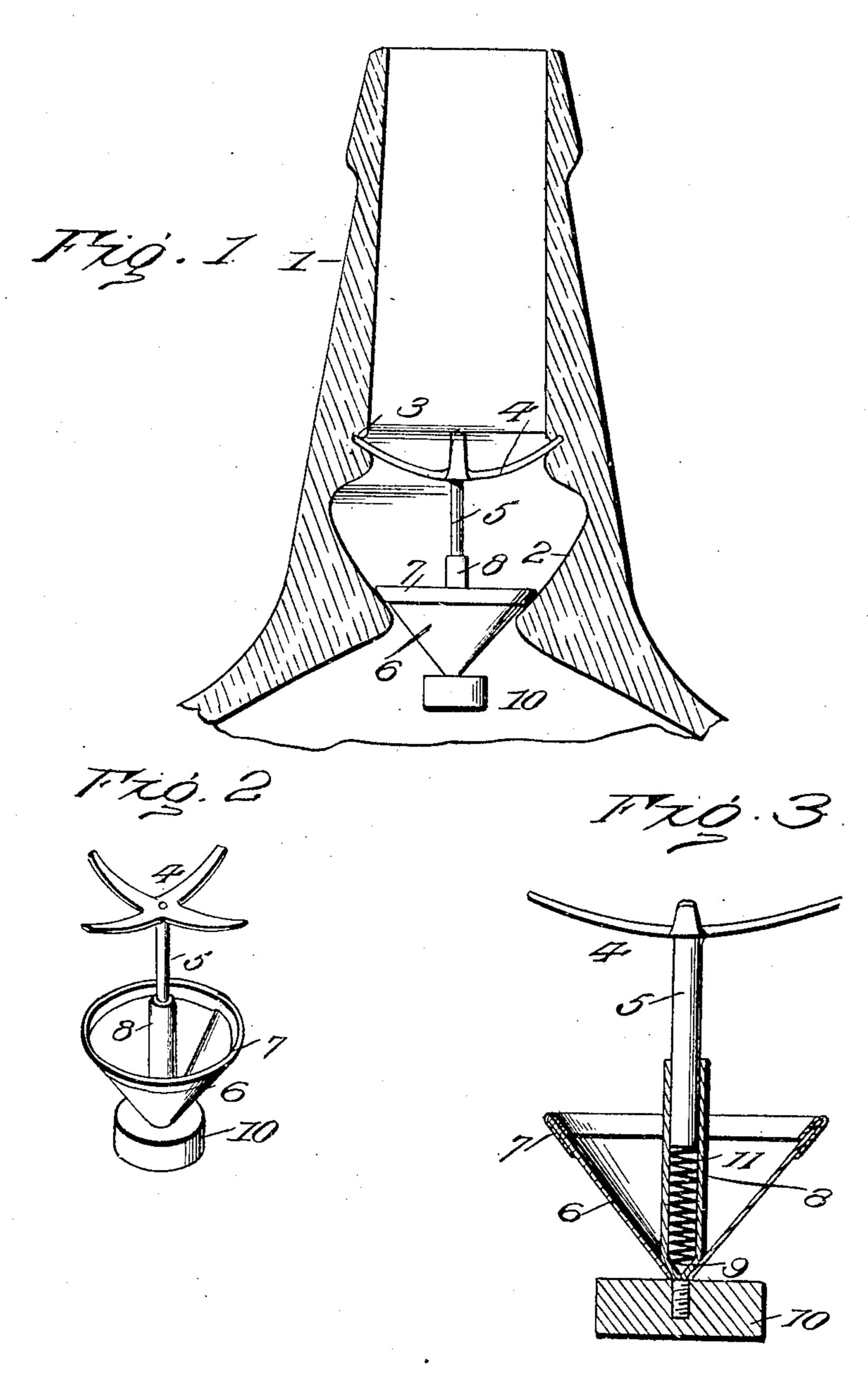
No. 869,390.

PATENTED OCT. 29, 1907.

R. J. PATTERSON.

NON-REFILLABLE BOTTLE.

APPLICATION FILED FEB. 7, 1907.



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## UNITED STATES PATENT OFFICE.

ROY J. PATTERSON, OF FORT WORTH, TEXAS.

## NON-REFILLABLE BOTTLE.

No. 869,390.

Specification of Letters Patent.

Patented Oct. 29, 1907.

Application filed February 7, 1907. Serial No. 356,243.

To all whom it may concern:

Be it known that I, Roy J. Patterson, a citizen of the United States, residing at Fort Worth, in the county of Tarrant and State of Texas, have invented certain new and useful Improvements in Non-Refillable Bottles, of which the following is a specification.

This invention appertains to bottles, or like receptacles, and has for its object to prevent the reuse of the same after their contents have been drawn off, thereby insuring to the consumer the brand of goods desired and at the same time preventing unscrupulous parties from dispensing an inferior article under the label, or brand applied to the genuine goods.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction and the means for effecting the result, reference is to be had to the following description and accompanying drawings.

While the invention may be adapted to different 20 forms and conditions by changes in the structure and minor details without departing from the spirit or essential features thereof, still the preferred embodiment is shown in the accompanying drawings, in which:

Figure 1 is a vertical central section of the neck por-25 tion of a bottle, provided with protective means embodying the invention. Fig. 2 is a perspective view of the protective means. Fig. 3 is a sectional view of the protective means showing the parts on a larger scale.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The bottle or other receptacle provided with a neck 1 has a valve seat 2 near the inner, or lower end of the 35 neck and an annular groove 3 a short distance from said valve seat. The valve seat 2 upwardly flares and is formed by thickening the neck 1 at its base, or juncture with the body of the bottle or receptacle. A spider 4 is sprung into the groove 3 and when in position 40 normally curves downward, thereby preventing the withdrawal of the spider without fracturing the bottle so as to preclude effective use thereof. A stem 5 is pendent from the center of the spider 4 and may be secured thereto in any way. The spider 4 is resilient, 45 yet sufficiently stout to prevent its removal from the neck of the bottle after being pressed home into the groove 3. The valve 6 is expansible and is of conical form and is composed of sheet material, metal being preferred, the blank being of circular outline and hav-50 ing a central opening, and a sector shaped portion cut from one side so that when the separated edges are brought together the blank will assume the conical shape substantially as shown. The upper edge of the valve is reinforced by means of a rubber band 7 fitted

thereto. The upper edge of the band embraces the 55 upper edge of the valve sò as to prevent downward displacement of the band on the conical surface of the valve. The rubber band, or elastic 6 performs the double office of drawing the separated edges of the blank together and of providing a packing to insure 60 the formation of a tight joint between the valve and its seat.

A hollow stem 8 has its lower portion reduced and threaded and passed through the opening at the apex of the valve. The shoulder 9 at the base of the reduced 65 portion of the stem tapers to conform approximately to the inclination of the walls of the valve. A weight 10 is threaded upon the projecting end of the stem 8 and serves as a nut to secure the valve thereon. A light spring 11 is placed within the stem 8 and acts jointly 70 with the weight 10 to insure the firm scating of the valve. The lower end of the stem 5 is in contact with the upper end of the spring 11. When the bottle, or receptacle is tilted to pour off the contents thereof, pressure upon the lower side of the valve 6 unseats the same 75 and permits the liquid contents of the bottle to pass off freely. When the bottle is placed in an upright position, the combined action of the weight 10 and spring 11 insures firm seating of the valve and prevents filling of the bottle in the ordinary way.

Having thus described the invention what is claimed as new is:

1. In combination, a bottle or receptacle, having a valve seat within the lower portion of its neck, a valve closing downward upon said seat, a stem fitted to said valve and 85 having its lower end reduced and passed through the valve, and a weight fitted to the lower projecting end of the stem and confining the valve in position thereon.

2. In combination, a bottle or necked receptacle having a valve seat within the lower portion of the neck, a valve 90 of approximately conical form and expansible and arranged to close downward upon the said seat, a stem fitted to the valve, means for seating the valve, and other means for directing the valve in its movements.

3. In combination, a bottle or necked receptacle, having 95 a valve seat within the lower portion of the neck, an expansible valve of approximately conical form, closing downward upon said seat, a stem having its lower end reduced and threaded and passed through an opening at the apex of said valve and a weight mounted upon the threaded end of the stem and confining the valve between the said weight and the shoulder formed at the base of the reduced end portion of said stem.

4. In combination, a bottle or necked receptacle having an inner valve seat, an expansible valve closing downward 105 upon said seat, and an elastic band fitted to the upper portion of the valve to form a packing and to hold the valve in contracted position.

5. In combination, a bottle or necked receptacle having an inner flange seat, a conical valve consisting of a circular blank having a sector-shaped portion removed from a side thereof and bent into conical form, and an elastic band fitted to the upper edge of the valve and embracing said edge and serving to hold the separated edges of the

blank together and to form a packing to insure the formation of a tight joint between the valve and its seat.

6. In combination, a bottle having an inner valve seat and an inner groove a short distance from the valve seat, 5 a spider sprung into said groove, a stem pendent from the spider, a valve adapted to close downward upon said valve seat and having an opening in its apex, a hollow stem fitted to the apex of the valve and having its lower end reduced and threaded and passed through said opening in the apex of the valve, a weight fitted to the projecting

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end of the stem and a spring arranged within the hollow stem and in contact at its upper end with the aforementioned pendent stem.

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

ROY J. PATTERSON. [L. s.]

- Witnesses:

J. C. WILSON,

D. W. HARVARD.