

No. 763,328.

PATENTED JUNE 21, 1904.

C. F. ROHWER.
NON-REFILLABLE BOTTLE.
APPLICATION FILED MAR. 7, 1904.

NO MODEL.

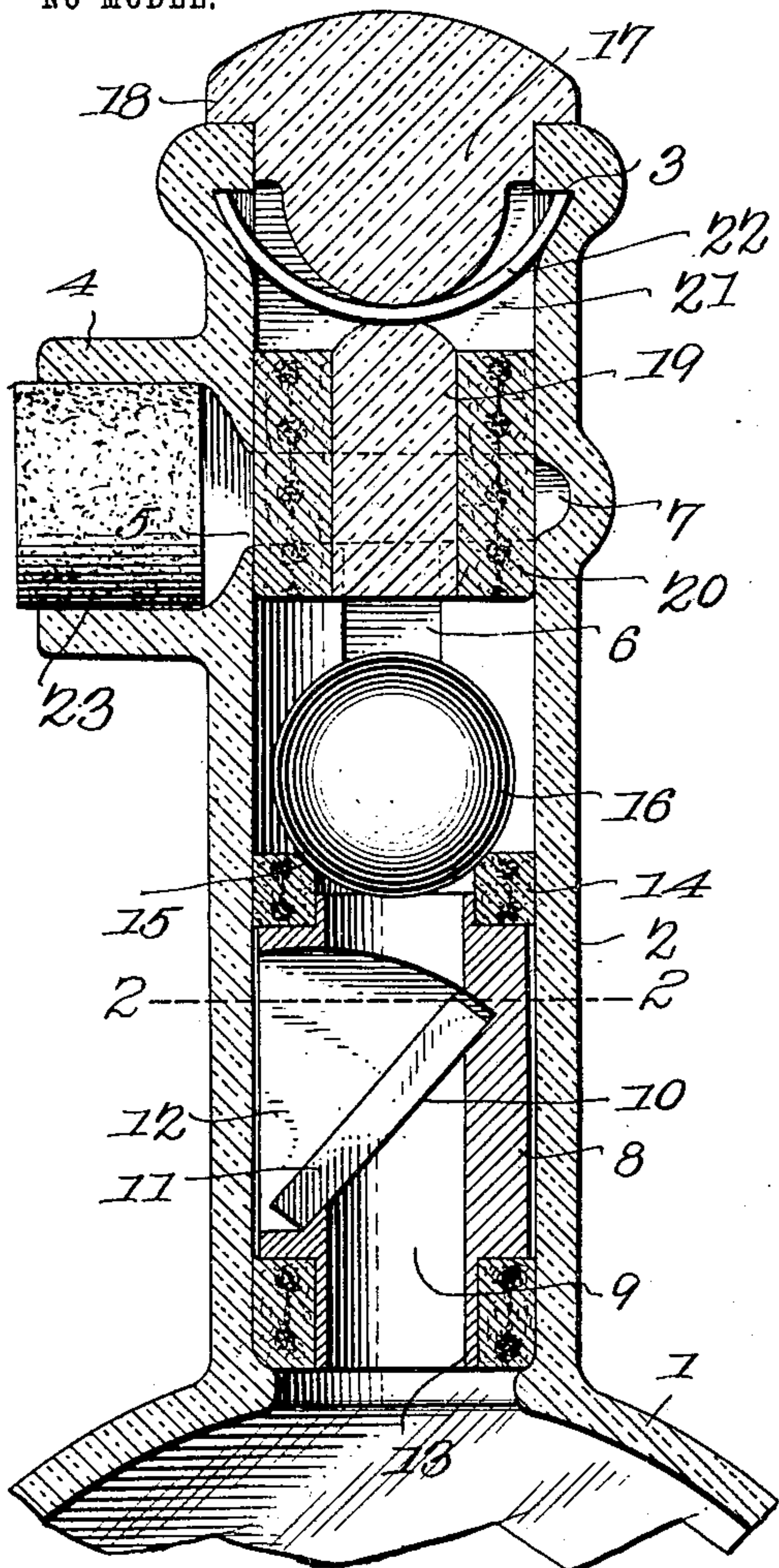


Fig. 1.

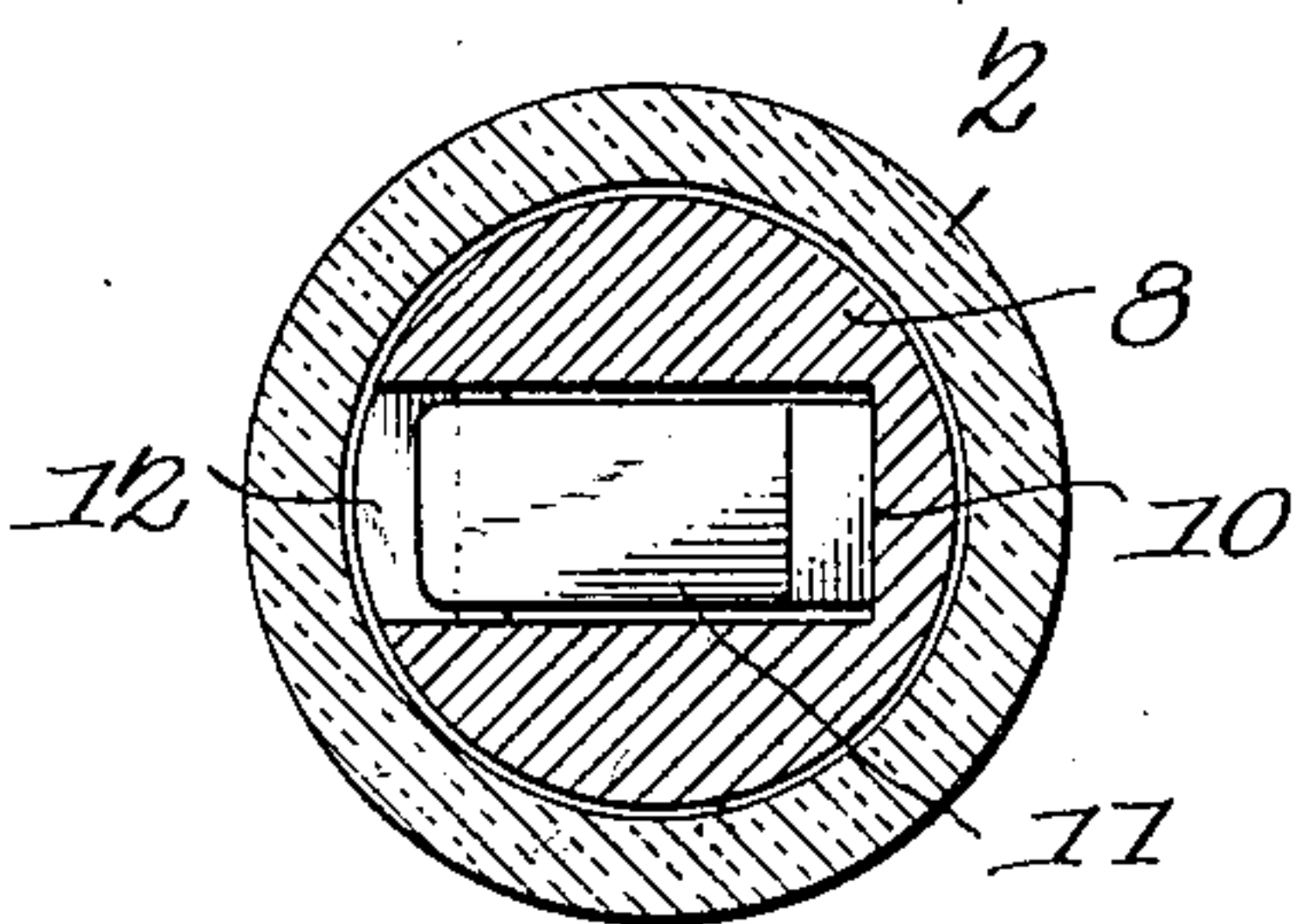


Fig. 2.

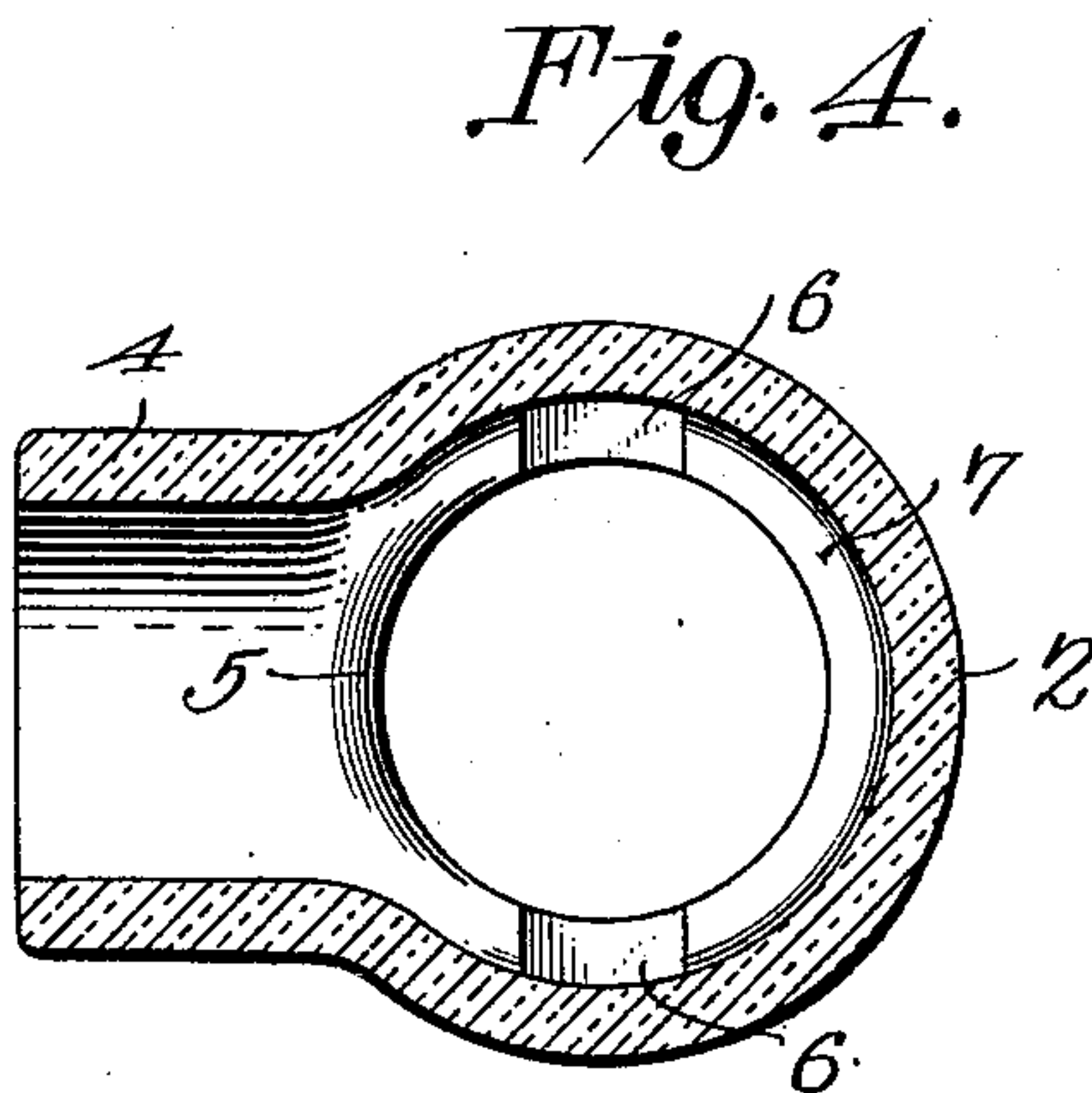


Fig. 4.

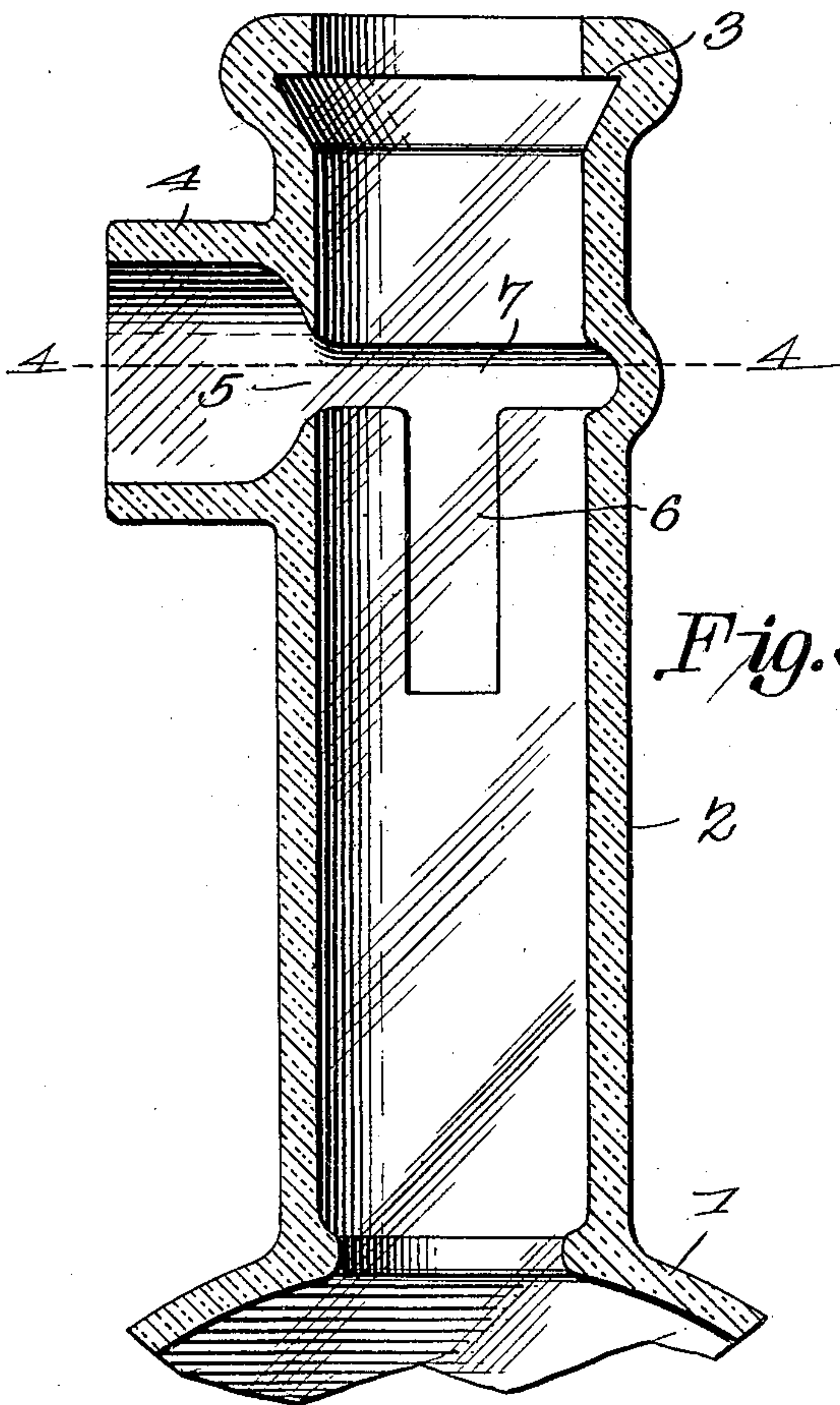


Fig. 3.

Witnesses

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UNITED STATES PATENT OFFICE.

CARL FREDERICK ROHWER, OF HOT SPRINGS, ARKANSAS.

NON-REFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 763,328, dated June 21, 1904.

Application filed March 7, 1904. Serial No. 197,018. (No model.)

To all whom it may concern:

Be it known that I, CARL FREDERICK ROHWER, a citizen of the United States, residing at Hot Springs, in the county of Garland and State of Arkansas, have invented a new and useful Non-Refillable Bottle, of which the following is a specification.

My invention relates to non-refillable bottles, and has for its objects to produce a comparatively simple inexpensive device of this character which in practice will, after the bottle has been originally filled and sealed, prevent the future introduction of liquid thereto, thereby obviating the fraudulent substitution of an inferior grade of goods for that initially contained in the bottle.

To these ends the invention comprises the novel features of construction and combination of parts more fully hereinafter described.

In the accompanying drawings, Figure 1 is a vertical section through a bottle-neck having my improved device applied thereto. Fig. 2 is a transverse section through the same on the line 2 2 of Fig. 1. Fig. 3 is a vertical section through the neck with the valve mechanism removed. Fig. 4 is a transverse section of the same on the line 4 4 of Fig. 3.

Referring to the drawings, 1 designates a bottle, and 2 its neck, these parts, except as hereinafter described, being of the usual or any preferred construction and material.

The neck 2 is provided adjacent to its upper end with an annular internal groove producing a stop-shoulder or abutment 3 and at a point beneath and suitably remote from the latter with a lateral tubular extension 4, formed integral with or otherwise joined to the neck and communicating with the latter through an opening 5, there being formed within the neck a pair of oppositely and longitudinally disposed grooves 6, constituting passages communicating at their upper ends with a transversely-arranged annular groove or passage 7, which in turn communicates with the extension 4 through the opening 5.

Housed within the neck 2 at a point beneath the extension 4 is a tubular sleeve or casing 8, composed of glass or other suitable material and having formed therein diagonally across its central discharge opening or passage 9 a

seat 10, upon which normally rests a flap-valve 11, which is entered into the casing through a longitudinally-extending transverse opening 12, the valve 11 being of oblong form and adapted when in open position to lie within and close the opening 12. The casing 8 is provided at its ends with reduced portions or extensions 13, designed for the reception of cork or analogous collars or gaskets 14, and at its normally upper end with a seat 15 for the reception of a ball-valve 16, arranged within the neck above the sleeve 8. It is here to be noted that the gaskets 14 serve to seal the casing within the neck and prevent passage of liquid between the parts and that the upper end of the casing, which is normally closed by the valve 16, terminates in position to discharge directly into the grooves or passages 6.

Seated in the upper end or mouth of the neck 2 is a stopper 17, composed, preferably, of glass and having a cap or flange 18, which fits upon the upper end of the neck, and a reduced portion 19, designed to receive a cork or analogous gasket 20, similar in construction to and performing the same office as the gaskets 14, the stopper being extended and terminated at a point beneath the opening 5 and provided above the reduced portion 19 with a transverse opening 21 for the reception of a substantially semicircular spring-metal retaining member or key 22, the ends of which when the stopper is inserted to position spring outward and into engagement with the shoulder 3, thereby preventing removal of the stopper from the neck.

In practice, the bottle having been initially filled with liquid and the casing 8 and valve 16 arranged in position, the stopper is inserted into the neck and serves to effectually close the latter except to the extent of the passages 6 7, which lead to and communicate with the extension 4, designed for the reception of the usual cork 23, attention being especially directed to the fact that when the bottle is in upright or non-discharging position the valves 11 16 will normally rest upon their respective seats 10 15 and effectually prevent entrance of liquid to the bottle. The extension 4, which constitutes the discharge-mouth of the bottle,

being arranged parallel with the plane of movement of the valve 11, will when the bottle is turned to discharging position insure the said valve moving to open position, while the
5 valve 16 will likewise move away from its seat, thereby permitting the liquid to flow from the bottle through the passages 9, 6, and 7, while the valves will immediately on the return of the bottle to non-discharging position again close, thereby preventing the intro-
10 duction of liquid to the bottle.

From the foregoing it is apparent that I produce a simple inexpensive device admirably adapted for the attainment of the ends
15 in view; but it is to be understood that I do not limit myself to the precise details herein set forth, as minor changes may be made without departing from the spirit of the invention.

20 Having thus described the invention, what is claimed is—

1. A bottle having its neck provided with a lateral discharge-opening, and a movable valve disposed within the neck and having opening
25 movement only in a direction toward the side of the neck on which the discharge-opening is located.

2. A bottle having its neck provided with a lateral discharge-opening, and a valve disposed
30 within the neck and having opening movement transversely of the latter and toward the side on which the discharge-opening is located.

3. A bottle having its neck provided with a
35 lateral discharge-opening, a valve disposed within the neck and having opening movement toward the side of the latter on which the discharge-opening is located, and means for guiding the valve during said movement.

40 4. A bottle having its neck provided with a lateral discharge-opening, a flap-valve dis-

posed within the neck and having opening movement in a predetermined direction and toward the side of the neck on which the discharge-opening is located, and a ball-valve
45 movable in the neck above the flap-valve.

5. A bottle having its neck provided with a lateral discharge-opening, and a flap-valve disposed within the neck and having opening movement only in a direction toward the side
50 of the neck on which the discharge-opening is located.

6. The combination with a bottle and its neck, the latter having a lateral discharge-opening and transverse longitudinal passages
55 communicating with each other and leading thereto, of a casing disposed within the neck beneath the transverse passage, a flap-valve arranged within the casing and having opening movement only toward the side of the
60 neck on which the discharge-opening is located, and a ball-valve adapted to seat upon the normally upper end of the latter.

7. The combination with a bottle and its neck, of a tubular casing disposed within the
65 latter and having a passage, a movable valve situated in the casing for normally closing the passage, a ball-valve arranged in the neck above the casing and adapted to seat upon the upper end of the latter, said neck being pro-
70 vided with discharge-passages above the casing, and a lateral discharge-port leading from the neck and communicating with the discharge-passages, and a permanent closure for the upper end of the neck.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

CARL FREDERICK ROHWER.

Witnesses:

A. J. GUNTHER,

MARK F. QUIGLEY.