

No. 774,066.

PATENTED NOV. 1, 1904.

G. S. GOLDIE.
NON-REFILLABLE BOTTLE.
APPLICATION FILED MAR. 30, 1904.

NO MODEL.

Fig 7

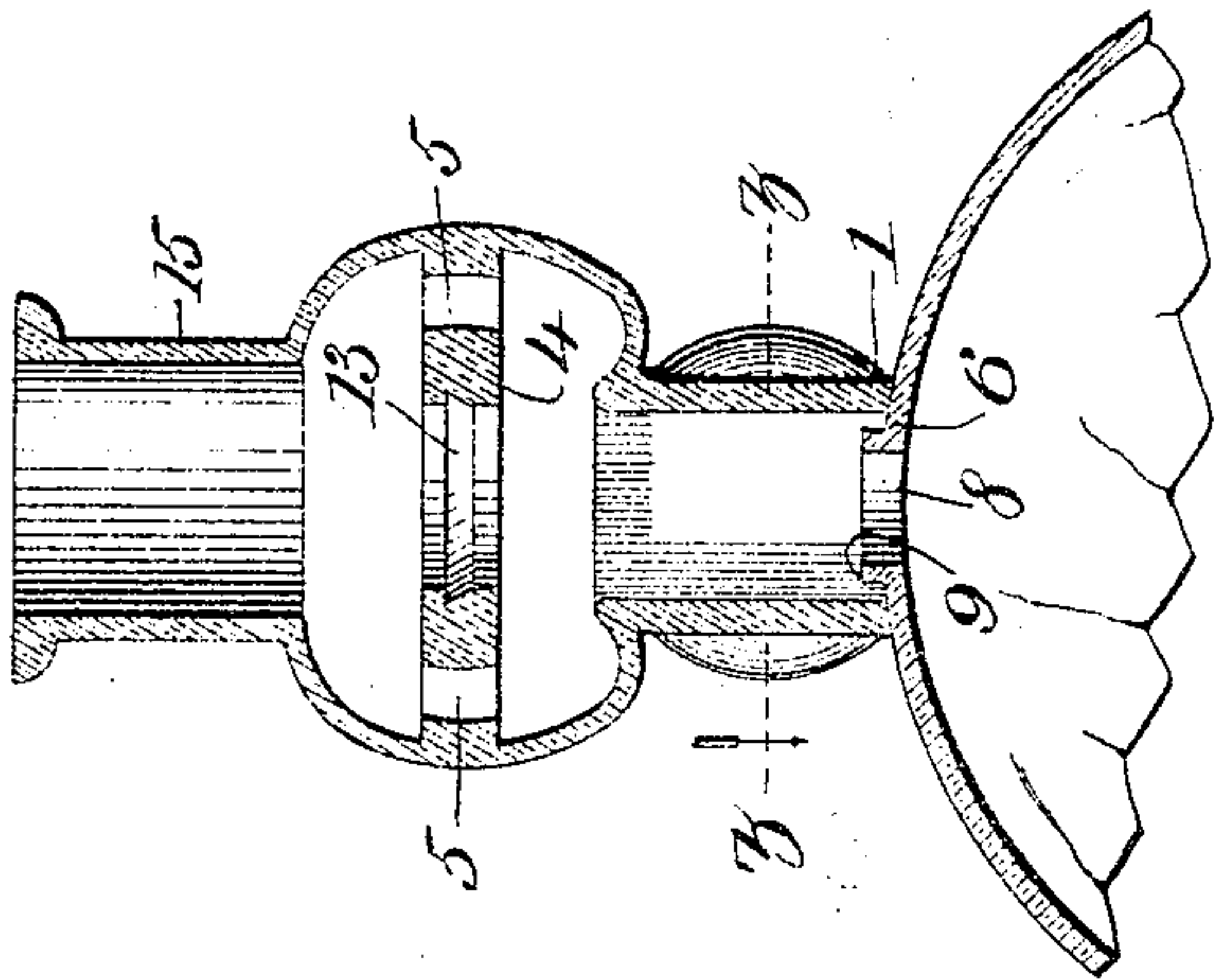


Fig 8

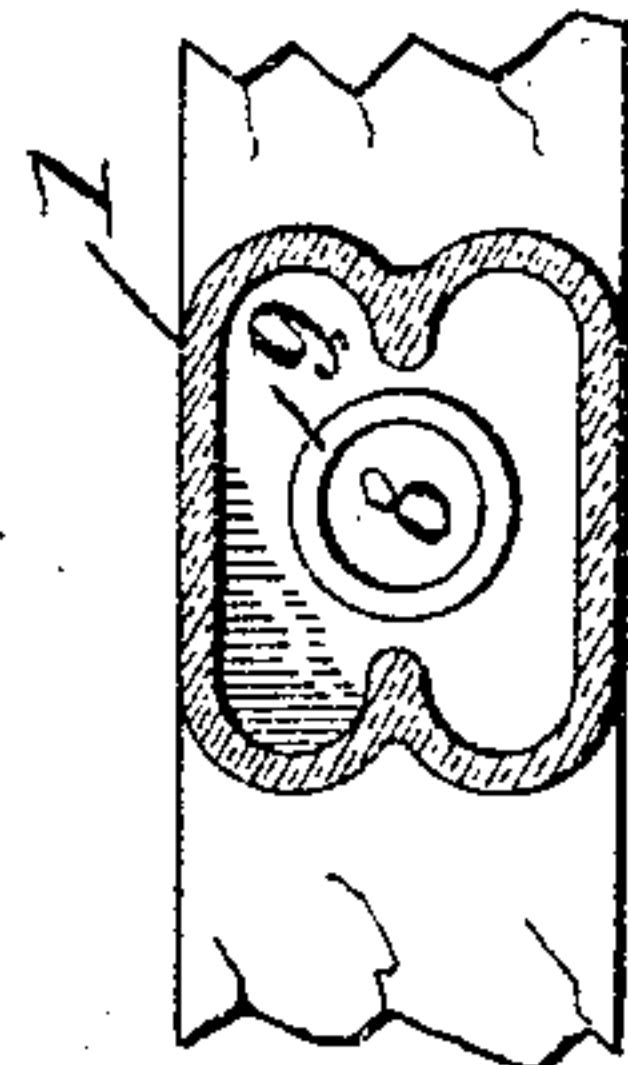


Fig 2

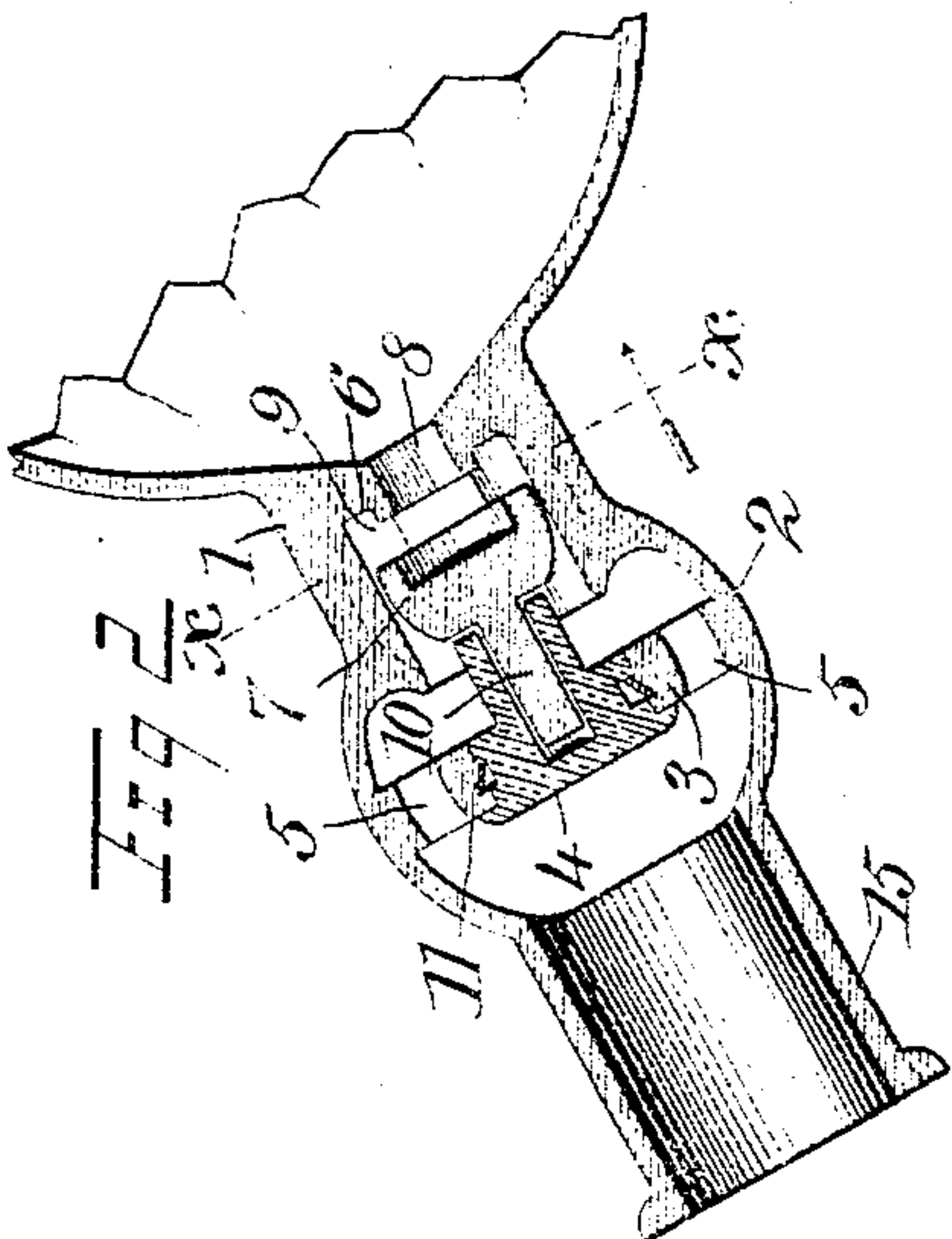


Fig 3

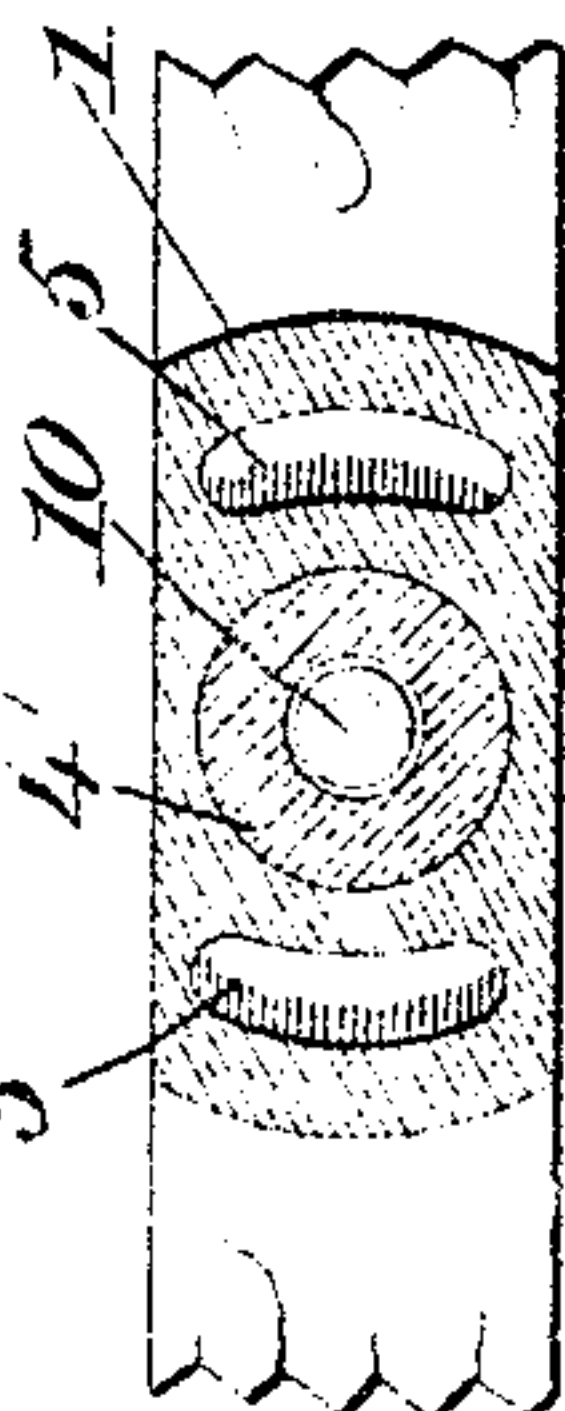


Fig 4

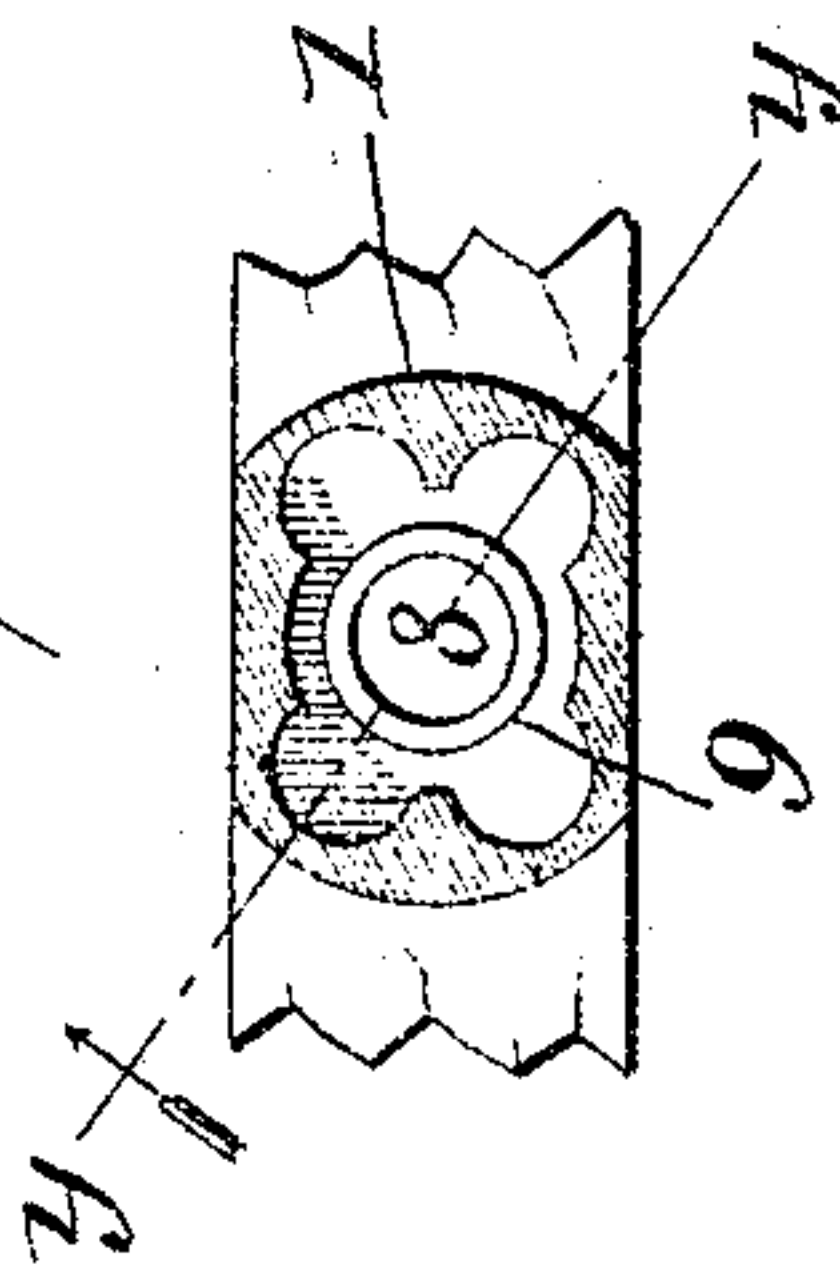
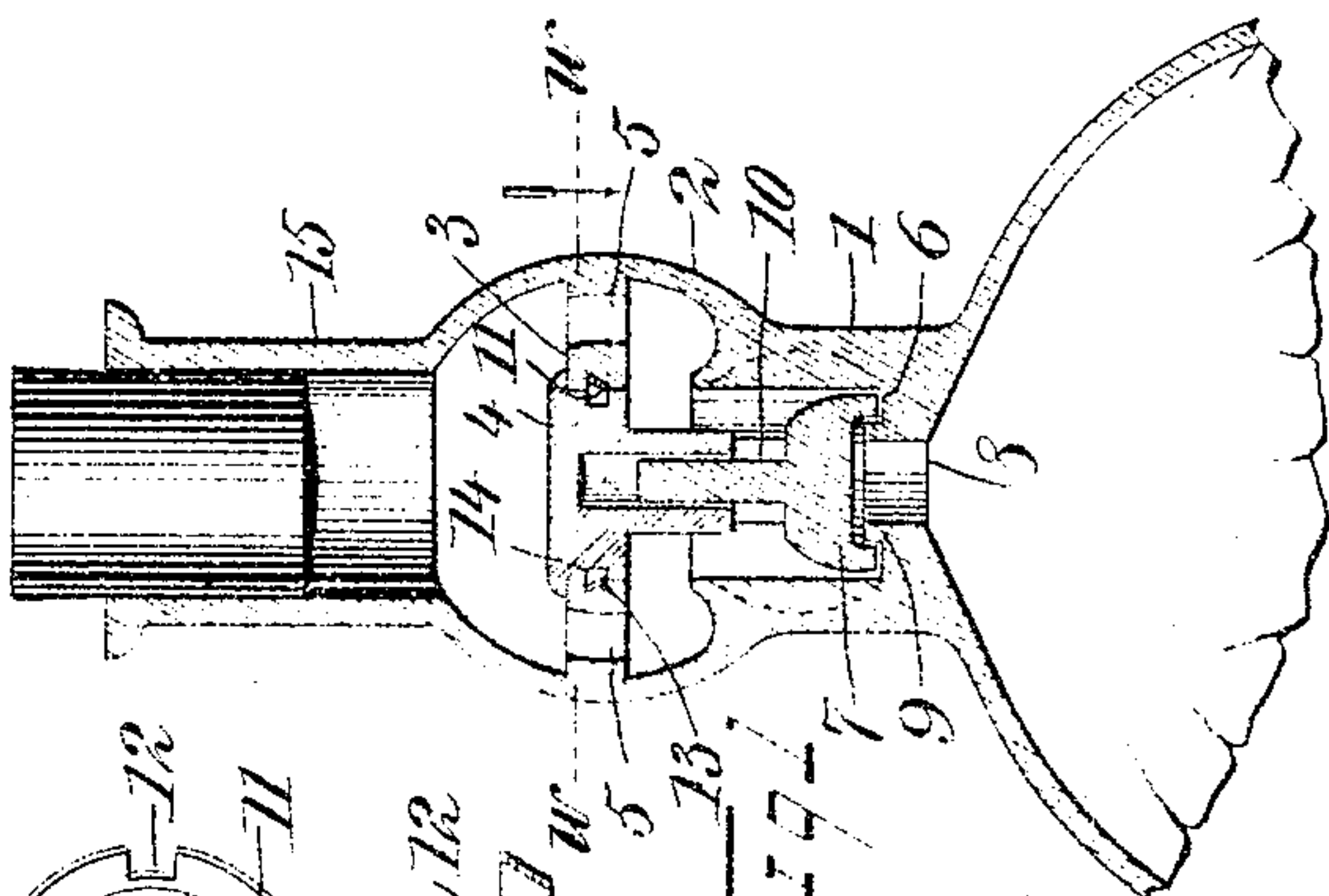
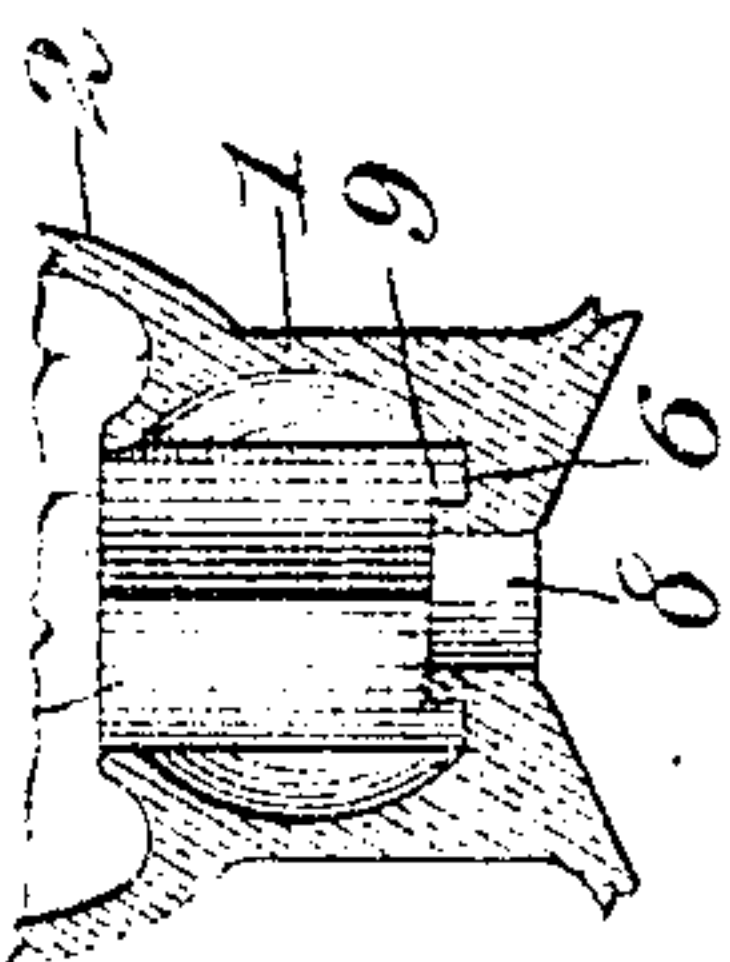


Fig 5



INVENTOR

George S. Goldie

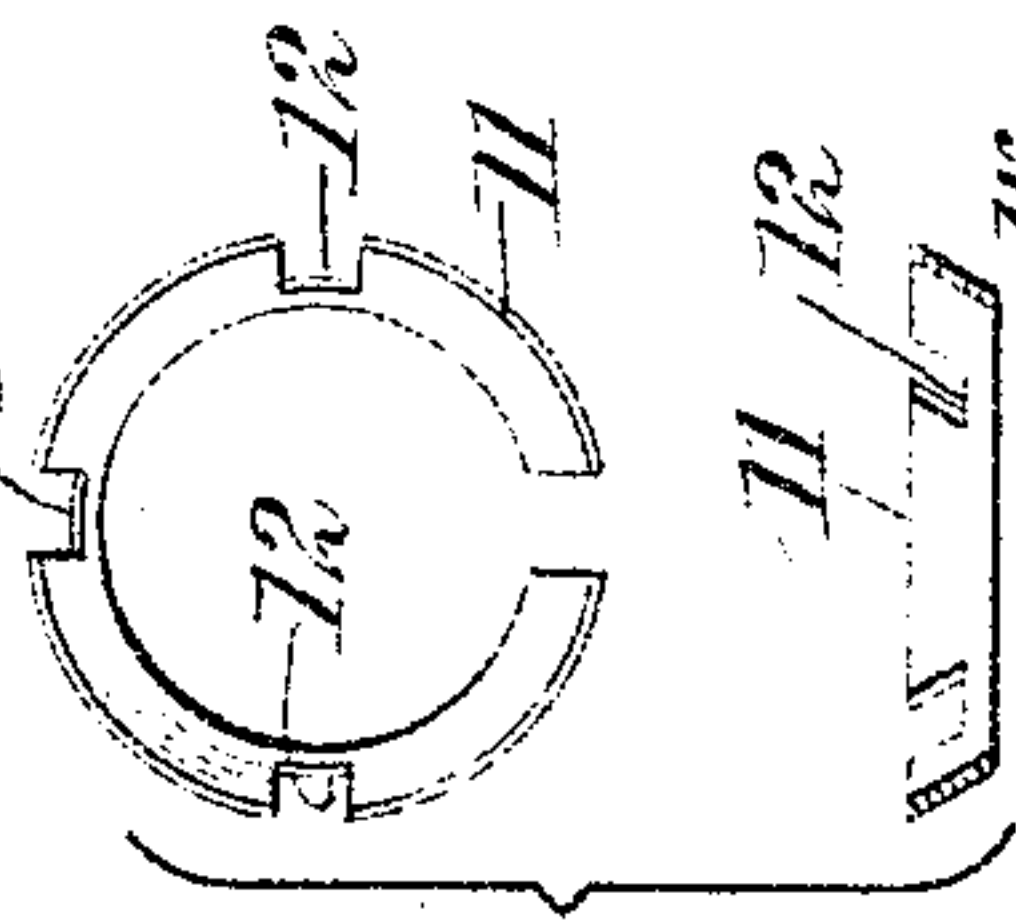
BY

MUMFORD
ATTORNEYS

WITNESSES:

John J. Miller
C. E. Ferguson

Fig 5



UNITED STATES PATENT OFFICE.

GEORGE S. GOLDIE, OF MANITOWOC, WISCONSIN.

NON-REFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 774,066, dated November 1, 1904.

Application filed March 30, 1904. Serial No. 200,669. (No model.)

To all whom it may concern:

Be it known that I, GEORGE S. GOLDIE, a citizen of the United States, and a resident of Manitowoc, in the county of Manitowoc and State of Wisconsin, have invented a new and Improved Non-Refillable Bottle, of which the following is a full, clear, and exact description.

This invention relates to improvements in bottles of the non-refillable class, the object being to provide a bottle of this character that will be simple in construction, comparatively cheap to make, and by the use of which both the original bottler and the purchaser will be protected from fraudulent reuse of the bottle.

I will describe a non-refillable bottle embodying my invention and then point out the novel features in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a longitudinal section of a portion of a non-refillable bottle embodying my invention. Fig. 2 is a sectional view showing the bottle as tilted to discharge liquid. Fig. 3 is a section on the line *ww* of Fig. 1. Fig. 4 is a section on the line *xx* of Fig. 2. Fig. 5 is a section on the line *yy* of Fig. 4. Fig. 6 shows a plan and sectional view of a locking-ring employed. Fig. 7 is a longitudinal section showing a modification, and Fig. 8 is a section on the line *zz* of Fig. 7.

Referring to the drawings, 1 designates the neck portion of a bottle having an enlarged portion 2, in which is a transverse partition 3, having a central opening to receive a tubular guide-plug 4 for the valve, and this partition 3 also has outlet-ports 5. In the lower portion of the neck is the valve-seat 6 for the valve 7, consisting of glass or other suitable material, and, as here shown, the valve-seat is provided around the outlet-opening 8 with a raised annular flange 9, which when the valve is seated will extend into the chambered lower end of the same, as indicated in Fig. 1.

By this arrangement a practically liquid-tight connection is made between the valve and its seat to prevent the introduction of liquid.

The stem 10 of the valve extends into the tubular plug 4, and this plug 4 is locked in position by means of a spring-ring 11, which is open at one side and tapered upward and outward, and to permit of sufficient spring to the ring it is reduced in thickness at intervals, as indicated at 12. The upper edge of the locking-ring is designed to engage against an upper wall of a channel 13, formed in the wall of the opening through the partition 3, and at its lower edge to engage with the bottom wall of an annular channel 14, formed in the plug. Above the enlarged portion 2 is a reduced portion 15, in which an ordinary cork may be placed.

In Fig. 7 I have shown the neck portion of the bottle as made independently of the body—that is, the two parts are manufactured separately and afterward cemented together while the glass is substantially in a molten or soft shape. This may aid materially in the construction of the device.

In the operation after filling the bottle with liquid the valve is to be placed in position and then the plug 4 forced through the opening in the partition 3 and locked by means of the ring 11.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A non-refillable bottle having a valve-seat in the lower portion of its neck, a valve for engaging therewith and having a stem, a partition extended across the neck above the valve-seat and having a central opening and also having ports, the wall of the central opening having an annular channel, a tubular plug adapted to receive the stem of the valve, the said plug being extended through the central opening of the partition and having an annular channel, and a locking-ring open at one side and tapered upward and outward, the said ring being adapted to engage at its upper edge with the upper wall of the channel in the partition and at its lower edge with the lower wall of the channel in the plug.

2. A bottle having a neck provided with a valve-seat at its lower end, an upwardly-extended flange extended around the opening between the neck and body of the bottle, a valve recessed at its under side for receiving

said flange, an upwardly-extended stem on the valve, a partition extended across the neck of the bottle and having ports and also having a central opening, a tubular plug adapted to
5 pass into said opening and to receive the stem of the valve, and means for locking the plug to the partition.

3. A bottle having a valve-seat in its neck portion, a valve for engaging therewith and
10 having a stem, a partition extended across the neck of the bottle and having ports and also having a central opening, the wall of said central opening having an annular channel, a tubular plug adapted to pass into said opening
15 and to receive the stem of the valve, the said

plug having an annular channel, and a locking device consisting of a spring-ring open at one side and having reduced portions, the said ring being flared upward and outward, whereby the upper edge will engage with the top 20 wall of the channel in the partition, and the lower edge will engage with the lower wall of the channel in the plug.

In testimony whereof I have signed my name to this specification in the presence of two sub- 25 scribing witnesses.

GEORGE S. GOLDIE.

Witnesses:

W. C. KADOW,
HUGH GOLDIE.