No. 740,774. PATENTED OCT. 6, 1903.

F. ONDRA.

NON-REFILLABLE BOTTLE.

APPLICATION FILED APR. 17, 1903.

NO MODEL.

Fig. I.

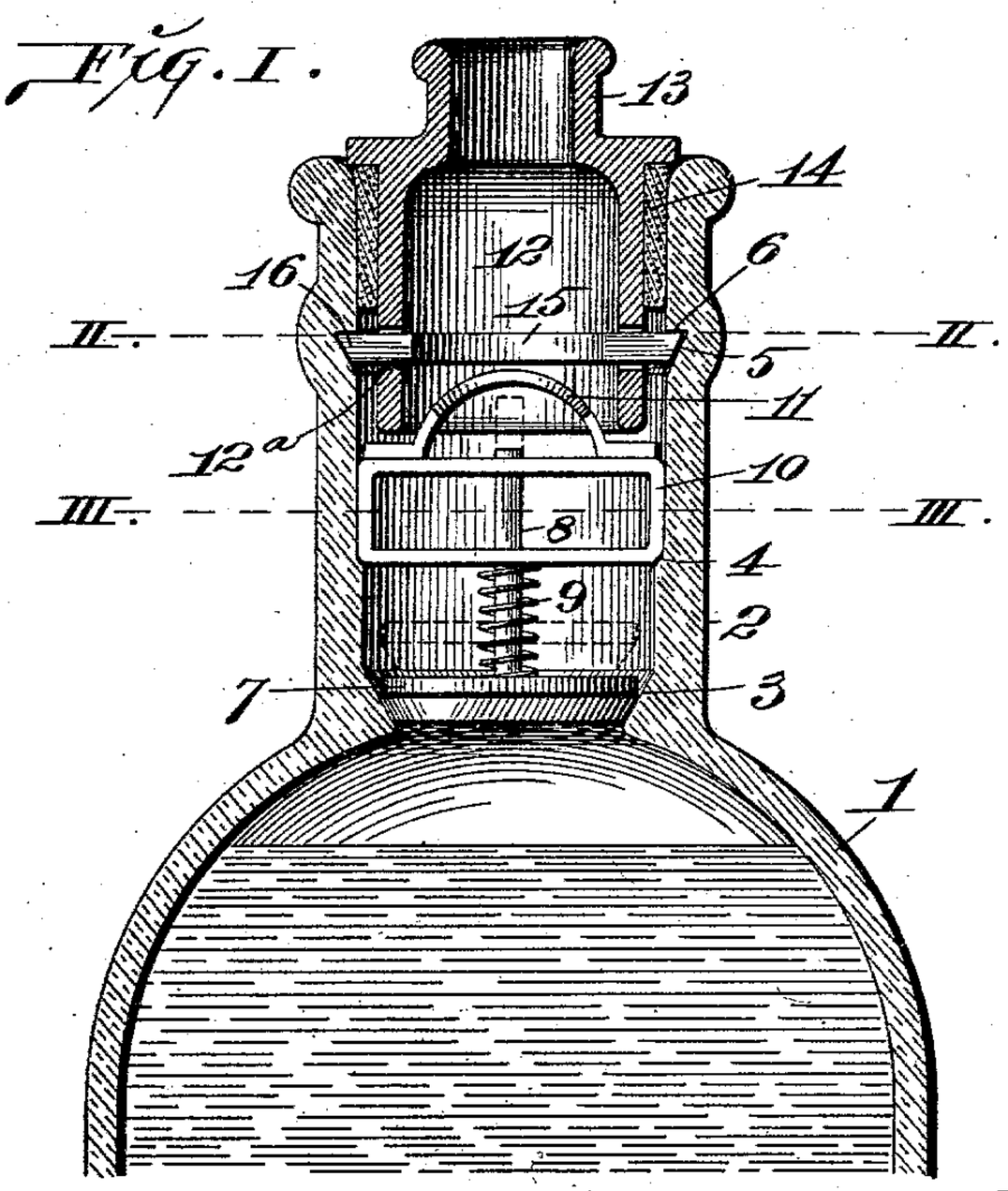


Fig. II.

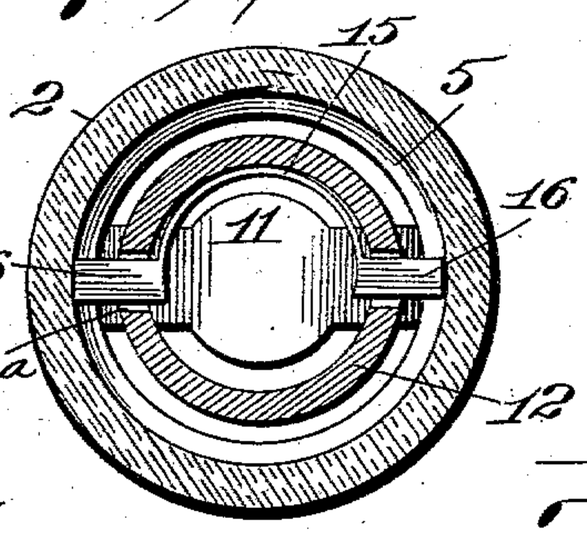


Fig. III.

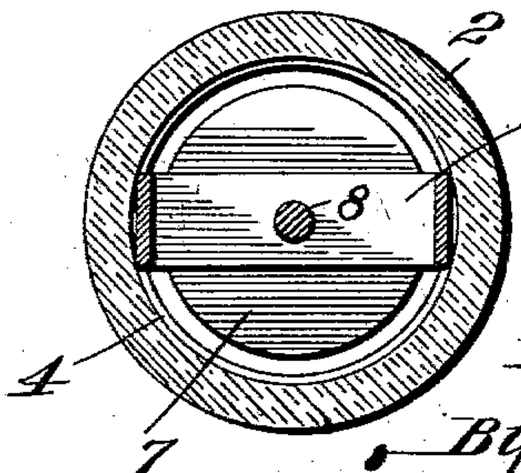


Fig. IV.

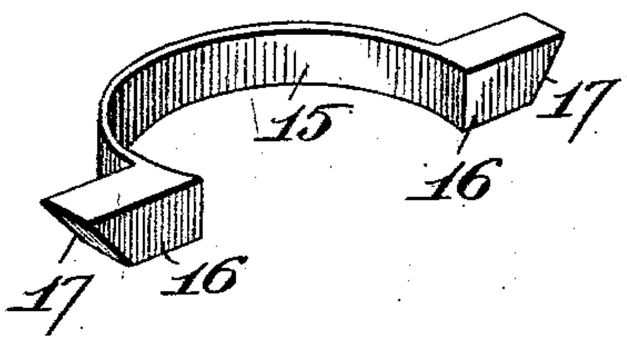
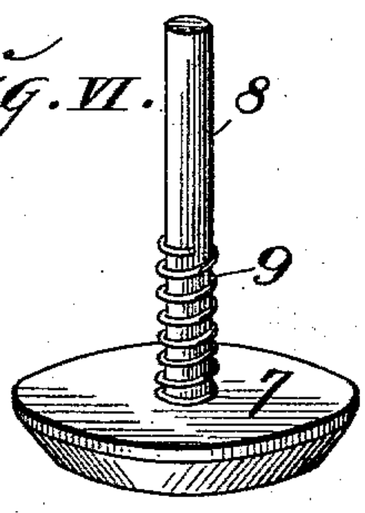


Fig. V.

Fig. VI.



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No. 740,774. Patented October 6, 1903.

UNITED STATES PATENT OFFICE.

FRANT ONDRA, OF ST. LOUIS, MISSOURI, ASSIGNOR OF ONE-HALF TO MARTIN V. KACER, CHARLES TRISKI, AND EMANUEL PERKA, OF ST. LOUIS, MISSOURI.

NON-REFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 740,774, dated October 6, 1903.

Application filed April 17, 1903. Serial No. 153,095. (No model.)

To all whom it may concern:

Be it known that I, FRANT ONDRA, a subject of the Emperor of Austria-Hungary, residing in the city of St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Non-Refillable Bottles, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to a bottle designed to prevent the introduction of liquid thereinto after the original contents have been removed, thereby preventing fraudulent refilling by unscrupulous parties to trade upon the name of the manufacturer by whom the bottle was originally filled.

The invention consists in features of novelty hereinafter fully described, and pointed out in the claims.

Figure I is a vertical section of a bottle constructed in accordance with my invention. Fig. II is a transverse section taken through the bottle-neck on line II II, Fig. I. Fig. III is a transverse section taken through the bottle-neck on line III III, Fig. I. Fig. IV is a perspective view of the keeper for retaining the bottle-stopper. Fig. V is a perspective view of the frame in which the stem of the stopper-valve is positioned. Fig. VI is a perspective view of the valve and its stem.

1 designates a bottle having a neck 2. Interior of the bottle-neck, at its lower end, is a tapered valve-seat shoulder 3, and above said shoulder, within the neck, is a second shoulder 4.

5 is an annular groove in the interior of the bottle-neck, which is provided with an upper horizontal face 6.

7 designates a valve positioned within the bottle-neck 2 to seat upon the valve-seat shoulder 3. The valve 7 is provided with an upwardly-extending stem 8, which is surrounded by a light spring 9, preferably of German silver. The valve-stem 8 is slidably positioned in a frame 10, that rests upon the shoulder 4 in the bottle-neck, beneath which the spring 9 is confined. This frame 10 consists of two centrally-perforated bars, one above the other, connected together at their ends and not as wide as the neck of the bottle.

11 is a guard surmounting the valve-rod frame 10 to prevent access to the valve-rod for the purpose of unseating the valve 7, which is normally held to its seat by the spring 9.

12 designates a nozzle having a nipple 13 and seated in the upper end of the bottle-neck, to which it is tightly fitted by a cork or other bushing 14. The nozzle 12 is secured to the bottle-neck by a keeper consisting of a bow-spring 15, situated within the nozzle and having fingers 16, that pass through apertures 12^a in the nozzle. The fingers 16 are tapered downwardly at their outer ends at 17, and they are adapted to enter the groove 5 in the bottle-neck to retain the nozzle 12 in said neck after it has been introduced thereinto, the bow-spring permitting inward movement of the fingers as they ride down the interior surface of the bottle-neck and serving to project them into said groove when they reach it. After the bottle-closure consisting of the parts described has been introduced into the bottle the contents of the bottle may be readily poured therefrom by inverting the bottle and causing the force of the liquid therein to exert pressure against the valve 7 to unseat it against the action of the light spring 9. The contents of the bottle will then find ready egress through the bottle-neck; but as soon as the pressure of liquid in the bottle against the valve 7 is relieved therefrom when the bottle is stood upright the valve 7 resumes its seat, thereby preventing the introduction of liquid past it into the bottle.

I claim as my invention—

1. In a non-refillable bottle, the combination with a bottle-neck containing a valve-seat, of a valve for movement to said seat, a valve-rod carried by said valve, a frame comprising a pair of centrally-perforated bars, one above the other, connected together at their ends, not as wide as the bottle-neck and in the perforations of which said valve-rod operates, and a spring located between said valve and said frame, substantially as set forth.

2. In a non-refillable bottle, the combination with a bottle-neck containing a valve-seat, of a valve for movement to said seat, a valve-rod carried by said valve, a frame comprising a pair of centrally-perforated bars, one above the other, connected together at their ends, not as wide as the bottle-neck and in the perforations of which said valve-rod operates, a spring located between said valve and said frame, and a guard surmounting said frame above the upper end of said valve-rod, substantially as set forth.

3. In a non-refillable bottle, the combination with a bottle-neck containing a valve-seat, of a valve for movement to said seat, a valve-rod carried by said valve, a frame comprising a pair of centrally-perforated bars, one above the other, connected together at their ends, not as wide as the bottle-neck and in the perforations of which said valve-rod operates, a spring located between said valve and said frame, a nozzle seated in the upper end of the bottle-neck, and a spring-keeper holding said nozzle to said bottle-neck, substantially as set forth.

FRANT ONDRA.

In presence of—
E. S. KNIGHT,
M. P. SMITH.