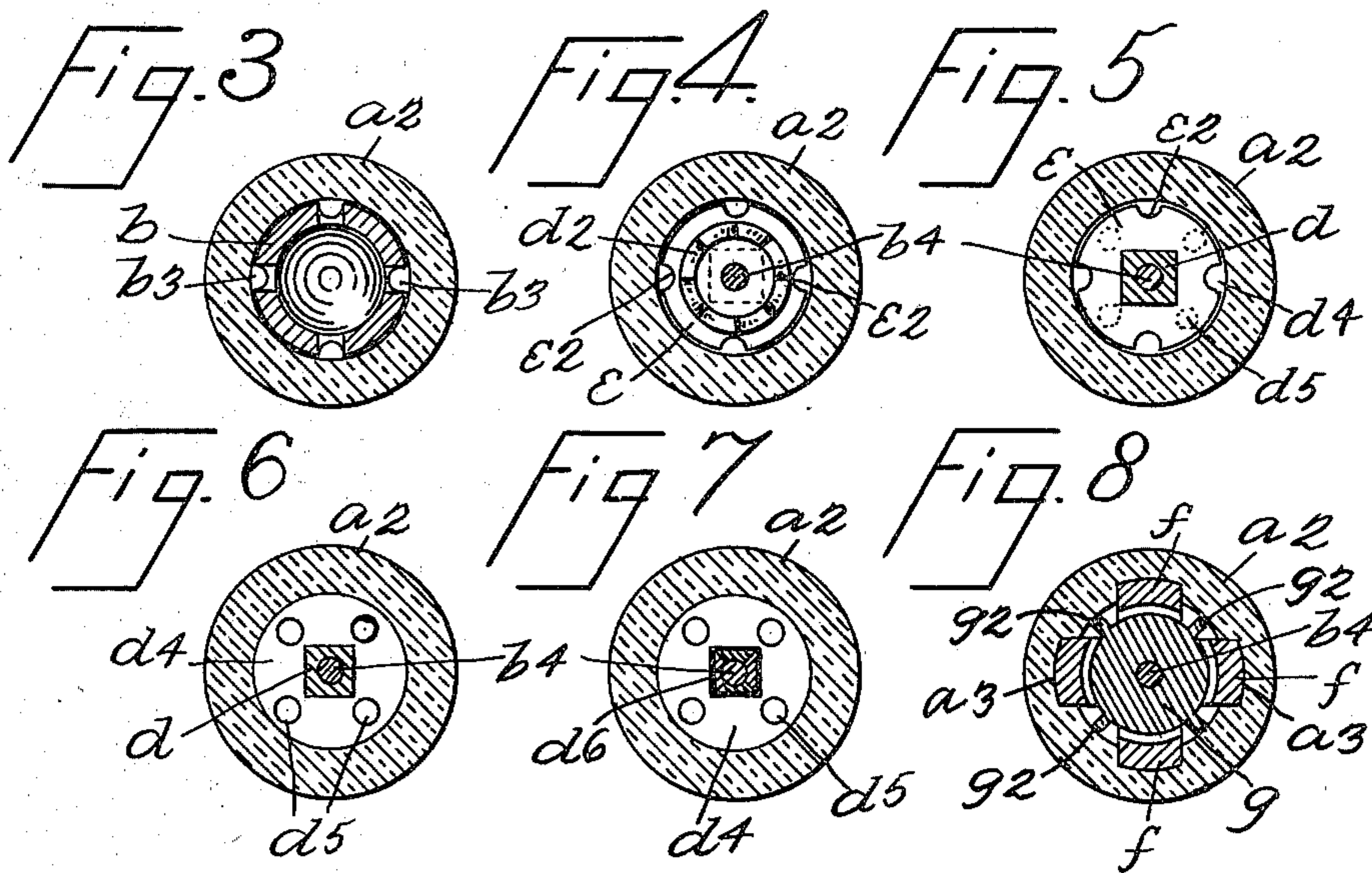
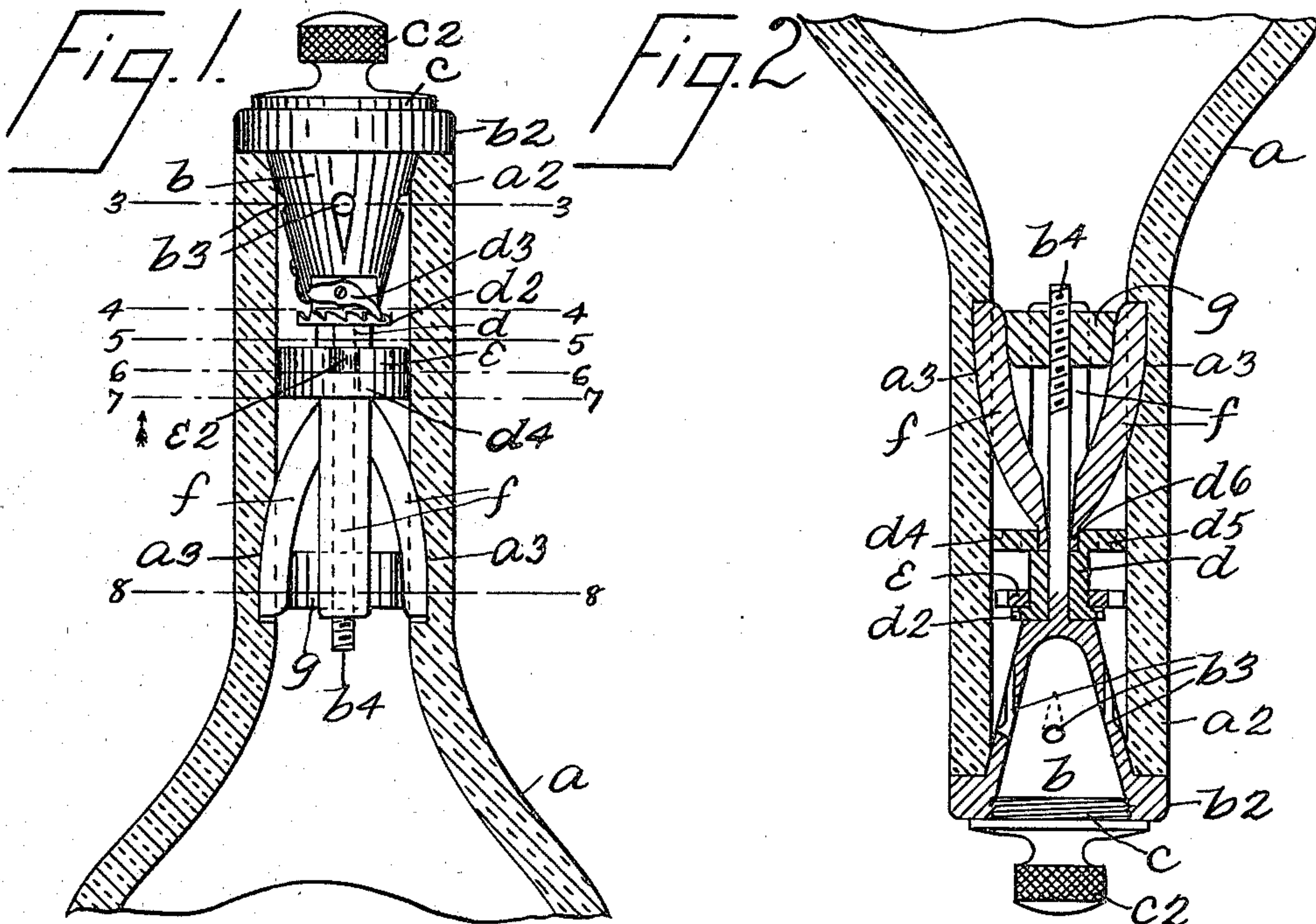


H. PARKER.
NON-REFILLABLE BOTTLE.
APPLICATION FILED DEC. 10, 1902.

NO MODEL.



WITNESSES

J. C. Larsen
F. A. Stewart.

INVENTOR

BY Henry Parker
Edgar & Sons

ATTORNEYS

UNITED STATES PATENT OFFICE.

HENRY PARKER, OF BROOKLYN, NEW YORK.

NON-REFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 735,407, dated August 4, 1903.

Application filed December 10, 1902. Serial No. 134,619. (No model.)

To all whom it may concern:

Be it known that I, HENRY PARKER, a citizen of the United States, residing at Brooklyn, in the county of Kings 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.

10 The object of this invention is to provide a bottle or similar vessel with a neck attachment by means of which after the bottle or other vessel has been filled and the neck attachment applied the bottle or vessel may be
15 emptied of its contents, but cannot be refilled or reused; and with this and other objects in view the invention consists in a neck attachment for bottles and other vessels constructed as hereinafter described and claimed.

20 The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which I have shown my improvement applied to an ordinary bottle and in which the separate parts of
25 said 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 of a bottle provided with my improvement, the attachment constituting the improvement being shown in full lines; Fig. 2, a similar view showing the bottle inverted and showing the improvement also in section; and Figs. 3 to 8, inclusive, are transverse sections on the lines 3-3 to 8-8, inclusive, of Fig. 1.

In the drawings forming part of this specification I have shown at *a* an ordinary bottle provided with a neck *a*², and in the practice
40 of my invention I form in the inner side walls of said neck, and preferably near the bottom thereof, vertically-arranged recesses *a*³, the back walls of which are inclined from the bottom toward the top, as clearly shown in Figs.
45 1 and 2.

In forming my improved neck attachment I provide a hollow conical plug *b*, having a top flange or rim *b*², which is adapted to rest on the top of the neck of the bottle and which is
50 screw-threaded interiorly and provided with a screw-threaded cap *c*, having a milled knob or head *c*², by which it may be screwed into

or detached from the conical plug *b*. The hollow conical plug *b* is also provided in the sides thereof with ports or passages *b*³, and
55 the smaller or inner end thereof is provided with a shank *b*⁴, the end of which is screw-threaded.

Mounted on the shank *b*⁴, adjacent to the hollow conical plug *b*, is a thimble *d*, having
60 a top ratchet-flange *d*², and pivoted to one side of the conical plug *b*, at the inner or smaller end thereof, is a pawl *d*³, which operates in connection with the ratchet-teeth of said flange. The bottom of the thimble *d* is
65 provided with an integral disk *d*⁴, having perforations *d*⁵, four of which are shown, and mounted on said thimble is a movable disk *e*, the perimeter of which is provided with recesses *e*², which form ports or passages which
70 do not register with the ports or passages *d*⁵ in the disk *d*⁴. The thimble *d* is angular in cross-section, and the disk *e* is free to slide thereon, but cannot turn thereon, and the disk *d*⁴ being stationary the ports or passages
75 therein and the ports or passages *e*² in the disk *e* can never be made to register. In the construction shown the ports or passages *e*² in the disk *e* are formed at the edges thereof, while the ports or passages *d*⁵ in the disk *d*⁴
80 consist of holes formed therein; but these ports or passages may be made in any desired manner, the only object in this connection being to so form the same that they will not register.

85 The disk *d*⁴ is so formed as to closely fit the inner walls of the neck *a*², while the disk *e* is so formed as to permit of its free movement on the thimble *d*.

The bottom of the disk *d*⁴ is provided
90 around the shank *b*⁴ with a recess or recesses *d*⁶, and I also provide locking devices *f*, which are preferably curved, as shown in the drawings, and the upper ends of which are inserted into the recess or recesses *d*⁶ and the
95 lower ends of which are adapted to fit in the recesses *a*³, formed in the inner walls of the neck of the bottle, and placed on the screw-threaded end of the shank *b*⁴ of the conical plug *b* is a nut *g*, and said nut is designed to
100 force the lower ends of the locking devices *f* into the recesses *a*³ and lock the attachment into the neck of the bottle. The nut *g* is provided with radial projections *g*² between the

locking devices f , and said nut is operated by turning the conical plug b , and when said plug is turned in one direction the nut g will be drawn upwardly and the locking devices f forced outwardly and the attachment secured in the neck of the bottle; but when said plug is turned in the opposite direction the nut g will move inwardly and the locks f will be released, and the attachment might under these conditions be removed from the neck of the bottle. It is never intended, however, that the attachment shall be removed after it has once been secured in the neck, and in order to prevent this the pawl d^3 and the ratchet-disk d^2 are provided. The pawl d^3 will not prevent the turning of the plug b in order to secure the attachment in the neck of the bottle; but it will prevent the turning of said plug in order to disconnect said attachment from the neck of the bottle.

In practice the bottle is filled with the desired contents and the attachment, with all the parts assembled, is placed in the neck of the bottle, after which the conical plug b is turned to the right, so as to cause the nut g to force the locking devices f outwardly into the recesses a^3 , and the plug b is then closed by the cap c . Whenever it is desired to empty the bottle or discharge a portion of its contents, the cap c is removed and the bottle is tilted or inverted, as shown in Fig. 2. In this operation the disk e assumes the position shown in said figure and the contents of the bottle pass out through the ports or passages in the stationary disk d^4 and through the ports or passages in the movable disk e and through the ports or passages in the sides of the hollow conical plug b , and this operation may be continued or repeated until the bottle is entirely empty. If an attempt be made to refill the bottle by pouring liquids therein in the usual manner, the disk e will at once assume the position shown in Fig. 1 and no liquids can enter the bottle. The foregoing will be the operation in any position in which the bottle can be held in an attempt to pour liquids therein, and, if desired, the disk e may be made so as to serve as a float, in which event liquids could not be forced into the bottle in any position in which the bottle might be held.

Although I have described the parts e and d^4 simply as disks or plates, it will be apparent that these parts serve simply as baffles and valves to prevent the refilling of the bottle, in which operation they will serve in the manner described.

The various parts of this attachment may be made of any preferred material, the only object of this connection being to provide material which will not corrode or be destructively affected by the action of liquids which it is desired to place in the bottle and which will not injuriously affect said liquids.

The attachment is simple in construction and operation and perfectly adapted to ac-

complish the result for which it is intended and may be applied to bottles or vessels of any kind or class having a neck and in connection with which such attachment is desired.

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

1. The combination with the neck of a bottle or similar vessel having recesses in the inner walls thereof, of an attachment comprising a hollow conical plug having side ports or passages and a screw-threaded shank, a thimble placed on said shank and provided with a disk movable longitudinally thereon and having ports or passages and at its lower end with a stationary disk having ports or passages, said thimble being also provided at its upper end with a ratchet-disk and said conical plug with a pivoted pawl which operates in connection therewith, and laterally-movable locking devices the upper ends of which are connected with the bottom portion of the stationary disk with which said thimble is provided, and a nut mounted on the screw-threaded shank of the hollow conical plug and adapted to force said locking devices outwardly, substantially as shown and described.

2. The combination with the neck of a bottle or similar vessel having recesses in the inner walls thereof, of an attachment comprising a hollow conical plug having side ports or passages and a screw-threaded shank, a thimble placed on said shank and provided with a disk movable longitudinally thereon and having ports or passages and at its lower end with a stationary disk having ports or passages, said thimble being also provided at its upper end with a ratchet-disk, and said conical plug with a pivoted pawl which operates in connection therewith, and laterally-movable locking devices the upper ends of which are connected with the bottom portion of the stationary disk with which said thimble is provided, and a nut mounted on the screw-threaded shank of the hollow conical plug and adapted to force said locking devices outwardly, and said hollow conical plug being also provided with a removable cap, substantially as shown and described.

3. An attachment for the neck of a bottle comprising a hollow conical plug having a removable cap at its larger end and a projecting screw-threaded shank at its smaller end, a thimble mounted on said shank adjacent to said plug and provided at its upper end with a ratchet-disk and at its lower end with a transverse disk having ports or passages a pawl pivoted to the conical plug and operating in connection with the ratchet-disk, a movable disk mounted on said thimble and provided with ports or passages, a nut mounted on the end of said screw-threaded shank and locking devices adapted to be operated by said nut when the conical plug is turned, substantially as shown and described.

4. An attachment for the neck of a bottle comprising a hollow conical plug having a removable cap at its larger end and a projecting screw-threaded shank at its smaller end, 5 a thimble mounted on said shank adjacent to said plug and provided at its upper end with a ratchet-disk and at its lower end with a transverse disk having ports or passages, a pawl pivoted to the conical plug and operating in connection with the ratchet-disk, 10 a movable disk mounted on said thimble and provided with ports or passages, a nut mounted on the end of said screw-threaded shank, and locking devices adapted to be operated 15 by said nut when the conical plug is turned, said locking devices being connected with the attachment between the thimble and said nut, substantially as shown and described.

5. An attachment for the neck of bottles 20 comprising a hollow conical plug having ports or passages a removable cap and a screw-threaded shank, a nut placed on said shank, said plug being adapted to be turned in one direction and not in the other, valve devices

arranged between the end of said shank and 25 the conical plug, and locking devices adapted to be operated by said nut, substantially as shown and described.

6. The combination with the neck of a bottle of an attachment comprising a hollow conical plug having side ports or passages and a 30 screw-threaded shank, a nut mounted on the end of the screw-threaded shank, means whereby said plug may be turned in one direction and not in the other, valve devices 35 placed on said shank between said plug and the nut, and locking devices adapted to be forced outwardly by said nut, substantially as shown and described.

In testimony that I claim the foregoing as 40 my invention I have signed my name, in presence of the subscribing witnesses, this 8th day of December, 1902.

HENRY PARKER.

Witnesses:

J. C. LARSEN,

F. A. STEWART.