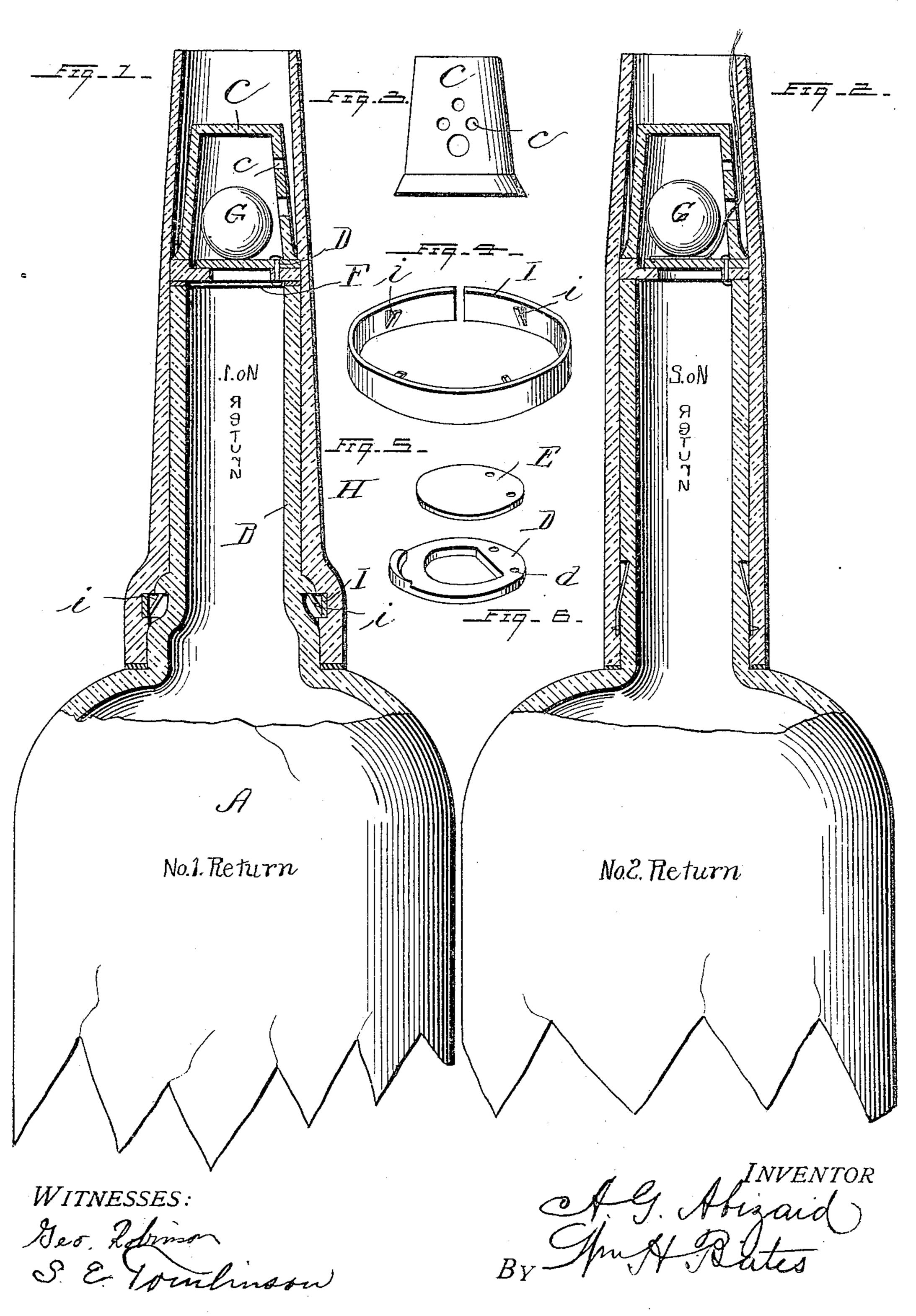
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NON-REFILLABLE BOTTLE.

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Attorney

UNITED STATES PATENT OFFICE.

AMEEN G. ABIZAID, OF WASHINGTON, DISTRICT OF COLUMBIA.

NON-REFILLABLE BOTTLE.

No. 816,699.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, AMEEN G. ABIZAID, a citizen of the United States, residing at Washington, in the District of Columbia, have 5 invented new and useful Improvements in Non-Refillable Bottles, of which the follow-

ing is a specification.

My invention relates to improvements in non-refillable bottles; and the object of the 10 invention is to provide the neck of the ordinary bottle interiorly with a frustum of a cone near the outlet having pouring-openings therein and the usual valve ordinarily used for the purpose of discharging the liquid 15 therefrom and having the exterior surface of the neck provided with an auxiliary neck or sleeve wherein are contained the elements or parts embodied in my improvements.

With these objects in view the invention 20 consists in the construction and combination of the several parts, as hereinafter described, and particularly pointed out in the claim.

In the accompanying drawings, to which reference is made and which fully illustrate 25 my invention, Figure 1 is a front elevation of a bottle, the neck portion thereof being broken away to show the interior construction and the operating-valve. Fig. 2 is a similar view, the construction in this figure hav-30 ing a modified form as to fastening means. Figs. 3, 4, 5, and 6 are details thereof.

Referring to the drawings, A designates a bottle of the ordinary or any approved construction, terminating in a neck B. Upon 35 the top of this neck is located a frustum of a cone C, having discharge-openings, as at c. At the base of this cone is located a circular valve-seat D, having holes d for the reception of screws, by means of which a valve E, made 40 of a suitable flexible or pliable material, such

as leather or rubber, is secured to the valveseat D, the valve-seat D and valve E being shown detached in Figs. 5 and 6 of the drawmgs.

Interposed between the top of the neck B of the bottle and the valve-seat D is a piece of rubber or other flexible material F, by | which leakage is prevented between the valve-seat D and the top of the bottle B.

50 It will be perceived that the auxiliary sleeve H, fitted to and telescoped over the neck of the bottle, tapers in the part extending above the mouth of the bottle, as shown, and that the cone C is formed with an annu-55 lar bottom edge flange, which snugly engages the base of the taper in the sleeve H,

so that when the parts are arranged in position their engagement holds them firmly in

place.

I designates a circular spring having small 60 braces or points i cut upon its inner surface. This spring is located in a circular opening formed by the lower ends of the necks B and H of the bottle, the braces or points of which hold the auxiliary neck to the neck of the 65 bottle proper by means of which displacement of the necks and parts therein is prevented.

As the parts of Fig. 1 in this invention are duplicated in Fig. 2, with the exception of 70 the fastening means of the auxiliary necks and pull-wire secured to the valve, a further description of those parts is herein deemed

unnecessary.

The operation of my invention is as fol- 75 lows: The bottle shown in Fig. 1 is filled before the auxiliary neck is secured upon the integral neck of the bottle. Then the valveseat, the valve, and the frustum of the cone containing the ball are placed in position, to- 80 gether with the auxiliary neck, and secured to the integral neck of the bottle by means of the circular spring having the points projecting therefrom, the said spring being interposed in the opening between the two necks 85 of the bottle in such a manner to hold these parts firmly to the integral neck of the bottle. In pouring out the liquid the bottle is turned upside down and the ball located in the cone will drop by gravity and let the 90 valve upon which it rests open, which will then allow the contents of the bottle to gradually pass into the cone and through the discharge - openings therein into the auxiliary neck near the top and out through the same 95 into any vessel placed to receive it. After the bottle is emptied of all of its contents the valve and ball drop back to their normal position and the bottle is prevented from being refilled again. In Fig. 2 the operation is 100 the same as in Fig. 1, with the exception that the valve upon which the ball rests is pulled and held open by the wire secured to the valve.

If in commerce it is found that the auxil- 105 iary neck is cheaper to use, when it is returned to the factory it may be broken off, and then the other or integral neck can be used, which forms a part of the bottle. These bottles when returned to the factory will be 110 found as cheap as the common bottle, not costing more, however, than one cent addi2 816,699

tional. The parts—i. e., the frustum of cone, the ball, and valve connected with same—are used with the integral neck of the bottle after the auxiliary neck is broken off, and if it is desired to break the bottle these parts above mentioned may be used with other bottles and be cheap just the same.

Having thus described my invention, what I claim, and desire to secure by Letters Pat-

ro ent, is—

A bottle of the kind described comprising a bottle having a neck, a sleeve fitted to and telescoping over the neck and formed to extend above the mouth of the bottle; said 15 extending part made tapering above the

mouth, a packing-ring disposed on the mouth of the bottle, a valve-seat on the packing-ring, a flexible valve secured to the valve-seat, a hollow cone having its base seated on the valve-seat and engaging the sleeve at the 20 base of the taper whereby it is held in place and said cone provided with discharge-openings, and a ball-weight within the cone to bear on the valve.

In testimony whereof I affix my signature 25 in presence of two subscribing witnesses.

AMEEN G. ABIZAID.

Witnesses:

GEO. ROBINSON, S. E. TOMLINSON.