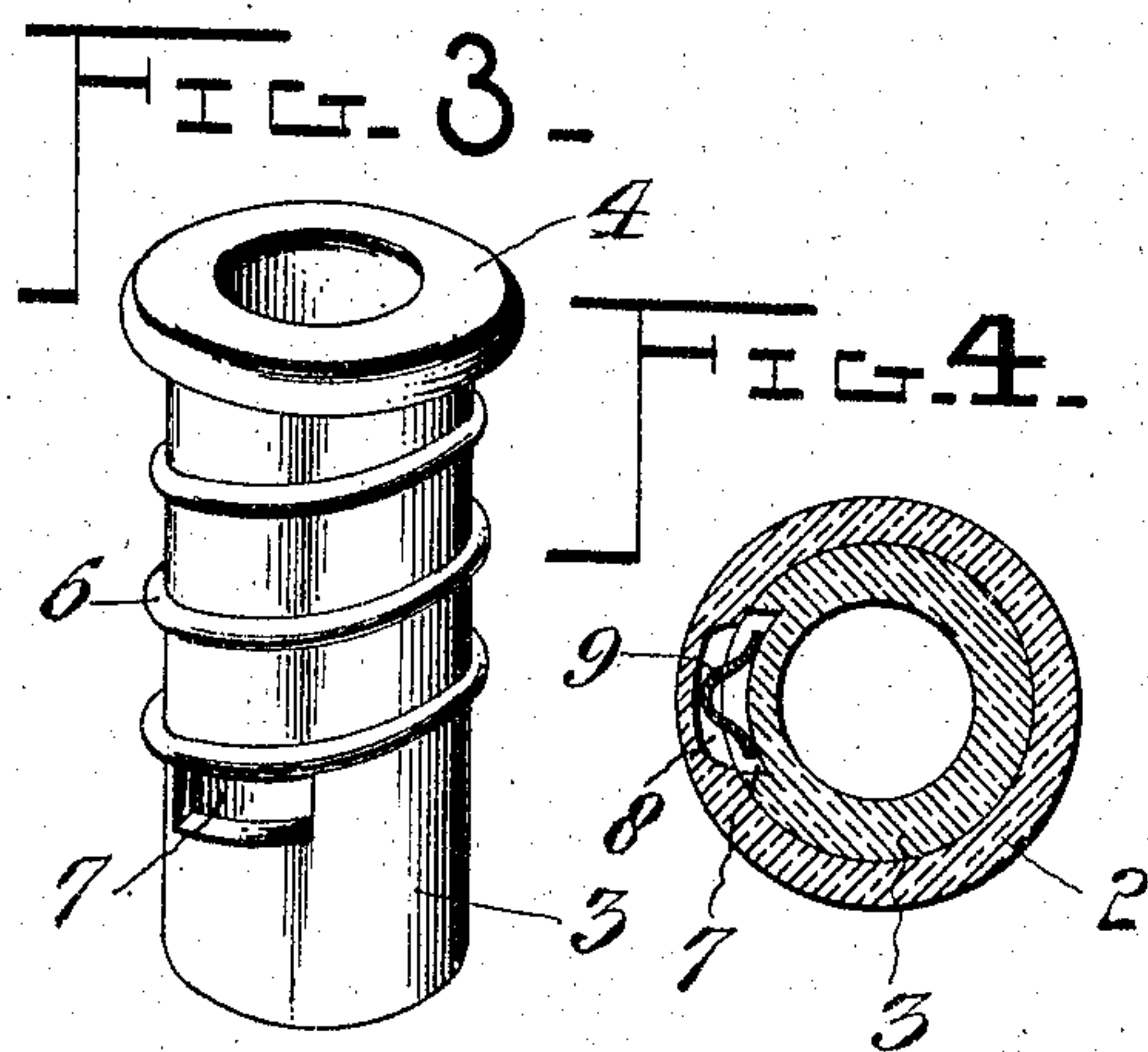
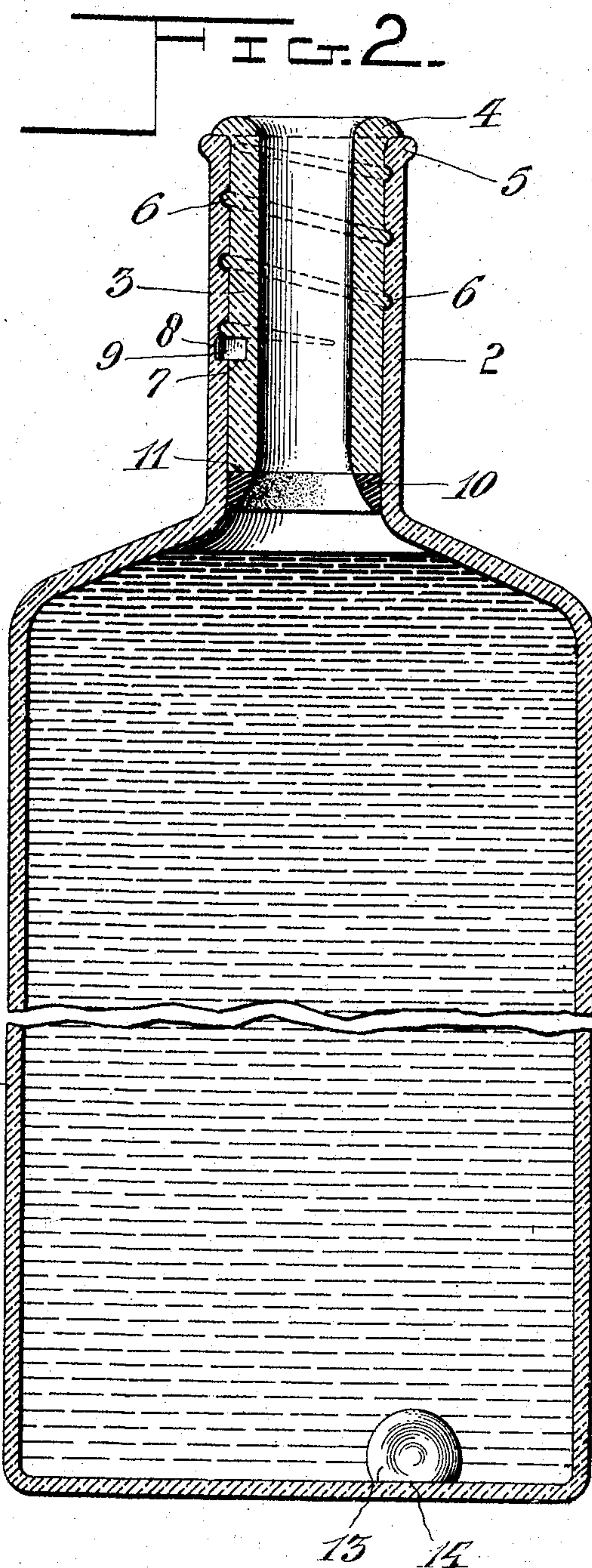
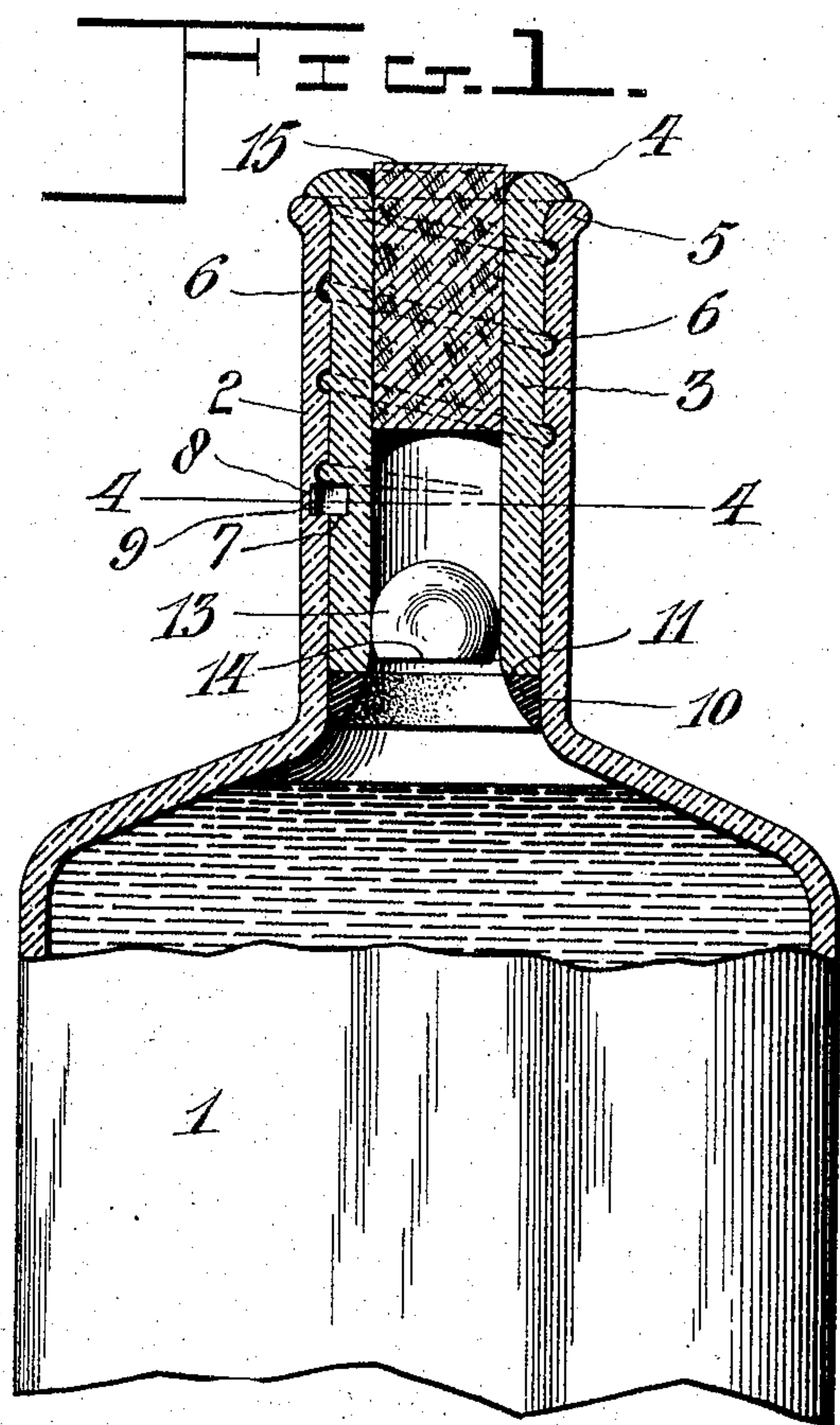


No. 780,650.

PATENTED JAN. 24, 1905.

W. GARDNER.
BOTTLE.

APPLICATION FILED APR. 28, 1904.



Witnesses:

John T. Deufferwald
J. H. Gibbs

William Gardner, Inventor,

By *Marion Marion*

Attorneys

UNITED STATES PATENT OFFICE.

WILLIAM GARDNER, OF CARBERRY, CANADA.

BOTTLE.

SPECIFICATION forming part of Letters Patent No. 780,650, dated January 24, 1905.

Application filed April 28, 1904. Serial No. 205,437.

To all whom it may concern:

Be it known that I, WILLIAM GARDNER, a subject of the King of Great Britain, residing at Carberry, in the county of Norfolk, Province of Manitoba, Dominion of Canada, have invented certain new and useful Improvements in Bottles; and I do hereby declare that the following is 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 new and useful improvements in bottles of the class adapted to indicate to the purchaser whether or not the contents of the bottle are of the character indicated by the label thereon, relating generally to the class of non-refillable bottles, but in this instance comprising a structure which is of such a character that it carries an indicator which will give notice to the purchaser by its location whether the contents of the bottle are the original goods placed therein or are goods substituted for such originals.

The object of the invention is to produce a structure which will be simple and convenient in operation and which may be manipulated by any person to place it in any position for use and which after it has served its original purpose may be utilized like other bottles or receptacles at will.

Referring to the drawings, in which similar numerals of reference indicate corresponding parts, Figure 1 is a broken or sectional elevational view illustrating the upper portion of a bottle or receptacle provided with my improvement with the seal or closure in position. Fig. 2 is a vertical sectional view, partly broken away, illustrating the bottle after the cork and indicating-seal have been displaced. Fig. 3 is a detached view illustrating the inner tube hereinafter referred to, and Fig. 4 is a sectional view taken on line 4 4 of Fig. 1.

In the drawings, 1 is the body portion of a bottle or other receptacle which may be provided with my improvement, said bottle terminating at its upper end in the neck portion 2, within which is adapted to be placed the hollow tube 3, which tube 3 has the laterally-projecting flange 4 at the upper end thereof

adapted to contact with the upper edge portion 5 of the bottle-neck 2 and the said neck and tube being provided with corresponding screw-threads adapted to secure the tube within the neck portion. In convenient proximity to and below the screw-thread on the tube 3 is a socket or seat 7, preferably rectangular in shape, formed within the said socket, while a corresponding socket portion 8 is provided in the interior of the neck portion 2. Within the socket 7 there is placed before the tube 3 is projected into the neck 2 a spring 9, which, as indicated in Fig. 2, is an expansion-spring adapted when the tube 3 has been screwed to its home position to interlock with the socket 8 of the neck portion, thereby locking the tube 3 within the neck portion, so as to prevent removal thereof after it has once been placed in position. As the neck 2 and tube 3 are preferably of glass or other non-compressible material, an annular seal 10, of rubber, cork, or other suitable compressible material, is placed within the neck portion 2 before the tube is projected to its innermost position, the said seal 10 being carried by the tube 3 to the position shown in Figs. 1 and 2 when the said tube has been projected to a position where the spring 9 will interlock with the sockets 7 and 8, thereby preventing any possibility of leakage of the fluid contents of the receptacle past and between the tube 3 and bottle-neck 2, as might result if such seal 10 were not provided. It will be evident that the flanges 4 on the tube 3 serve as a stop to indicate that the spring 9 has reached a position where the sockets 7 and 8 coincide, and said spring is interlocked with both of said sockets. It will be noted in the drawings that the inner face of the seal 10 is slightly beveled and also that the lower inner portion of the tube 3 at 11 is also slightly beveled, so that the non-buoyant seal 13 may be readily placed in position, the said non-buoyant seal being preferably approximately semispherical in shape and having the flattened face 14, as shown. When the parts described have been properly placed, they form, with the exception of the body 13, a practically permanent fixture within the bottle-neck, after which the cork or other stopper 15 may be placed in position in

the usual manner to form the closure for the upper end of the said tube.

When it is desired to fill the bottle, the fluid is first placed therein, after which the seal 10 is placed in position within the neck portion 2 and the tube 3 is projected into said neck portion 2 sufficiently far so that the screw-threads 6 will come into engagement, after which the said tube is rotated and is carried downwardly into the neck 2 by means of said screw-threads, thereby carrying with it the seal 10 and the stopper of non-buoyant material 13, which should previously have been placed in position within the said tube 3. This rotation is continued until the spring 9 comes into engagement with the socket 8 in the neck portion 2, whereupon the said parts are securely locked in position against removal except upon breaking the bottle-neck. When the bottle is properly sealed and stopped and it is desired to obtain the contents thereof, it is necessary first to withdraw the cork 15, after which the non-buoyant stopper 13 is driven into the bottle past the annulus 10, which, by the way, owing to its compressible material will have a tendency to sustain the said stopper 13 in position, said stopper being also held by frictional engagement within the tube 3, whereupon the stopper 13, being of non-buoyant material, will fall to the bottom of the receptacle, as shown in Fig. 2, resting presumably upon the flattened face 14 thereof. Thus it will be evident that if the stopper 13 is not in the uppermost position, as shown in Fig. 1, and a cork, as 15, is in position within the bottle a warning is conveyed to the purchaser that the bottle has been tampered with and its contents have been subjected to removal, whether removed therefrom or not, and the purchaser is placed upon his guard with relation to the contents of the bottle. After the stopper 13 has been driven into the bottle it is evident that said stopper being of a non-buoyant material will not prevent the egress of material from the bottle through the opening in the tube 3, and the bottle may be used at will for any purpose desired.

While I have shown in the accompanying drawings the preferred form of my invention, it will be understood that I do not limit myself to the precise form shown, for many of the details may be changed in form or position without affecting the operativeness or utility of my invention, and I therefore reserve the right to make all such modifications as are included within the scope of the following claims or of mechanical equivalents to the structures set forth.

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

1. In a bottle, a screw-threaded neck portion having a socket therein, in combination with a correspondingly screw-threaded and socketed tube within said neck, a spring held in said tube-socket adapted to engage with the other socket, and an annular seal within said neck below the tube.

2. In a bottle, a screw-threaded neck portion having a socket therein, in combination with a correspondingly screw-threaded and socketed tube within said neck, a spring held in said tube-socket, which spring is adapted to engage with said neck-socket, an annular seal within the neck below the tube, and a non-buoyant stopper frictionally engaging the lower interior portion of said tube.

3. In a bottle, a screw-threaded neck portion having a socket therein, in combination with a correspondingly screw-threaded and socketed tube within said neck, a spring held in said tube-socket, which spring is adapted to engage with said neck-socket, an annular seal within the neck below the tube, and a non-buoyant stopper having a flattened face frictionally engaging the lower interior portion of said tube.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

WILLIAM GARDNER.

Witnesses:

AGNES JANE DICKIE.
BLAKE SCOTT EATON.