

No. 749,604.

PATENTED JAN. 12, 1904.

G. C. BESSONET.
NON-REFILLABLE BOTTLE.
APPLICATION FILED MAY 16, 1903.

NO MODEL.

FIG. 2.

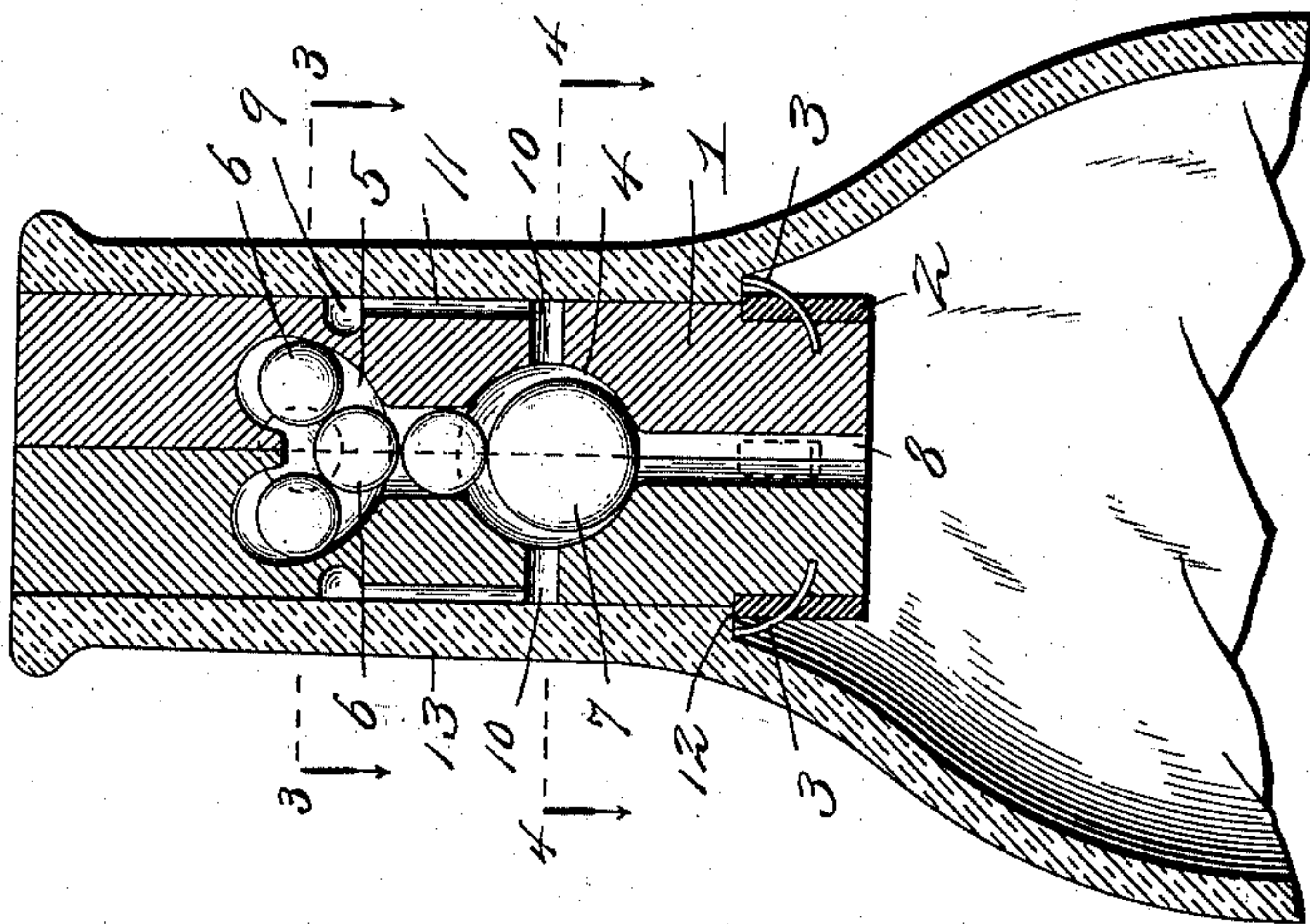


FIG. 3.

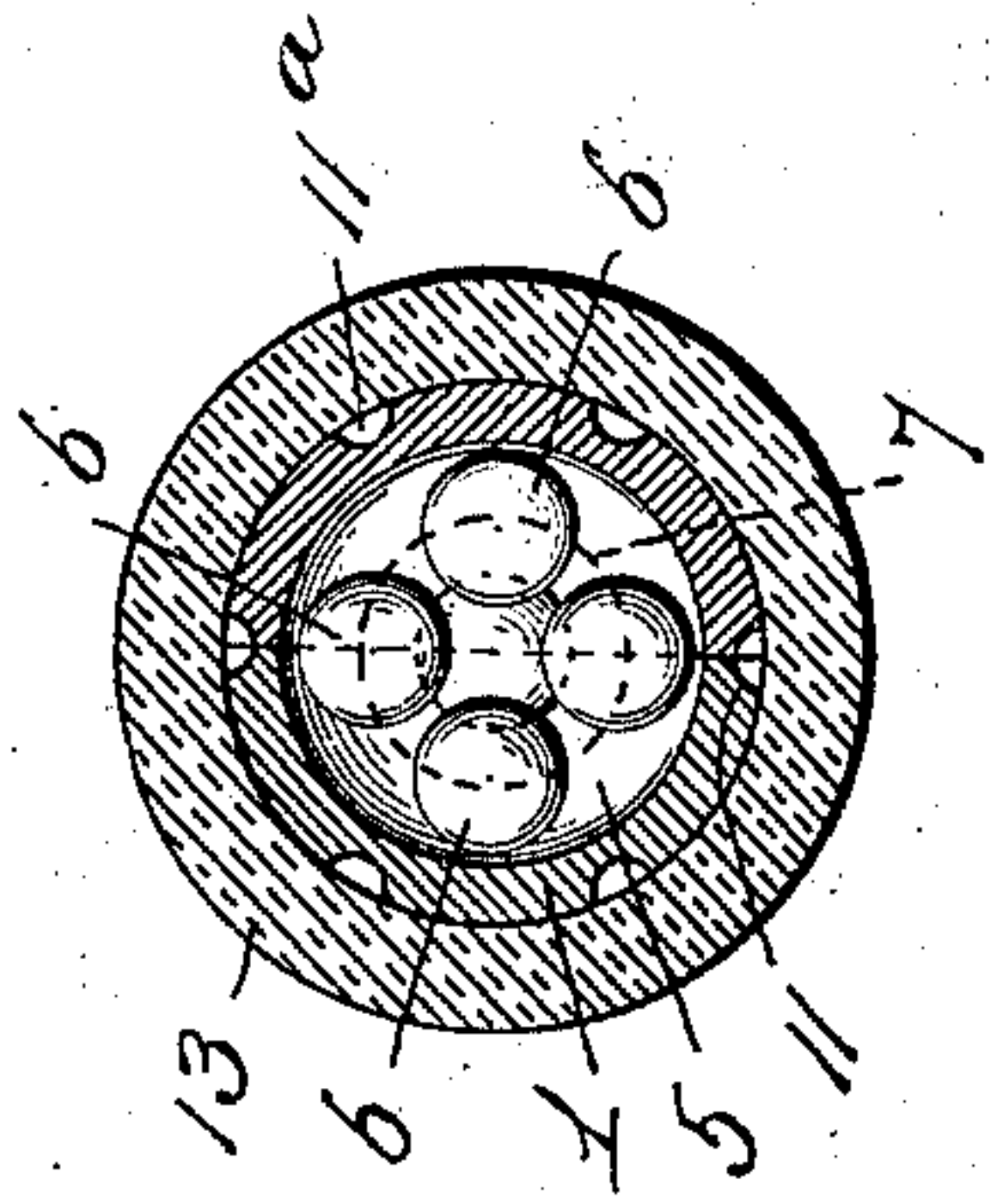


FIG. 4.

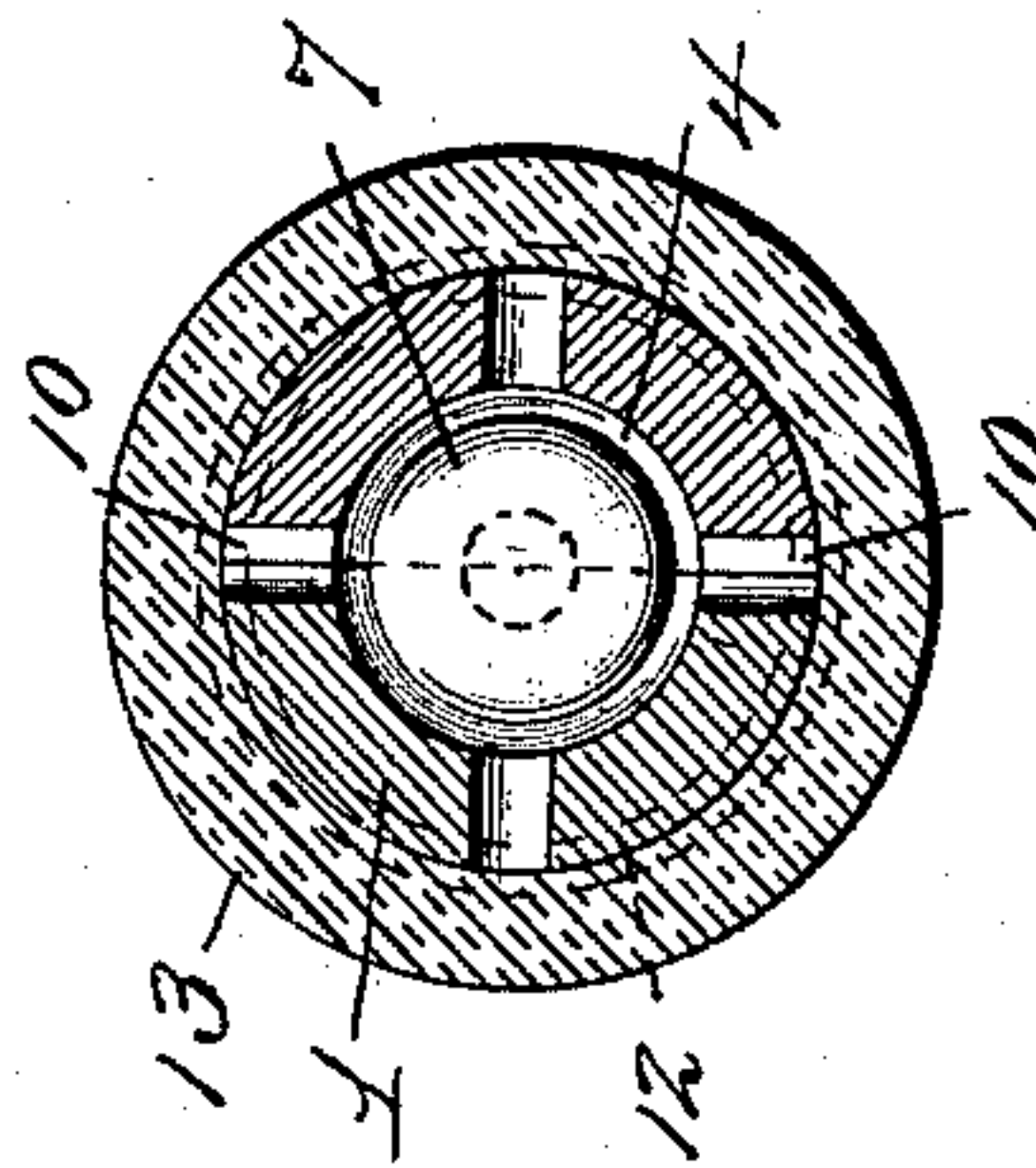
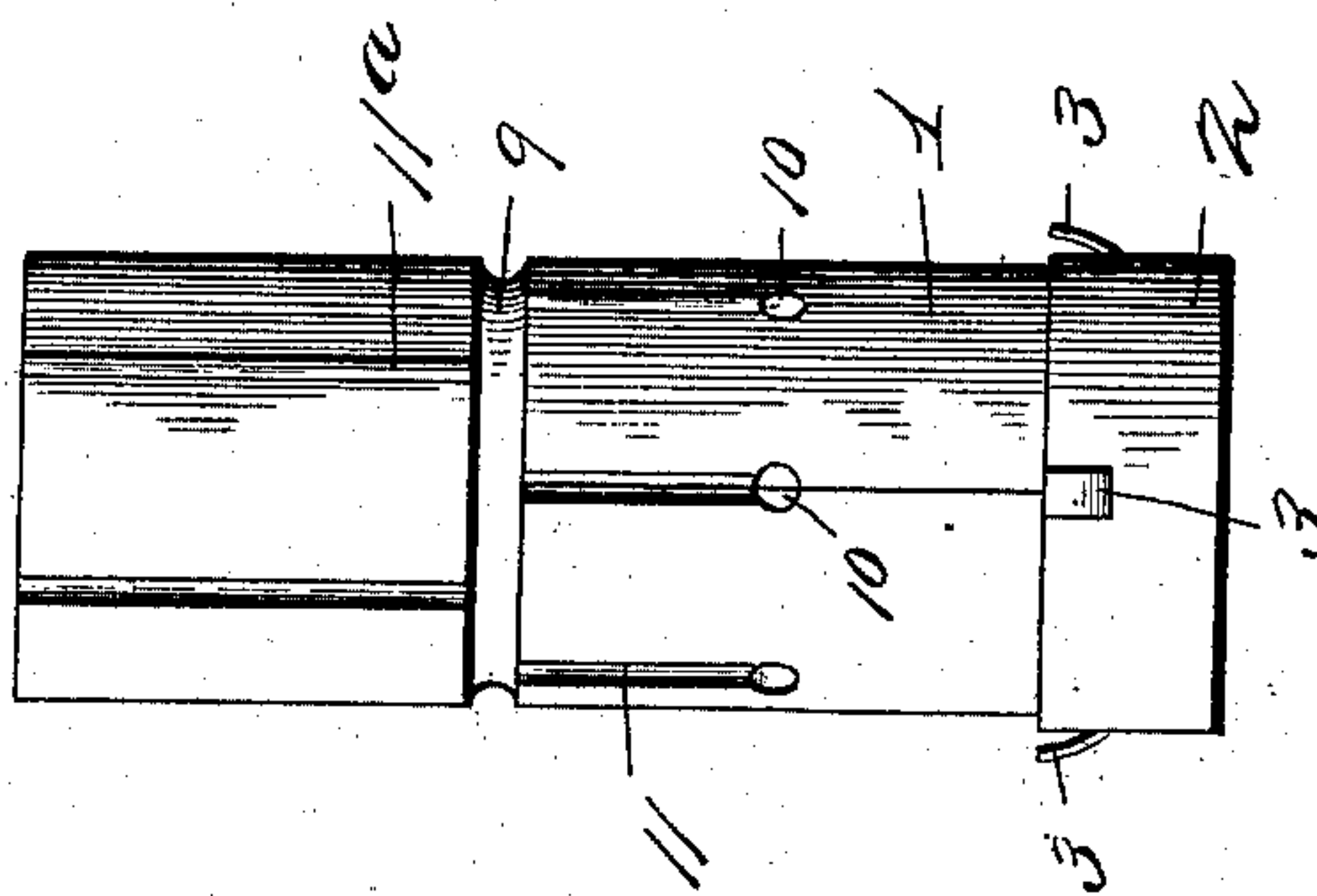


FIG. 1.



Witnesses

Harry L. Amer.
Herbert Lawson

Inventor

George C. Bessonet.

By

Victor J. Evans

Attorney

UNITED STATES PATENT OFFICE.

GEORGE C. BESSONET, OF CHANNING, TEXAS.

NON-REFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 749,604, dated January 12, 1904.

Application filed May 16, 1903. Serial No. 157,454. (No model.)

To all whom it may concern:

Be it known that I, GEORGE C. BESSONET, a citizen of the United States, residing at Channing, in the county of Hartley and State of Texas, have invented new and useful Improvements in Non-Refillable Bottles, of which the following is a specification.

My invention relates to new and useful improvements in non-refillable bottles, and its object is to provide a closure which may be readily inserted into and locked within the neck of a bottle and which is provided with a ball-valve adapted to be seated automatically, whether or not in an inverted position, by the introduction of liquid to the closure when an attempt is made to refill the bottle.

The invention consists in providing a closure having springs for locking it within the neck of a bottle. A passage extends into the closure from the lower end and communicates with a compartment within which is arranged a float. Passages extend laterally from this compartment and communicate with a groove extending around the closure and opening into grooves which extend longitudinally within the closure to the outer end thereof. Solid balls or weights are arranged within a compartment provided therefor and are adapted to bear upon the float when the bottle is in normal position and hold the same seated upon the inner end of the central passage in the closure. When the bottle is inverted, the float will rise in view of its buoyant nature whenever liquid is forced upward through the grooves and into the compartment containing the float.

The invention also consists in the further novel construction, combination, and arrangement of the several parts, which will be more fully hereinafter described and claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of the closure. Fig. 2 is a vertical section therethrough, showing the same in position within the neck of a bottle. Fig. 3 is a section on line 3 3, Fig. 2; and Fig. 4 is a section on line 4 4, Fig. 2.

Referring to the figures by numerals of reference, 1 is a hollow substantially cylindrical stopper formed, preferably, of two similar sec-

tions. The lower end of this stopper is slightly reduced in diameter and is inclosed by a washer 2, through which project spring-arms 3, the inner ends of which are embedded in the lower end of the stopper. A circular compartment 4 is formed adjacent to the center of the stopper, and communicating therewith is a substantially T-shaped compartment 5, within which are arranged a series of balls 6, preferably formed of glass or other heavy non-corrosive material. A buoyant sphere 7 is arranged within the compartment 4 and is normally seated at the inner end of a passage 8, which extends inward from the center of the lower end of stopper 1 and opens into compartment 4.

A groove 9 is formed within the stopper, and longitudinally-extending grooves 11 extend therefrom and communicate at their inner ends with passages 10, which extend inward to the compartment 4. Longitudinally-extending grooves 11^a are also arranged upon the outer face of the stopper between the groove 9 and the outer end of the stopper. To use this closure, the balls 6 and the float 7 are placed between the two sections of the stopper, and washer 2 is then arranged upon the reduced end. When the stopper is inserted into the neck of a bottle, the arms 3 will spring outward into engagement with shoulders 12, formed within the neck 13 of a bottle, at the lower end thereof. When it is desired to move liquid from the bottle, it is merely necessary to invert it, and the ball 6 and float 7 will roll downward by gravity, and thereby permit the liquid to flow through the passage 8 and the lower passages 10 to the grooves 11, 9, and 11^a. This liquid will be displaced by air entering the upper grooves 11^a and 11 and the upper passage 10 and thence through the passage 8. It will be impossible to again refill the bottle, for the reason that the balls 6 hold the float 7 in position upon the inner end of passage 8 when the bottle is in an upright position. When the bottle is inverted, the float 7 will rise because of its buoyancy whenever liquid passes through the grooves 11 and 11^a and into the compartment 4.

The device is extremely simple and inexpensive in construction and can be readily

inserted into a bottle and serves as an effective device for preventing the refilling thereof.

In the foregoing description I have shown the preferred form of my invention; but I do not limit myself thereto, as I am aware that modifications may be made therein without departing from the spirit or sacrificing the advantages thereof, and I therefore reserve the right to make such changes as fairly fall within the scope of my invention.

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

1. In a closure for bottles the combination with similar sections having recesses in their contacting faces forming a compartment, a longitudinally-extending passage communicating with the compartment and opening through the bottom of the closure, passages extending laterally from the compartment, and longitudinally-extending grooves communicating with the passages; of a float within the compartment and normally closing the longitudinally-extending passage, and spherical weights normally bearing upon the float.
2. In a closure for bottles, the combination with similar sections having recesses in their contacting faces forming a compartment, spring-arms extending from the sections, a longitudinally-extending passage within the closure, communicating with the compartment, passages extending laterally from the compartment, and longitudinally-extending grooves within the closure and communicating with said passages; of a float within the compartment and normally closing the longitudinally-extending passage, and a series of spherical weights adapted to bear upon the float and hold it in its seat.
3. A closure for bottles comprising similar

semicylindrical sections having recesses in their contacting faces forming a compartment, an inlet-passage thereto and outlet-passages therefrom, grooves extending longitudinally of the sections and communicating with the outlet-passages, a float within the compartment and normally seated at the end of the inlet-passage, spherical weights normally bearing upon the float, a washer inclosing the sections, and spring-arms extending from the sections.

4. The combination with a bottle having a shoulder within the neck thereof; of a closure within said neck and comprising similar sections having recesses in their contacting faces forming a compartment, an inlet-passage and outlet-passages, longitudinally-extending grooves communicating with the outlet-passages, a float within the compartment for closing the inlet-passage, spherical weights normally bearing upon the float, spring-arms extending from the sections and adapted to engage the shoulders, and a washer.

5. A closure for bottles comprising sections having recesses in their contacting faces forming a compartment and an inlet-passage therebetween, said sections having outlet-passages, and longitudinally-extending grooves communicating therewith, a float within the compartment normally closing the inlet-passage, and means for overcoming the buoyancy of the float to retain it in position at the end of the inlet-passage.

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

GEORGE C. BESSONET.

Witnesses:

E. E. KERSEY,
F. L. BREWER.