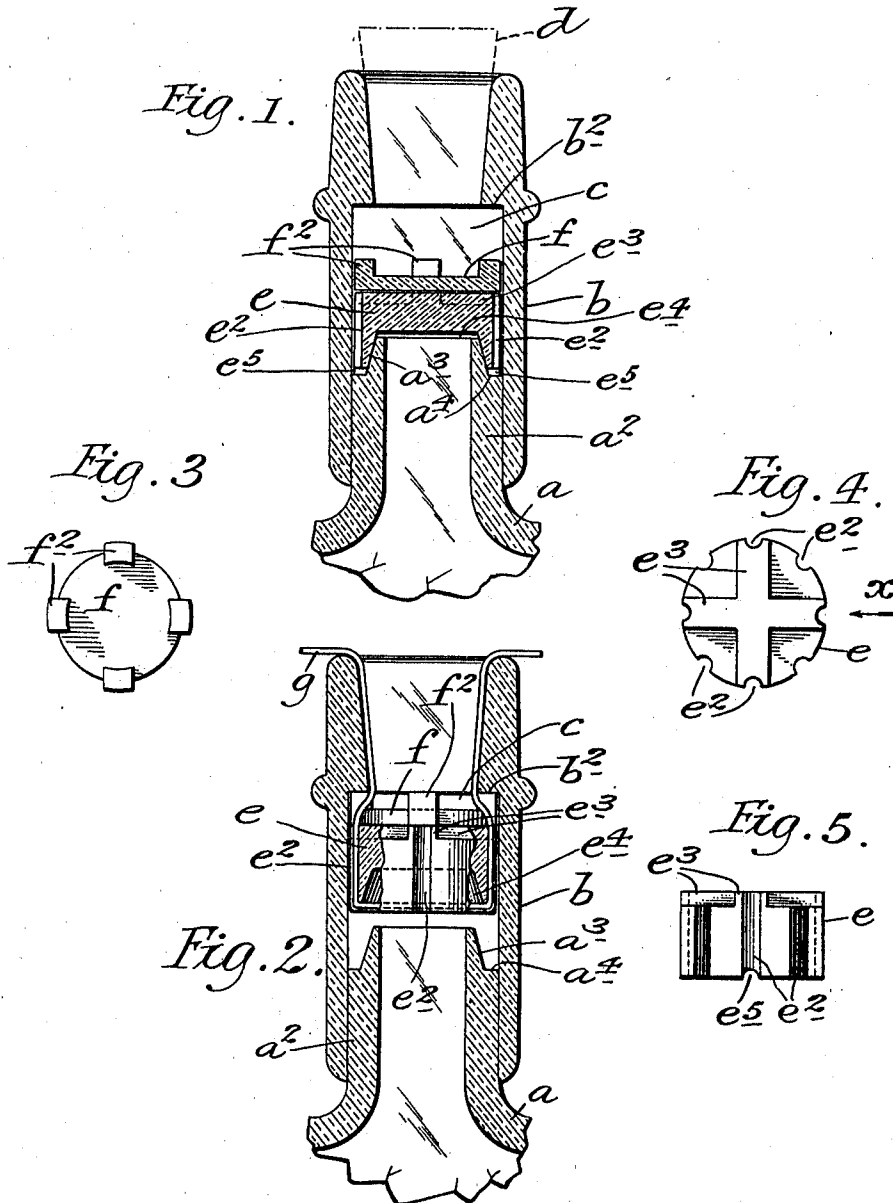


W. J. & H. L. LASHER.
NON-REFILLABLE BOTTLE.
APPLICATION FILED FEB. 7, 1910.

982,506.

Patented Jan. 24, 1911.



WITNESSES:

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UNITED STATES PATENT OFFICE.

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NON-REFILLABLE BOTTLE.

982,506.

Specification of Letters Patent.

Patented Jan. 24, 1911.

Application filed February 7, 1910. Serial No. 542,473.

To all whom it may concern:

Be it known that we, WILLIAM J. LASHER and HARRY L. LASHER, citizens of the United States, and residing at 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, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to bottles, jugs, jars or similar vessels and the object thereof is to provide a vessel of this class with a neck attachment by means of which the vessel when filled and sealed may be emptied of its contents but cannot be refilled or reused.

The invention is fully disclosed in the following specification, of which the accompanying drawing forms a part, in which the separate parts of our improvement are designated by suitable reference characters in each of the views, and in which;—

Figure 1 is a central vertical section of the neck portion of a bottle provided with our improvement; Fig. 2 a similar view but showing the parts in a different position; Fig. 3 a plan view of a valve protecting device which forms a part of the neck attachment; Fig. 4 a plan view of the valve device, and;—Fig. 5 a side view of the valve device shown in Fig. 4.

In the accompanying drawing we have shown at *a* the top part of the body of a bottle provided with the usual neck *a*² and the outer wall of said neck at the top thereof is beveled downwardly and outwardly as shown at *a*³ to form an annular valve seat at the bottom of which, in the form of construction shown, is an annular shoulder *a*⁴.

Secured to and inclosing the neck *a*² of the bottle and extending a predetermined distance above the same is a supplemental neck member *b*, which forms, above the neck member *a*² of the bottle, a cylindrical chamber *c*, the diameter of which is equal to the outer diameter of the neck *a*², and in the top portion of the supplemental neck member *b* is an annular shoulder *b*², and the top of said supplemental neck member is adapted to be closed by an ordinary plug or stopper *d* in the usual manner.

Within the valve chamber *c* and movable therein is placed a valve device *e* which is

shown in section in Fig. 1, and plan and side views of which are given in Figs. 4 and 5. The valve device *e* is cylindrical in cross form, and is adapted to move vertically in the supplemental neck member *b*, and in the sides thereof are vertical grooves *e*², and the top thereof is provided with transverse raised members or bars *e*³ forming radial spaces with which said grooves communicate, and in the bottom of said valve device is a recess *e*⁴, the side walls of which are beveled outwardly to correspond with the bevel of the valve seat *a*³, and in the bottom of the side portions of said valve device are preferably formed radial recesses *e*⁵ which correspond with and register with the recesses *e*² in the sides of said valve device. We also place in the chamber *c* over the valve device *e* a circular guard plate *f* which is also movable in the chamber *c* and of slightly less diameter than said chamber and the sides of which are provided with lugs or projections *f*² which extend above the said plate.

The supplemental neck member *b* may be secured to the neck *a*² at *b*³ in any desired manner or by any of the well known processes, and the operation will be readily understood from the foregoing description when taken in connection with the accompanying drawing and the following statement thereof.

In practice the supplemental neck member *b* with the valve device *e* and guard device *f* therein is secured to the neck *a*² of the bottle, and in this operation a cord, fine wire, or similar device *g* is passed around the said valve device and guard plate *f* as shown in Fig. 2, and the ends thereof carried out of the top of the supplemental neck and held so that the valve device *e* will be raised above its seat as shown in Fig. 2. The bottle *a* may then be filled by pouring liquids in through the supplemental neck *b* and when said bottle is filled in this way the cord or other device *g* is drawn out and the valve device *e* and guard plate *f* drop into the position shown in Fig. 1 and the supplemental neck *b* is then closed by the plug or stopper *d* in the usual manner.

Whenever it is desired to empty the bottle, or to discharge a part of its contents, the plug or stopper *d* is removed and the

bottle is inverted or tilted, and in this operation the valve *e* and guard plate *f* drop forward or downward until the lugs *f*² of the guard plate strikes on the annular shoulder *b*² in the supplemental neck *b*, and the contents of the bottle are free to flow out around said valve and guard plate, and this operation may be continued or repeated until the bottle is entirely emptied. If an attempt be made to refill the bottle by pouring liquids therein and by holding said bottle in an upright position the valve and guard plate will at once drop into the position shown in Fig. 1 and no liquids can enter the bottle; and said valve and guard plate may, if desired, be made to serve as floats and this construction would prevent the filling of the bottle by holding it in an inverted position and forcing liquids therein.

The object of the guard plate *f* is to prevent an instrument of any kind from being inserted into the supplemental neck so as to interfere with the operation of the valve device *e* in an attempt to pour liquids into the bottle, and while we have shown and described the preferred form of our invention it will be apparent that changes therein and modifications thereof may be made within the scope of the appended claims, without departing from the spirit of our invention or sacrificing its advantages.

Having fully described our invention

what we claim as new and desire to secure by Letters Patent, is;—

A bottle or similar vessel provided with a main neck member, the top portion of which is formed into a conical valve seat, a supplemental neck secured to said main neck member and extending above the same and in the top portion of which is an annular shoulder, a valve device placed in the supplemental neck member and movable therein and the bottom of which is provided with a recess around which is a depending conical flange adapted to be seated on and inclose said conical valve seat, said valve device being cylindrical in form and the sides thereof being provided with grooves some of which communicate with radial spaces in the top thereof and a guard plate placed on the valve device and movable with said valve device and provided at its perimenter with radial and upwardly directed projections and adapted to strike against said annular shoulder.

In testimony that we claim the foregoing as our invention we have signed our names in presence of the subscribing witnesses this 5th day of February 1910.

WILLIAM J. LASHER.
HARRY L. LASHER.

Witnesses:

B. M. RYERSON,
C. E. MULREANY.