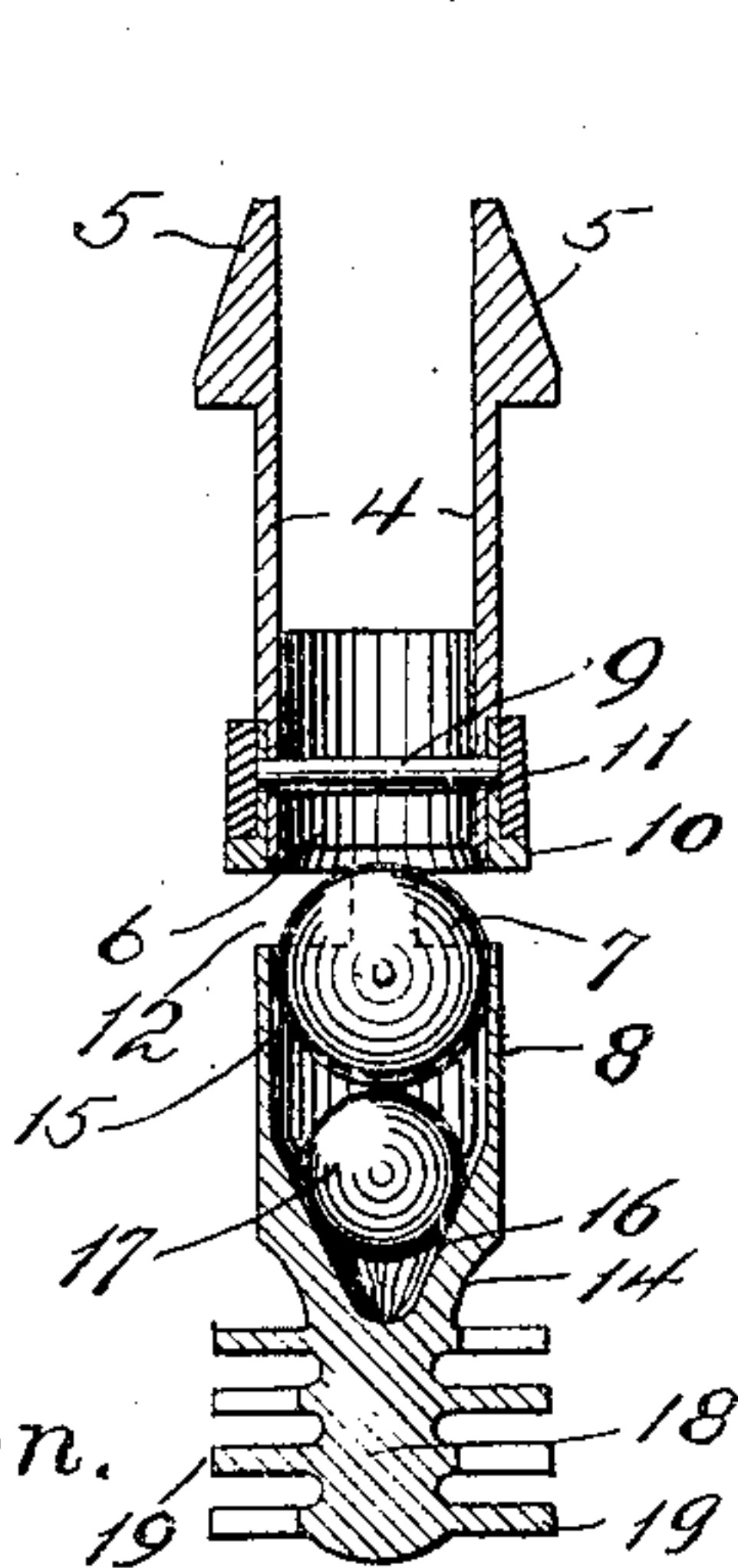
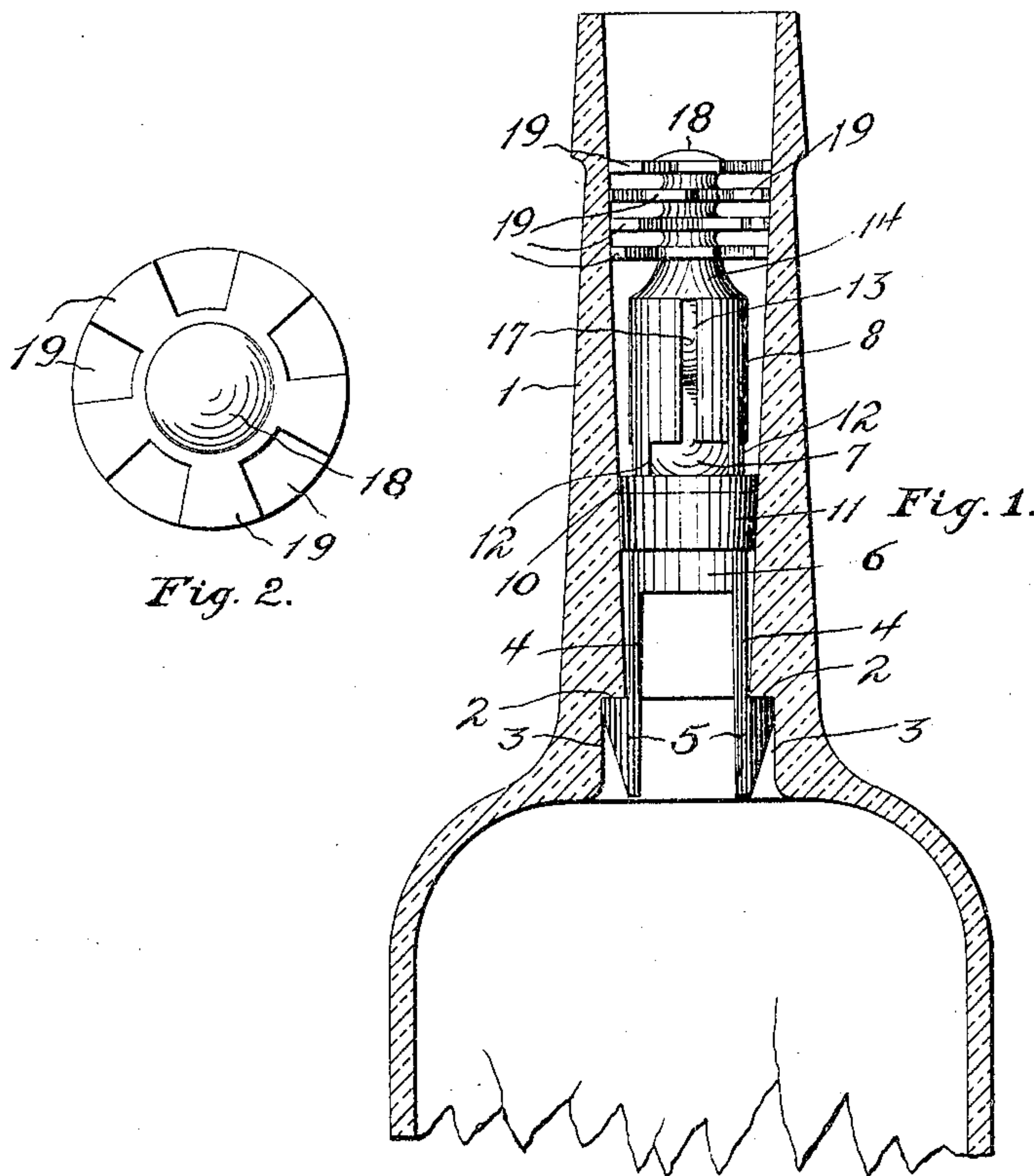


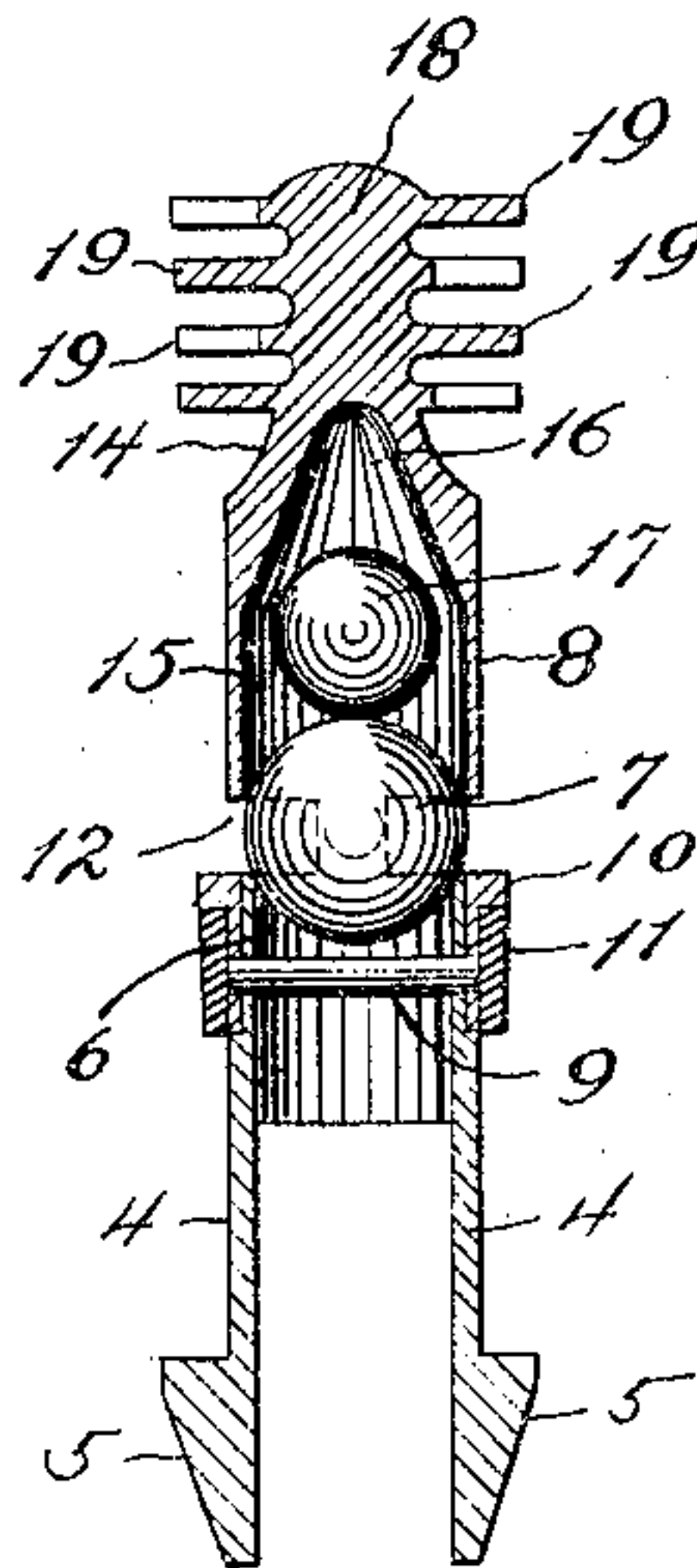
B. PROUTY.
NON-REFILLABLE BOTTLE.
APPLICATION FILED AUG. 27, 1904.



WITNESSES:
C. Stoughton.

M. J. Eckley

Fig. 3.



BY
Fig. 4. *Shepherd & Parker*
ATTORNEYS.

INVENTOR
Burt Prouty

UNITED STATES PATENT OFFICE.

BURT PROUTY, OF COSHOCTON, OHIO, ASSIGNOR OF ONE-HALF TO
DENNIS J. FLEMING, OF COLUMBUS, OHIO.

NON-REFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 789,757, dated May 16, 1905.

Application filed August 27, 1904. Serial No. 222,479.

To all whom it may concern:

Be it known that I, BURT PROUTY, a citizen of the United States, residing at Coshocton, in the county of Coshocton and State of Ohio, have invented a certain new and useful Improvement in Non-Refillable Bottles, of which the following is a specification.

My invention relates to a new and useful improvement in non-refillable bottles.

The object of the invention is to provide an improved valve of superior construction which will effectually prevent the refilling of the bottle.

Finally, the object of the invention is to provide a device of the character described that will be strong, durable, and efficient, and one which will be simple and comparatively inexpensive to manufacture.

With the above and other objects in view the invention consists of the novel details of construction and operation, a preferable embodiment of which is described in the specification and illustrated in the drawings, wherein—

Figure 1 is a vertical sectional view of the upper portion of a bottle, showing my invention in elevation arranged in the neck of the bottle. Fig. 2 is a top plan view. Fig. 3 is an inverted vertical sectional view, and Fig. 4 is a vertical sectional view showing the parts in their normal position.

In the drawings the numeral 1 designates the neck of the bottle, which is gradually tapered toward its lower end, where it is provided with an annular shoulder 2 and a recess 3. The closure or valve construction is formed at its lower end with a pair of oppositely-disposed spring-legs 4, carrying at their lower ends hook members 5, which engage beneath the shoulder 2 and stand in the recess 3. Supported upon the upper ends of the legs 4 and preferably formed integral therewith is a circular valve-seat 6, formed to receive the ball-valve 7. A valve chamber or sleeve 8 has its lower end encircling the valve-seat, to which it is secured by a pin 9, which passes through the said parts. The sleeve 8 is formed with an annular rib or shoulder 10, beneath which is disposed the ring 11, formed of cork or any

suitable material, which engages with the tapering walls of the bottle-neck so as to hold the device in position, as clearly shown in Fig.

1. This ring is slightly tapered, so as to more perfectly fit the contour of the bottle-neck wall. Rectangular openings 12 are formed in the sleeve 8 immediately above the shoulder 10. I preferably form three of these openings, but may make more, if desired. Slotted openings 13 extend upwardly from the openings 12 and terminate at the base of the cone-shaped dome 14, formed at the upper end of the sleeve. The interior of the sleeve 8 is formed with a cylindrical portion 15, from which rises a conical portion 16. Mounted within the sleeve is a small ball-weight 17, which rests upon the ball-valve 7 and normally holds the same upon the seat 6. When the bottle is inverted, the ball-valve will pass into the cylindrical portion 15, forcing the ball-weight 17 into the conical portion 16, the liquid passing up through the valve-seat 6 and out through the rectangular openings 12. It will be seen that the slotted openings 13 will admit air to the interior of the sleeve 8, and thus prevent the valve and the weight from being held therein by suction.

For the purpose of preventing the introduction of implements into the neck of the bottle to dislodge the ball-valve 7 for the purpose of refilling I form on the upper end of the sleeve 8 a stem 18, from which project segmental guards 19, arranged in separate layers and disposed in staggered relation. The layers are slightly tapered, so as to fit the inner contour of the bottle-neck, and by their staggered relation the liquid passing out of the rectangular opening 12 is caused to take a circuitous path when passing in and about the guards 19. It will thus be seen that it will be impossible to pass any implement through the guards without breaking the latter or so twisting and bending the implement that the same will be useless. When the device is once applied to the bottle-neck, the hooks 5, engaging under the shoulder 2, locks the same in the bottle-neck. Therefore it would be impossible to remove it without breaking some of the parts.

I do not wish to limit myself to the exact

details of construction herein set forth, as I may make various changes in the same without departing from the spirit of my invention.

Having now fully described my invention, 5 what I claim, and desire to secure by Letters Patent, is—

1. The combination with a bottle-neck formed with an annular shoulder, of a valve-seat provided with means for engaging said 10 shoulder to lock the same in position, a valve-sleeve having openings secured to the valve-seat, a valve contained in the sleeve and normally resting on the valve-seat, means for forcing the valve to its seat, and a guard car- 15 ried on the upper end of the valve-sleeve.

2. The combination with a tapering bottle-

neck and an annular shoulder formed therein, of a valve-seat having spring-arms, hooks formed on the arms and engaging under the shoulder, a valve-sleeve extending from the 20 valve-seat provided with openings, a valve contained in the sleeve and normally resting on the seat, a ring surrounding the valve-sleeve and engaging with the bottle-neck, and staggered guards projecting from the upper 25 end of the valve-sleeve arranged in layers and contacting with the tapering wall of the bottle-neck.

BURT PROUTY.

In presence of—

M. B. SCHLEY,
A. L. PHELPS.