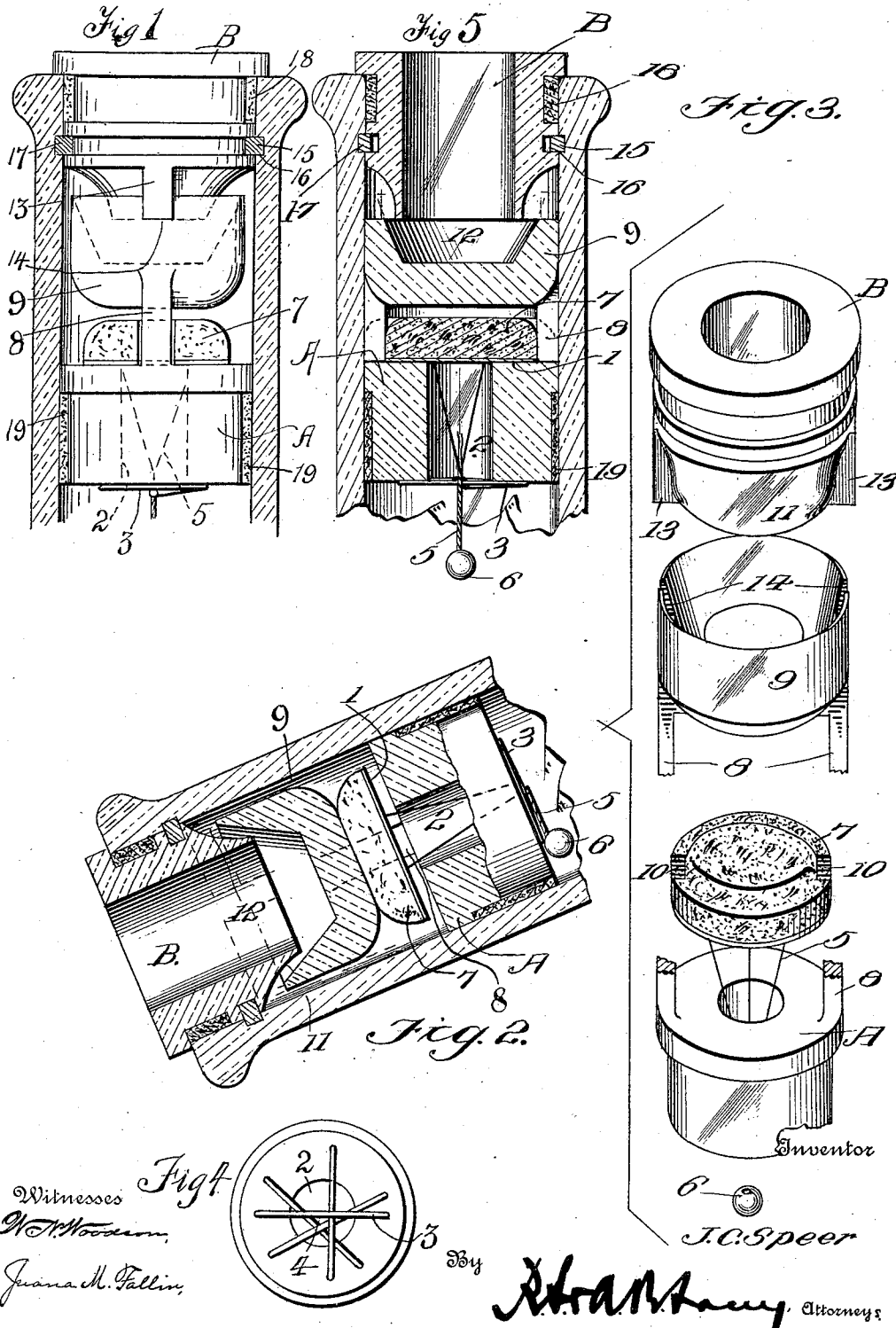


J. C. SPEER.
 NON-REFILLABLE BOTTLE.
 APPLICATION FILED FEB. 18, 1910.

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Patented Dec. 10, 1912.



UNITED STATES PATENT OFFICE.

JHUGH C. SPEER, OF MARKED TREE, ARKANSAS.

NON-REFILLABLE BOTTLE.

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Specification of Letters Patent.

Patented Dec. 10, 1912.

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To all whom it may concern:

Be it known that I, JHUGH C. SPEER, a citizen of the United States, residing at Marked Tree, in the county of Poinsett and State of Arkansas, have invented certain new and useful Improvements in Non-Refillable Bottles, of which the following is a specification.

The primary object of this invention is a simple and efficient construction of non-refillable bottle designed to effectually prevent the refilling of the bottle by any of the tests that are ordinarily employed for this purpose, and thereby insuring that the contents of the bottle are genuine and not spurious.

With this and other objects in view as will more fully appear as the description proceeds, the invention consists in certain constructions, arrangements and combinations of the parts that I shall hereinafter fully describe and claim.

For a full understanding of the invention, reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a vertical sectional view of the neck portion of a non-refillable bottle constructed in accordance with my invention; Fig. 2 is a similar view with the neck tilted; Fig. 3 illustrates the parts in perspective; and, Fig. 4 is a bottom plan view of the inner section of the device. Fig. 5 is a view similar to Fig. 1 showing the stopper elements in side elevation and arranged at right angles to showing in Figs. 1 and 2.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

In the present embodiment of the invention, the device is formed initially separate from the neck of the bottle and is adapted to be inserted and held therein. It includes an inner tubular member A which is preferably formed of glass or porcelain and which embodies an outwardly facing valve seat 1, an opening 2 leading from said valve seat in through the inner tubular member so as to connect with the interior of the bottle in which the device is placed, and a series of rods 3 which extend diametrically across the inner end of the opening 2, having short ends embedded in the inner end of the member A. The rods all cross each other and form at the center of the opening an aper-

ture 4 through which a cord or flexible suspension member 5 passes. To the inner end of the suspension member 5 a pendent or weight 6 is secured. To the opposite end of the suspension member a valve 7 is attached. The valve 7 is preferably formed of cork or other buoyant material, faced with rubber or with rubber and some textile fabric so as to securely seal the valve seat when the valve is in a closed position, the valve being mounted for a limited movement, as shown, and being guided by arms 8 which extend longitudinally, and which connect the inner end or base portion of the member A with a baffle member 9 having cup-shaped or concaved outer end and spaced at two opposite sides from the inner walls of the neck to provide for the passage of the liquid. The valve 7 is formed at its margin with recesses 10 by which it has a guiding connection with the connecting arms 8. The movement of the valve away from its seat is limited by the inner end of the baffle member 9. This baffle member 9 is cup-shaped as above mentioned, and is closed at its inner end and only open at its rim or outer edge and with seats in its rim.

The improved device also comprises an outer tubular member, represented as a whole at B, this member being also preferably constructed of glass, porcelain, or the like with the inner end reduced, as shown at 11, and extending by the reduced portion into the cup-shaped or concaved portion of the baffle 9, but terminating short of the bottom of the baffle and spaced from the inner walls of the same, as indicated at 12. By forming the member B tubular, an opening is provided between the concaved portion of the baffle outwardly to the mouth of the bottle into which the outer tubular member is inserted. The outward passage thus formed is obviously a circuitous one which will effectively prevent any tool from being inserted in the device in an attempt to tamper with the valve thereof.

The inner end of the outer tubular member B is provided at diametrically opposite points with wings or webs 13 fitting within the seats in the upper edge of the baffle member 9, the three members being thereby held together with the inner edge of the member B in spaced relation with the bottom of the cup-shaped baffle member 9. The member B is secured permanently within the mouth of the bottle and by engagement

with the lower or inner tubular member A, serves to securely hold the latter in place. In the present instance, the means for securing the outer tubular member B in place, is a spring washer 15 which is mounted in a groove 16 and adapted to spring into an annular groove 17 formed in the bottle neck near the mouth rim thereof. Preferably, a cork or rubber washer 18 surrounds the outer tubular member B near the rim thereof, and a corresponding washer 19 surrounds the inner end of the inner tubular member A, these washers serving to render the device air tight.

From the foregoing description in connection with the accompanying drawing, the operation of my improved non-refillable bottle will be apparent.

In the practical use of the device, when the bottle is in an upright position, it is obvious that the valve 7 will be held on its seat by the pendent or weight 6. When the bottle is tilted, the valve will be moved off of its seat and permit the contents to be poured out, while the weight 6 will roll to one side. If the bottle should be inverted in an attempt to immerse the same and thereby fill it, it is obvious that the buoyancy of the valve will cause it to seat itself, while the formation of the parts and connection between the two sections of the device will effectually preclude the possibility of any tool being inserted and the valve reached and held away from its seat.

It is, of course, to be understood that a

cork or stopper may be inserted in the mouth of the outer tubular member B in order to keep the contents of the bottle from deteriorating.

Having thus described the invention, what is claimed as new is:

1. In a bottle stopper an inner tubular member, a baffle having a concaved outer face and with seats in its rim and connected to the inner tubular member by spaced guides, a valve between the baffle and inner tubular member and provided with recesses engaging said guides, an outer tubular member reduced at the inner end and extending by the reduced end into the concaved portion of the baffle, and wings depending from the outer tubular member and engaging in the seats of the baffle.

2. In a bottle stopper an inner tubular member, a baffle connected to the inner tubular member and spaced therefrom, said baffle having its outer face concaved and with seats in its rim, a valve between said inner tubular member and baffle, an outer tubular member reduced at the inner end and extending by the reduced portion into the concaved portion of the baffle, and wings depending from said outer tubular member and engaging in the seats of the baffle.

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

JHUGH C. SPEER.

Witnesses:

W. E. LEATHERWOOD,
T. G. STATON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."