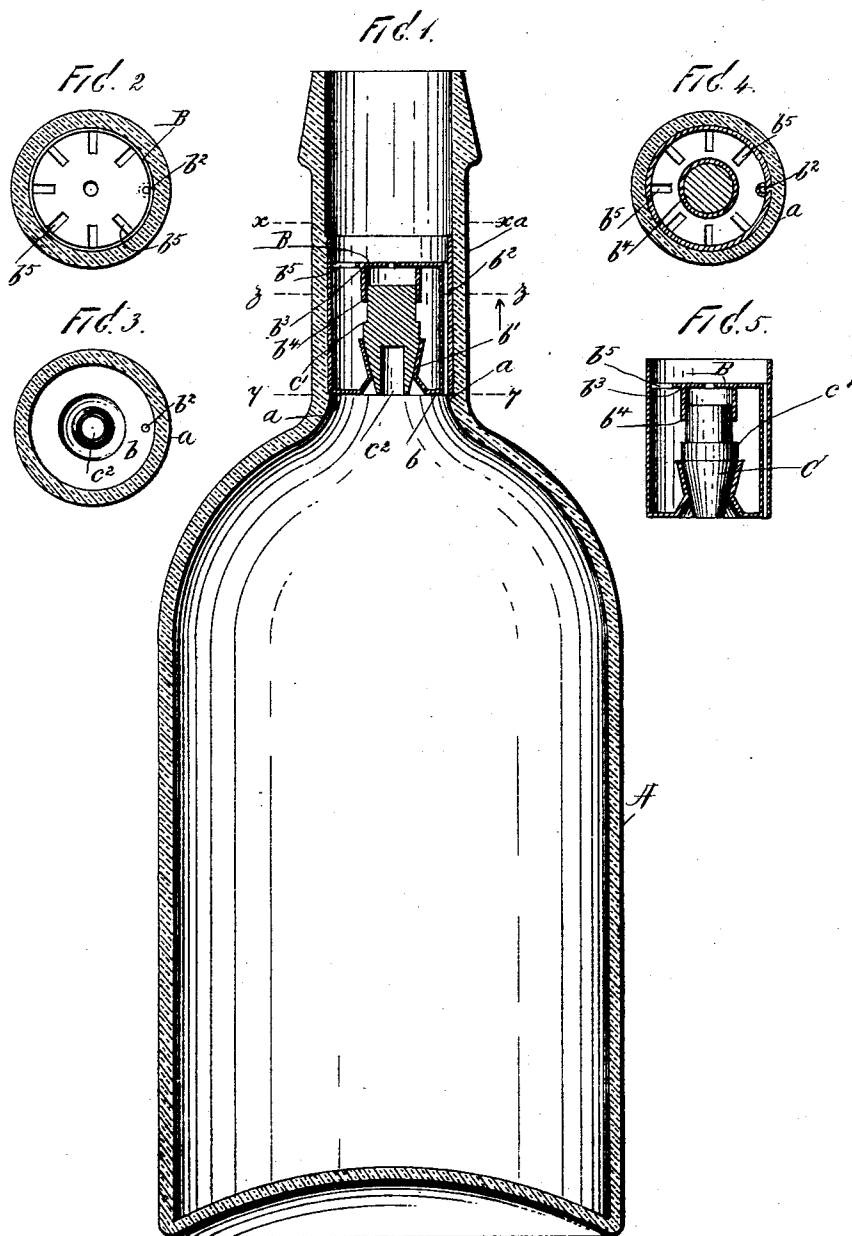


(No Model.)

W. C. SHERMAN.
BOTTLE.

No. 580,061.

Patented Apr. 6, 1897.



WITNESSES:

John Buckler,
C. G. Smith.

INVENTOR

William C. Sherman,
BY
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ATTORNEYS.

UNITED STATES PATENT OFFICE.

WILLIAM CONNER SHERMAN, OF ORLANDO, FLORIDA, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, OF FIVE-TWELFTHS TO CHARLES LORD, JOHN B. NEEDHAM, MAURY ERSKINE BISHOP, AND ABIAH EDWIN HESTON, OF SAME PLACE, AND DAVIS L. FERGUSON, OF JACKSONVILLE, FLORIDA.

BOTTLE.

SPECIFICATION forming part of Letters Patent No. 580,081, dated April 6, 1897.

Application filed October 29, 1895. Serial No. 567,302. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM CONNER SHERMAN, a citizen of the United States, and a resident of Orlando, in the county of Orange and State of Florida, have invented certain new and useful Improvements in Bottles, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar letters of reference indicate corresponding parts.

My invention relates to bottles, jugs, flasks, and similar articles; and the object thereof is to provide an article of this description which cannot be refilled and which is simple of construction and effective in operation; and with these objects in view my invention consists in the construction, arrangement, and combination of parts, as hereinafter more fully described in the following specification and illustrated in the accompanying drawings, in which—

Figure 1 is a vertical section of a bottle provided with my improvement. Fig. 2 is a horizontal section on the line $x x$. Fig. 3 is a horizontal section on the line $y y$. Fig. 4 is a horizontal section on the line $z z$. Fig. 5 is a vertical section of the plug or attachment, showing the valve in elevation.

Similar letters of reference designate like parts throughout the several views.

In the practice of my invention I provide a bottle A, having an annular inwardly-directed flange or shoulder a , and within the neck a' of the bottle A is secured the plug or cylindrical attachment B, provided with the inwardly-directed portion b , the edges of which are turned upwardly and then outwardly, forming the inclined valve-seat b' , and in one side of said plug is secured a vertical tube or opening b^2 , and near the upper portion of said plug is formed the horizontal portion or cover b^3 , having a depending annular flange b^4 . Said cover b^3 is also provided near the periphery thereof with radial slots b^5 . Mounted centrally within said cylindrical plug is a valve C, having a conical or tapering lower portion c and an annular shoulder or extension c' intermediate of the length of the same, and in the lower or conical portion

of said valve is formed a central bore c^2 or recess, extending a portion of the length thereof. This valve C is adapted to normally rest within a flaring portion b' or valve-seat of the plug B and is adapted to move vertically therein, said cylindrical plug being retained in position between the sides of said valve-seat b' and the depending annular flange b^3 , as shown in Figs. 1 and 5 of the drawings, and the cylindrical plug or attachment is adapted to be inserted within the neck of the bottle after the same has been filled and to rest upon the annular shoulder a' and the lower portion of said neck, being secured in position by means of cement, which when raised to the proper temperature will securely retain the said plug in position and will render the removal of the same impossible.

The operation of the valve is as follows: When the bottle is tilted, the valve slides upwardly within the depending flange b^3 , and the opening formed in the lower portion of the valve-seat is put in communication with the annular chamber surrounding the same and which communicates with the radial slots in the top of cover b , which open in the upper portion of the neck of the bottle; but when the bottle is returned to a vertical position the valve slides downwardly and automatically closes the opening in the valve-seat and prevents the injection of liquid into the bottle, as the liquid will enter said slots and fill the annular chamber surrounding the valve-seat and the valve, but cannot enter the main portion of the said bottle.

The tube or opening b^2 in the side of the plug or attachment provides for the admission of air within the bottle, which is necessary in order that the liquid may flow from the bottle when the valve is unseated.

Various changes and modifications can be made in the construction, arrangement, and combination of the parts without departing from the spirit or scope of my invention.

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

A bottle, the neck of which is provided with an inwardly-directed annular flange near the

lower portion thereof, in combination with a detachable non-refilling attachment, substantially as herein shown and described, composed of a cylinder, the upper end of which
5 is open, and the lower end is provided with a depending flange and with an inwardly-directed annular flange, from which projects upwardly a tubular portion forming an inclined valve-seat, said cylinder having at one
10 side thereof an air-inlet tube, and a solid-rod valve, one end of which is frusto-conical in form and adapted to enter said inclined valve-seat, the opposite end of said valve being cylindrical in form and slightly reduced form-

ing an annular shoulder thereon, a superimposed apertured disk in the top of said cylinder, provided with peripheral slots, to prevent the insertion of an instrument to unseat the valve, all designed and operating as and
15 for the purpose set forth. 20

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 28th day of October, 1895.

WILLIAM CONNER SHERMAN.

Witnesses:

C. GERST,

M. A. KNOWLES.