

H. C. BECKER.
NON-REFILLABLE BOTTLE.
APPLICATION FILED FEB. 24, 1912.

1,040,848.

Patented Oct. 8, 1912.

Fig. 1.

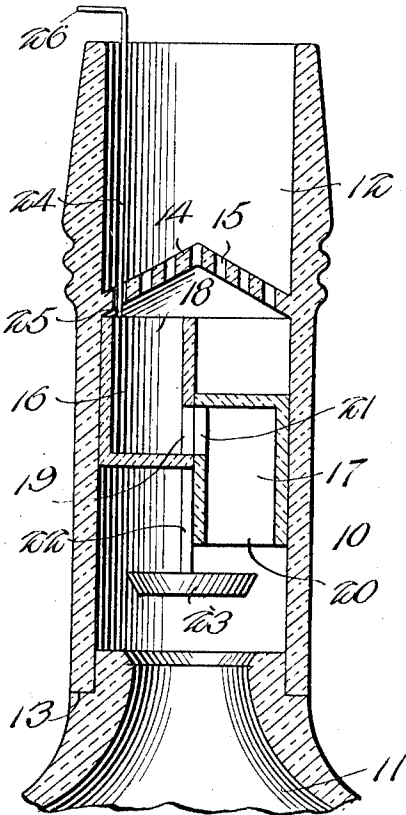


Fig. 2.

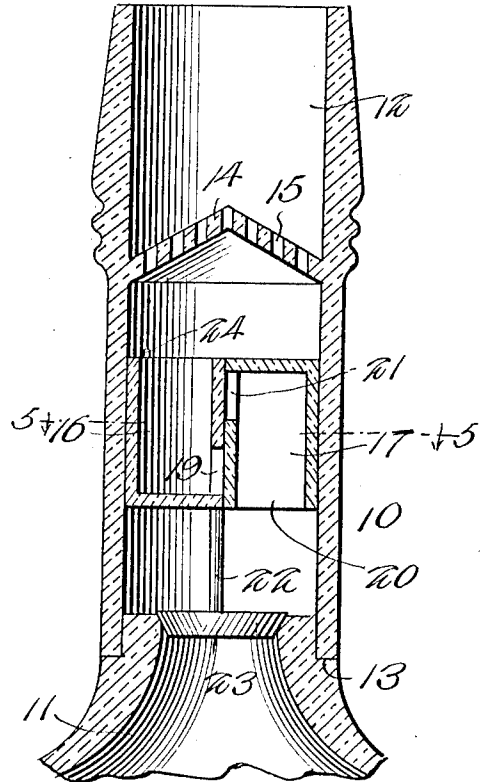


Fig. 3.

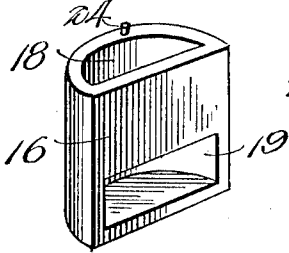


Fig. 4.

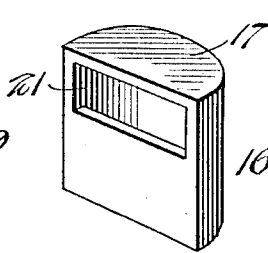
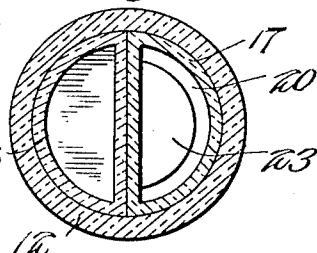


Fig. 5.



Witnesses

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NON-REFILLABLE BOTTLE.

1,040,848.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, HENRY C. BECKER, a citizen of the United States, residing at Fort Riley, in the county of Geary and State of Kansas, have invented new and useful Improvements in Non-Refillable Bottles, of which the following is a specification.

An object of the invention is to provide a bottle that cannot be conveniently refilled after the original contents thereof have been withdrawn therefrom.

The invention embodies, among other features, a bottle provided with means whereby, when the original contents of the bottle have been removed therefrom, a refilling of the bottle through the medium of the neck thereof will be prevented.

In the further disclosure of the invention, reference is to be had to the accompanying drawings constituting a part of this specification, in which similar characters of reference denote corresponding parts in all the views, and in which—

Figure 1 is a vertical sectional view of my bottle, showing the same in position for filling. Fig. 2 is a similar vertical sectional view showing the bottle ready for use after being filled, the various parts in position for preventing the refilling of the bottle when the original contents have been withdrawn therefrom. Fig. 3 is a perspective view of one of the valve members. Fig. 4 is a perspective view of the other valve member. Fig. 5 is a horizontal sectional view taken on the line 5—5 in Fig. 2.

Referring more particularly to the views, use is made of a bottle 10 consisting of a body 11 and a neck 12 suitably mounted on a seat 13, formed on the body 11 of the bottle, it being readily understood that the neck 12 can be also fused to the body of the bottle. Formed in the neck 12 is a conically shaped guard plate 14 provided with apertures 15 and mounted to slide in the neck beneath the conical guard plate 14 is a valve member 16 mounted to operate with a second valve member 17, rigidly positioned within the neck 12. The valve member 16 is provided with an upper opening 18 and a side opening 19 and the stationary valve member 17 is provided with a lower opening 20 and a side opening 21, the side openings 19 and 21 of the valve members 16 and 17 respectively being out of register when the valve member 16 is in normal or closed position

as shown in Fig. 2, the mentioned openings 19 and 20 being adapted to register when the valve member 16 is in open position. Dependingly mounted on the under side of the valve member 16 is a rod 22, having secured to the lower end thereof a stopper 23 mounted to engage the upper end of the body 11 to close the same, it being understood that the stopper 23 will be in closed position when the valve member 16 is in closed position, the mentioned stopper being movable with the valve member. Extending upwardly from the valve member 16 is a frangible rod 24 provided with a weakened portion 25, the said rod being slidably extended through one of the apertures 15 in the conically shaped plate 14 with the upper end of the rod bent to form a handle 26, arranged exteriorly of the neck 12.

In the use of the device when it is desired to initially fill the bottle, an upward pull is exerted on the handle 26, thus operating the valve 16 and stopper 23, it being understood that the side opening 19 of the valve member will register with the side opening 21 of the stationary valve member, the stopper 23 being moved upwardly a distance from the upper end of the body 11. The fluid is now poured into the neck 12 and passing through the apertures 15 in the conical guard plate 14 will flow downwardly from the upper opening 18 in the valve member 16, thence through the side opening 19 of the valve member 16 and the side opening 21 of the valve member 17, after which the fluid will flow downwardly through the opening 20 in the valve member 17 thence past the stopper 23 into the body 11. When the body has been filled to the desired height, the handle 26 is twisted, thus causing the frangible rod 24 to break at the weakened portion 25, it being understood that the weakened portion 25 will be positioned adjacent the conical guard plate 14 when the valve member 16 is in its uppermost position and when the frangible rod 24 has been broken as mentioned, the valve member 16 will gravitationally move downward and assume a closed position, thus also causing the rod 23 to move downwardly and close the opening to the body 11, the apertures 19 and 21 being now out of register. By referring to Fig. 2, it will be seen that a portion of the frangible rod 24 will still extend upwardly from the valve member 16, the mentioned portion being be-

low the conical guard plate 14 and by restricting the length so that the mentioned portion will not project beyond the conical guard plate 14, thus preventing any persons from grasping the same and holding the valve member 16 and stopper 23 in open position.

Now when it is desired to pour fluid from the bottle, the body 11 is tilted, thus causing the valve member 16 to gravitationally assume an open position with the aperture 19 registering with the aperture 21, the stopper 23 being movable gravitationally with the valve member 16 to open the body 11 so that the fluid in the body can flow through the opening 20, thence through the openings 21 and 19 and then through the upper opening 18 of the valve member 16, after which the fluid will flow outwardly through the apertures 15 and the conical guard plate 14 as will be readily understood.

With a device of the class described it will be readily seen that the body 11 of the bottle cannot be conveniently refilled by pouring a fluid into the neck of the bottle, after the original contents have once been drawn therefrom and it will be further seen that by providing the conical guard plate 14 the insertion of a tool or wire in the neck of the bottle to operate the valve member 16, will be prevented.

I claim:—

In a non refillable bottle, the combination with a bottle body, of a neck thereon, an apertured conical guard plate formed within the said neck, a stationary valve member secured within the said neck and provided with a plurality of openings, a slidable valve member mounted within the said neck and provided with a plurality of openings, one of the openings in the said slidable valve member being adapted to register with one of the openings of the stationary valve member when the slidable valve member is moved into open position, a rod mounted to depend from the under side of the slidable valve member, a stopper secured to the lower end of the said rod and movable with the said slidable member and a frangible rod provided with a weakened portion and extended upwardly from the said slidable valve member to project exteriorly of the said neck for permitting an initial raising of the said slidable valve member when an upward pull is exerted on the said frangible rod.

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

HENRY C. BECKER.

Witnesses:

ALEXANDER M. WRIGHT,
EUGENE F. HAHM.