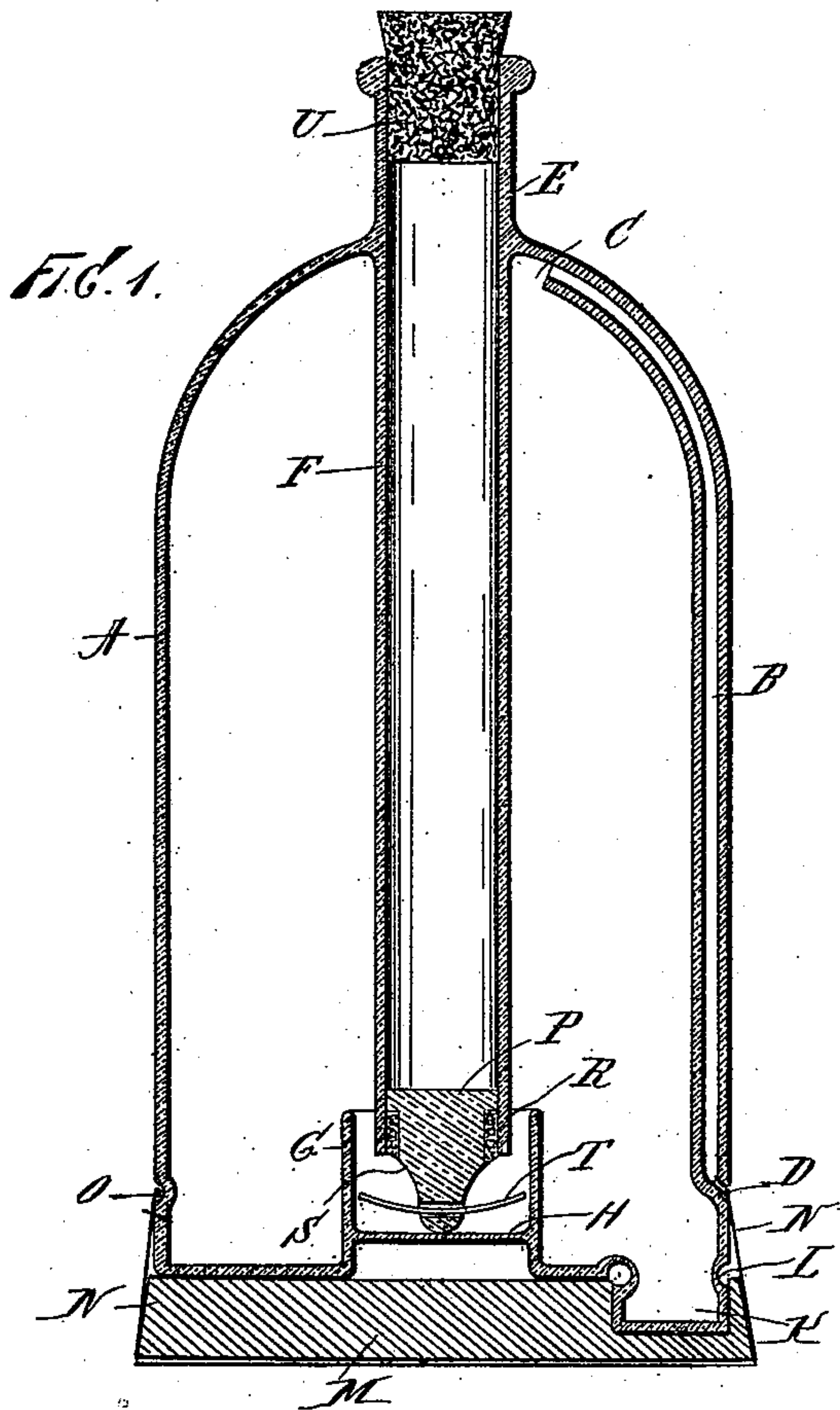


(No Model.)

T. W. RICHARDS.
BOTTLE.

No. 554,498.

Patented Feb. 11, 1896.



WITNESSES:

John Buckler,
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INVENTOR

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UNITED STATES PATENT OFFICE.

THOMAS W. RICHARDS, OF BROOKLYN, ASSIGNOR OF ONE-HALF TO JAMES PAULSON, OF RICHMOND HILL, NEW YORK.

BOTTLE.

SPECIFICATION forming part of Letters Patent No. 554,498, dated February 11, 1896.

Application filed June 28, 1895. Serial No. 554,308. (No model.)

To all whom it may concern:

Be it known that I, THOMAS W. RICHARDS, a citizen of the United States, and a resident of Brooklyn, county of Kings, and State of New York, have invented certain new and useful Improvements in Bottles, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar letters of reference indicate corresponding parts.

This invention relates to bottles, and the object thereof is to provide a bottle which, having been once filled, cannot be emptied and refilled without destroying the bottle or leaving evidence of the fact that the bottle has been once filled; and with this and other objects in view the invention consists in the construction, combination, and arrangement of parts hereinafter described and claimed.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, and in which—

Figure 1 is a central vertical section of a bottle constructed according to my invention, taken on the line *x x* of Fig. 2; Fig. 2, a bottom plan view of the bottle, and Fig. 3 a detail view of the construction.

In the practice of my invention I employ a bottle A, which is preferably practically square in cross-section, but which may be of any desired form, and in the side of which, or in one corner of which, if the bottle be square in cross-section, is formed a tube B, the upper end of which opens within the bottle adjacent to the lower end of the neck, as shown at C, and the lower end of which opens near the bottom of the bottle on the outside thereof, as shown at D. The bottle is also provided with the usual neck E and with a central tube F, which forms a continuation of the neck and extends outwardly through the bottle to near the bottom thereof. The bottom of the bottle is also provided with an inwardly-directed central tube G, which incloses the lower end of the tube F, as shown in Fig. 1, and the lower end of which is closed by the plate or partition H, and formed at one side of the bottom of the bottle is a tubular extension K, the outer end of which is closed, and at the base of which is formed an annular groove or recess L, and

in practice I provide a base-piece M, of any desired material, having a tubular cavity or recess at one side thereof adapted to receive the tubular extension K, this arrangement being for the purpose of affording a flat even bottom for the bottle, and also to prevent the removal or the breaking off of the said tubular extension K.

The base-piece M is held in place by means of a wire frame N operating in connection with an annular bead O, formed near the lower end of the bottle and in the outer walls thereof, as shown in Fig. 1.

The bottle is filled through the tube F, and said tube is designed to receive the plug or stopper P, which is formed of glass or similar material, and around which is placed a packing R, of cork or similar material, and the plug or stopper P is provided with an extension S, in the lower end of which is formed an opening through which is passed the plate-spring T.

The plug or stopper P is so constructed that it may be forced through the tube F from the upper end thereof, in which operation the spring T will be held in the position shown in Fig. 3, and when the plug or stopper has reached the position shown in Fig. 1 the spring T or the ends thereof will be liberated from the tube F and spring out into the position shown in said figure, when, as will be understood, the removal of the plug or stopper by any means whatever will be impossible, as the ends of the spring T striking against the lower end of said tube will securely hold the stopper in place within the tube. In this class of devices the bottle must first be filled with the desired contents before the stopper or stoppers are applied, and this having been done the plug or stopper P, with the spring T connected therewith, is forced into the position as hereinbefore described, after which the neck or nozzle is closed by the cork or plug U in the usual manner.

It will be understood, of course, that in the process of filling the bottle the air escapes through the tube B, and the bottle may be filled to the top thereof, or nearly so, and when the plug or stopper P is forced downwardly through the tube F the fluid within said tube F will be forced out at the bottom thereof and

will pass out through the tube B, if there is more than is necessary to entirely fill the bottle. The bottle having been thus filled and the stoppers applied, if it be desired to empty the bottle the bottom piece M is removed and the tubular extension K broken away and the bottle emptied through the opening thus formed, and in the process of emptying the bottle as above described air will enter there-
 10 into through the tube B, as will be understood, and it will also be understood that the contents of the bottle cannot be discharged through the tube B, because of the fact that when the tube F and the neck E are closed, as
 15 hereinbefore described, no air can enter the bottle except through the tube B. The lower end of the tube B may also be closed by any desired means, and, if necessary, at any time, and means by which this closure is made may
 20 be removed.

It is evident that changes in and modifications of the construction described may be made without departing from the spirit of my invention or sacrificing its advantages, and I
 25 therefore reserve the right to make such alterations and changes in the form, construction, and arrangement of the various parts of my improved bottle as fairly come within the scope thereof.

30 Having fully described my invention, I claim and desire to secure by Letters Patent—

1. A bottle having an air-tube in one side thereof, one end of which opens into the bot-
 35 tle at or near the neck, and the other end of which opens outside, at or near the bottom, said bottle being also provided with a neck and a central tube, which forms a continuation of said neck, and extends to near the
 40 bottom of the bottle, and with means for closing the lower end of said tube, substantially as shown and described.

2. A bottle having an air-tube in one side thereof, one end of which opens into the bottle
 45 at or near the neck, and the other end of which opens outside, at or near the bottom, said bottle being also provided with a neck and a central tube, which forms a continuation of said neck, and extends to near the bottom of the
 50 bottle, and with means for closing the lower end of said tube, the bottom of said bottle being also provided with an outwardly-directed tubular extension, the outer end of which is closed, and which is adapted to be broken
 55 away when it is desired to open the bottle, substantially as shown and described.

3. A bottle having an air-tube in one side thereof, one end of which opens into the bottle at or near the neck, and the other end of which
 60 opens outside, at or near the bottom, said bottle being also provided with a neck and a central tube, which forms a continuation of said neck, and extends to near the bottom of the bottle, and with means for closing the lower

end of said tube, the bottom of said bottle be- 65
 ing also provided with an outwardly-directed tubular extension, the outer end of which is closed, and which is adapted to be broken away when it is desired to open the bottle, the
 70 bottom of said bottle, being also provided centrally thereof, with an inwardly-directed tube or tubular extension which is adapted to in-
 close the lower end of the central tube, substantially as shown and described.

4. A bottle provided at one side thereof, with 75
 a tube, one end of which opens inside thereof at or near the neck of the bottle, and the other end of which opens outwardly near the bot-
 80 tom of the bottle, said bottle being also provided with a neck having a tubular extension which extends downwardly through the bot-
 85 tle to near the bottom thereof, and a plug or stopper designed to close the lower end of said tubular extension, said plug or stopper being
 90 provided with an extension through which is passed a spring, whereby when the stopper is inserted through the tube, and reaches the lower end thereof, the ends of the spring will
 95 fly out and prevent the removal of the stopper, substantially as shown and described.

5. A bottle provided with a central tube, which forms the continuation of the neck and extends downwardly through the bottle, to
 95 near the bottom thereof, a plug or stopper adapted to be inserted through said neck and to close the lower end of the tube, and pro-
 100 vided with means to prevent the removal thereof, and said bottle being also provided with means for admitting air thereto, and al-
 lowing its discharge therefrom, substantially as shown and described.

6. A bottle provided with a central tube, which forms a continuation of the neck and extends downwardly through the bottle, to
 105 near the bottom thereof, a plug or stopper adapted to be inserted through said neck and to close the lower end of the tube, and pro-
 110 vided with means to prevent the removal thereof, and said bottle being also provided with means for admitting air thereto, and al-
 115 lowing its discharge therefrom, the bottom of said bottle being also provided with a tubular extension closed at its outer end and adapted to be broken away when it is desired to empty
 the bottle and said bottle being also provided with a base-piece, having a tubular cavity or recess therein, adapted to receive said tubular extension, substantially as shown and de-
 scribed.

In testimony that I claim the foregoing as 120
 my invention I have signed my name, in presence of two witnesses, this 26th day of June, 1895.

THOMAS W. RICHARDS.

Witnesses:

L. M. MULLER,
 C. GERST.