

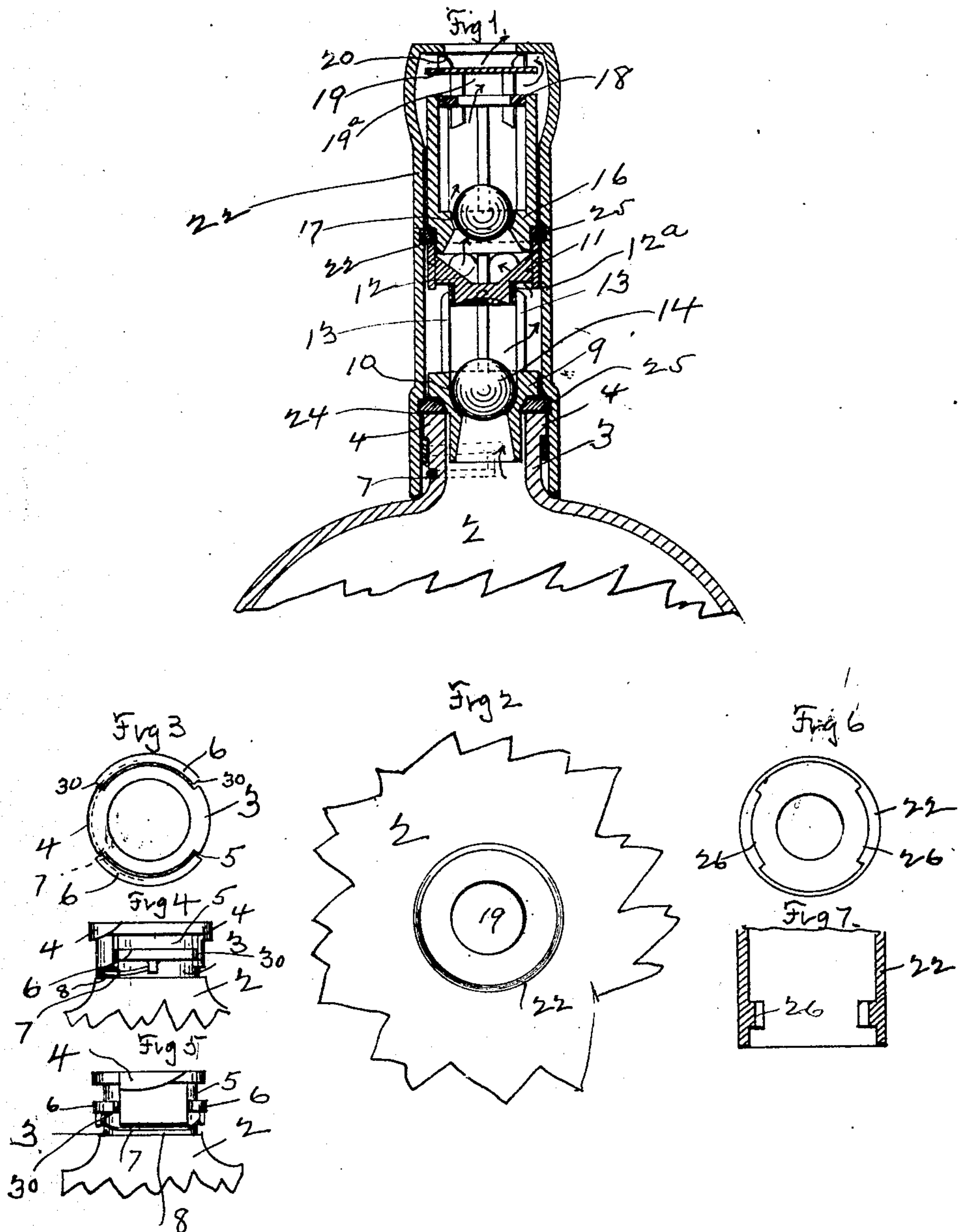
A. V. WESTERLUND.

NON-REFILLABLE BOTTLE.

APPLICATION FILED NOV. 22, 1907. RENEWED OCT. 6, 1908.

919,664.

Patented Apr. 27, 1909



Witnesses:
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UNITED STATES PATENT OFFICE.

AUGUST V. WESTERLUND, OF NEW YORK, N. Y., ASSIGNOR TO WESTERLUND-LUDERER BOTTLE COMPANY, A CORPORATION OF NEW YORK.

NON-REFILLABLE BOTTLE.

No. 919,664.

Specification of Letters Patent.

Patented April 27, 1909.

Application filed November 22, 1907, Serial No. 403,287. Renewed October 6, 1908. Serial No. 456,414.

To all whom it may concern:

Be it known that I, AUGUST V. WESTERLUND, citizen of the United States, and resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Non-Refillable Bottles, of which the following is a specification.

My invention relates to non-refillable bottles, and in the improvements in construction and arrangements of devices hereafter described, whereby it is designed to provide more effective apparatus to prevent refilling bottles, reference being had to the accompanying drawings in which,

Figure 1 is a vertical section of the neck of a bottle showing my apparatus connected therewith. Fig. 2 is a top view of Fig. 1. Fig. 3 is a detached plan view of the short neck of the bottle. Fig. 4 is a side view of Fig. 3. Fig. 5 is another side view of Fig. 3 showing the segmental wedge lug. Fig. 6 is a detached inverted view of the detachable neck of the bottle. Fig. 7 is a side view of Fig. 6.

The bottle 2 has formed integrally with it the short neck 3. The outside of this short neck is provided with two segmental wedge shaped lugs 4, and spaces 5 between the lugs into which is placed the locking rings 6, united by the spring rod or wire 7 passing under the lugs, and into the groove 8. The short neck holds the lower ball holder 9, consisting of a ball seat 10, a removable upper part or cap 11, having openings 12 and ribs 13, which connect the upper ring 12^a to the lower part.

14 is the ball.

The lower ball holder 9 supports the upper ball holder 16 consisting of the ball bearing part 17 and detachable cap 18 having disk 19. The cap is provided with openings 19^a and the disk is provided with lugs 20 on the upper face.

These parts are assembled as shown in Fig. 1, and over them is placed the detachable neck 22 made of glass or metal. The upper and lower ball holders are held within the neck by the shoulders 23—24, which act against the washers 25 on upper and lower holder. To hold this neck to the short neck of the bottle so that it cannot be removed, I provide the detachable neck 22 with interior lugs 26. Now by passing these lugs over the short neck between the segmental

wedge shaped lugs 4 of the short neck and then turn the said detachable neck around so that the lugs 26 will ride upon the wedge surface of the segmental lugs 4, they (the lugs 26) will draw the detachable neck down in place and get in front of the edges 30 of the locking rings making it impossible to turn back the detachable neck in order to remove it from the bottle, because the said lugs 26 will strike against the edges of the locking rings.

All the parts can be made of glass if necessary.

The operation of the two ball holders is readily understood. When the bottle is tipped the balls will open their seats, and permit the liquid to flow through the holders as shown by arrows and out through the aperture in the top of the detachable neck.

The disk 19 prevents the apparatus being tampered with through the top opening in the detachable neck.

What I claim is—

1. In a non-refillable bottle the short neck, integral with the bottle and having wedge-shaped lugs, the locking rings and means of connecting the said rings consisting of a round piece of spring metal.

2. In a non-refillable bottle the short neck integral with the bottle and having wedge-shaped lugs, the locking rings suitably united, and the detachable neck having interior lugs which act upon the wedge-shaped lugs of the short neck and also against the edges of the locking rings, to lock the detachable neck to the short neck of the bottle.

3. In a non-refillable bottle a lower ball holder having a ball seat, upper ring and connecting ribs, a detachable cap having openings and suitably joined to the lower ball holder.

4. In a non-refillable bottle an upper ball holder having ball seat and a detachable cap with a disk.

5. In a non-refillable bottle, the upper and lower ball holders, the washers placed over the upper and lower ball holders, the detachable neck placed over the upper and lower ball holders, and having shoulder-grooves to receive the washers and means of holding detachable neck to neck of bottle.

6. In a non-refillable bottle and in combination, the upper and lower ball holders, the washers placed over upper and lower ball holders, the detachable neck having interior

lugs, and shoulder-grooves to receive the washers of ball holders, means of holding detachable neck to neck of bottle, consisting of wedge shaped lugs on short neck of bottle, and the locking rings, suitably connected, and placed over the short neck of bottle.

Signed at New York in the county of New

York and State of New York this 6th day of November A. D. 1907.

AUGUST V. WESTERLUND.

Witnesses:

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