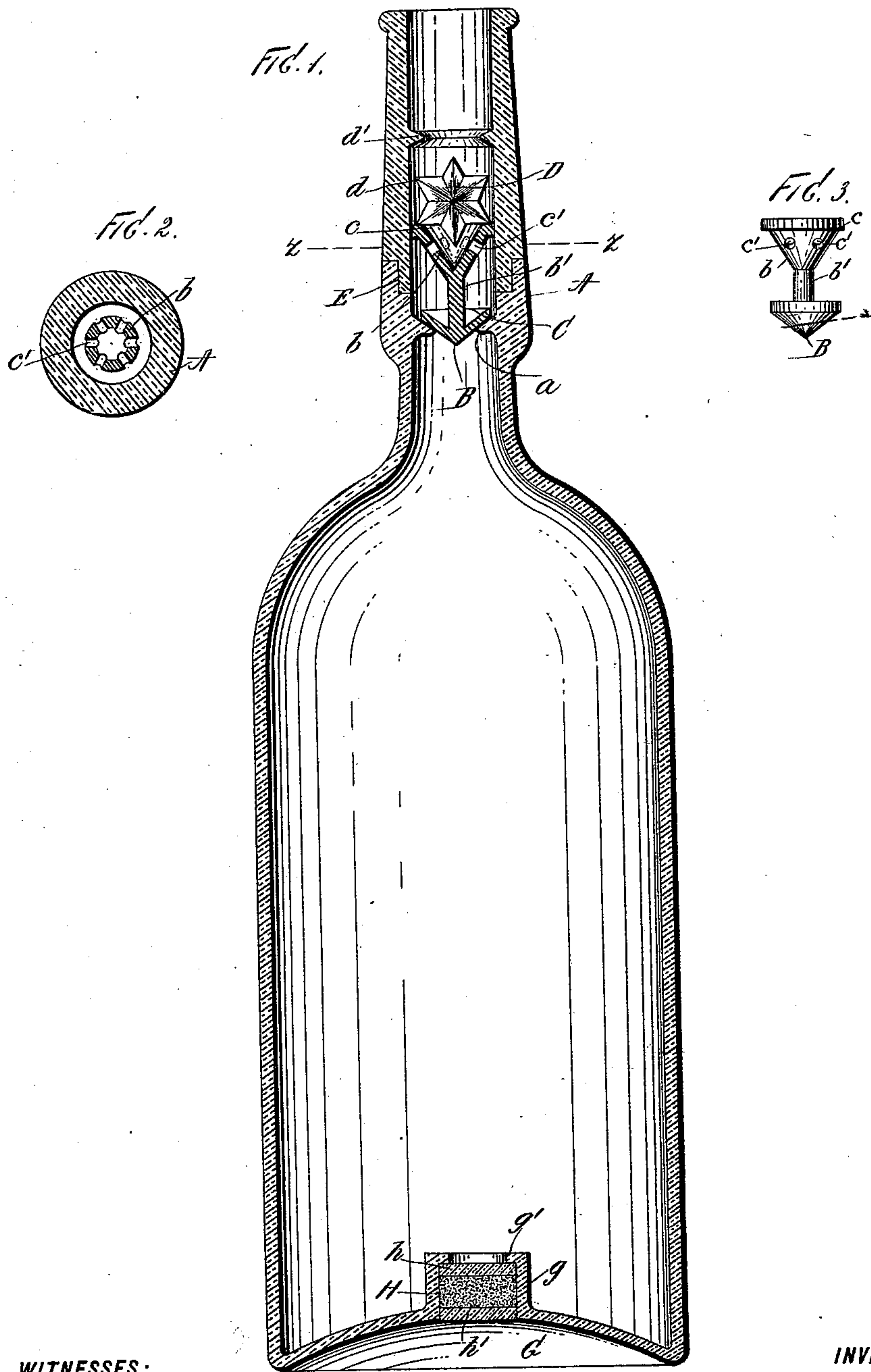


(No Model.)

H. C. PEASE.
BOTTLE.

No. 561,275.

Patented June 2, 1896.



WITNESSES:

John Buckler,
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INVENTOR

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UNITED STATES PATENT OFFICE.

HENRY C. PEASE, OF SCRANTON, PENNSYLVANIA.

BOTTLE.

SPECIFICATION forming part of Letters Patent No. 561,275, dated June 2, 1896.

Application filed July 30, 1895. Serial No. 557,558. (No model.)

To all whom it may concern:

Be it known that I, HENRY C. PEASE, a citizen of the United States, and a resident of Scranton, county of Lackawanna, and State of Pennsylvania, 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 in all the figures.

My invention relates to bottles, and particularly to that class which are provided with means to prevent the bottle being refilled after it has once been filled and emptied; and the object thereof is to provide a simple construction and arrangement of parts, which can be inexpensively manufactured, to prevent the refilling of a bottle which has once been filled and emptied of its contents, which is especially important to those manufacturers who sell bottled liquors, wines, medicines, table goods, &c.

With these and other equally important ends in view, the invention contemplates a bottle having a valve-seat in the lower portion of the neck thereof, a valve arranged to operate above said seat, a body provided with a number of projections above the valve, and an annular shoulder to hold said valve and body in place; and the invention consists of the combination and arrangement of parts hereinafter described and claimed.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, and in which—

Figure 1 is a vertical central sectional view of a bottle-neck provided with my improvements; Fig. 2, a transverse sectional view on the line 2 2 of Fig. 1, and Fig. 3 a side view of a valve employed.

My invention may be applied to bottles of all kinds, and in the practice thereof I form in the neck A of the bottle an annular valve-seat *a*, which is suitably located and above which is placed a valve consisting of a conical lower portion B, the apex of which is directed downward, a central shank *b'*, and upper cup-shape or flared portion *b*. The lower portion B is provided on its upper side with an annular recess C around the stem or shank *b'*, and the upper portion is also provided with

a central cavity *c*, through the side walls of which are formed small ports or openings *C'*. A body D of irregular form is placed within the neck above the valve and is provided with a number of projections *d*, which extend outwardly approximately to the inner walls of the neck of the bottle, and the said body D and the valve are prevented from slipping out of the neck of the bottle by an annular shoulder *d'*, and, as will be understood, the neck or nozzle of the bottle is adapted to be closed in the usual manner by a cork or other stopper, which is not shown.

My bottle is preferably filled in the first instance by means of an opening in the side thereof, which is not shown, and which is afterward hermetically sealed. I may, however, form the neck of the bottle in separate pieces, as shown at E, and after the bottle has been filled the valve and body D may be placed in position in the neck and the separate parts of the neck united in any desired manner. If, however, the neck of the bottle is formed integral, the valve and the body D may be made of such material as to admit of their being forced past the annular shoulder after the bottle has been filled. I also provide a filling-orifice in the bottom G of the bottle, having an upwardly-directed tubular extension *g*, provided at its top with an inwardly-directed flange *g'*, and this orifice is adapted to be closed by a glass disk *h*, below which the tube *g* is filled in with a body of cement H, below which is placed another glass disk *h'*, the latter when secured in place being non-removable.

The bottle may be filled from either end. If filled through the orifice in the bottom, the separate parts of the neck must first be secured together and the nozzle closed by a cork or stopper in the usual manner, and after the bottle has been filled the orifice in the bottom must be sealed in the manner described, and this is the process I prefer to follow. If the bottle is filled through the neck, however, the bottom orifice is first sealed, after which the bottle is filled, and the separate parts of the neck are secured together with the valve and other parts therein, after which the neck or nozzle will be closed by a cork or stopper.

When it is desired to empty the bottle, it is only necessary to remove the cork or stop-

per and hold the bottle in an inverted or tilted position, when the valve in the neck will leave its seat under the pressure of the fluids in the bottle and the action of gravity, as will be readily understood, and the contents of the bottle will flow around the valve, through the ports or openings *c'* in the upper end thereof, and out at the nozzle, as will also be understood.

10 If an attempt be made to refill the bottle, the valve will at once be seated and no liquids can be poured thereinto through the neck, and this operation will be the same in any position in which the bottle can be held to admit of pouring liquids thereinto.

The body D serves to prevent the insertion of any instrument or tool of any kind into the neck of the bottle to interfere with the operation of the valve, and it will thus be seen that I accomplish the object of my invention by means of a construction which is simple in form and operation and comparatively inexpensive.

25 It is evident that changes in and modifications of the construction shown and described may be made without departing from the spirit of my invention or sacrificing its ad-

vantages, and I therefore reserve the right to make all such alterations therein as come within the scope thereof.

30 Having fully described my invention, I claim and desire to secure by Letters Patent—

The combination with a bottle having a tubular opening in the bottom thereof, of the neck provided with inwardly-directed annular flanges, the valve secured between said flanges, and consisting of the pointed lower portion having a concave inner surface, the conical upper portion having an annular shoulder or flange of substantially the same diameter as the interior of the bottle-neck and provided with lateral openings, and the rod connecting said upper and lower portions, and the irregular body above said valve, substantially as described.

45 In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 26th day of July, 1895.

HENRY C. PEASE.

Witnesses:

L. M. MULLER,

C. C. OLSEN.