No. 810,398. PATENTED JAN. 23, 1906.

J. M. DUNKLE.

NON-REFILLABLE BOTTLE.

APPLICATION FILED MAY 2, 1905.

Fig. 1.

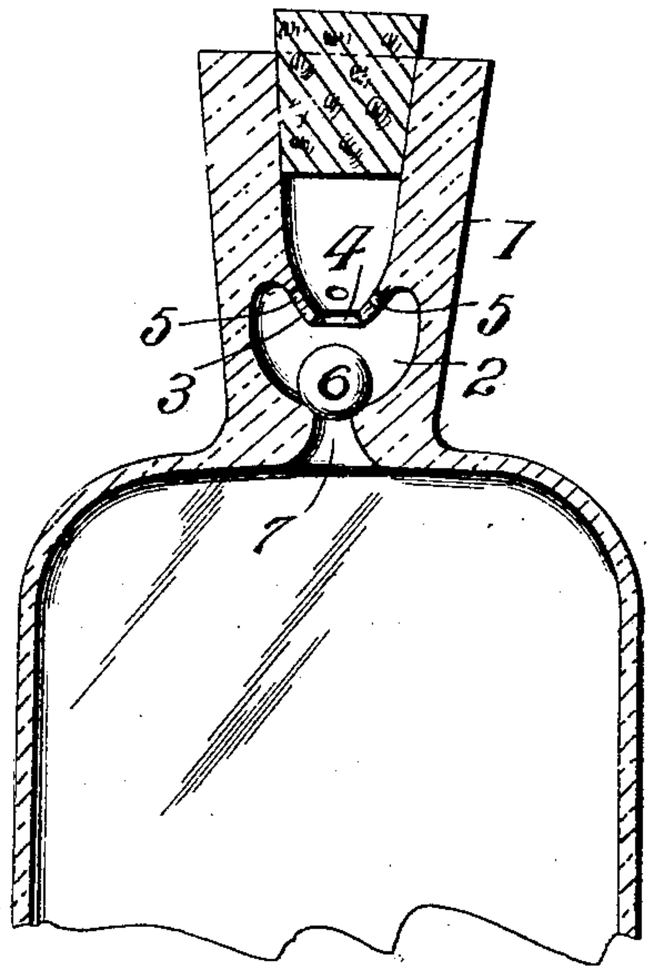
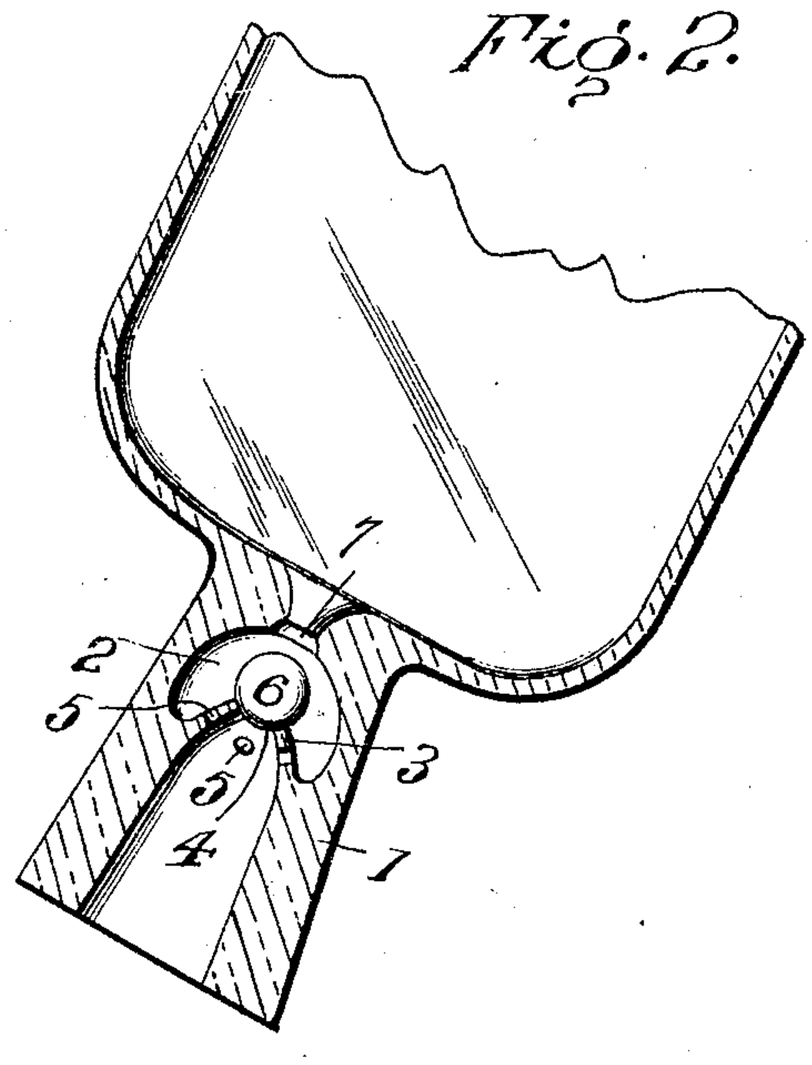


Fig. 2.



Witnesses

J. M. Dunkle.

W. N. Woodson.

Inventor

J. M. Dunkle.

By R. H. A. B. Racey, Attorneys

UNITED STATES PATENT OFFICE.

JOHN M. DUNKLE, OF ROLFE, PENNSYLVANIA.

NON-REFILLABLE BOTTLE.

No. 810,398. Specification of Letters Patent. Patented Jan. 23, 1906.

Application filed May 2, 1905. Serial No. 258,469.

To all whom it may concern:

Be it known that I, JOHN M. DUNKLE, a citizen of the United States, residing at Rolfe, in the county of Elk and State of Pennsylvania, have invented certain new and useful Improvements in Non-Refillable Bottles, of which the following is a specification.

This invention relates to improvements in non-refillable bottles; and it consists, essentially, of a chamber placed in the neck of a bottle and having connection with the inside of the bottle through an opening controlled by a ball-valve and of a perforated flange around the top of said chamber to allow the contents of the bottle to be removed and to prevent the ball from being displaced.

It has for its object to produce a device of this character which will be very simple in construction and which will at the same time be positive in operation.

Reference is to be had to the accompanying drawings, in which—

Figure 1 is a transverse sectional view. Fig. 2 is a similar view showing the bottle in an inverted position and showing the operation.

Corresponding and like parts are referred to in the following description and indicated in both the views of the drawings by the same reference characters.

The numeral 1 indicates the neck of the bottle, which is provided with a chamber 2, having connection with the inside of the bottle by means of an opening 7. An inwardly and downwardly projecting flange 3, which has approximately the shape of an inverted cone, is placed at the top of the chamber 2. This conical-shaped flange 3 is provided with a series of small holes 5 in its sides and forms a large opening 4 at its apex. An elastic ball 6 of a larger diameter than the openings 5 and 4 is compressed so as to be forced through the opening 4 into the chamber 2 after the bottle has been filled. This ball 6 normally closes the openings 7; but when the bottle is turned upon its side or inverted it allows the contents thereof to run out through the holes in the flange 3. However, it will be readily seen that should an attempt be made to force anything into the bottle the ball 6 will close the opening 7. The elastic properties of this ball enable the same to be readily placed in position, but render it impossible to obtain a grip to remove it.

From the foregoing description it will be readily understood that I have invented a device which will cost but slightly more than the ordinary bottle and which will positively prevent the same from being refilled.

Having thus described the invention, what is claimed as new is—

A bottle or like receptacle having its neck contracted upon its inner side to provide a valve-seat, and having an inner annular extension above the said seat contracted at its lower end, and having a series of openings around its upper portion, and a compressible valve of larger diameter than the contracted end of said annular extension and forced therethrough for coöperation with the valve-seat and prevented from withdrawal by expansion after clearing the said contracted annular extension.

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

JOHN M. DUNKLE. [L. S.]

Witnesses:
JOHN A. CRAIG,
F. W. BAYLESS.