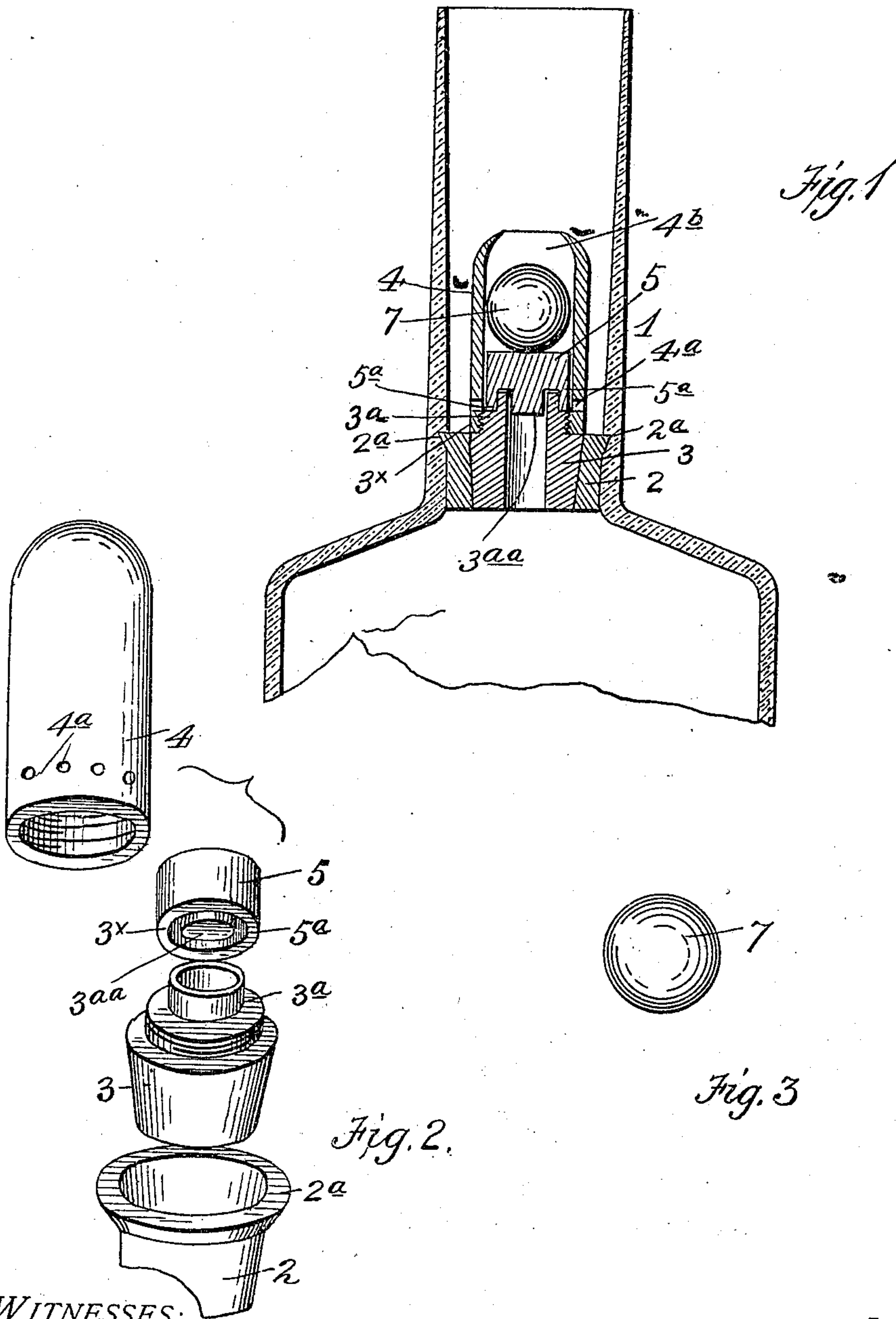


No. 837,665.

PATENTED DEC. 4, 1906.

C. A. CLARK.
NON-REFILLABLE BOTTLE.
APPLICATION FILED FEB. 6, 1906.



WITNESSES:

H. T. McKeever.

J. Miller

INVENTOR:

Charles A. Clark,

By *Sam. Bagge & Co.*
Attorneys.

UNITED STATES PATENT OFFICE.

CHARLES A. CLARK, OF DETROIT, MICHIGAN, ASSIGNOR OF ONE-HALF
TO JOHN M. HART, OF FLINT, MICHIGAN.

NON-REFILLABLE BOTTLE.

No. 837,665.

Specification of Letters Patent.

Patented Dec. 4, 1906.

Application filed February 6, 1906. Serial No. 299,786.

To all whom it may concern:

Be it known that I, CHARLES A. CLARK, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented new and useful Improvements in Non-Refillable Bottles, of which the following is a specification.

My invention relates to improvements in bottle-valves, otherwise commonly termed what are known as "non-refillable" bottles.

As indicated, the invention has for its object principally to guard against the unauthorized refilling of the bottle and to carry out the same in a simple, practical, economic, and effective manner.

Said invention consists of certain structural features, substantially as hereinafter fully disclosed and specifically pointed out by the claim.

In the accompanying drawings, illustrating the preferred embodiment of my invention, Figure 1 is a vertical sectional elevation thereof. Fig. 2 is an enlarged disassembled view of the several constituent parts of the invention exclusive of the ball-valve or baffle. Fig. 3 is a like view of the baffle or globular valve.

In the carrying out of my invention I produce the bottle-neck 1 preferably with a slightly-downward taper or convergence upon its interior, and into said neck is suitably wedged a packing 2, preferably of rubber or elastic material, to permit as it is forced to its final position the lower end lateral extension or flange 2^a thereof to embrace or impinge upon the bottle-neck at its contracted or base end, and thus aid against the outward displacement of said packing, &c.

A metal tubular member 3, forming, as presently seen, a valve-seat, is stepped at its upper end, as at 3^a, and inserted and effectively held in place in said packing, and suitably screwed upon the lower step of the stepped portion 3^a of said tubular member or seat is a much lighter metal tubular member 4, forming practically an extension of the latter for a purpose presently made apparent. Said tubular extension or member 4 is provided in its lower portion about opposite the opening and closing point of the valve presently described with passages or perforations 4^a for the passage of the bottle contents into the space intermediately of the bottle-neck

and the tubular extension or sleeve 4 in the outpouring of said contents.

A valve 5 of peculiar construction housed within the closure or tubular extension 4, is adapted to be seated upon the lower tubular member or seat 3 for guarding the entrance thereto, the latter forming direct communication with the main or body portion of the bottle, as will presently more fully appear. Said valve has an annular channel or socket 5^a opening out through its lower surface and effective to receive the corresponding top step of the stepped portion 3^a of the tubular member 3, thus providing for seating the valve thereon. Said valve has its thus-formed flange 3^x effective to surround the upper end of the member 3 and its central core portion 3^{aa} depending and fitting so closely within the latter and aided by other contributory conditions, as weight, &c., as to prevent the possibility of the passage of sufficient water at that point to float said valve in any attempt to refill the bottle.

Within the tubular member 4 is arranged a baffling-ball 7, preferably of glass, normally resting upon the valve 5, while the upper end of said tubular member is somewhat contracted or converged, as at 4^b, to provide for seating the ball when the bottle is slanted or inverted.

I claim—

A device of the character described, having a tubular seat provided with a stepped upper end, and centrally within said seat with a socket, a valve having an annular channel in its lower end receiving the top step of said seat and a depending corefitting said seat-socket, and a second tubular member connected to said seat at its lower step and having its upper end somewhat contracted or converged and containing a baffling-ball adapted to seat in said upper end when the device is slanted, said second tubular member adapted to guard or inclose said valve and having also near its lower end liquid-delivering openings or passages.

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

CHARLES A. CLARK.

Witnesses:

EDWARD L. SCHOUMAN,
FRANK COURTRIGHT.