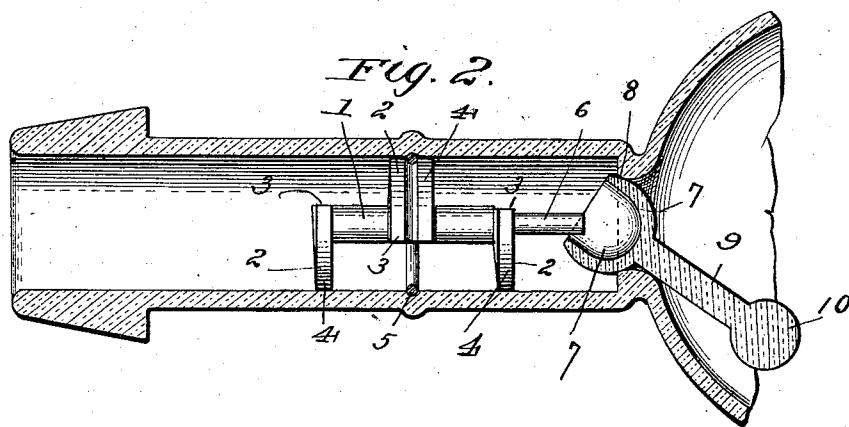
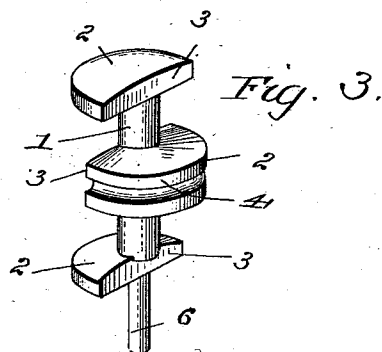
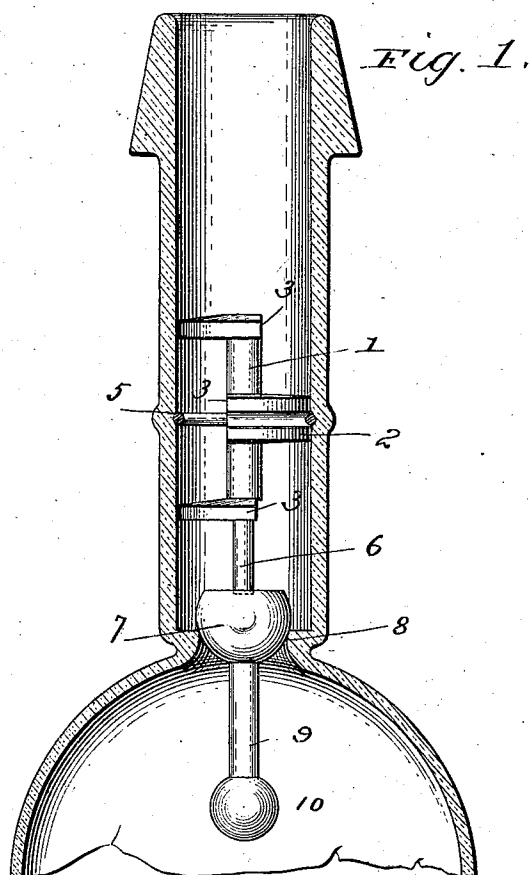


(No Model.)

H. J. BREEZE.
NON-REFILLABLE BOTTLE.

No. 551,576.

Patented Dec. 17, 1895.



Witnesses
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UNITED STATES PATENT OFFICE.

HERBERT J. BREEZE, OF PORT HURON, MICHIGAN, ASSIGNOR OF ONE-HALF
TO HENRY RIEMENSCHNEIDER, OF SAME PLACE.

NON-REFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 551,576, dated December 17, 1895.

Application filed August 3, 1895. Serial No. 558,126. (No model.)

To all whom it may concern:

Be it known that I, HERBERT J. BREEZE, a citizen of the United States, residing at Port Huron, in the county of St. Clair and State of Michigan, have invented certain new and useful Improvements in Non-Refillable Bottles, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to that class of bottles provided with means for preventing them being refilled after the original contents have once been removed, these bottles being employed for valuable liquids, (such as high-class brands of whisky, perfumes, &c.) where it is desirous to prevent the bottles being refilled with spurious articles, as more fully hereinafter set forth.

In the drawings annexed, Figure 1 is a vertical section of the upper part of a bottle in a vertical position containing my improvements; Fig. 2, a similar view showing the bottle in its horizontal position; Fig. 3, a detail perspective view of the trap.

In the drawings the numeral 1 designates a vertical stem of the trap which has formed integral with it three semicircular plates 2 spaced a suitable distance apart on the stem. The plates 2 have their straight edges 3 facing inward and their curved semicircular edges 4 facing outward and adapted to fit within the neck of the bottle, the latter being cylindrical. The intermediate plate 2 projects in the opposite direction from the two remaining plates and its inner straight edge projects beyond the vertical plane of the straight edges of the two end plates, whereby is formed a tortuous passage through the neck of the bottle, which will prevent the insertion of a wire for the purpose of holding open the valve. The intermediate plate is provided with a semiannular groove extending around its curved edge which is adapted to register with an annular groove formed in the interior of the bottle-neck, a spring-ring 5 engaging in said registering grooves for the purpose of locking the trap in its proper position in the neck. Depending from the trap is a central pin 6, which terminates within or near the valve 7, which is hollowed out on its upper side to engage over the pin and be held in place during the pouring action. The valve is substantially hemispherical in shape

and rests normally upon the valve-seat 8, which is formed integrally with the bottle and at the juncture of the neck with the body. The valve-seat is simply an inwardly-extending annular flange having its upper side substantially straight and its under side flaring downward and outward into the body portion of the bottle. Depending centrally from the valve is a stem 9, which carries at its lower end a weight 10, these parts serving to hold the valve normally in its seat and properly roll the valve when the bottle is tilted, as shown in Fig. 2.

It will be observed that the valve 7 is greater than a hemisphere, its upper edge being straight and extending across above the center from which the curved exterior of the valve is described. This construction of the valve, together with a properly-proportioned stem and weight, insures the valve remaining closely in its seat until it is tilted to such an angle that the inlet of liquid will be impossible. It will also be perceived that when liquid is poured from the bottle its pressure will throw the valve onto the pin 6, which will hold it suspended until the outflow of liquid ceases, when the valve will immediately return to its seat by gravity if the bottle be held at an angle sufficiently near the vertical to cause gravitation to act.

Having thus fully described my invention, what I claim is—

The combination of a bottle having a valve seat and an annular groove formed within its neck, a gravitating valve working on said valve seat, and a trap device fitting within the bottle neck above the valve and consisting of a vertical central stem having formed integral with it three semi-circular plates separated from each other and having their outer curved edges fitting the bottle neck and the intermediate plate having its outer curved edge grooved circumferentially and its inner straight edge projecting beyond the straight edges of the end plates, and a spring ring for securing the trap in the neck, substantially as described.

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

HERBERT J. BREEZE.

Witnesses:

CHARLES E. HAND,
EDW. KESSEL.