

No. 665,233.

Patented Jan. 1, 1901.

H. S. LA BARGE.
NON-REFILLABLE BOTTLE.

(Application filed Apr. 28, 1900.)

(No Model.)

Fig. II.

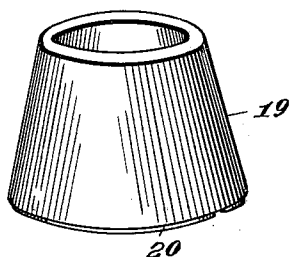


Fig. III.

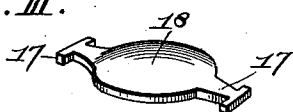


Fig. IV.

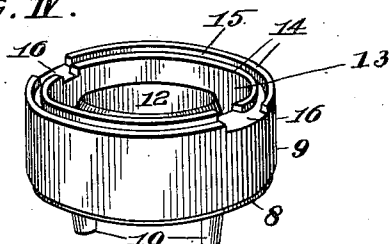


Fig. V.

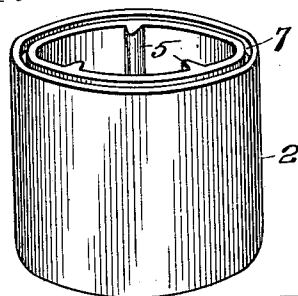


Fig. VII.

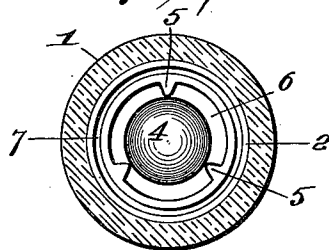


Fig. I.

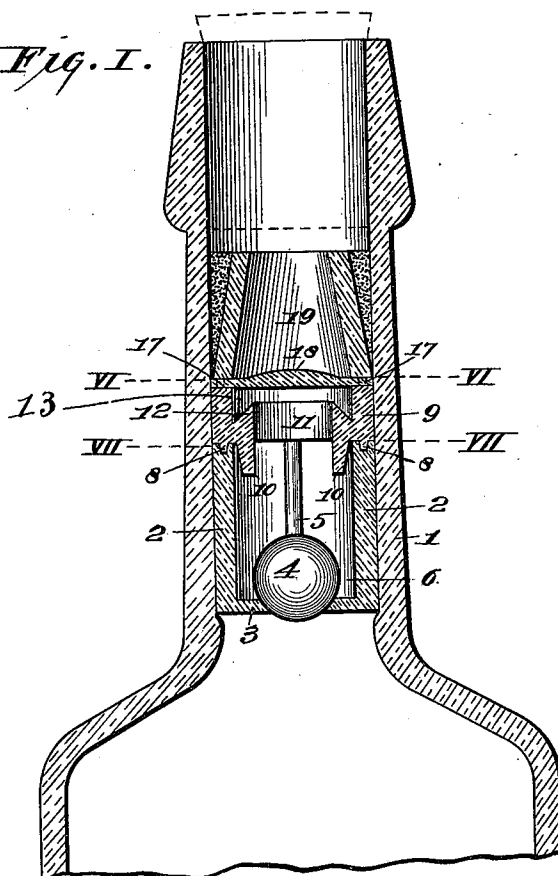
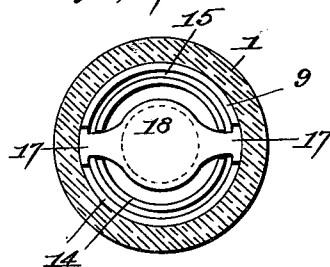


Fig. VI.



attest:—

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UNITED STATES PATENT OFFICE.

HENRY S. LA BARGE, OF WELLSTON, MISSOURI, ASSIGNOR OF ONE-FOURTH
TO WILLIAM B. DALTON, OF ST. LOUIS, MISSOURI.

NON-REFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 665,233, dated January 1, 1901.

Application filed April 28, 1900. Serial No. 14,651. (No model.)

To all whom it may concern:

Be it known that I, HENRY S. LA BARGE, a citizen of the United States, residing at Wellston, in the county of St. Louis and 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 that class of bottles constructed with the object in view of preventing refilling when the bottle has been emptied of its original contents, the device being so constructed that the original contents of the bottle may be readily and freely extracted therefrom.

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

Figure I is a vertical sectional view taken through the upper end and neck of a bottle constructed in accordance with my invention. Fig. II is an enlarged perspective view of the confining-cone located at the upper end of my device. Fig. III is a perspective view of the guard-disk located beneath the confining-cone. Fig. IV is an enlarged perspective view of the pronged ring located beneath the guard-disk. Fig. V is an enlarged perspective view of the valve-container. Fig. VI is a cross-sectional view taken on line VI VI, Fig. I. Fig. VII is a cross-sectional view taken on line VII VII, Fig. I.

1 designates the neck of the bottle, which may be of any suitable design adapted for the reception of my non-refilling device.

2 designates a valve-container provided with an apertured lower end 3, provided with a valve-seat for the reception of the ball-valve 4, located within the container. The container 2 is provided upon its interior with longitudinally-extending ribs 5, between which the ball-valve 4 is confined, as seen in Fig. VII, the valve being of such size as to freely move between said ribs, but being maintained out of contact with the wall of the container by the ribs, so as to provide channel-ways 6, (see Fig. VII,) through which the contents of the bottle may pass when the bottle is inverted and the ball-valve moves

from its seat at the lower end of the container. The container 2 is provided at its upper end with an annular groove 7, (see Figs. I and V,) that receives an annular rib 8 at the lower edge of a ring 9, which surmounts the container. The ring 9 is provided with downwardly-projecting prongs 10, against which the ball-valve 4 moves when the bottle is inverted, said prongs serving to limit the movement of the ball-valve and prevent it from seating against the body of the ring and closing the aperture 11, extending therethrough. The ring 9 contains an angular shoulder 12, located beneath the rim of the ring 9, said shoulder being located in an enlargement 13 of the aperture 11. At the upper edge of the ring 9 are a pair of ribs 14, between which is a groove 15. (See Fig. IV.) The ribs 14 are notched at 16 to receive the cross-arms 17 of a guard-disk 18, that is seated on the ring 9. The body of the disk 18 is less than the area of the enlargement 13 of the aperture 11, so that the liquid flowing through said aperture and enlargement may find ready passage past the guard-disk; but the diameter of the disk is slightly in excess of the diameter of the edge of the angular shoulder 12, so as to exclude the passage of a wire or other implement past the guard-disk into the aperture 11 and therefrom into engagement with the ball-valve 4 to unseat said valve and enable the introduction of liquid into the bottle. If any attempt were made to pass a wire or other implement into engagement with the ball-valve to unseat it, such wire or implement might be inserted past the disk into the enlargement 13 of the cavity 11; but it would there come in contact with the angular shoulder 12 and pass to the bottom of the enlargement 13, against said shoulder, it being impossible to cause the wire or implement to be directed inwardly beneath the guard-disk to a sufficient extent to cause it to enter the aperture 11 over the edge of the sloping angular shoulder.

The guard-disk 18 is confined and retained by a cone 19, provided at its lower edge with a notched tongue 20, that enters the groove 15 between the ribs 14 of the ring 9, said tongue straddling the cross-arm 17 of the guard-disk and holding the disk firmly seated

against the ring 9. The cone 19 is surrounded by a body of cement of any suitable description, through the medium of which the cone is held securely in place within the bottle-neck.

I claim as my invention—

1. In a non-refillable bottle, the combination with a bottle-neck, of a valve-container provided with a valve-seat aperture at its lower end and having interior ribs, a ball-valve located in said container, an apertured ring surmounting said container having downwardly-projecting prongs; an angular shoulder within said ring, and a guard-disk located above said ring and the shoulder thereof; substantially as described.

2. In a non-refillable bottle, the combination with a bottle-neck, of a valve-container located therein provided with a valve-seat aperture and having interior ribs, a ball-valve located in said container, a pronged apertured ring surmounting said container, the aperture in said ring being enlarged at its upper end, an angular shoulder located in said enlargement, and a guard-disk located above said ring, substantially as described.

3. In a non-refillable bottle, the combination with a bottle-neck, of a valve-container provided with a valve-seat aperture, ribs on the interior of said container, a ball-valve located between said ribs, an apertured ring surmounting said container, an angular shoulder located in said ring, and a guard-disk surmounting said ring, said guard-disk being of greater diameter than the aperture in said ring, substantially as described.

4. In a non-refillable bottle, the combination of a valve-container provided with a valve-seat aperture, and having interiorly-located ribs, a ball-valve located in said container, prongs projecting from said ring into said container, an angular shoulder within said ring, a guard-disk surmounting said ring and having cross-arms seated upon the upper edge of the ring, and a confining-cone surmounting said guard-disk and ring, substantially as described.

HENRY S. LA BARGÉ.

In presence of—

E. S. KNIGHT,

N. V. ALEXANDER.