

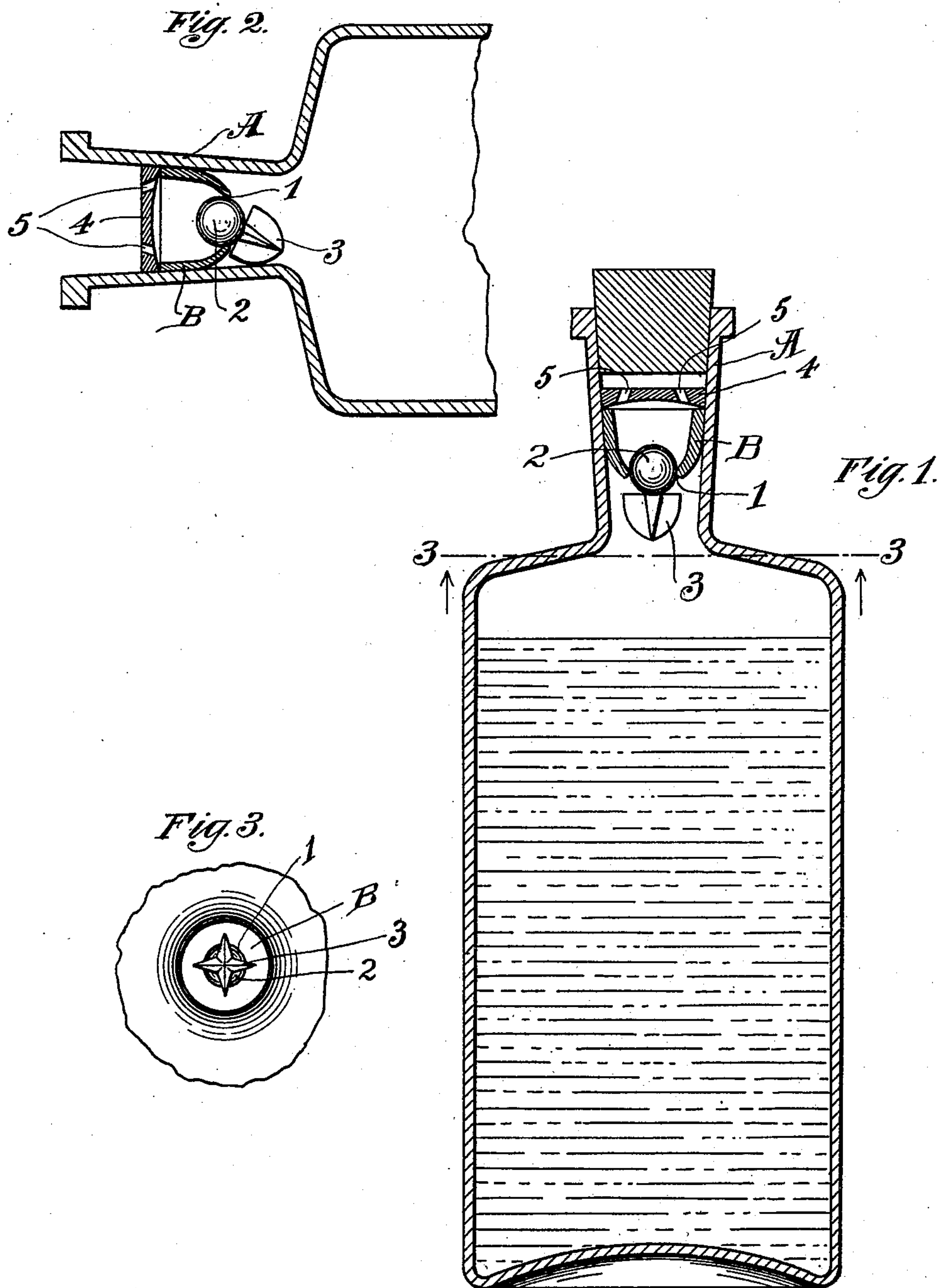
No. 618,757.

Patented Jan. 31, 1899.

A. WILCKE.
NON-REFILLABLE BOTTLE.

(Application filed Jan. 24, 1898.)

(No Model.)



Witnesses:
Arthur Klotz
Erwin J. Lutz

Inventor
Adolph Wilcke
By *Rudolph M. Lutz*
Atty

UNITED STATES PATENT OFFICE.

ADOLPH WILCKE, OF CHICAGO, ILLINOIS.

NON-REFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 618,757, dated January 31, 1899.

Application filed January 24, 1898. Serial No. 667,726. (No model.)

To all whom it may concern:

Be it known that I, ADOLPH WILCKE, 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.

My invention relates to a novel construction in a non-refillable bottle, the object being to provide a cheap and operative device of this character; and it consists in the features of construction and combinations of parts hereinafter fully described and claimed.

In the accompanying drawings, illustrating my invention, Figure 1 is a vertical longitudinal section of a bottle constructed in accordance with my invention. Fig. 2 is a similar fragmentary view showing the bottle in a horizontal position. Fig. 3 is a horizontal section on the line 3 3 of Fig. 1.

Referring now to said drawings, A indicates the neck of a bottle constructed in accordance with my invention, which is slightly tapered and wider at its upper than at its inner end. In said neck A, I secure a cup B, of any suitable material, by means of a suitable cement. The said cup B is open at both ends, but contracted at its lower end to form a small opening 1, adapted to be closed by a ball-valve 2, said opening being ground or otherwise treated to form a perfect valve-seat for said ball-valve 2, which is of slightly greater diameter than said opening 1. Before placing said cup B in said neck A said ball-valve 2 is inserted therein and a spider 3 then secured thereto, which holds said ball-valve 2 against removal from said cup and limits its movement with relation to said opening 1. The said spider 3 is preferably made of greater weight than said ball-valve 2, so that when said bottle is tipped to a horizontal position or approximately so, as shown in Fig. 2, said spider 3 will overbalance said ball-valve and hold the

latter firmly against the valve-seat. In this manner, it will be seen, the valve 2 will remain in position to close the opening 1 until the bottle is inverted to a position considerably below horizontal, where the possibility of refilling is obviated. After said cup B has been inserted in said neck A a perforated disk 4 is inserted in said neck above said cup and firmly cemented therein, thus preventing tampering with said valve. The perforations 5 in said disk 4 are inclined, so that any wire or tool inserted through the same would abut against the walls of said cup in such a manner that said valve could not be caught thereby. Obviously said spider 3 must be of greater diameter than said opening 1 to prevent its passage through the same, but owing to its shape could not close said opening 1 in inverting said bottle. Said bottle could be sealed by means of a cork 6 inserted in the neck A above said disk 4, as shown.

My experiments with my device have shown that it is absolutely impossible to refill the bottle after the contents thereof have been emptied out.

My device is also very cheap to manufacture and when once in the bottle cannot be removed.

I claim as my invention—

In a non-refillable bottle, the combination with a bottle having a conical neck of greatest diameter at its upper end, of a cup adapted to fit within said neck, an opening in the lower end of said cup, a ball-valve in said cup adapted to close said opening and project therethrough below the bottom of said cup, a spider of greater weight than said ball firmly secured to and abutting against said ball, a cap over the upper end of said cup, and inclined openings in said cap.

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

ADOLPH WILCKE.

Witnesses:

RUDOLPH WM. LOTZ,
ERWIN J. LOTZ.