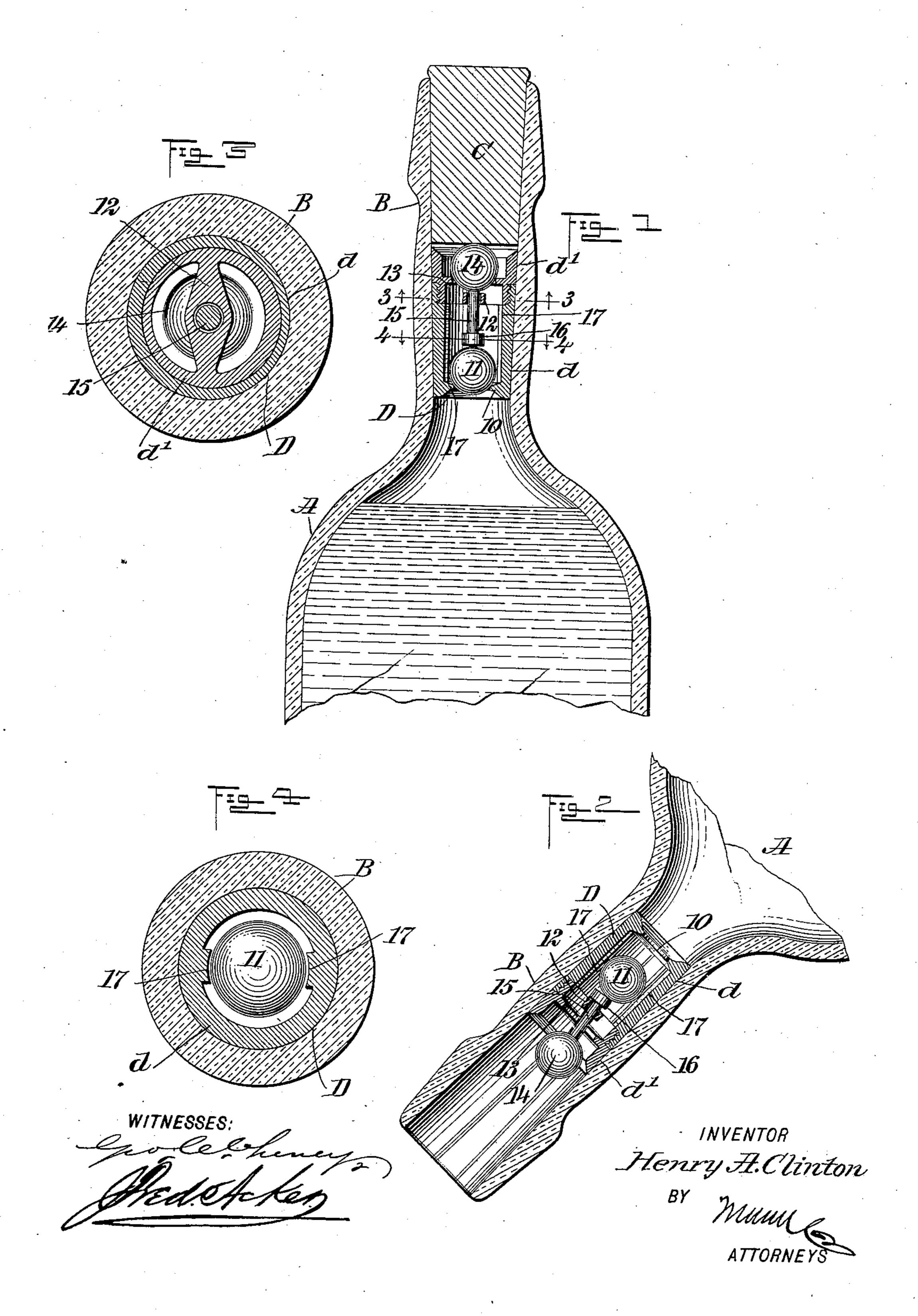
## H. A. CLINTON. NON-REFILLABLE BOTTLE. APPLICATION FILED JULY 23, 1903.

NO MODEL.



## United States Patent Office.

HENRY A. CLINTON, OF NEWARK, NEW JERSEY.

## NON-REFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 742,592, dated October 27, 1903.

Application filed July 23, 1903. Serial No. 166,694. (No model.)

To all whom it may concern:

Be it known that I, Henry A. Clinton, a citizen of the United States, and a resident of Newark, in the county of Essex and State of New Jersey, have invented a new and useful Improvement in Non-Refillable Bottles, of which the following is a full, clear, and exact description.

The purpose of the invention is to provide a simple and economic form of device adapted to be firmly secured in the neck of any ordinary bottle, which device is so constructed as to admit of liquid being freely poured out from the bottle, but which will prevent the bottle from being refilled and offered a second time as an original package.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a vertical section through the upper portion of the body of the bottle and its neck, together with a vertical section through the improved device secured in the neck, the bottle being shown upright. Fig. 2 is a view similar to that shown in Fig. 1, the bottle being shown inclined or in a position to pour out liquid. Fig. 3 is an enlarged transverse section taken practically on the line 3 3 of Fig. 1, and Fig. 4 is also an enlarged transverse section taken practically on the line 4 4 of Fig. 1.

A represents the body of a bottle of ordinary type; B, the neck, and C the cork, which is made to close the top or mouth portion of the neck in the customary manner.

Drepresents what may be termed a "supplemental" or "auxiliary" stopper, which is located below the cork C. This auxiliary stopper D consists of a cylindrical casing constructed in two parts, a body-section d and an upper section d', the two sections being detachably connected, preferably by a thread connection, as is shown in Figs. 1 and 2. The casing, consisting of the said sections d and d', after the sections have been connected is secured in the neck of the bottle by cement or other means. The said casing may be constructed

of any suitable material; but when it is made from glass the outer surface of the said casing of the said auxiliary or supplemental stopper 55 may be ground and made to meet the ground inner surface of the neck. The said casing is of such formation that it will tightly fit in the neck of the bottle and conform to the shape of the interior of the neck.

The casing of the auxiliary or supplemental stopper D is open at the top and at the bottom and at the bottom is provided with an inner annular flange 10, forming a seat for a ballvalve 11. Near the bottom portion of the 65 upper section d' of the said casing a spider 12 is secured, and above the said spider an interior annular flange 13 is preferably made integral with the said upper section d', as is shown in Figs. 1 and 2, which upper flange 13 70 constitutes a seat for an upper ball-valve 14. This upper ball-valve 14 has a stem 15, which extends downward therefrom, terminating, preferably, in a head 16, and when the two ball-valves 11 and 14 are seated the 75 head of the stem of the upper valve 14 is brought in close relation or in contact with the lower valve 11, thus preventing the said lower valve from accidentally shifting and from being reached by a wire or like device. 80 In order that an ample space may be provided for the exit of liquid between the lower ball-valve 11 and the inner wall of the lower or body section d of the said casing of the auxiliary or supplemental stopper, longitudi- 85 nal ribs 17 are produced on the inner face of the said lower or body section D, as is illustrated in Figs. 1, 2, and 4. When the cork or main stopper C is removed from the neck of the bottle and the bottle is inclined to a 90 greater or a less extent, the upper ball-valve 14 will drop outward, becoming unseated, and will fall outward until the head 16 of its stem is brought into engagement with the spider 12, whereupon the lower ball-valve 11 95 will roll to the upper end of the section in which it is located, permitting the liquid in the body of the bottle to flow freely outward through the aforesaid valve device. As soon as the bottle is restored to its upright posi- 100 tion the two valves 11 and 14 immediately seat themselves. The arrangement of the valves is such and the valves bear such relaforce liquid into the bottle for the purpose of refilling the same, even when the bottle has been heated to form substantially a vacuum therein.

The improved auxiliary valved stopper is exceedingly simple, it is durable and effective, and it is economic and can be readily introduced and secured in the neck of any bottle.

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

1. An auxiliary stopper for the neck of a bottle, comprising a casing adapted to be se-15 cured in the neck of a bottle and constructed of detachably-connected sections, the upper section having an upper valve-seat and the lower section a lower valve-seat, the upper section being provided with a spider below

20 the valve-seat therein, a ball-valve adapted to be normally seated on the lower valveseat, and an upper ball-valve on the upper valve-seat, a stem connected with the upper ball-valve, adapted to extend down substan-

25 tially in engagement with the lower ballvalve, passing through the said spider, and a head at the lower or inner end of the said stem, for the purpose set forth.

2. An auxiliary stopper for the neck of a bottle, comprising a casing adapted to be se- 30 cured in the neck of a bottle and constructed of detachably-connected sections, the upper section having an upper valve-seat at about its middle portion and the lower section a valve-seat at its lower end, the upper section 35 being provided with a spider at its lower end, a ball-valve adapted to be normally seated on the lower valve-seat and an upper ballvalve on the upper valve-seat, a stem connected with the upper ball-valve, adapted to 40 extend down substantially in engagement with the lower ball-valve, passing through the said spider and a head at the lower or inner end of the said stem, the said lower section of the casing being provided with longi- 45 tudinal ribs which keep the lower valve spaced from the major portion of the section of the casing in which the said lower ball-valve has movement, as set forth.

In testimony whereof I have signed my 50 name to this specification in the presence of

two subscribing witnesses.

HENRY A. CLINTON.

Witnesses:

J. FRED. ACKER, FRANCIS N. DEDE.