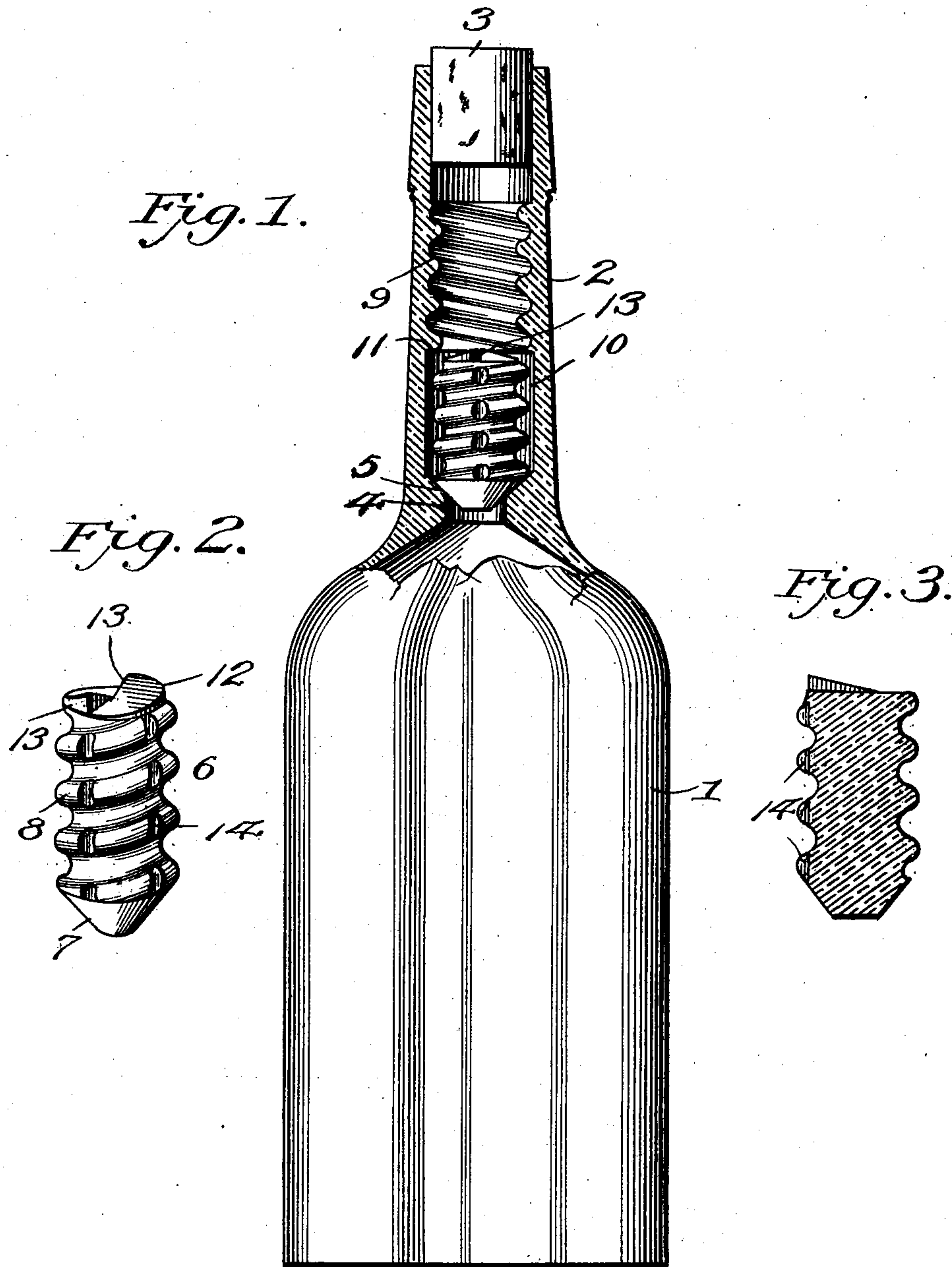


No. 756,200.

PATENTED APR. 5, 1904.

J. BAILEY.  
NON-REFILLABLE BOTTLE.  
APPLICATION FILED JULY 11, 1903.

NO MODEL.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

JEFFERSON BAILEY, OF AUBURN, RHODE ISLAND.

## NON-REFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 756,200, dated April 5, 1904.

Application filed July 11, 1903. Serial No. 165,166. (No model.)

*To all whom it may concern:*

Be it known that I, JEFFERSON BAILEY, a citizen of the United States, residing at Auburn, in the county of Providence and State of Rhode Island, have invented new and useful Improvements in Non-Refillable Bottles, of which the following is a specification.

This invention relates to non-refillable bottles, and has special reference to the construction of the bottle and a valve used in connection therewith, whereby after filling the bottle the valve may be readily inserted and positioned in the neck of the bottle by means of an ordinary screw-driver or similar implement, the subsequent removal of the valve being rendered impossible by reason of its peculiar formation. When the valve is in place, liquid may be poured from the bottle; but the valve, which is automatic, prevents the bottle from being again refilled.

With the above object in view the invention consists in the novel construction, combination, and arrangement of parts, as hereinafter fully described, illustrated, and claimed.

In the accompanying drawings, Figure 1 is a sectional elevation of a bottle containing a valve and constructed in accordance with the present invention. Fig. 2 is a detail perspective view of the valve. Fig. 3 is a sectional view of the valve.

Like reference-numerals designate corresponding parts in all figures of the drawings.

Referring to the drawings, 1 designates the bottle provided with a neck 2, being of the usual form and the end portion of the neck being adapted to receive a suitable stopper 3.

In carrying out the present invention the neck of the bottle is provided adjacent to its junction with the bottle 1 with an annular shoulder 4, the upper surface of which is beveled to form a conical valve-seat 5, which is preferably ground to form a liquid-tight joint with the valve, (shown at 6,) said valve having its lower end formed in the shape of a cone 7, which accurately fits the seat 5 and prevents the introduction of liquid into the bottle after the latter has been emptied.

The valve is exteriorly screw-threaded, as

shown at 8, while the neck 2 of the bottle is correspondingly threaded upon the inside, as shown at 9, to allow the valve to be screwed downward through the threaded portion of the neck until it reaches and lodges in an enlarged, smooth, and unthreaded cavity or chamber 10. This chamber is slightly greater in length than the valve, so as to permit the valve to play a short distance toward and away from the valve-seat for the purpose of allowing the contents of the bottle to be poured off. The chamber 10 terminates at its upper end in a shoulder 11, which limits the outward movement of the valve. The valve is also provided at its outer end with a pair of reversely-beveled lugs 12, comprising radial shoulders 13, facing in opposite directions, so as to be engaged by a screw-driver or similar implement, by means of which the threaded valve may be screwed downward into the neck of the bottle until it reaches the smooth cavity 10. The shape of the lugs 13 renders it impossible for the screw-driver or other implement to turn the valve backward, so as to screw the same out of the neck. Thus after the valve is inserted in the chamber or cavity 10 it cannot be removed.

By inverting the bottle the contents thereof may be poured off, and ordinarily there will be sufficient space around the valve and between the threads thereof to allow the liquid to pass by it. To provide for a more rapid outflow of the liquid, however, the valve is provided with one or more grooves 14, extending lengthwise thereof and vertically through each of the threads 8. When the valve is seated, the ends of the grooves are closed by the contact of said valve with its seat.

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

A bottle having a neck provided with an internally-threaded portion, a smooth-walled valve-chamber located below the threaded portion and terminating in an annular shoulder having a conical valve-seat therein, and a threaded valve adapted to be screwed through the threaded portion of the neck into the valve-chamber, said valve having vertical movement



in the chamber and provided with a cone-shaped lower end to coact with the conical valve-seat, said valve also having one or more grooves arranged in a straight line through  
5 each of its threads, and reversely-beveled lugs projecting from the upper surface of said valve, substantially as specified.

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

JEFFERSON BAILEY.

Witnesses:

JOHN J. WILBURN,  
JOSEPH L. SANDERS.