

(No Model.)

J. H. REELAND.
NON-FILLABLE BOTTLE.

No. 535,554.

Patented Mar. 12, 1895.

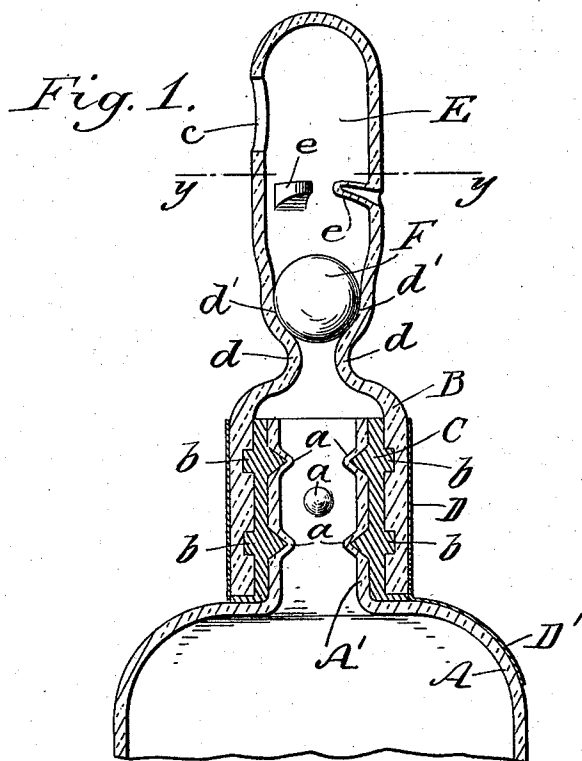


Fig. 3.

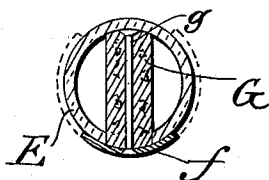


Fig. 2.

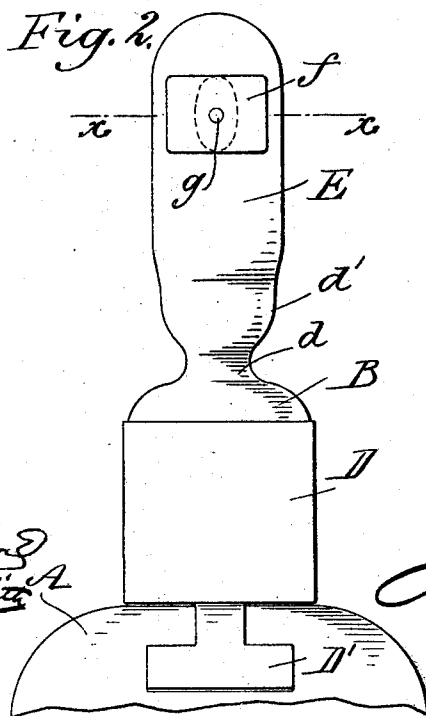


Fig. 4.



WITNESSES:

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JOHN HENRY REELAND, OF NEW YORK, N. Y.

NON-FILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 535,554, dated March 12, 1895.

Application filed January 5, 1895. Serial No. 533,892. (No model.)

To all whom it may concern:

Be it known that I, JOHN HENRY REELAND, a subject of the Queen of England, and a resident of New York, county of New York, and State of New York, have invented certain new and useful Improvements in Non-Fillable Bottles, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which
10 similar letters of reference indicate corresponding parts in all the figures.

This invention relates to non-fillable bottles, and has for its object to provide a device of this character which will comprise but a
15 single auxiliary piece or attachment for the bottle in addition to the closing valve and stopper.

The invention consists in the novel construction and arrangement of parts hereinafter fully described.

Referring to the drawings: Figure 1 is a longitudinal central section of the upper portion of a bottle embodying my invention. Fig. 2 is a front elevation of the same. Fig. 3 is a
25 transverse section upon the line $x-x$, Fig. 2. Fig. 4 is a similar section upon the line $y-y$, Fig. 1.

In the practice of my invention, I form the neck A' of the bottle A with a plurality of
30 conical indentations a in its sides, preferably six in number, and of any desired size, to form recesses in the exterior of said neck A' . Loosely mounted upon this neck is an auxiliary neck B , having two interior annular
35 grooves b therein, and secured to the bottle neck A' by means of a plaster of paris filling C , which enters the indentations a and the grooves b from the top of the neck A' to the
40 bottom thereof, and when it becomes hardened, rigidly secures the auxiliary neck B to said bottle neck. Any attempt at tampering with the junction of the parts is readily detectible by the consumer by securing a sheathing
45 D around the outside of the auxiliary neck B , said sheathing having an extension D' which is secured to the bottle A and being either of indestructible material, or of paper or the like suitably marked with the trade
50 mark or name of the bottler.

Projecting upwardly from the auxiliary neck B , which is formed of glass, is a cylin-

dric head E , closed at the top, and having in one side thereof beneath said top an elliptical aperture c . The lower portion of this cylinder is downwardly inclined and at its
55 junction with the main portion of the neck B is inwardly projected to form shoulders d , above which said cylinder is internally curved at d' to form a seat for the ball valve F . At about the center of the cylinder E are formed
60 three horizontal projections or lugs e , extending radially from the inside of said cylinder. The cylinder is of much thinner material than the main portion B , being thereby more
fragile.

In the aperture c is inserted, upon a horizontal plane, as shown in Fig. 3, a sectionally elliptical cork or stopper G , projecting to and bearing against the opposite side of the
65 cylinder E , and having a segmental plate f secured upon the outside thereof by means of a headed spindle or rod g extending longitudinally therethrough. This stopper is
70 frictionally inserted in the aperture c , the plate f closing and sealing the outside of the said aperture, and enabling its removal, this
75 being effected by raising the ends of said plate, which is preferably constructed of spring metal, and thereby securing a convenient grasp to withdraw said stopper. In Fig.
80 2, I have illustrated this plate as projecting to slightly beyond the sides of the aperture c , but the same may also be of such length as to project almost wholly around the cylinder
85 E , as shown in dotted lines in Fig. 3.

The operation of the device will be readily understood from the foregoing description taken in connection with the accompanying drawings. The bottle is first filled with liquid, and a liberal amount of the plaster of
90 paris C placed upon the outside of the neck A' , filling the indentations a therein, and into the auxiliary neck B , filling the annular grooves b therein. The said neck B is then forced upon said bottle neck A' to the
95 bottom thereof, the superfluous plaster being thereupon removed and the sheathing D secured. The stopper G is then inserted in the aperture c as hereinbefore described. When
100 it is desired to wholly or partially decant the contents of the bottle, this stopper is removed and the bottle tilted at the proper angle to

cause the ball F to roll away from its seat until its motion is limited by the lugs e, and the upper portion of the cylinder being widened, the liquid passes around said ball and escapes through the aperture c; and it is to be observed that by reason of this aperture being in the side of the bottle, the flow of the liquid will be uniform, and too rapid egress thereof restricted, thereby preventing a customer from withdrawing too large a quantity of the liquid by a quick movement of the bottle when the bartender's attention is otherwise occupied.

It is further to be observed that by the top or usual mouth of the bottle being closed, the insertion of instruments vertically into the bottle neck to manipulate the valve is prevented, and not only does the stopper G securely and tightly seal the bottle, but furthermore, as with gaseous liquids, danger of the cork being blown out is avoided, as the pressure being upward or longitudinal of the bottle, the cork is not thereby affected.

The valve F prevents filling of the bottle while in any other position than upon a slight downward incline, and if the bottle is inserted in a body of liquid in such inclined or even inverted position, the liquid will not enter by reason of the air within the bottle having no outlet, particularly by reason of the aperture c being in the side. Manipulation of the auxiliary neck is correspondingly impracticable, as the sheathing D prevents access to the plaster filling C, and any attempt to loosen the junction of the neck B with the bottle-neck by turning the same will result only in snapping off the cylinder E immediately beneath the seat d', which being of appreciably less thickness than the main portion of the said neck B, is necessarily fragile.

The advantages resultant from the use of the invention will be manifest to all who are conversant with the general class of devices to which the same appertains.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A non-fillable bottle having a plurality of indentations in its neck, an auxiliary neck surrounding the same and having interior grooves therein, a plaster of paris filling inserted between said bottle neck and auxiliary neck, and entering the indentations and grooves therein to secure the same together, an upwardly projecting cylindrical head formed integrally with said auxiliary neck, having a valve seat formed at its junction with said neck, and integral lugs projecting inwardly and substantially horizontally therefrom near the center thereof, said head having a stopper aperture or mouth in the side thereof, and a valve inserted in said neck, normally resting upon the seat and freely movable to abut against the lugs or projections, substantially as shown and described.

2. A non-fillable bottle having an auxiliary

neck thereon which is closed at the top, and provided with an aperture in the side thereof, a stopper extending transversely through said aperture to bear against the opposite side of the neck, having a plate secured upon the outside thereof to withdraw the same, and a valve inserted in said neck, substantially as shown and described.

3. A non-fillable bottle having an auxiliary neck secured thereto, comprising a main portion, and an integral cylindrical head projecting inwardly at its junction with the main portion to form a valve seat, and provided near its center with inwardly projecting lugs, said head being closed at the top, and provided with an aperture in its side, a stopper extending transversely through said aperture and bearing against the opposite side of the neck, a segmental plate secured to the outside of said stopper by a rod extending therethrough, and formed of spring metal, having the ends thereof extending around said head to clasp the same and secure said stopper, and a valve inserted in said head and freely movable between the seat and the projections thereof, substantially as shown and described.

4. A non-fillable bottle having a plurality of indentations in the exterior of its neck, an auxiliary neck surrounding the same and provided with interior annular grooves, a plaster of paris filling inserted between said bottle neck and auxiliary neck, and entering the indentations and grooves therein to secure the same together, a sheathing surrounding and secured to the exterior of said auxiliary neck to protect the junction thereof, an upwardly projecting cylindrical head formed integrally with said neck, and having a valve seat at its junction therewith, said head being closed at the top, and having an aperture in the side thereof, a stopper inserted transversely through said aperture and secured to the head, a valve sliding in said head, and means for limiting the movement of said valve, substantially as shown and described.

5. A non-fillable bottle comprising a main vessel having a neck in which are formed a plurality of indentations, an auxiliary neck surrounding the same, and having interior annular grooves therein in alignment with said indentations, a plaster of paris filling inserted between said bottle neck and the auxiliary neck from top to bottom thereof, and inserted in the said indentations and grooves to secure said necks together, a sheathing surrounding said auxiliary neck exteriorly and secured thereto, and having a projection or extension which is secured to the side of the bottle, an integral cylindrical head extending upwardly from said auxiliary neck and inwardly projected at its junction therewith to form shoulders, above which said head is downwardly inclined and interiorly curved to form a valve seat, a ball valve normally resting upon said seat and longitudinally movable in said head, integral lugs projecting horizon-

tally and radially from the inside of said head
near the center thereof to limit the movement
of said valve, the said head being closed at the
top, and having an aperture in the side thereof,
5 a stopper inserted transversely through said
aperture and bearing against the opposite
side of the head, a segmental spring metallic
plate secured to the outside of said stopper by
means of a rod extending therethrough said
10 plate surrounding the said head to secure the

said stopper in place, substantially as shown
and described.

In testimony that I claim the foregoing as
my invention I have signed my name, in
presence of two witnesses, this 27th day of 15
December, 1894.

JOHN HENRY REELAND.

Witnesses:

PERCY T. GRIFFITH,
C. GERST.