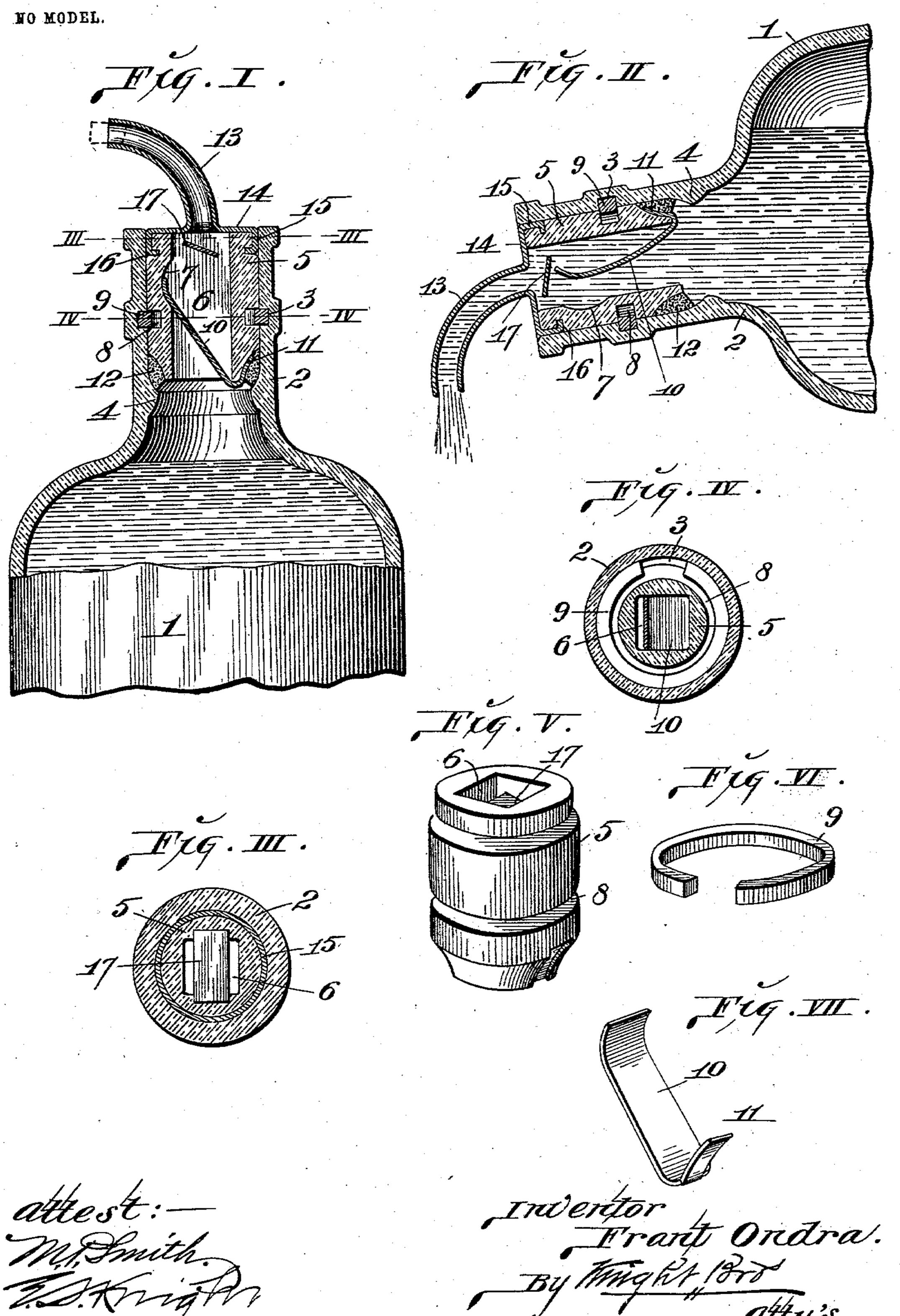
F. ONDRA.

NON-REFILLABLE BOTTLE.

APPLICATION FILED DEC. 29, 1902.



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. 740,773, dated October 6, 1903.

Application filed December 29, 1902. Serial No. 136,961. (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 Mis-5 souri, 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 10 specification.

My invention relates to a bottle into which liquids cannot be introduced after the stopper is seated therein to inclose the original contents and subsequent to the removal of

15 said contents.

The object of the invention is to produce a bottle that is proof against fraudulent refilling by unscrupulous parties desiring to trade upon the name of the manufacturer by whom 20 the bottle is originally filled.

The invention consists in features of novelty hereinafter fully described, and pointed

out in the claims.

of the bottle.

Figure I is a view of my bottle-closure in 25 vertical section. Fig. II is a section of the bottle illustrated in the position assumed in the act of pouring the contents therefrom. Fig. III is a cross-section taken on line III III, Fig. I. Fig. IV is a cross-section taken 30 on line IV IV, Fig. I. Fig. V is a perspective view of the stopper used in the bottle. Fig. VI is a perspective view of the retainingring by which the stopper is secured. Fig. VII is a perspective view of the valve applied 35 to the bottle-stopper.

1 designates the body of the bottle, having a neck 2, provided with an interior annular groove 3 and an interior annular shoulder 4.

5 designates a stopper provided with a 40 square aperture 6, extending longitudinally therethrough. At one side of the aperture 6 is a recessed seat 7. In the exterior of the stopper is an annular groove 8, corresponding in dimensions to the annular groove 3 in the 45 neck of the bottle, in which the stopper is fitted and adapted to register with said groove when the stopper is introduced into the neck

9 is a spring retaining-ring, which is de-

signed to seat partially in the groove 3 and 50 partially in the groove 8 to hold the stopper from extraction after it has been introduced into the neck of the bottle, the said ring being placed in the groove in the stopper previous to the introduction of the stopper and 55 springing outwardly into the groove in the bottle-neck after the stopper has been inserted.

10 designates a valve positioned in the square longitudinal aperture of the stopper 60 5 and provided at its lower end with a tongue 11, that is secured between the lower reduced end of the stopper and a body 12 of cement that rests upon the shoulder 4 at the lower end of the neck 2 interior thereof. The up- 65 per free end of the valve 10 is adapted to swing freely in the aperture 6 of the stopper when pressure of liquid is exerted thereagainst from its lower side, and when such pressure is relieved the free end of the valve 70 moves into the seat 7 at the side of said aperture, as seen in Fig. I. The valve 10 may be of any desirable material, such as light thin metal of a springy nature, that will yield under pressure of liquid at its under side and 75 will move resiliently to close the aperture 6 when pressure of liquid thereagainst is relieved.

13 designates a curved spout having a baseflanged cap 14, the rim 15 of which is adapted 80 to extend over the upper edge of the stopper 5 and enter a groove 16, contained by said stopper, by which construction the spout is securely held to the stopper after said stopper has been introduced into the neck of the 85 bottle, thereby preventing the separation of the spout from the stopper.

17 is a guard extending across the upper end of the aperture 6 in the stopper 5 to prevent the introduction of a wire or other in- 90 strument into said aperture from the spout 13 to open the valve 10 and hold it open for the introduction of liquid into the bottle. As illustrated in Fig. III, the pressure of liquid in the bottle acts against the valve 10 to 95 move its free end from its seat and permit the ready egress of the liquid, after which as soon as the pressure is relieved the valve closes

and remains in that condition except when pressure from the interior of the bottle is exerted thereagainst by the outflowing liquid.

I claim as my invention—

1. In a non-refillable bottle, the combination with a bottle-neck, of a stopper secured therein and containing a non-circular aperture, and a spring-valve secured to the lower end of said stopper and having a free end exro tending upwardly into the non-circular aperture in said stopper, substantially as set forth.

2. In a non-refillable bottle, the combination with the neck of the bottle, of a stopper secured in said neck, and containing a non-15 circular aperture, a spring-valve secured at the lower end of said stopper and having a

free end extending into the non-circular aperture in said stopper, and a guard located in the upper end of said aperture, substantially 20 as set forth.

3. In a non-refillable bottle, the combina-

tion with the neck of the bottle, of a stopper fitted in said neck, and provided with a square aperture extending longitudinally therethrough, and a spring-valve having its lower 25 end secured at the lower end of said stopper and its upper end freely positioned in said aperture to rest against the inner face of the stopper-wall, substantially as described.

4. In a non-refillable bottle, the combina- 30 tion with the neck of the bottle, of an apertured stopper secured in said neck, a springvalve located in the aperture in said stopper and immovably held at its lower end, a guard located in the upper end of said aperture, and 35 a spout having a flanged base fitted to the upper end of said stopper within the neck of the bottle, substantially as set forth.

FRANT ONDRA.

In presence of— N. V. ALEXANDER, GEO. H. KNIGHT.