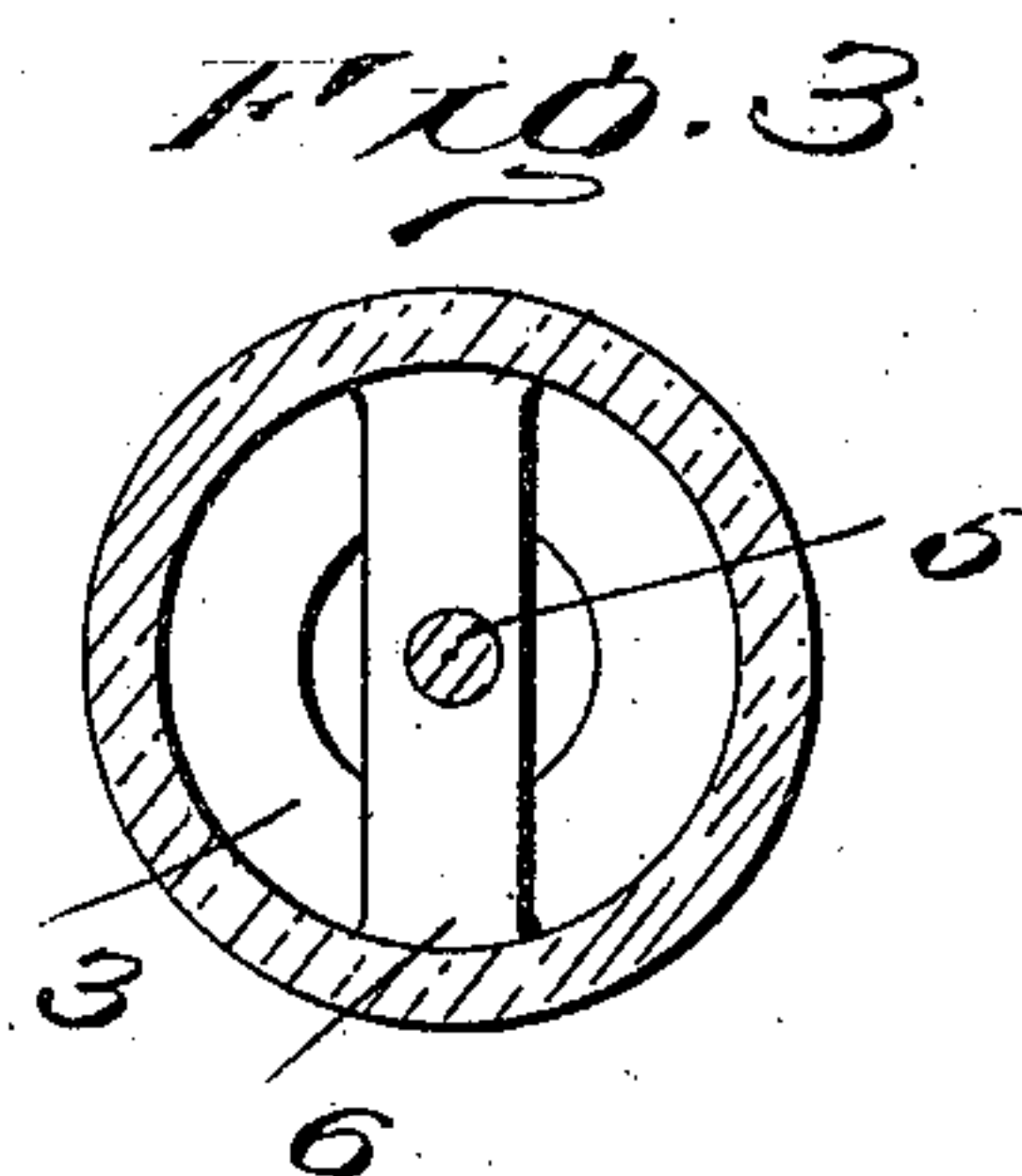
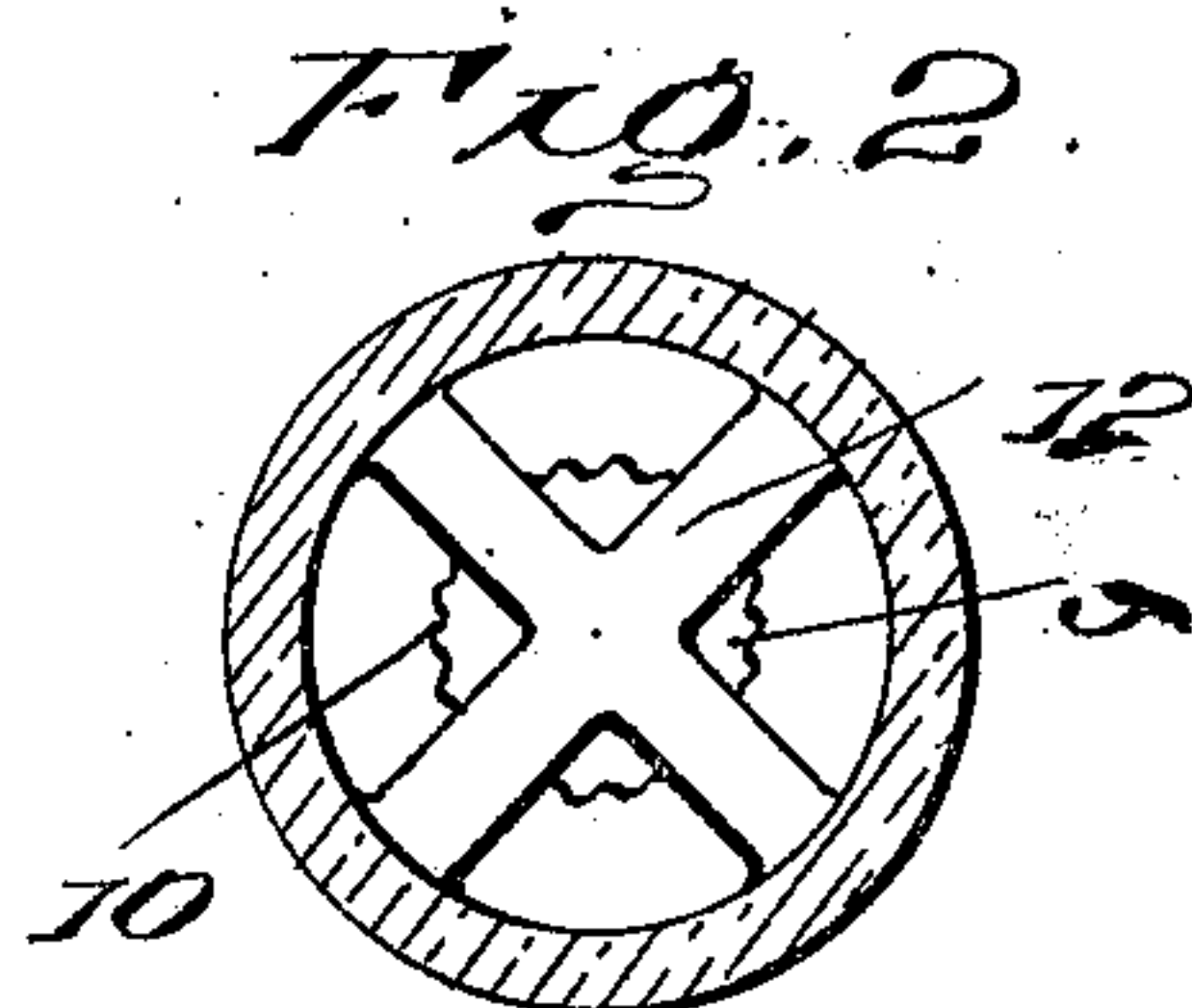
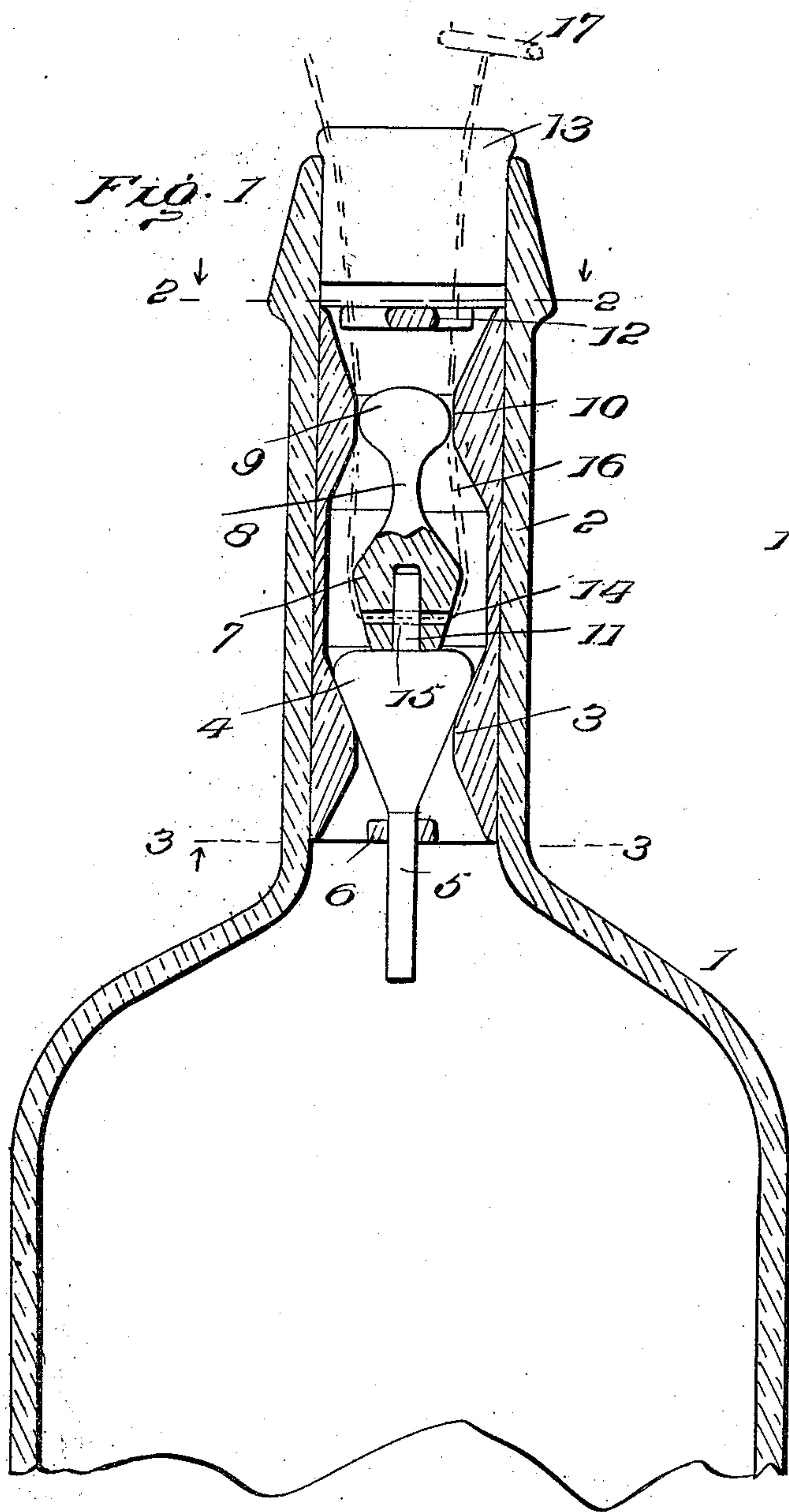


No. 876,981:

PATENTED JAN. 21, 1908.


J. E. LEPAGE.
NON-REFILLABLE BOTTLE.
APPLICATION FILED AUG. 6, 1907.



Inventor

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Witnesses

Witnesses

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By

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UNITED STATES PATENT OFFICE.

JOSEPH E. LEPAGE, OF TWO HARBORS, MINNESOTA.

NON-REFILLABLE BOTTLE.

No. 876,981.

Specification of Letters Patent.

Patented Jan. 21, 1908.

Application filed August 16, 1907. Serial No. 337,356.

To all whom it may concern:

Be it known that I, JOSEPH E. LEPAGE, citizen of the United States, residing at Two Harbors, in the county of Lake and State of Minnesota, have invented certain new and useful Improvements in Non-Refillable Bottles, of which the following is a specification.

The present invention relates to certain new and useful improvements in receptacles or bottles of that type provided with a valve mechanism to prevent refilling thereof after the original contents have been withdrawn.

The object of the invention is to design a valve mechanism comprising novel and effective means for preventing any tampering with the valve.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction and the means for effecting the result, reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a vertical sectional view through the upper portion of a bottle constructed in accordance with the invention. Fig. 2 is a horizontal sectional view on the line 2—2 of Fig. 1 looking in the direction of the arrows. Fig. 3 is a similar view on the line 3—3 of Fig. 1.

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.

Referring to the drawings the numeral 1 designates the bottle and 2 the neck thereof, the said neck being provided with a contracted portion 3 forming a valve seat. The upper portion of the valve seat 3 is flared outwardly and the valve 4 has approximately the formation of an inverted cone, the sides of the valve having an inclination corresponding to the flare of the valve seat. Carried by the valve 4 is a stem 5 extending inwardly through the valve seat 3 and passing loosely through a guide member 6 located below the valve seat, the said stem and guide member serving to insure an accurate seating of the valve. A guard member 7 is loosely connected to the upper portion of the valve 4 and moves longitudinally within the neck 2 independently of the valve, the said guard member having the upper portion thereof contracted as indicated at 8 and terminating at its upper extremity in a head 9 which is

designed to cooperate with a contracted portion 10 of the neck located above the valve seat 3 to prevent tampering with the valve by means of wires or similar devices. It will be observed that the lower end of the guard member 7 is recessed and loosely receives a stem 11 projecting upwardly from the valve, the said guide member sliding upon the stem to permit the valve to fall freely upon its seat regardless of the position of the guard member. For the purpose of limiting the outward movement of the guard member 7 a baffle 12 is employed which is in the nature of cross bars extending across the passage through the neck of the bottle.

When the bottle or other receptacle is in an upright position the valve 4 rests upon the valve seat 3 so as to prevent any liquid from being forced into the bottle and the guard member 7 falls against the valve, the head 9 at the upper extremity thereof being received within the contracted portion 10 of the bottle neck and effectively closing the passage through the neck 2 so as to prevent any wires or similar implements from being thrust through the neck for tampering with the valve. When the bottle is inverted however the valve 4 falls away from the valve seat and the head 9 is moved upwardly into contact with the baffle 12. The contents of the bottle or receptacle can then be turned out in the usual manner. The baffles 12 are preferably located inwardly a short distance from the mouth of the bottle to permit the mouth being closed by a stopper 13 in the usual manner.

In the manufacture of the device the guard member 7 and stem 11 are formed with corresponding openings 14 and 15 respectively through which a wire 16 or other flexible member is passed, the ends of the wire projecting beyond the mouth of the bottle and having a cross bar or finger piece 17 applied thereto. For the initial filling of the bottle the finger-piece 17 is pulled outwardly and the valve thereby unseated and after the said initial filling the wire 16 is slipped through the openings 14 and 15 whereupon the valve falls upon its seat and the valve and guide member 6 are permitted to move freely relative to each other. With this construction it will be readily apparent that even though the guard member should be engaged by a wire and held against move-

ment the valve 4 will still operate freely and will effectively prevent any liquid from being forced into the bottle.

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

1. The combination of a necked receptacle, a valve seat in the neck thereof, the passage through the neck being contracted at a point above the valve seat, a baffle located above the said contracted portion, a valve cooperating with the valve seat, and a guard member loosely mounted over the valve and provided with a head adapted to move freely through the contracted portion of the neck and normally positioned therein to prevent tampering with the valve.

2. The combination of a necked receptacle, a valve seat in the neck thereof, the passage through the neck being contracted at a point above the valve seat, a guide member below the valve seat, a valve cooperating with the valve seat and provided with a downwardly extending stem engaging the guide member, and a guard member mounted over the valve and provided with a head adapted to move freely through the contracted portion of the neck and normally positioned therein to prevent tampering with the valve.

3. The combination of a necked receptacle, a valve seat in the neck thereof, the passage through the neck being contracted at a point above the valve seat, a baffle located above the contracted portion of the neck, a guide member located below the valve seat, a valve cooperating with the valve seat and provided with a stem engaging the guide member, and a guard member loosely mounted over the

valve to move independently thereof, the said guard member being provided with a head adapted to move freely through the contracted portion of the neck and normally positioned therein to prevent tampering with the valve.

4. The combination of a necked receptacle, a valve seat in the neck thereof, a valve cooperating with the valve seat and provided with an inwardly projecting stem and an outwardly projecting stem, a guide member engaging the inwardly projecting stem for accurately seating the valve, and a guard member loosely mounted upon the outwardly projecting stem.

5. The combination of a necked receptacle, a valve seat in the neck thereof, the passage through the neck being contracted at a point above the valve seat, a valve cooperating with the valve seat and formed with an inwardly projecting stem and an outwardly projecting stem, a guide member engaging the inwardly projecting stem to accurately seat the valve, a guard member formed with a recess loosely receiving the outwardly projecting stem and terminating in a head cooperating with the contracted portion of the neck to prevent tampering with the valve, and a baffle mounted within the neck to limit the outward movement of the guard member.

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

JOSEPH E. LEPAGE. [L. s.]

Witnesses:

F. F. JAMES,
JOHN DWAU.