

No. 777,499.

PATENTED DEC. 13, 1904.

M. M. DE GRODY.
NON-REFILLABLE BOTTLE.
APPLICATION FILED FEB. 16, 1904.

NO MODEL.

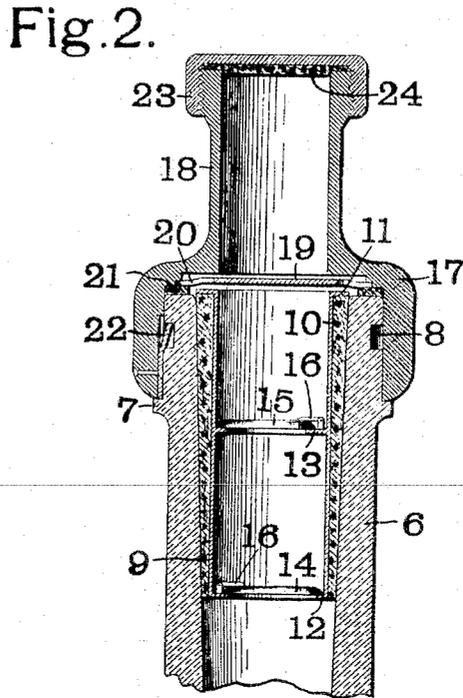
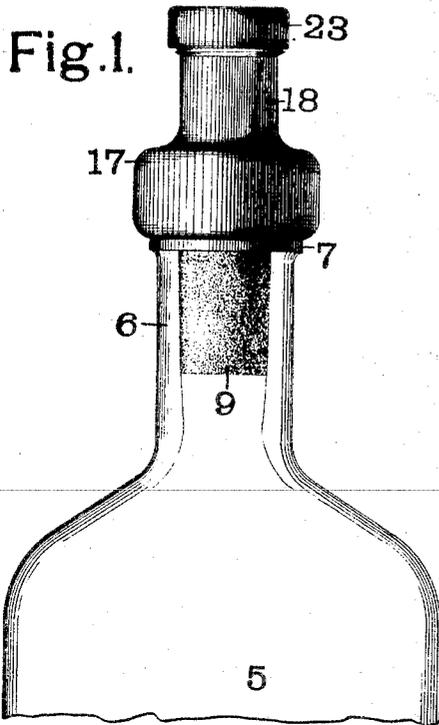
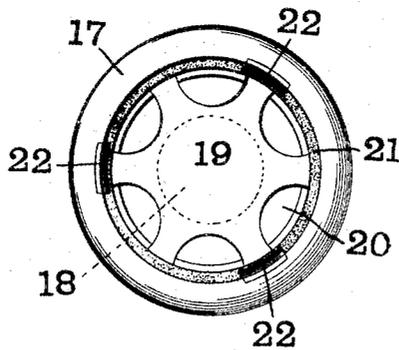


Fig. 3



Witnesses

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UNITED STATES PATENT OFFICE.

MARTIN M. DE GRODY, OF ST. LOUIS, MISSOURI, ASSIGNOR OF ONE-HALF
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NON-REFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 777,499, dated December 13, 1904.

Application filed February 16, 1904. Serial No. 193,771. (No model.)

To all whom it may concern:

Be it known that I, MARTIN M. DE GRODY, a citizen of the United States, residing at the city of St. Louis, in the State of Missouri, have invented a certain new and useful Non-Refillable Bottle, of which the following is such a full, clear, and exact description as will enable any one skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

My invention consists in part in the combination, with a receptacle having a neck provided with a passage, of a plurality of outwardly-opening flap-valves therein with their pivots arranged out of alinement and a hood secured to the outside of said neck and provided with means for preventing access to the passage in said neck.

My invention also consists in certain other novel features and details of construction, all of which are described in the following specification and pointed out in the claims affixed hereto.

In the accompanying drawings, which illustrate one form of bottle made in accordance with my invention, Figure 1 is a side elevation. Fig. 2 is an enlarged sectional view, and Fig. 3 is a bottom plan view of the hood or cover for the bottle.

Like marks of reference refer to similar parts in the several views of the drawings.

5 is the body of the bottle or other receptacle, and 6 is the neck. The neck 6 is provided with a ring or projection 7, against which the hood rests, as hereinafter described. The neck is also provided with an annular recess 8, forming a shoulder for the retention of the hood or cover. Within the neck 6 is a cork sleeve 9. The sleeve and the interior of the neck are both slightly conical, so as to prevent the movement of the sleeve in the neck more than a predetermined distance. Within the sleeve 9 is a tube 10, preferably provided on its upper end with a flange 11. The tube 10 is also provided with a lower valve-seat 12 and an upper valve-seat 13, the upper valve-seat 13 preferably being situated

about midway between the ends of the tube. 14 is a flap-valve cooperating with the seat 12, and 15 is a similar flap-valve cooperating with the seat 13.

16 represents the hinges of the valves 14 and 15. These hinges 16 are arranged out of alinement and are preferably placed at diametrically opposite points at the sides of the tube for a purpose to be hereinafter set forth.

17 is the hood or cover for the neck of the bottle. This hood or cover 17 is adapted to rest against the ring or projection 7 hereinbefore described. The hood or cover 17 is provided with a reduced portion or mouth 18, the internal diameter of which is preferably about equal to the internal diameter of the tube 10. Carried by the hood 17 is a shield 19, adapted to cover the opening into the tube 10, but provided with by-passes 20, by means of which the liquid may pass from the tube 10 to the mouth 18. The object of the shield 19 is to prevent access to the valves 14 and 15.

In order to form a liquid-tight joint between the hood and the top of the bottle-neck 6, I preferably place between the said hood and neck a ring 21, of cork or other similar material. In order to hold the hood 17 permanently in position on the neck of the bottle, I provide the said hood with spring locks or detents 22, preferably three in number, which engage with the shoulder formed by the annular groove 8, so that when the said hood is once placed in position it will be permanently secured by the said spring-detents.

23 is a screw-cap for the mouth 18. In order to make this cap liquid-tight, I preferably provide it with a cork disk 24.

In the operation of my device the bottle may be filled in the same manner as any ordinary bottle, as the hood 17 and cork sleeve 9 are not applied until after the bottle is filled. After the bottle has been filled the cork sleeve 9, containing the tube 10, is first forced into position, and then the hood is applied over the neck of the bottle. As soon as the hood is forced into position, so that the locks or detents 22 engage with the recess 8, the hood will be permanently secured in place, and

while the liquid contained within the bottle may be readily poured out by unscrewing the cap 24 it will be impossible to refill the bottle, owing to the valves 14 and 15. If only
 5 one valve were used, it might be possible to bring the valve with its pivot-point down, and thus elevate the mouth of the bottle to a considerable angle without closing the valve, and liquid could then be poured into the bot-
 10 tle. Owing to the use of the two valves, however, with their pivots at opposite sides, this is impossible, because when the bottle is in such position that one valve will remain open the other will firmly close when the
 15 mouth of the bottle is elevated to even the slightest angle. It will therefore be impossible to refill the bottle.

Having fully described my invention, what I claim as new, and desire to secure by Letters
 20 Patent of the United States, is as follows:

1. In a non-refillable bottle or the like, the combination with a receptacle having a neck provided with a passage, of a plurality of out-
 25 wardly-opening flap-valves therein with their pivots arranged out of alinement, a hood carried by said neck, and provided with a pas-

sage, and a shield completely covering the passage in said hood.

2. In a non-refillable bottle or the like, the combination with a receptacle having a neck, 30 of a valved passage in said neck, a hood carried by said neck and provided with a passage, a shield between said hood and neck and completely covering the passages in said hood and neck, and by-passes around said shield to
 35 connect said passages.

3. In a non-refillable bottle or the like, the combination with a receptacle having a neck, of a valved passage in said neck, a hood per-
 40 manently secured to the outside of said neck and provided with a passage, a shield separate from said hood and held between said hood and neck and completely covering the passages of both, and by-passes around said
 45 shield to connect said passages.

In testimony whereof I have hereunto set my hand and affixed my seal in the presence of the two subscribing witnesses.

MARTIN M. DE GRODY. [L. s.]

Witnesses:

JAMES E. BAKER,
 D. C. BETJEMAN.