

M. V. WHITING.
NON-REFILLABLE BOTTLE.
APPLICATION FILED MAR. 27, 1908.

908,718.

Patented Jan. 5, 1909.

2 SHEETS—SHEET 1.

Fig. 1

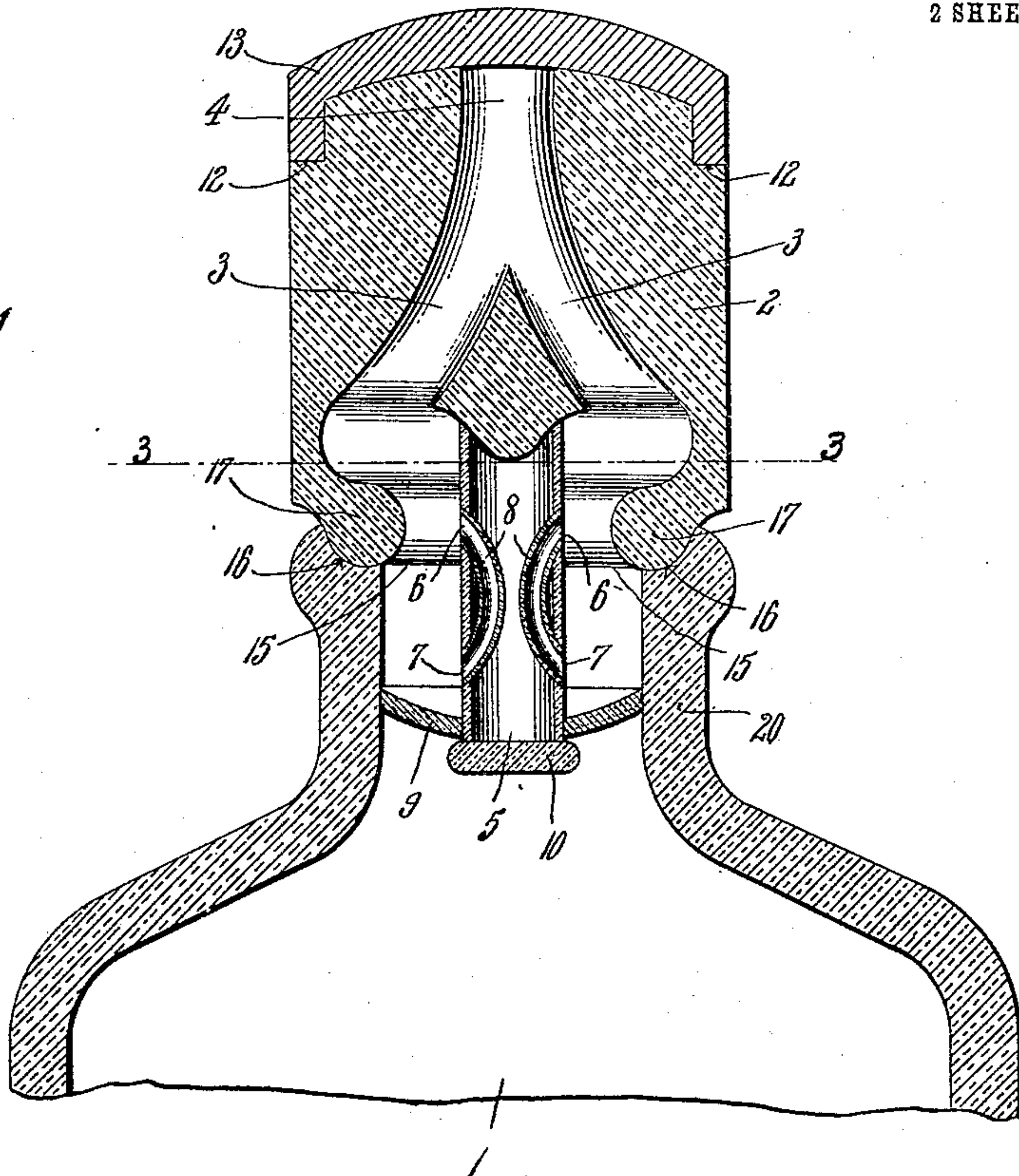


Fig. 2

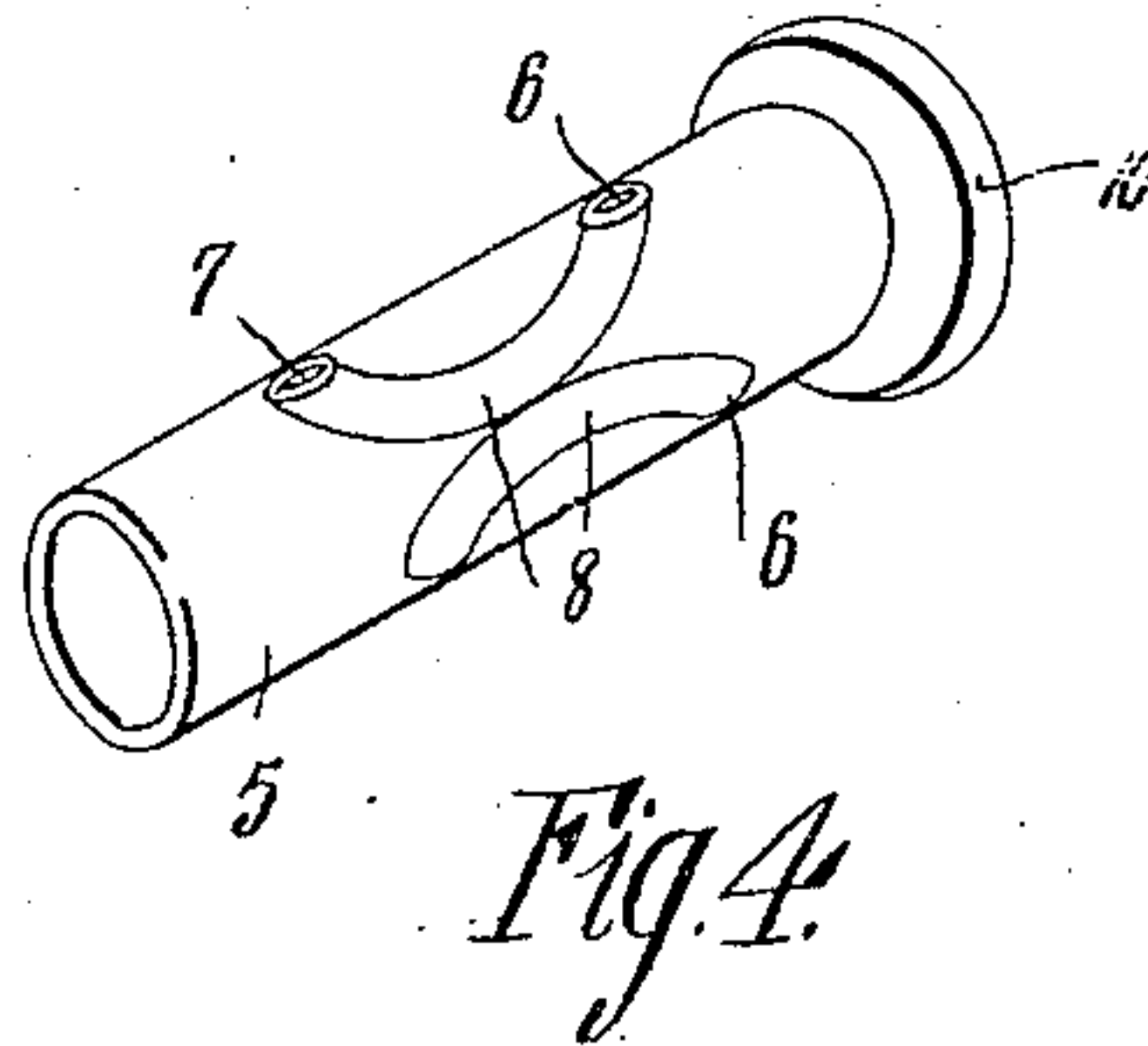
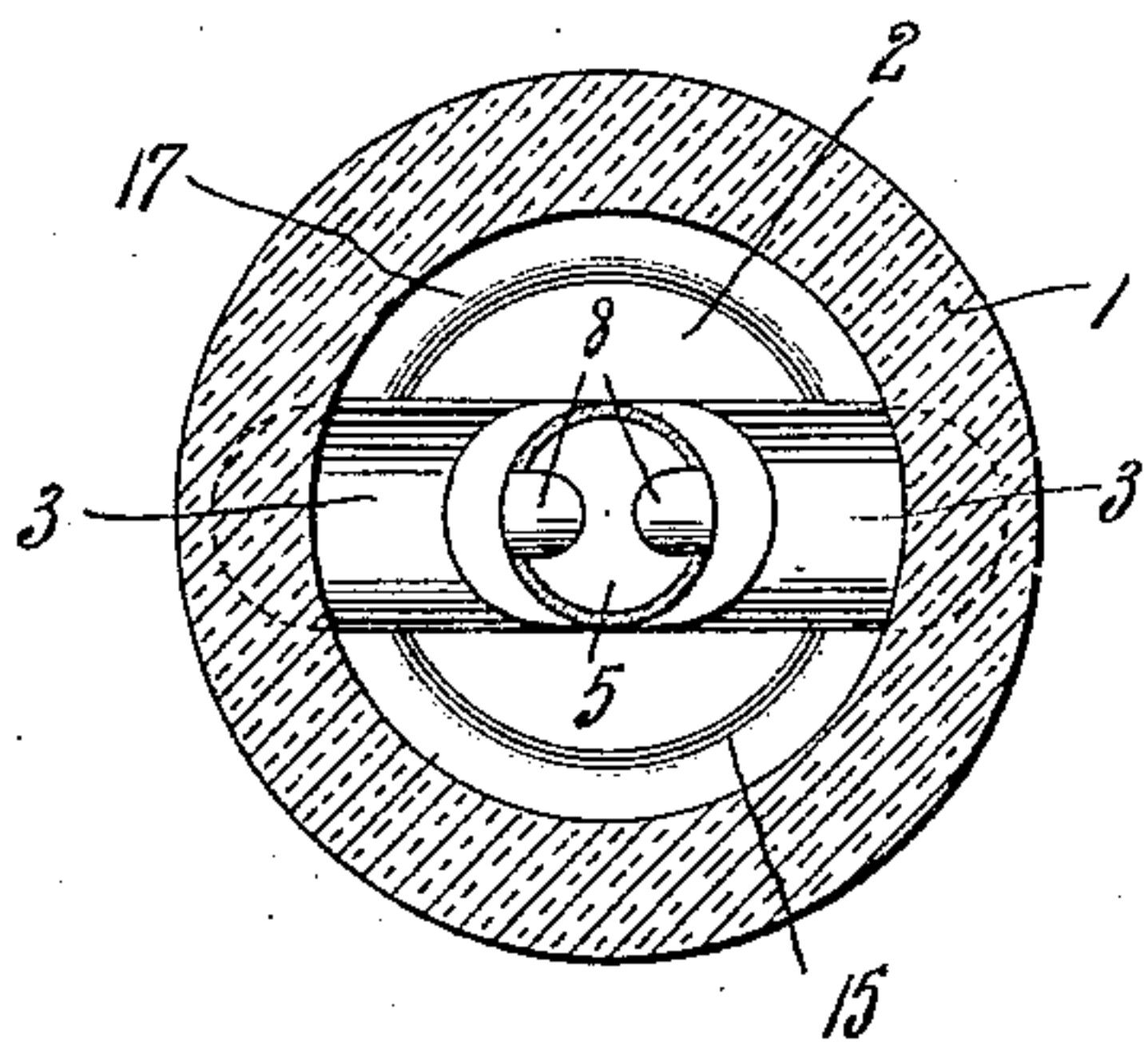


Fig. 4

WITNESSES:

J. H. Crawford
M. J. Miller

INVENTOR

Milton V. Whiting,
BY *Charles Chandler*

Attorneys

M. V. WHITING.
NON-REFILLABLE BOTTLE.
APPLICATION FILED MAR. 27, 1908.

908,718.

Patented Jan. 5, 1909.

2 SHEETS—SHEET 2.

Fig. 2.

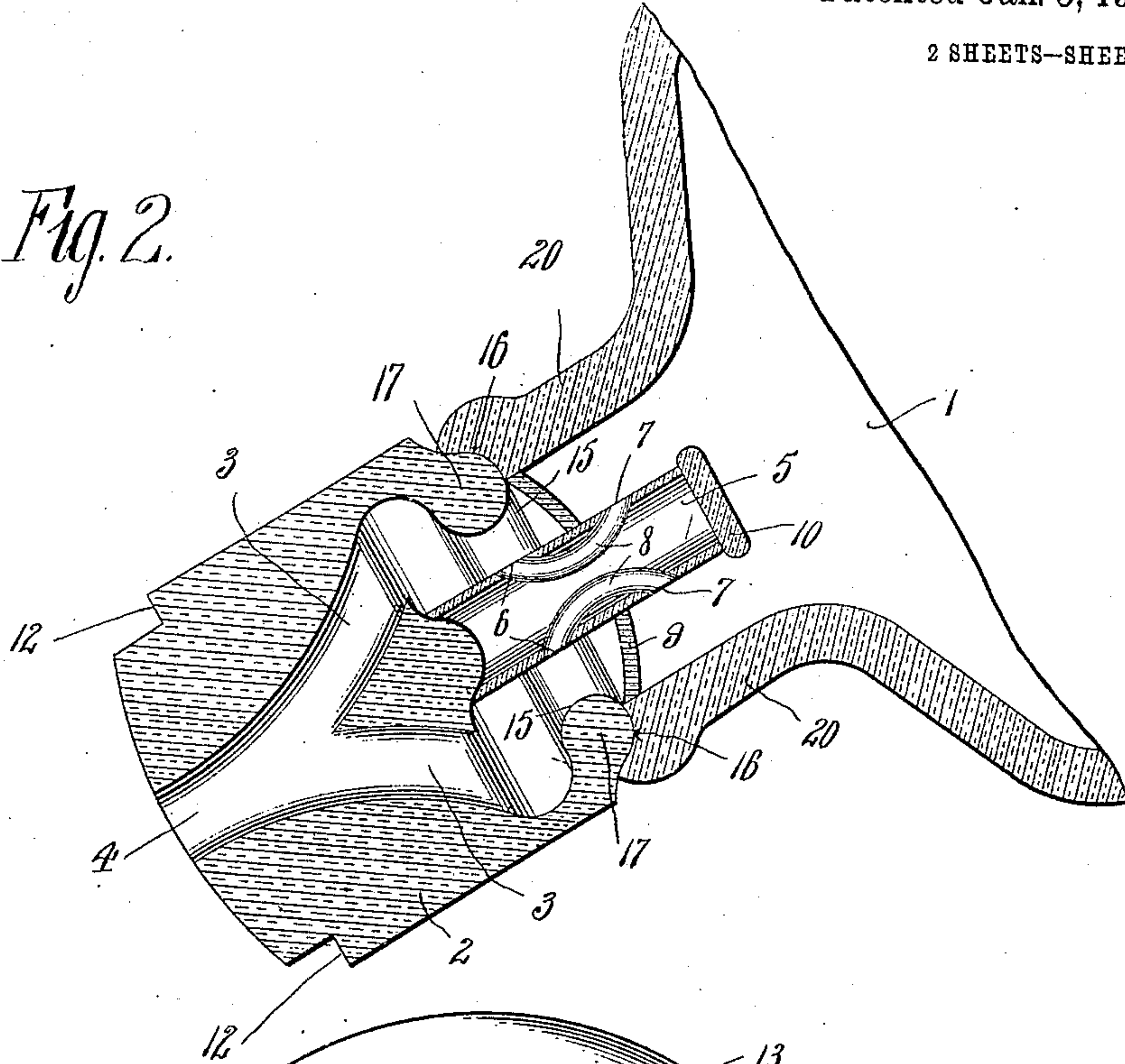
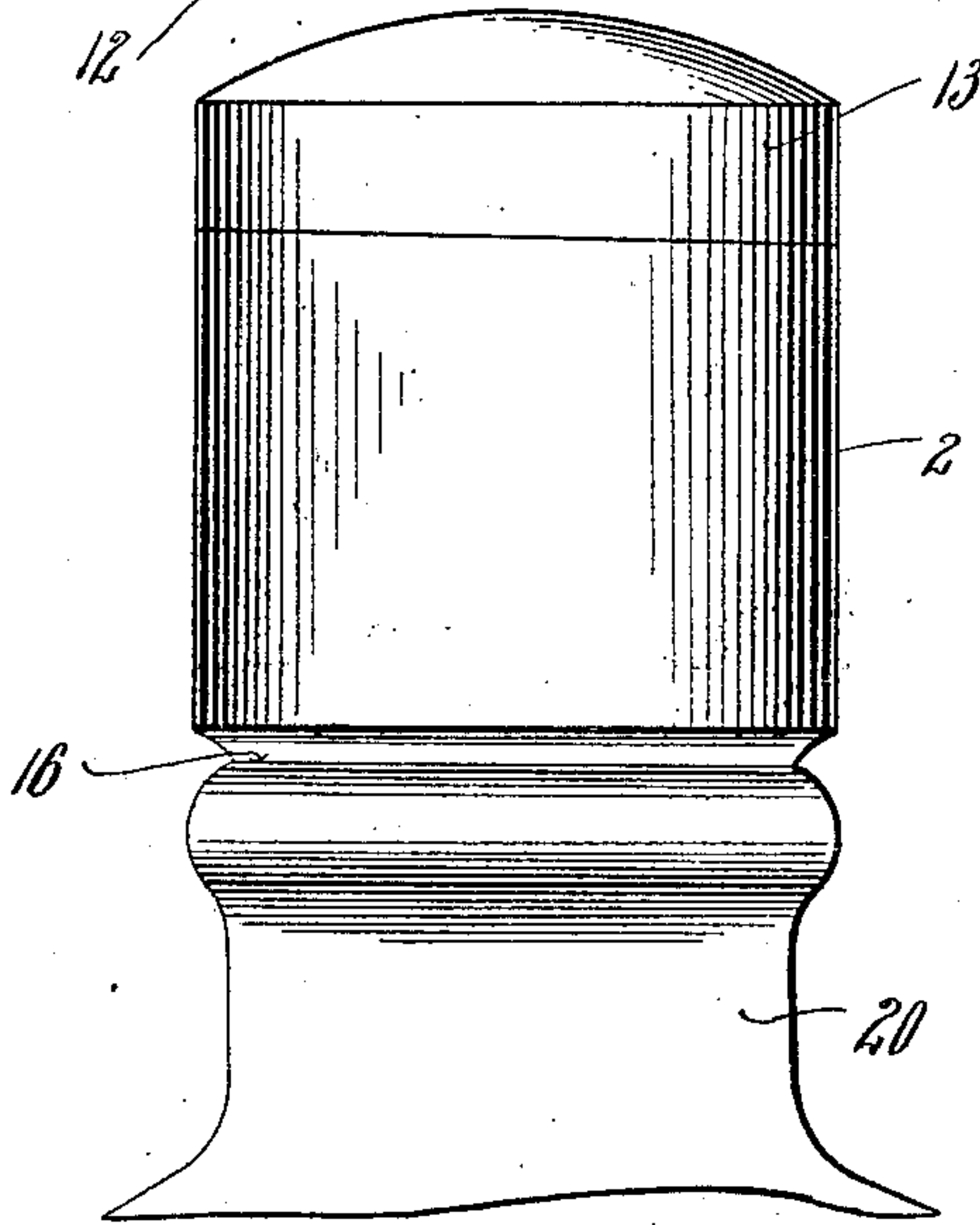


Fig. 5.



WITNESSES:

J. H. Crawford

M. J. Miller

INVENTOR

Milton V. Whiting,

BY

Charles C. Chandler

Attorneys

UNITED STATES PATENT OFFICE.

MILTON V. WHITING, OF ELBERT, COLORADO.

NON-REFILLABLE BOTTLE.

No. 908,718.

Specification of Letters Patent.

Patented Jan. 5, 1909.

Application filed March 27, 1908. Serial No. 423,681.

To all whom it may concern:

Be it known that I, MILTON V. WHITING, a citizen of the United States, residing at Elbert, in the county of Elbert, State of Colorado, 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 relates to a new and useful improvement in non-refillable bottles.

The object of my invention is to provide a bottle so constructed that after the same has been filled and sealed it will be impossible to refill the same without destroying a part of the bottle.

In the accompanying drawings I have shown in Figure 1 a central sectional view of a bottle embodying my invention showing the valve in its normal closed position. Fig. 2 discloses the bottle as tilted, Fig. 3 shows a view on line 3, 3 of Fig. 1 looking towards the stopper end. Fig. 4 is a detailed perspective view of the interior glass tube and Fig. 5 is an elevation of an upper portion of a bottle sealed with the present invention.

In carrying out the object of my invention I provide a bottle 1 with an especially constructed glass stopper 2. This stopper is round and forms a continuation of the bottle neck as shown in Fig. 1 and is solid and provided with the converging escape ways 3, 3 which unite in a circular exit opening 4. This stopper is provided with a lower rounded edge 17 adapted to be sealed upon the grooved upper neck surface 16 of the bottle 1 as shown in Fig. 1.

Secured to the stopper 2 is a glass tube 5 which is provided with the upper openings 6, 6 and the lower openings 7, 7, these openings being disposed in sets of twos one above the other and forming the escape ways for the ducts 8, 8 as shown in Fig. 1.

Slidably held upon the tube 5 and guided within the bottle neck 20 is the cupped disk valve 9 made of any suitable material and presenting its concaved surface to the upper end of the bottle as shown in Fig. 1 so that any liquid introduced through the escape

ways 3, 3 will escape through the tubes or ducts 8 and collect within the disk valve when the bottle is in its normal position. To hold this valve upon the centrally disposed tube 5, I provide a stop shoulder 10 at the lower end thereof upon which this cupped valve is held while the bottle is in its normal upright position as is shown in Fig. 1.

The stopper portion of my invention is provided with the upper shoulder 12 so that a sealing cap 13 may be fixed to the stopper as disclosed to prevent any dust from entering the bottle or vapors or odors escaping from the same.

The cupped valve 9 is so constructed that it will snugly slide within the bottle neck 20 and with its peripheral edge presenting a cylindrical surface is guided within the bottle neck. Now when the bottle is in its normal upright position as shown in Fig. 1, the valve will rest upon the shoulder 10 to seal the bottle. In emptying the bottle the same is inverted so that the valve will stop against the lower edge 15, which forms a stop shoulder, of the glass stopper 2 in which position the central portion of the glass cup-shaped disk valve will come squarely between the openings 6 and 7 as shown in Fig. 2. The glass stopper 2 is suitably sealed to the bottle proper by electrical or other means, and

Having thus described my said invention what I claim as new is—

1. The combination with a bottle having a cylindrical neck ending in an upper sealing surface, of a glass stopper having an upper cap receiving shoulder, and a lower surface adapted to be sealed upon said neck surface, said stopper being provided with two escape ways meeting at the stopper end, a tube centrally secured to said stopper having an upper and a lower opening, a duct extending from said upper opening to said lower opening, a cupped disk valve slidably held upon said tube, and a stop shoulder secured to the end of said tube as disclosed.

2. The combination with a bottle having a cylindrical neck ending in a curved upper surface, of a glass stopper having a lower curved surface adapted to be sealed upon said neck surface, said stopper being provided with two escape ways meeting at the

stopper end, a tube centrally secured to said stopper having two upper and two lower openings, a duct extending from each upper opening to one of said lower openings, a
5 cupped disk valve slidably held upon said tube, and a stop shoulder secured to the end of said tube as disclosed.

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

MILTON V. WHITING.

Witnesses:

ALEX BRAZELTON,
WALTER DITTEMORE.