

No. 708,545.

Patented Sept. 9, 1902.

C. C. GUERNSEY.
NON-REFILLABLE BOTTLE.

(Application filed Jan. 22, 1902.)

(No Model.)

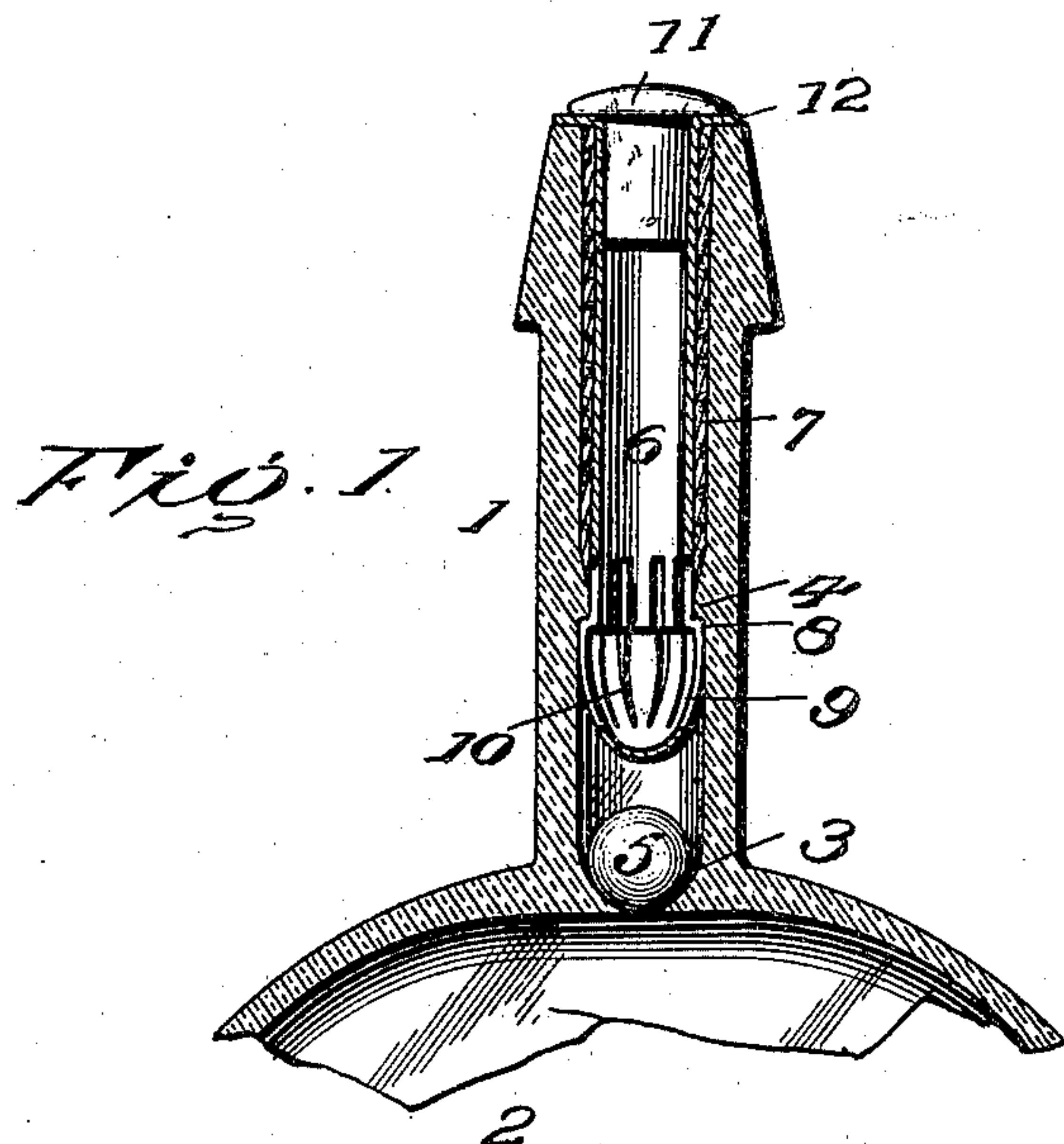


Fig. 2.

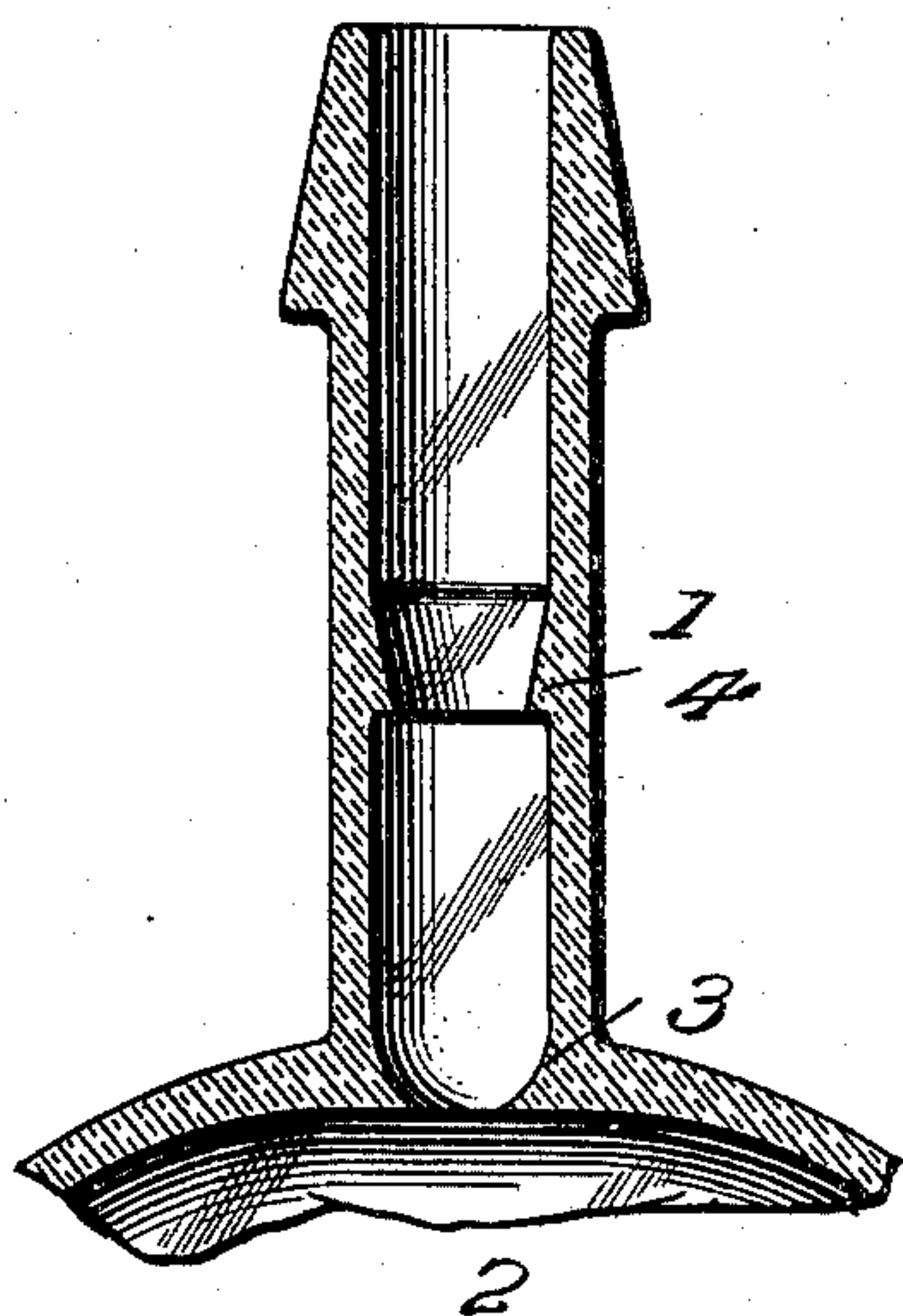
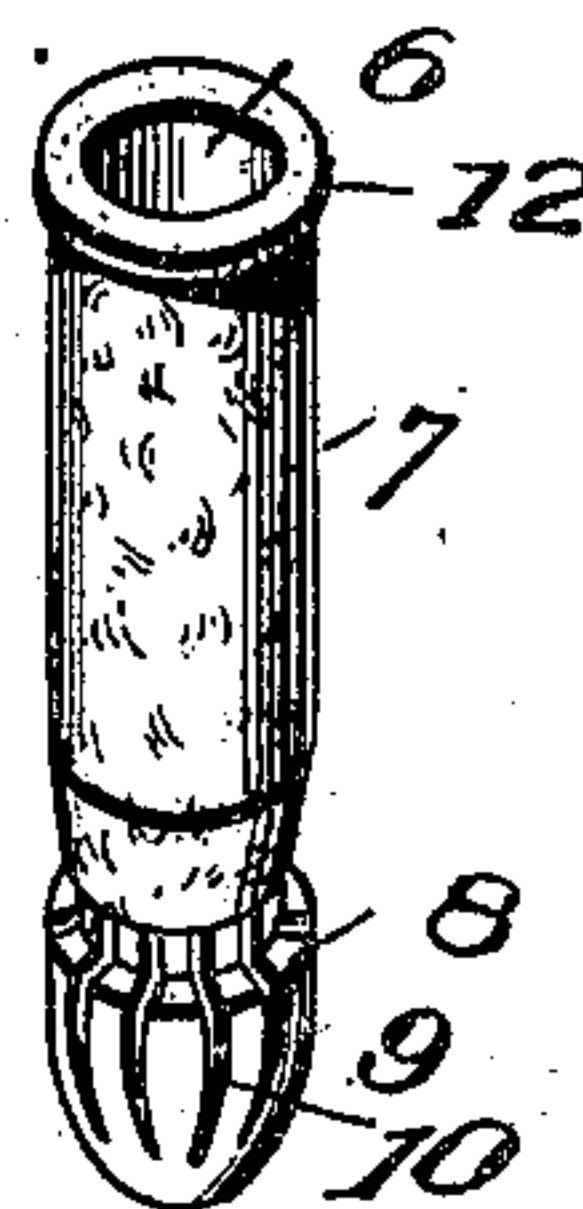


Fig. 3.



Witnesses

Witnesses
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UNITED STATES PATENT OFFICE.

CHARLES C. GUERNSEY, OF NASHVILLE, TENNESSEE, ASSIGNOR OF ONE-HALF TO N. B. SHYER, OF NASHVILLE, TENNESSEE.

NON-REFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 708,545, dated September 9, 1902.

Application filed January 22, 1902. Serial No. 90,821. (No model.)

To all whom it may concern:

Be it known that I, CHARLES C. GUERNSEY, a citizen of the United States, residing at Nashville, in the county of Davidson and State of Tennessee, have invented certain new and useful Improvements in Non-Refillable Bottles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention provides a novel means for preventing the refilling of a bottle or analogous receptacle after the same has been drained of its contents, thereby guarding against imposition upon the public and proprietor of a meritorious article by unscrupulous dealers.

The invention consists, essentially, of a ball-valve located in the neck of the bottle or receptacle and normally closing the passage therethrough, and a lock of novel formation for preventing the withdrawal of the valve without necessitating mutilation of either the bottle or guard to such an extent as to make detection possible.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and drawings hereto attached.

While the essential and characteristic features of the invention are susceptible of modification, still the preferred embodiment of the invention is illustrated in the accompanying drawings, in which—

Figure 1 is a vertical central section of the upper portion of a bottle, showing the application of the invention. Fig. 2 is a view similar to Fig. 1, the valve and guard being omitted. Fig. 3 is a perspective view of the guard.

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.

The neck 1 of the bottle or analogous receptacle 2 is provided with a valve-seat 3 at or near its lower end and an inner shoulder 4 a short distance from the valve-seat. The

parts 3 and 4 are blown with the glass or otherwise provided in the formation of the receptacle. A ball-valve 5 normally rests upon the seat 3 and closes the passage through the neck and is of a diameter to pass by the inner shoulder 4. This valve may be of any material best adapted for the purpose.

To prevent withdrawal of the valve after being placed in position a guard 6 is provided, and consists of a tubular body having its upper portion provided with a sleeve 7, of cork, rubber, or other packing material, for maintaining a tight joint between the guard and the neck of the bottle. The lower end of the guard is enlarged, the shoulder 8 at the base of the enlargement being adapted to snap under the inner shoulder 4 and secure the guard against displacement after being placed in position. The enlargement 9 is conoidal in shape, and its lower end is closed, thereby preventing interference with the valve 5 by means of a wire or instrument inserted into the neck of the bottle and through the guard, the lower closed end of the guard arresting the progress of such instrument. The sides of the guard are formed with slots 10 of a width to admit of the enlargement 9 being contracted when passing by the shoulder 4. These slots 10 are formed in the sides of the enlargement and the body of the guard adjacent to the shoulder 8 and result in permitting the portions of the guard between the slots to be compressed when forcing the guard home into the neck of the bottle. The tapering form of the enlargement 9 enables its spring portions to ride upon the beveled side of the inner extension forming the shoulder 4. The guard is preferably formed of metal, which is prepared so as not to be affected by the contents of the package.

After the bottle has been filled the valve 5 is dropped into place upon the seat 3 and the guard 6 is pressed home into the neck until the shoulder 8 clears the shoulder 4 and snaps thereunder. The bottle is sealed by a cork 11 in the usual manner. A space exists between the inner end of the guard and the valve, so as to permit the latter to have a limited movement when tilting the bottle to pour off the contents. When the bottle is placed upon its bottom, the valve becomes seated,

thereby preventing refilling of the same in the ordinary way. The enlargement 9 snapping under the inner shoulder 4 prevents removal of the guard without either mutilating the same or the bottle, thereby rendering detection possible. The upper end of the guard is outwardly flanged, as shown at 12, to overlap the end of the neck 1 and limit the inward movement of the guard and prevent it being crowded upon the valve when forcing the cork 11 therein to seal the bottle after being filled.

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

1. In combination with a bottle or receptacle having a neck provided with a valve-seat and an inner shoulder a short distance from said valve-seat, a valve cooperating with the valve-seat to close the passage through the said neck, and a guard for preventing displacement of the valve, the same consisting of a tubular body fitted within the neck of the bottle and having an enlargement at its inner end provided at its base with an outer shoulder to snap under the inner shoulder of the neck, said enlargement comprising spring elements, substantially as set forth.

2. In combination with a bottle or receptacle having a neck provided with a valve-seat and an inner shoulder a short distance from the said seat, a valve cooperating with the valve-seat for closing the passage through the neck of the bottle, and a guard of tubular form having an enlargement at its inner end of approximately conoidal form and having an outer shoulder at the base of the said enlargement to snap under the inner shoulder

der of the neck of the bottle, said enlargement and the adjacent portion of the tubular body being slotted to admit of compression of the said enlargement when passing by the inner shoulder of the bottle-neck when pressing the guard therein, substantially as set forth.

3. In combination, a bottle or receptacle having a valve-seat, and an inner shoulder spaced therefrom, a valve cooperating with the valve-seat, and a guard having an enlargement at its inner end to snap under the inner shoulder of the neck, said enlargement being closed at its lower end to prevent interference with the valve by means of a wire or instrument inserted into the neck of the bottle, substantially as set forth.

4. In combination, a bottle or receptacle having a valve-seat and an inner shoulder within its neck, a valve cooperating with the valve-seat, and a guard consisting of a tubular body having a conoidal-shaped enlargement at its lower end and having an outer shoulder at the base of the enlargement to snap under the inner shoulder of the bottle-neck, the sides of the enlargement being slotted and the lower end of the enlargement being closed, the upper portion of the guard having a packing-sleeve fitted thereto, substantially as set forth.

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

CHARLES C. GUERNSEY.

Witnesses:

G. E. MATLOCK,
JENNIE A. BERRY.