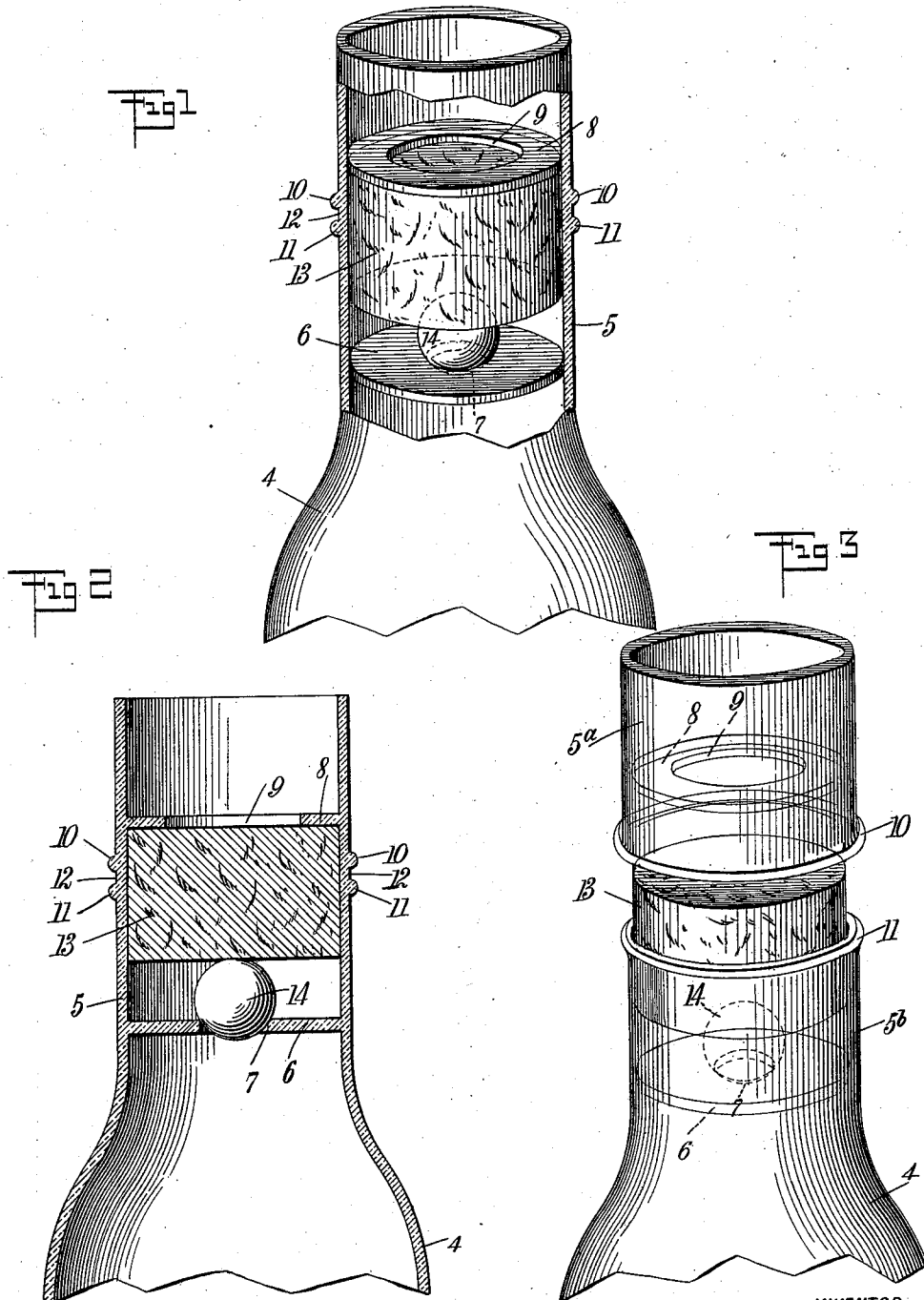


B. ERDALE.
SINGLE USE BOTTLE.
APPLICATION FILED OCT. 20, 1911.

1,028,696.

Patented June 4, 1912.



WITNESSES

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BERNARD ERDALE, OF NEW YORK, N. Y.

SINGLE-USE BOTTLE.

1,028,696.

Specification of Letters Patent.

Patented June 4, 1912.

Application filed October 20, 1911. Serial No. 655,741.

To all whom it may concern:

Be it known that I, BERNARD ERDALE, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Single-Use Bottle, of which the following is a full, clear, and exact description.

My invention relates to bottles of the kind which preclude more than a single use.

More particularly stated, I produce a bottle having a peculiar form of neck so arranged that in order to open the bottle it is necessary to mutilate the neck in such manner that the bottle cannot be subsequently filled except under conditions which render detection an easy matter.

Reference is to be had to the accompanying drawing forming a part of this specification in which like characters of reference indicate corresponding parts in all the views, and in which—

Figure 1 is a view partly in perspective and partly in section, showing the upper portion of my single use bottle as it appears when first filled; Fig. 2 is a central vertical section through the same; and Fig. 3 is a perspective showing the appearance of the bottle and detached portion of the neck thereof, the bottle being now in condition for the cork to be drawn.

The body portion of the bottle is shown at 4, and the neck, which in this instance has a general cylindrical form, appears at 5. Located within the neck 5 and integral therewith is a partition 6 having a general annular form and thus provided with a centrally disposed opening 7. The neck 5 is further provided with a partition 8 having a central opening 9, this opening being of larger diameter than the opening 7. The partition 8 thus has an annular form. The neck 5 is provided externally with a pair of annular beads 10, 11 so as to form between them a track 12 having, like the beads, an annular form.

A cork is shown at 13 and below the cork is a closure member 14 having the form of a sphere. This member fits fluid tight upon the partition 6 and normally closes the partition 7. The cork 13 is inserted through the opening 9 by being first steamed and then rolled or compressed, and after being inserted through the opening 9 the cork expands to fit neatly against the inner surface of the neck. The cork 13 is of such depth

that when once put into position, as indicated in Fig. 2, it fills the space between the upper surface of the valve and the lower surface of the partition 8.

The annular track 12 is adapted to receive a cut from a glass cutter, the annular beads 10, 11 being so positioned as to guide the glass cutter and prevent the same from slipping. By aid of these beads the path of travel of the glass cutter is confined to a perfect circle. After the cut is thus made, the portion of the neck above it may readily be broken off, as indicated in Fig. 3. The portion of the neck remaining upon the body now appears as at 5^b, and the disconnected part of the neck is shown at 5^a.

The operation of my device is as follows:—The bottle is filled with liquid and the valve 14 is inserted through the opening 9 and brought into such position that it closes the opening 7, as indicated. The cork 13 is next steamed and rolled or compressed so that its diameter is reduced, and the cork is then inserted in the opening 9, as above described, and allowed to swell. This leaves the bottle in the condition indicated in Figs. 1 and 2, and it remains in this condition until it is to be opened. The operator, by aid of a glass cutter, now makes a circular cut, following the general contour of the path 12, and by a quick blow upon the upper portion of the neck, severs the portion 5^a, as indicated in Fig. 3. The cork 13 may now be withdrawn, either with the fingers directly, or by aid of a cork puller, as desired.

I do not limit myself to the precise form shown, the scope of my invention being commensurate with my claims.

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

1. In a single use bottle, the combination of a neck having a pair of partitions located within the same and disposed parallel with each other, said partitions having openings therethrough, an expansible member mounted within said neck and located between said partitions and engaging one of the same, and a spherical closure member likewise mounted between said partitions and fitting the edge of the opening in the other partition, the said expansible member serving to hold the said spherical member in position to close the opening through the other partition.

2. The combination of a neck, a pair of partitions located within the neck and having apertures therethrough, a spherical closure member located between said partitions
5 and engaging the edge of the opening through one of the same, and an expansible member mounted within said neck and located between said partitions in position to engage said closure member and the other
10 partition, so as to hold said closure member in place, said neck having means formed on

the outer surface thereof between said partitions, to facilitate cutting and breaking the same when the expansible member is to be removed.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

BERNARD ERDALE.

Witnesses:

ALFRED H. DAVIS,

PHILIP D. ROLLHAUS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."