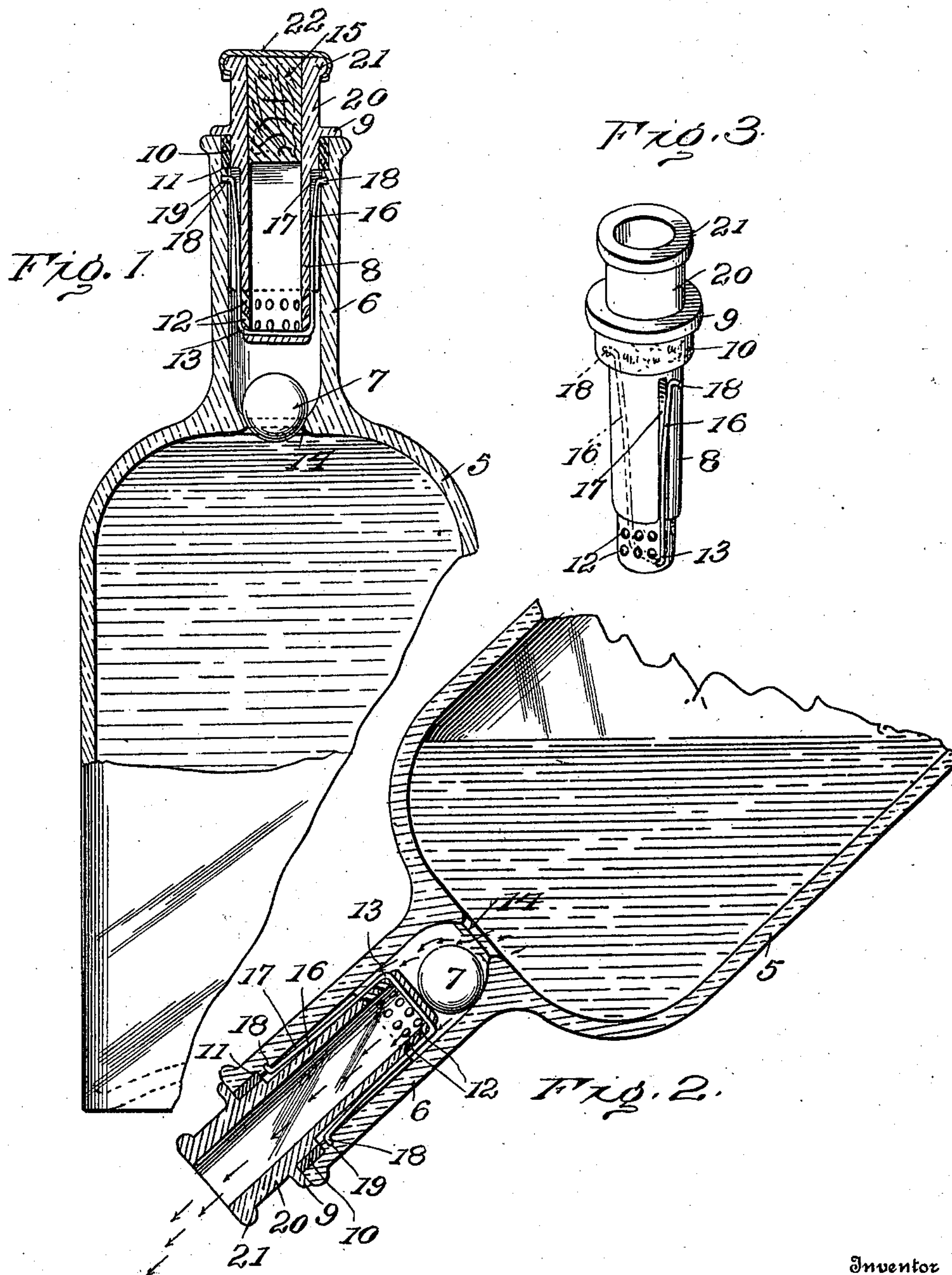


F. B. LOCKE.
NON-REFILLABLE BOTTLE.
APPLICATION FILED JUNE 9, 1909.

963,302.

Patented July 5, 1910.



Witnesses
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UNITED STATES PATENT OFFICE.

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NON-REFILLABLE BOTTLE.

963,302.

Specification of Letters Patent.

Patented July 5, 1910.

Application filed June 9, 1909. Serial No. 501,206.

To all whom it may concern:

Be it known that I, FRANK B. LOCKE, citizen of the United States, residing at Sharpsville, in the county of Mercer and State of Pennsylvania, have invented certain new and useful Improvements in Non-Refillable Bottles, of which the following is a specification.

This invention relates to non-refillable bottles and has for its object to provide a comparatively simple and inexpensive bottle of this character, the construction of which is such as positively to prevent an unauthorized person from fraudulently refilling the same with an inferior grade of goods to that originally contained in the bottle.

A further object of the invention is generally to improve this class of devices so as to increase their utility, durability, and efficiency, as well as to reduce the cost of manufacture.

Further objects and advantages will appear in the following description, it being understood that various changes, in form, proportions, and minor details of construction may be resorted to within the scope of the appended claim.

For a full understanding of the invention and the merits thereof and also to acquire a knowledge of the details of construction and the means for effecting the result, reference is to be had to the following description, and accompanying drawings, in which:

Figure 1 is a vertical sectional view of a non-refillable bottle constructed in accordance with my invention; Fig. 2 is a similar view showing the bottle in vertical position to permit the discharge of the contents thereof; Fig. 3 is a perspective of the casing detached.

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

The improved bottle forming the subject matter of the present invention, comprises a body portion 5 having a tapered neck 6, the interior walls of which are formed with a valve seat 7, preferably disposed at the juncture of the neck with the body portion, as shown. Seated in the neck of the bottle, is a correspondingly shaped tubular casing 8 having its upper end provided with a laterally extending flange 9 adapted to overhang and bear against the top of the neck 6 when

the casing is positioned therein, there being a gasket 10 formed of cork, rubber, or other yieldable material surrounding the tubular member at the flange 9 and adapted to bear against an annular shoulder 11 in the neck of the bottle, thereby to prevent leakage. The lower end of the tubular casing 8 is reduced at 12 and provided with a plurality of transverse perforations 13 preferably inclined downwardly and through which the liquid in the bottle is discharged when the latter is inverted.

Disposed beneath the perforated end of the tubular member 8, is a ball valve 14 preferably formed of glass or other heavy material and which normally engages the seat 7 so as to prevent an unauthorized person from introducing liquid into the interior of the bottle when the stopper 15 is removed and the bottle is placed in upright or normal position.

As a means for locking the tubular casing 8 within the neck of the bottle, there is provided a U-shaped spring member 16 preferably formed of wire and having its intermediate portion extending through a transverse opening in the reduced portion 12 of the casing 8 and its opposite ends extended upwardly within seating grooves or kerfs 17 formed in the exterior walls of the casing 8 and its terminals bent laterally to produce locking lips 18 adapted to enter suitable sockets or depressions 19 formed in the neck of the bottle beneath the shoulder 11.

The upper end of the tubular member 8 is reduced to form a vertically disposed nipple 20 adapted to receive the stopper 15, the free end of the nipple being provided with an annular bead 21 which engages the crimped edge of a metallic cap 22. If desired, however, the cap 22 may be dispensed with, and said cork retained within the nipple 21 by a binding wire or by placing a small quantity of wax or other adhesive material over the top of the cork.

Attention is here called to the fact that by inclining the openings 13 downwardly in the direction of the valve, a person is effectually prevented from surreptitiously introducing a hook, wire, or other suitable tool within the neck of the bottle and through the openings in the tubular casing in an attempt to unseat the valve and refill the bottle.

Thus it will be seen that by removing the cap 22 and stopper 15 and subsequently in-

verting the bottle, the valve 14 will unseat itself, thus permitting the liquid in the bottle to flow through the openings 13 and tubular casing 8 into a glass or other suitable receptacle designed to receive the same. When the bottle is returned to normal or upright position, the valve will automatically seat itself and thus prevent an unauthorized person from introducing liquid through the valve seat in an attempt to fraudulently refill the bottle.

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

A non-refillable bottle having a tapered neck provided with a valve seat and having its interior wall at the upper end cut-away to form an annular shoulder, a tapered tubular casing seated in the neck of the bottle and having its lower end reduced and provided with a series of perforations inclined downwardly in the direction of the bottom of the bottle, there being a transverse opening formed in the reduced extension of the casing and a vertically disposed seating groove formed in the exterior walls thereof,

a U-shaped wire, having its intermediate portion extending through the transverse opening of the casing and its opposite ends extending upwardly within the seating groove and provided with terminal lips for engagement with the depressions in the walls of the neck of the bottle, a valve engaging the seat, the upper end of the tubular member being provided with an integral nipple having a laterally extending flange for engagement with the top of the neck, a yieldable packing ring disposed beneath the flange of the nipple and engaging the shoulder in the neck of the bottle, a stopper seated in the nipple, and a metallic cap having a crimped edge engaging the free end of said nipple and forming a housing for the stopper.

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

FRANK B. LOCKE. [L. s.]

Witnesses:

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