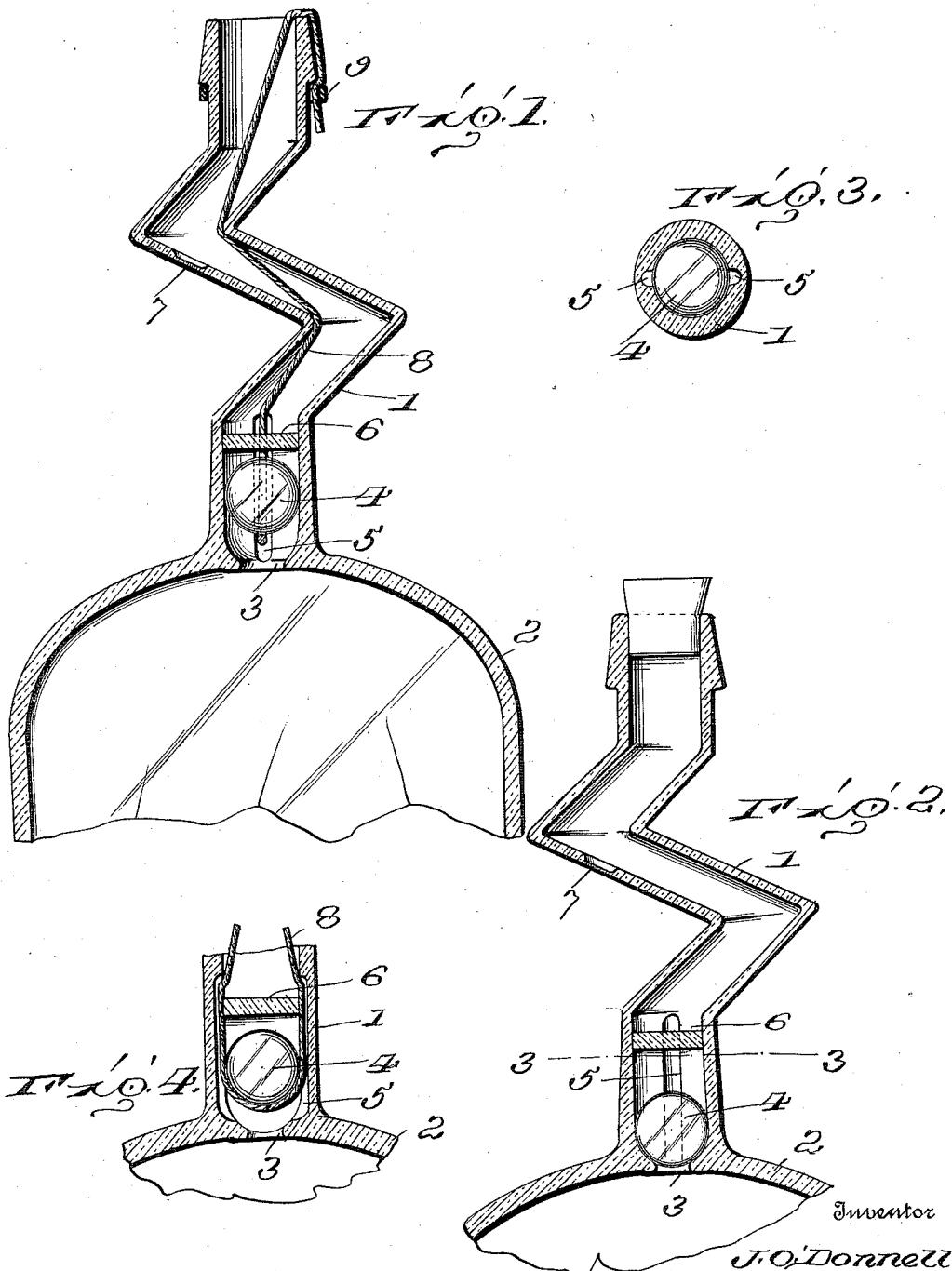


J. O'DONNELL.
NON-REFILLABLE BOTTLE.
APPLICATION FILED MAR. 9, 1911.

998,715.

Patented July 25, 1911.



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN O'DONNELL, OF NEWBURYPORT, MASSACHUSETTS.

NON-REFILLABLE BOTTLE.

998,715.

Specification of Letters Patent. Patented July 25, 1911.

Application filed March 9, 1911. Serial No. 613,455.

To all whom it may concern:

Be it known that I, JOHN O'DONNELL, a subject of the King of Great Britain, residing at Newburyport, in the county of Essex and State of Massachusetts, have invented 5 certain new and useful Improvements in Non-Refillable Bottles, of which the following is a specification.

The primary object of this invention is 10 an improved construction of bottle which is designed to be incapable of being refilled whereby the purchaser of the bottle will be sure that the contents thereof are not spurious, and the invention consists in certain 15 constructions and arrangements of the parts that I shall hereinafter fully describe and claim.

With this and other objects in view as 20 will more fully appear as the description proceeds, the invention consists in certain constructions, arrangements and combinations of the parts that I shall hereinafter fully describe and claim.

For a full understanding of the invention, reference is to be had to the following 25 description and accompanying drawings, in which:

Figure 1 is a vertical longitudinal sectional view of the upper portion of a bottle 30 equipped with the improvements of my invention; Fig. 2 is a similar view indicating the closed position of the valve after the bottle has been filled; Fig. 3 is a horizontal sectional view on the line 3—3 of Fig. 1; 35 and, Fig. 4 is a fragmentary sectional view, taken at right angles to Fig. 1.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the 40 same reference characters.

Referring to the drawings, the numeral 1 designates a bottle neck which is provided, preferably at its base where it joins the body portion 2, with an interior valve seat 45 3 on which a ball valve 4 is intended to rest, so as to prevent any liquid from being poured into the bottle. The base of the neck 1, above the valve seat 3, and contiguous thereto, is formed with channels or

guides that extend almost entirely around 50 the ball 4, said guide channels opening at opposite sides into two relatively narrow or contracted diametrically opposite outlet passages 5 leading into the main outer portion of the neck.

Above the ball valve 4 a stop plate or cap 6 is held in any desired way in a permanent manner in the neck 1, so as to limit the outward movement of the ball. Beyond this stop 6, the neck is of a zigzag form, as 60 shown, so as to tend to prevent the introduction of a wire or similar device into the neck in an unauthorized attempt to refill the bottle. The neck 1 is provided with a weakened portion 7 at a point directly opposite the first return end in the neck, whereby if a wire or the like were to be inserted in the neck for the purpose of unseating the valve, the end of the wire would engage this weakened portion and pierce the same, 70 thereby rendering the bottle useless and showing the attempted fraud. This weakened portion does not show from the outer wall of the neck, being in the form of an inwardly facing socket, as clearly illustrated 75 in the drawing.

In order that the bottle may be originally filled, I use a wire or cord 8 which extends down through one of the passages 5 and up through the other, being held thereby 80 centrally positioned around the ball valve 4. The ends of this cord or wire pass out through the mouth of the bottle and are preferably initially held around the mouth rim by a rubber band 9 or the like, so as 85 to hold the valve 4 suspended in open position while the contents of the bottle are poured in. After the bottle has been filled the cord or wire may be easily withdrawn by releasing one end thereof and retaining 90 hold upon the other end, whereupon the ball valve 4 will fall to the seat 3 and prevent any more liquid from being poured into the body portion of the bottle.

In the practical use of the bottle, it is 95 manifest that when the bottle is inverted, the ball valve 4 will move away from the seat 3 and rest against the stop 6, the liquid

contents being permitted to readily flow out through the passages 5 and the outermost portions of the bottle neck.

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

The herein described bottle provided with a neck having a plurality of reverse bends whereby a circuitous outlet passage is produced and with a valve seat at the inner 10 end of the passage, said passage being further provided with a weakening cavity in its

inner face adjacent to one of the bends and in position to receive an implement thrust through the passage, and a valve engaging the valve seat.

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

JOHN O'DONNELL. [L.S.]

Witnesses:

CATHERINE A. CONWAY,
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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."