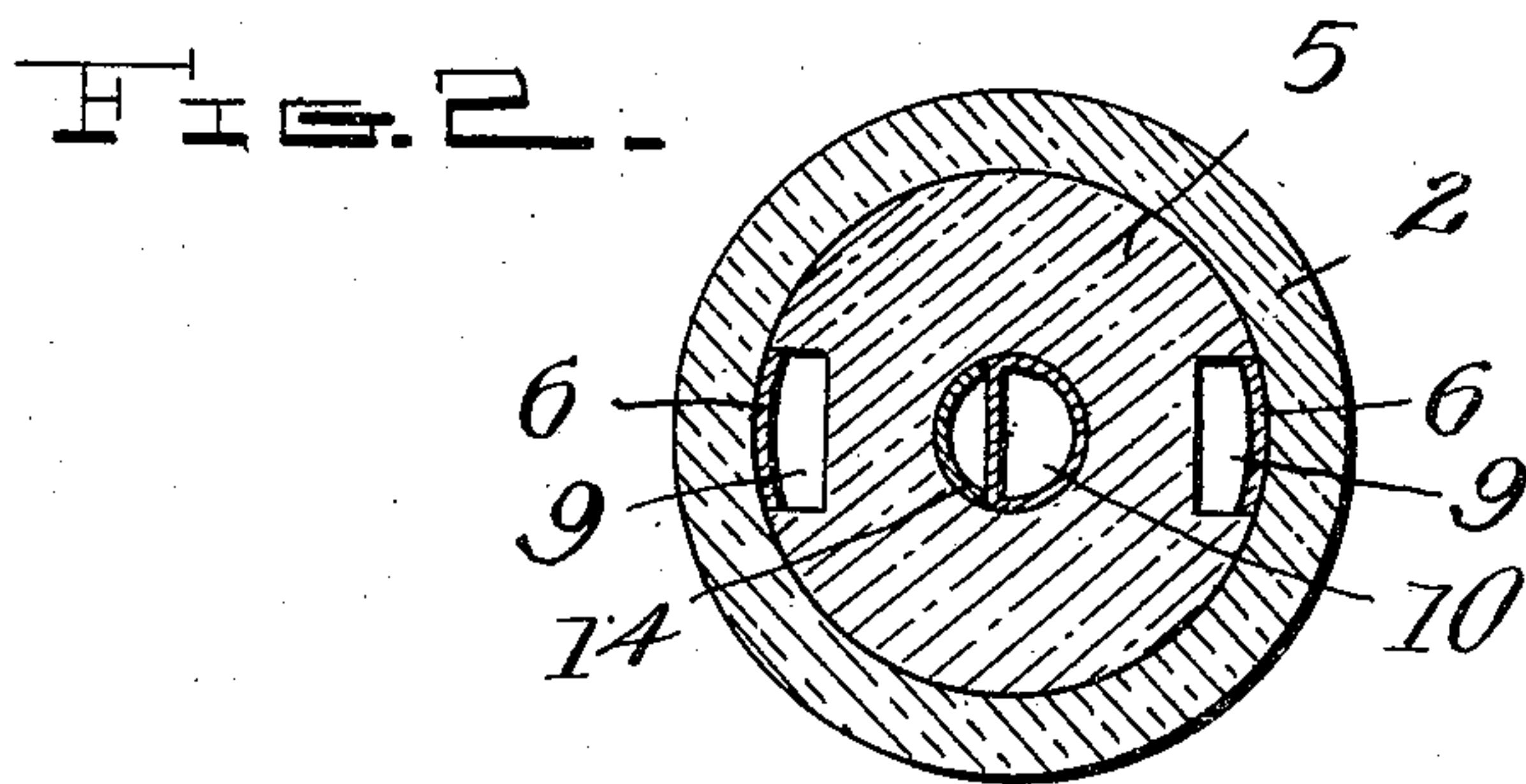
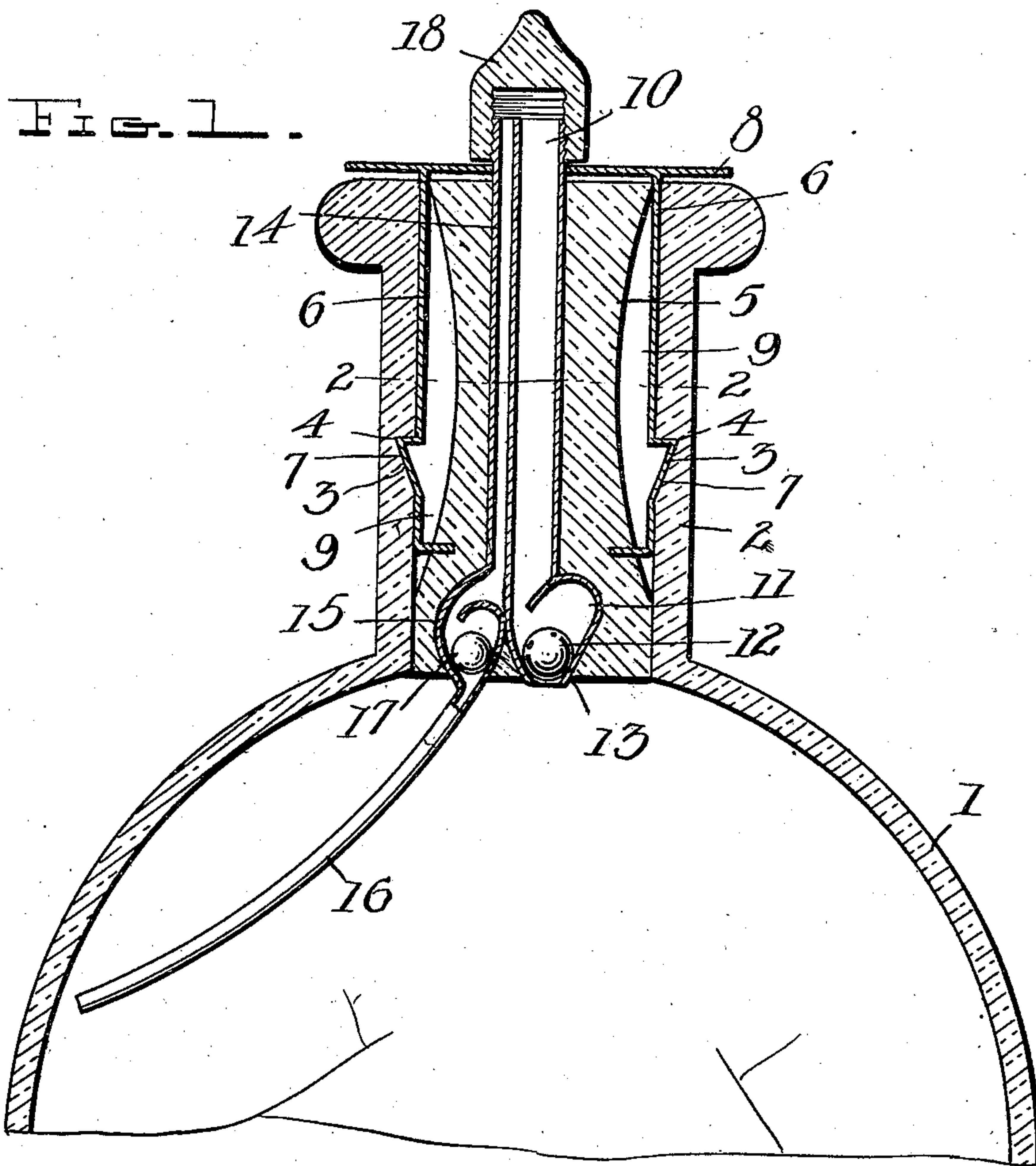


No. 877,249.

PATENTED JAN. 21, 1908.

S. M. SPRYSZYNSKI.
NON-REFILLABLE BOTTLE.
APPLICATION FILED AUG. 5, 1907.



Witnesses
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UNITED STATES PATENT OFFICE.

STEPHEN M. SPRYSZYNSKI, OF BUFFALO, NEW YORK.

NON-REFILLABLE BOTTLE.

No. 877,249.

Specification of Letters Patent.

Patented Jan. 21, 1908.

Application filed August 5, 1907. Serial No. 387,097.

To all whom it may concern:

Be it known that I, STEPHEN M. SPRYSZYNSKI, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Non-Refillable 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.

This invention has relation to new and useful improvements in non-refillable bottles, and has for its object the production of simple and economical means of this character, whereby the contents of a bottle may be removed or discharged, but which will prevent the bottle being refilled.

With this object in view the invention consists of certain novel features of construction, combination and arrangement of parts as will be more fully described and particularly pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a central vertical section of the bottle constructed in accordance with the invention, only so much of the bottle being shown as is necessary to illustrate the invention; and Fig. 2 is a horizontal section on the line 2—2 of Fig. 1.

In the embodiment illustrated, a bottle, 1, is shown having the usual neck, 2. In carrying out the invention, the neck is provided on its inner face, preferably at points diametrically opposite, with recesses, 3, forming inner shoulders, 4, adapted to engage fastening means, to be hereinafter described of a stopper, 5. Said fastening means preferably comprise two springs, 6, attached at their lower ends near the lower end of the stopper, preferably at points diametrically opposite, and being bent intermediately of their ends as at 7, to form outwardly extending offset portions or shoulders adapted to engage under the shoulders 4 of the bottle neck to secure the stopper in position. The upper or free ends of the springs are attached to a metallic plate, 8, which, when the stopper is fastened in position in the bottle, is of sufficient distance above the upper end thereof to permit the springs to be depressed in fastening the stopper in position. Said stopper is also provided with suitable recesses, 9, adjacent the springs to permit them to be depressed.

A vertically disposed tube 10 is arranged

in the stopper and extends a suitable distance above the same at its upper end. The lower end of this tube is provided with a curved enlargement to form a cup, 11, for receiving a ball, 12. Said tube is also provided immediately under or below said cup with a reduced portion, 13, which extends preferably somewhat below the lower end of the stopper, a valve seat being formed by the junction of said reduced portion with said cup, on which normally rests said ball, 12, whereby the lower end of the tube is closed. The cup 11 is such as to permit the ball to rise from its seat when it is desired to discharge any of the contents of the bottle, but holds the ball in the lower end of the tube at all times and causes it to return to its original position when the bottle is placed in an upright position.

An elongated strip, 14, corresponding with the arc of a circle in cross section is arranged to extend through said stopper and above the top or upper end of the same at its upper end. This member is arranged against the outer surface of said tube 10 so that the same may constitute one wall of an air passage, and the elongated member the other wall of said passage. Said member is also provided near the lower end with a curved enlargement, 15, which forms a cup for receiving a suitable ball, 17, and terminates in an air tube, 16, which projects downwardly into the bottle, the junction of said tube with said enlarged portion forming a valve seat, which is normally closed by said ball. The upper ends of said tube and arc-shaped member 10 and 14, respectively, are exteriorly threaded to receive a suitable cap, 18.

In practice, after the bottle has been filled, the stopper is placed in position and cannot be removed because of the shoulders or offset portions of the springs, 6, engaging under the shoulders 4 of the bottle neck, the balls 12 and 17, respectively, resting on their respective valve seats. Should it be desired to remove any of the contents of the bottle, the cap 18 is removed and the bottle inverted, when the ball, 12, falls from its seat and permits the discharge of the liquid through the tube, 10. The ball 17 at the same time also falls from its seat and permits entrance of air into the bottle. When the bottle is placed in an upright position, the ball, 12, returns to its seat and prevents refilling of the bottle.

From the foregoing description, taken in

connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

5 Various changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention as defined in the appended
10 claims.

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

1. In combination with a bottle having
15 shoulders on the inner face of its neck, a stopper having longitudinal recesses adapted to fit in said neck, springs attached to the stopper in position to fit in its recesses, said springs being bent intermediately of their
20 ends to form shoulders adapted to engage under the shoulders of the bottle neck, and a plate attached to the free ends of said springs.

2. In combination with a bottle, a stopper
25 adapted to close the mouth thereof, means for fastening the stopper in position, a tube extending through the stopper, said tube having a curved enlargement near its lower end, and a valve seat below the enlargement,
30 a ball arranged in the enlarged portion of

said tube and normally bearing on said valve seat, with means for closing the upper end of said tube.

3. In combination with a bottle, a stopper for closing the mouth thereof, means for fastening the stopper in position, a tube extending longitudinally through the stopper, said tube having an enlargement near its lower end to form a cup, a ball arranged in the cup for normally closing the lower end of said
40 tube, an air tube extending through the stopper, and means for closing the upper end of said air tube and said first-mentioned tube.

4. The combination with a bottle having
45 its neck recessed at diametrically opposite points to provide inner shoulders, a stopper having longitudinal recesses adapted to register with said shoulders, springs attached to the stopper in position to fit in the recesses therein, said springs having shoulders inter-
50 mediately of their ends adapted to engage under the shoulders of said neck, and a plate attached to the upper ends of the springs.

In testimony whereof I have hereunto set my hand in presence of two subscribing wit-
55 nesses.

STEPHEN M. SPRYSZYNSKI.

Witnesses:

F. H. ZDZIEBKOWSKI,
GEORGE MOCZULSKIZ.