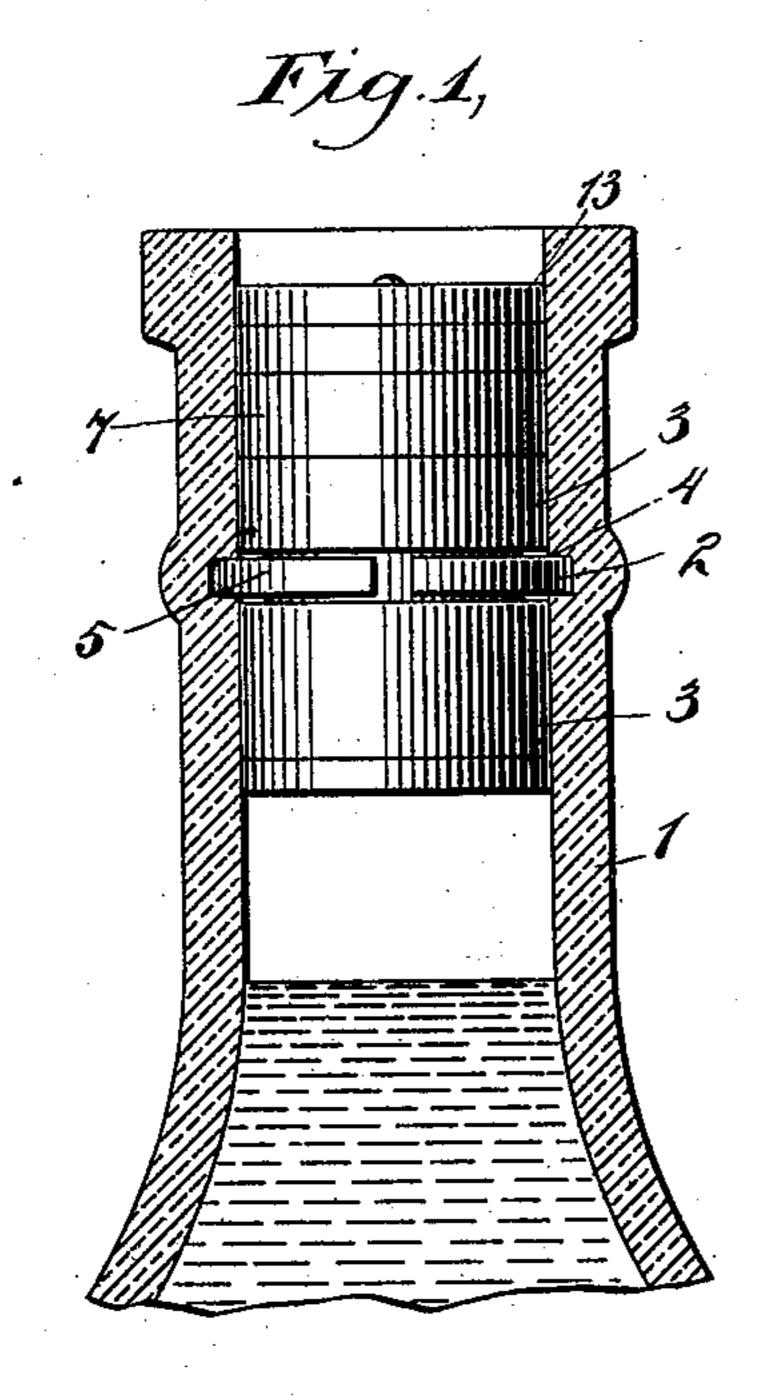
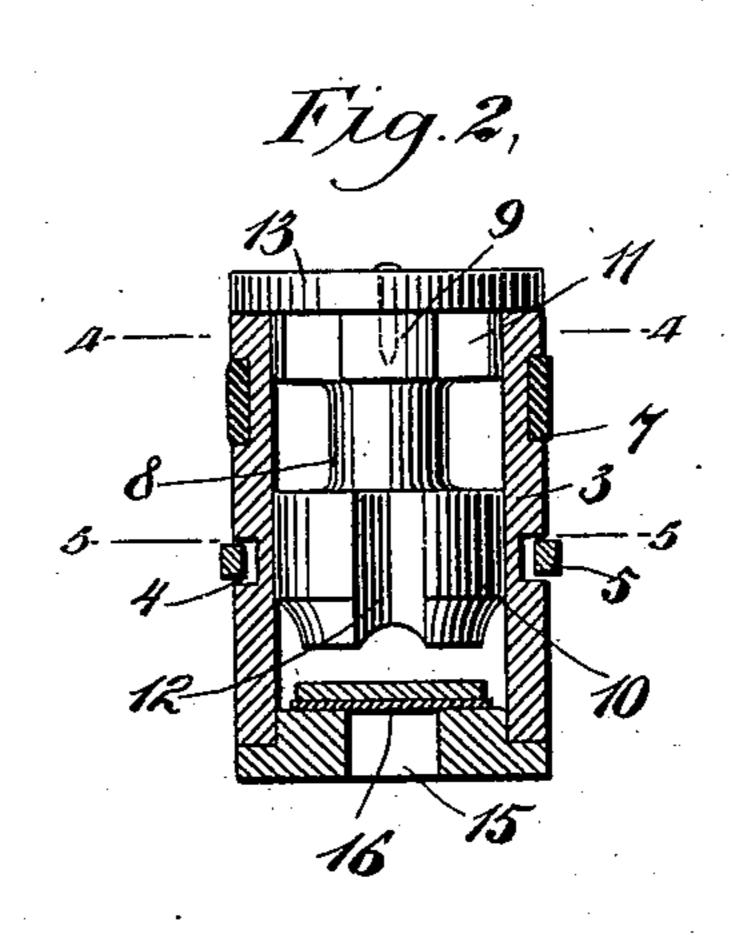
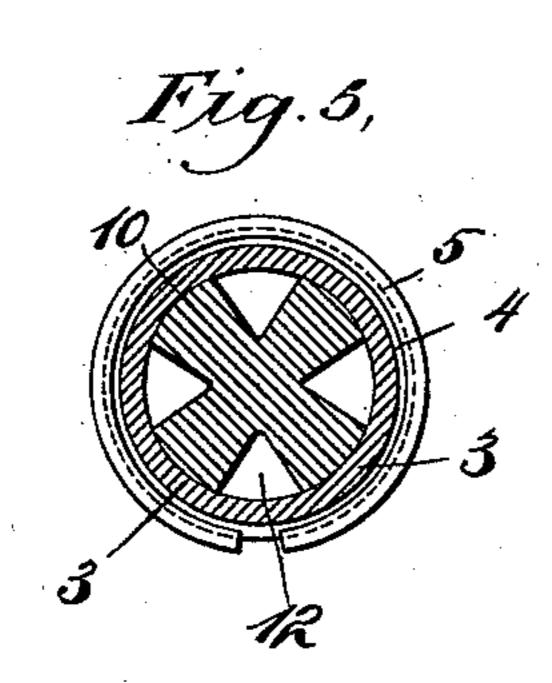
O. G. OGDEN. BOTTLE.

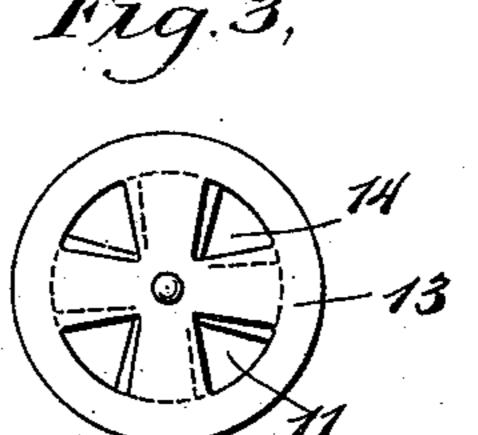
No. 601,102.

Patented Mar. 22, 1898.

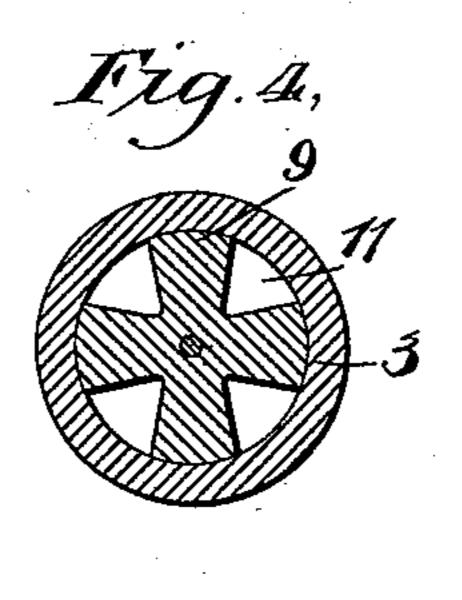












WITNESSES:

Edward Thorpe. C.R. Ferguson INVENTOR

OS. Ogden.

BY

ATTORNEYS.

United States Patent Office.

OTTO GALE OGDEN, OF LOUISVILLE, KENTUCKY, ASSIGNOR OF ONE-HALF TO SAMUEL P. JONES AND JOSEPH M. BRADLEY, OF SAME PLACE.

BOTTLE.

SPECIFICATION forming part of Letters Patent No. 601,102, dated March 22, 1898.

Application filed May 7, 1897. Serial No. 635,449. (No model.)

To all whom it may concern:

Be it known that I, Otto Gale Ogden, of Louisville, in the county of Jefferson and State of Kentucky, have invented new and useful Improvements in Bottles, of which the following is a full, clear, and exact description.

This invention relates particularly to that class of bottles known as "non-refillable;" and the object is to provide a simple valve mechanism of comparatively cheap construction that may be fitted in the neck of the bottle and which will allow the free outward passage of the original contents of the bottle, but will effectually prevent a refilling.

I will describe a bottle embodying my invention and then point out the novel features

in the appended claim.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a vertical section of the neck portion of a bottle, showing a valve embodying my invention as placed therein. Fig. 2 is a partial section and partial elevation of the valve mechanism. Fig. 3 is a top plan view thereof. Fig. 4 is a section on the line 4 4 of Fig. 2. Fig. 5 is a section on the line 5 5 of Fig. 2, and Fig. 6 is an edge view of a spring locking-band of modified construction that may be employed.

Referring to the drawings, 1 designates the neck portion of a bottle having an interior annular channel 2. Movable into the neck portion is a valve-casing 3, which has an annular channel 4, designed to register with the channel 2. Seated in the channel 4 is a locking-ring 5. This locking-ring will be open at its side and will be made of spring material that may be compressed into the channel when the casing is moved into the neck portion. When the channel 4 registers with the channel 2, the said locking-ring will spring outward to engage partly in the channel 2 and partly in the channel 4. Thus the valve will be prevented from being withdrawn.

The locking-ring 5 is shown as rectangular in cross-section. In some instances, however, such as when liquids under high pressure are contained in a vessel, it may be necessary to employ the ring 6. (Shown in Fig. 6.) This ring 6 will have somewhat greater spring than the ring 5, and to allow it to be pressed easily into the neck of the bottle its outer edge is

rounded from the bottom outward and up- 55 ward. To make a tight joint between the exterior of the valve-casing and the interior of the neck, I provide the exterior of the valve-casing with an annular channel in which a rubber or other yielding band 7 may be placed. 60 This band of course may be either at the upper or lower portion of the valve-casing.

Fitting tightly within the valve-casing is a plug having a circumferentially-reduced middle portion 8 and head portions 9 and 10, fit- 65 ting snugly into the valve-casing. These head portions 9 and 10 will be provided with longitudinal ports 11 and 12. A regulatingvalve consisting of a disk 13 is mounted to rotate on the upper end of the plug. This 70 regulating-valve has a series of ports 14, which by turning the disk may be made to more or less register with the ports 11, thus regulating the outward flow of the liquid. It will be noted that the regulating-valve is located 75 wholly within the bottle-neck, so that the valve cannot be accidentally turned. The lower end of the valve-casing has a central opening 15, and controlling this opening 15 is a flap-valve 16, arranged within the casing. 80 Of course there will be sufficient room between the upper side of the flap-valve and the lower end of the plug to allow for the opening movement of said flap-valve. The ports 11 will be arranged out of line with the ports 12. 85 Therefore it will be practically impossible for a person to insert a wire or other instrument to raise or open the flap-valve should an attempt be made to refill the bottle.

As this valve consists of very few parts, it 90 is obvious that it will not add materially to the ordinary cost of a bottle.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

In a bottle, a valve-casing secured in the neck thereof, a plug-guard rigidly secured in the casing, the said guard having enlarged end portions provided with outlet-ports, a regulating-valve pivoted to the outer end of 100 the guard, the said regulating-valve being wholly within the bottle-neck, and a valve in the casing below the plug-guard, substantially as specified.

OTTO GALE OGDEN.

Witnesses:

JOSEPH M. BRADLEY, SAM. JONES.