

(No Model.)

2 Sheets—Sheet 1.

J. C. PATTERSON.  
BOTTLE.

No. 604,193.

Patented May 17, 1898.

Fig: 1

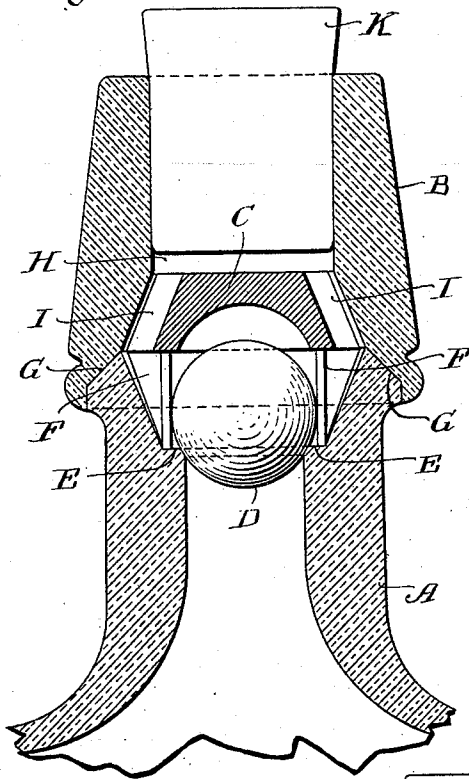


Fig: 2

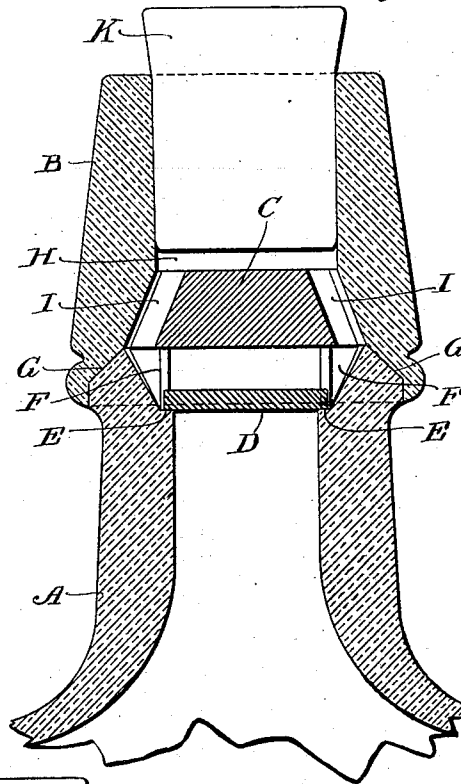
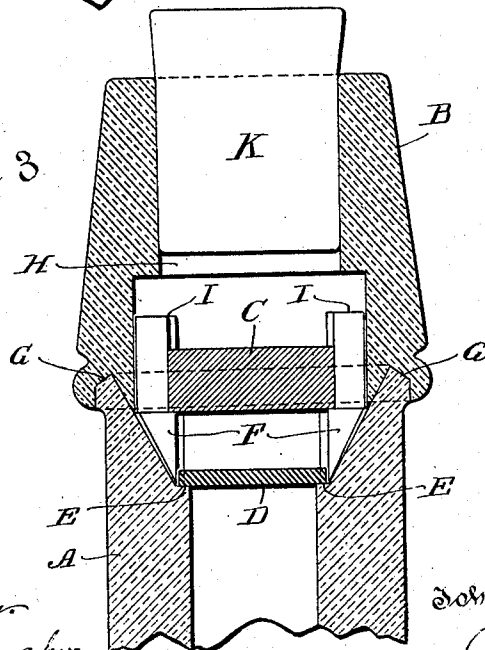


Fig: 3



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Inventor.  
John Curtis Patterson.  
By his Attorney Chas. A. Rutter.

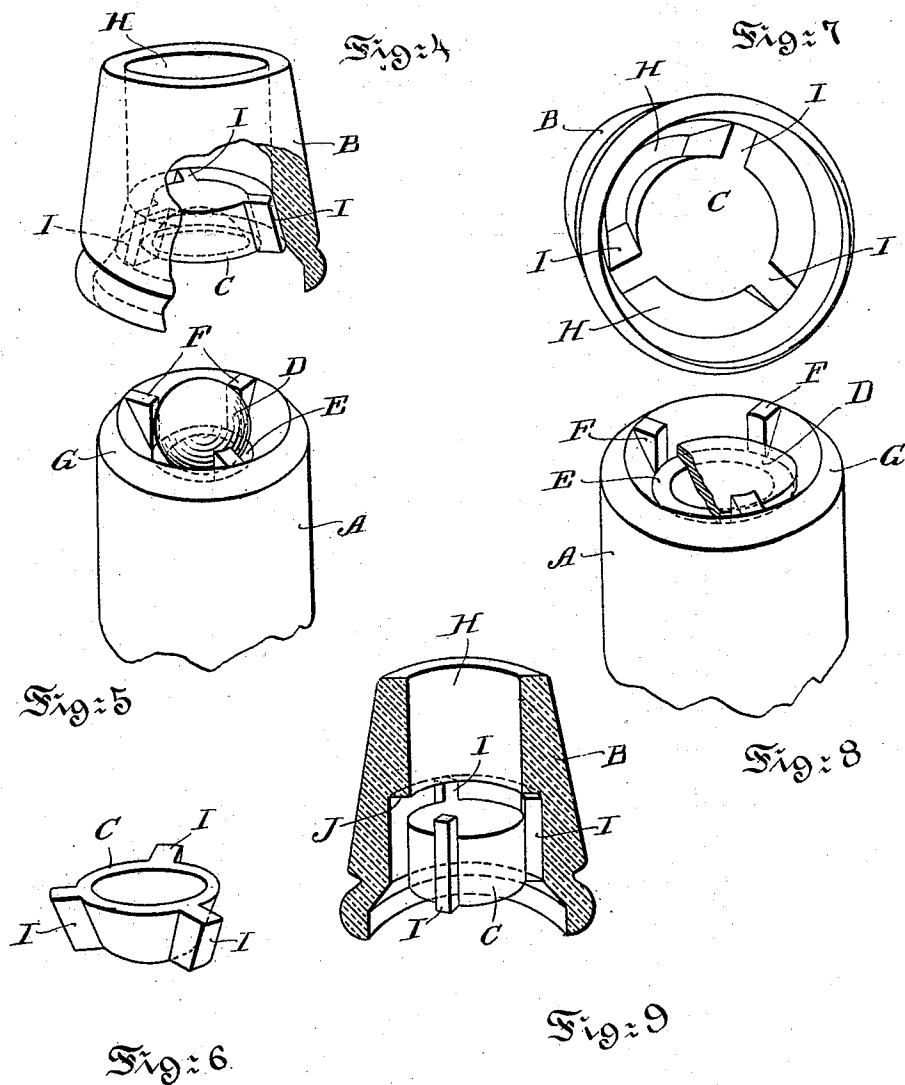
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2 Sheets—Sheet 2.

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W. A. Schaefer.  
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By his Attorney, Chas. A. Rutter.

# UNITED STATES PATENT OFFICE.

JOHN CURTIS PATTERSON, OF PHILADELPHIA, PENNSYLVANIA.

## BOTTLE.

SPECIFICATION forming part of Letters Patent No. 604,193, dated May 17, 1898.

Application filed March 11, 1897. Serial No. 626,926. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN CURTIS PATTERSON, a citizen of the United States, and a resident of the city and county of Philadelphia, State of Pennsylvania, have invented certain new and useful Improvements in Bottles, of which the following is a specification.

My invention relates to improvements in bottles; and the object of my invention is to furnish, in connection with a bottle, an inexpensive and efficient device which will prevent its being refilled after having been emptied.

In the accompanying drawings, forming part of this specification, and in which similar letters of reference indicate similar parts throughout the several views, Figure 1 is a central sectional elevation of the neck of a bottle embodying my invention; Figs. 2 and 3, similar views showing modifications of the invention; Fig. 4, a perspective view, partly in section, of the ferrule, Fig. 1, showing the stop in place; Fig. 5, a perspective view looking downward into the neck of the bottle, Fig. 1, the ferrule being removed; Fig. 6, a perspective view of the stop; Fig. 7, a perspective view looking upward from the under side of the ferrule, Fig. 2; Fig. 8, a perspective view looking downward into the neck of the bottle, Fig. 2, showing the valve partly broken away, the ferrule being removed; and Fig. 9, a perspective view, partly in section, of the ferrule, Fig. 9, showing the stop in place.

My improved bottle is made in four pieces—the bottle proper, A, the ferrule B, a stop C, and a valve D. The upper end of the neck of the bottle A carries the valve D and is furnished with a seat E for this valve. It is also furnished with lugs F, which guide the valve D to and from its seat and which also serve to engage the bottom of the stop C, as hereinafter described. The upper outer side of the neck of the bottle is beveled, as shown at G, and the upper part of the inner side is preferably flared outwardly, having an inverted conical surface, as shown in Figs. 1, 2, 5, and 8, to form a chamber for the valve.

The ferrule B, which is, as heretofore described, a separate piece, has its under end so formed as to receive the upper end of the neck, to which it is adapted to be secured by cement of any suitable kind—white or red

lead or silicate of soda, for instance—and the under part of its bore H is chambered out to receive the stop C, while the upper part of its bore is smaller and adapted to receive the usual cork K.

The stop C is furnished upon its outer sides with projecting lugs I, which engage the walls of the chamber in the ferrule, in which the stop is placed, and to which they may be cemented, if desired, and the bottom of this stop is adapted to engage the tops of the lugs F in the neck to prevent the stop from falling from place when cement is not used.

The valve D may be a spherical piece of glass, as shown in Fig. 1, or it may be simply a flat disk of glass, as shown in Figs. 2 and 3. If it is spherical, the under end of the stop C is hollowed out to receive it, as shown in Fig. 1, when emptying the bottle; if a disk, the bottom of the stop would be flat, as shown in Figs. 2 and 3.

The liquid having been poured into the bottle, the valve D is next placed upon its seat. The stop C is now put in place, its bottom resting on the top of the lugs F, carried by the bottle, and the ferrule B is placed upon the neck, to which it is cemented firmly. When the ferrule is in place, the outer edges of the lugs I, carried by the stop, engage the inner sides of the bore of the ferrule, and in order to prevent any movement of the stop when the ferrule is in place the lugs on the stop, as well as the walls of the ferrule, are preferably tapered, as shown in Figs. 1, 2, 5, and 8, and engage one another along their entire length; but, if desired, the chamber in the ferrule, which contains the stop, may be cylindrical, as shown in Fig. 3, and the stops made to engage the walls, as shown. In this case the upper end of the chamber would be furnished with a shoulder J, against which the lugs on the stop would bear to prevent movement of the stop while in place.

The stop C serves a twofold purpose: First, it prevents a too great movement of the valve D from its seat, and, second, it so shuts off the hole in the ferrule that it is impossible to tamper with the valve by a wire or otherwise when the ferrule is in place. For the latter purpose the solid body of the stop has a diameter at least as great as the bore for the cork. The passages around the stop between

the lugs F and I are therefore irregular and serve to prevent the valve from being tampered with. When the bottle is inverted so as to pour out the liquid, the valve D leaves its seat and rests against the bottom of stop C, and the liquid escapes around the sides of the stop between the lugs I. After the bottle has been emptied it cannot be refilled unless the ferrule be removed, because the valve D closes off the opening in the neck whenever the bottle is raised to a position which would permit the flow of liquid into it, and the stop C prevents an instrument being inserted to hold the valve in a raised position.

15 If the ferrule has been properly cemented to the bottle in the first instance, it cannot be well removed without breaking either the ferrule or the bottle.

Having thus described my invention, I claim—

The combination with a bottle having a valve-seat formed in its neck, a chamber of

inverted-cone shape above said valve-seat, integral inwardly-projecting lugs F upon the sides of said chamber, and a valve adapted to said seat; of a ferrule B having its lower end fitted to the upper end of the bottle-neck, a substantially cylindrical bore in its upper end adapted to receive a cork, a chamber of larger diameter than said bore at its lower end; and a stop C in said latter chamber, said stop having a solid body resting upon the lugs F and as large in diameter as the bore for the cork and being provided with projecting lugs I which conform to the wall of said enlarged chamber, whereby irregular passages are formed around the stop and direct access to the valve is prevented, substantially as described.

JOHN CURTIS PATTERSON.

Witnesses:

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CHARLES A. RUTTER.