

(No Model.)

W. VON BOKERN.
BOTTLE.

No. 529,821.

Patented Nov. 27, 1894.

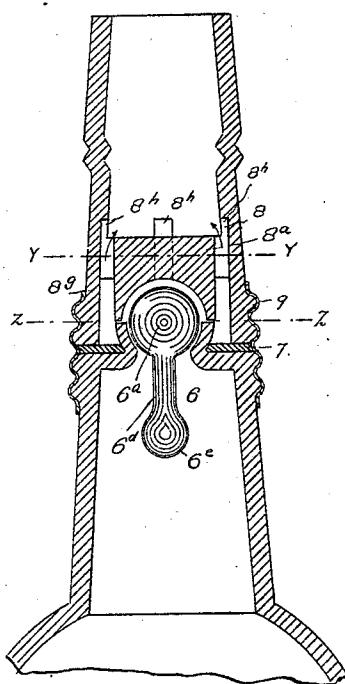


Fig. 1.

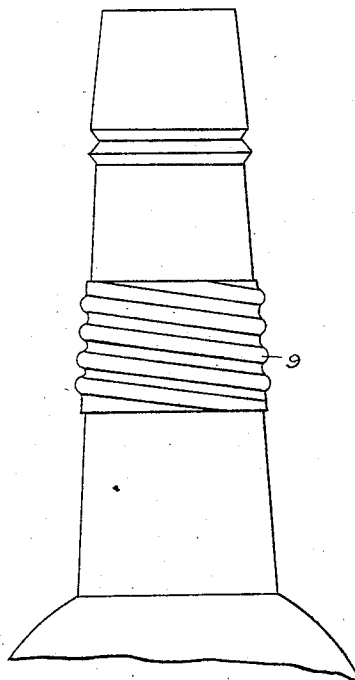


Fig. 2.

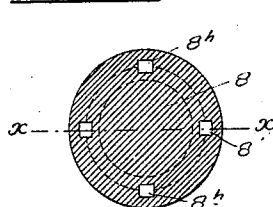


Fig. 3.

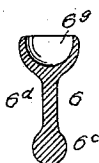


Fig. 6.

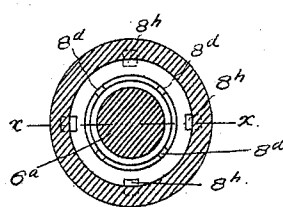


Fig. 4.

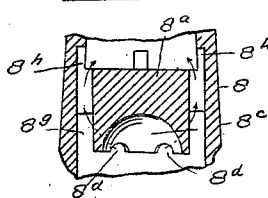


Fig. 5.

WITNESSES.

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WILLIAM VON BOKERN, OF DENVER, COLORADO, ASSIGNOR OF ONE-HALF
TO HERBERT HEATLEY, OF SAME PLACE.

BOTTLE.

SPECIFICATION forming part of Letters Patent No. 529,821, dated November 27, 1894.

Application filed March 12, 1894. Serial No. 503,384. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM VON BOKERN, a citizen of the United States of America, residing at Denver, in the county of Arapahoe and State of Colorado, have invented certain new and useful Improvements in Bottles; and I do 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, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in bottles, and the object of the improvement is to provide a bottle which when once emptied, cannot be refilled; and to this end, my improved bottle consists of the features herein-after described and claimed, all of which will be fully understood by reference to the accompanying drawings, in which is illustrated an embodiment thereof.

In the drawings, Figure 1 is a longitudinal section taken through the detachable nozzle and neck of the bottle on the line $x-x$, Figs. 3 and 4, the valve being shown in elevation. Fig. 2 is a side elevation of the neck and detachable nozzle, the connecting sleeve being shown in place. Fig. 3 is a section taken on the line $y-y$, Fig. 1. Fig. 4 is a section taken on the line $z-z$, Fig. 1, looking upward. Fig. 5 is a section taken on the line $x-x$, Fig. 3. Fig. 6 is a detail view of a modified form of valve.

Similar reference characters indicate corresponding parts in these views.

Let the numeral 5 designate the neck of the bottle provided with the integral seat 5^a for the valve 6, and shouldered around said seat to support the packing ring 7, preferably composed of cork. The valve is composed of the enlarged head 6^a, the bulb-shaped lower extremity 6^b, and the elongated neck 6^d connecting the two extremities. The lower part 6^c is preferably made as large as is consistent with its passing through the aperture surrounded by the valve-seat; in other words, the lower part of the valve is made quite heavy to the end that it may retain its seat securely when the bottle is in an upright po-

sition. The upper part of the valve may be formed cup-shaped as shown at 6^s in Fig. 6, whereby if an attempt is made to refill the bottle, the cup will first receive the liquid and have a tendency to hold the valve more securely in place.

The nozzle 8 is formed separate from the neck 5, and connected therewith by means of a screw sleeve 9, the adjacent extremities of the connected parts being correspondingly threaded to receive the sleeve. The nozzle is provided with an integral depending safety-cap 8^a adapted to engage the top of the valve-seat when the nozzle is in place. The cap is pressed integral with the lower part of the nozzle, and recessed or hollowed out as shown at 8^c on its lower surface to receive the upper part of the valve, the cavity being large enough to allow the valve to move away from its seat to permit the liquid to escape when the bottle is suitably tipped or inverted. Around the concavity 8^c, the cap is provided with recesses or apertures 8^d which afford an escape for the liquid between the cap and the seat when the bottle is tipped, and the valve unseated.

Between the cap and the lower part of the nozzle there is a space 8^e surrounding the cap. From this space, lead small orifices 8^h which are formed or punched by the mold or matrix around the top of the cap to afford a passage from the space 8^e to the upper part of the nozzle above the cap. The orifices 8^h are formed in the glass between the nozzle proper and the upper part of the safety cap, and are preferably located intermediate the recesses 8^d to afford a greater security against the possibility of inserting an instrument from the outside for the purpose of tampering with the valve. With the exception of the apertures 8^h, the upper part of the cap and the nozzle are solid as shown in Fig. 3. In assembling the parts of the bottle, the valve is first placed in position, and the cork washer or packing ring 7 placed around the seat. The lower edge of the nozzle is then placed upon the washer, after which the nozzle is attached to the neck by means of the screw sleeve 9, which is cemented on after the bottle is filled.

It will thus be seen that my improved bot-

tle consists of few parts, and at the same time embodies the necessary elements of security against refilling.

Having thus described my invention, what
5 I claim is—

In a bottle, the combination of the body part having a valve seat formed integral with its neck extremity, and the valve engaging said seat, of the nozzle having a safety cap formed
10 integral therewith and covering the valve, the cap and nozzle being so constructed that there is a space around the lower part of the

cap, a passage way from the opening in the neck to said space, and another passage way from said space to the space in the nozzle 15 above the cap, and suitable means for connecting the neck and nozzle, substantially as described.

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

WILLIAM VON BOKERN.

Witnesses:

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