

No. 649,801.

Patented May 15, 1900.

W. H. BOYINGTON.
NON-REFILLABLE BOTTLE.

(Application filed Sept. 28, 1899.)

(No Model.)

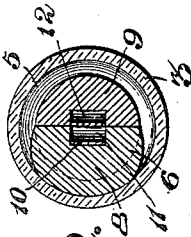


Fig 2.

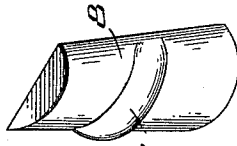


Fig 3.

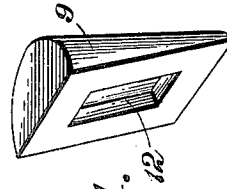


Fig 4.

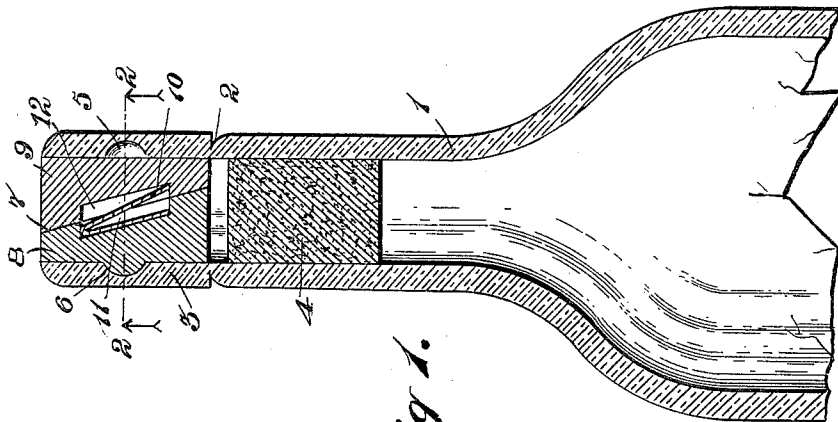


Fig 1.

Witnesses

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Inventor

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UNITED STATES PATENT OFFICE.

WILLIAM H. BOYINGTON, OF VALLEY JUNCTION, WISCONSIN.

NON-REFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 649,801, dated May 15, 1900.

Application filed September 28, 1899. Serial No. 731,925. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. BOYINGTON, a citizen of the United States, residing at Valley Junction, in the county of Monroe and State of Wisconsin, have invented a new and useful Non-Refillable Bottle, of which the following is a specification.

The invention relates to improvements in non-refillable bottles.

One object of the present invention is to improve the construction of non-refillable bottles and to provide a simple, inexpensive, and efficient one which must be sufficiently mutilated to obtain access to its contents to prevent it from being ever afterward used as an original package for the sale of an imitation or spurious liquid.

A further object of the invention is to provide a bottle of this character which may be sealed with an ordinary cork or stopper and to arrange the latter at a point below the place where the neck of the bottle is to be broken, so that there will be no liability of any of the particles of the broken glass entering the bottle.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a vertical sectional view of the upper portion of a non-refillable bottle constructed in accordance with this invention. Fig. 2 is a horizontal sectional view on line 2 2 of Fig. 1. Figs. 3 and 4 are detail perspective views of sections of the upper stopper or plug.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates a bottle provided between the ends of its neck with an exterior annular groove 2, forming a frangible upper portion 3, which is adapted, as hereinafter described, to be broken off to obtain access to a cork or stopper 4; but instead of weakening the bottle at the neck portion by means of an exterior groove it may be accomplished by any other means, and the upper portion of the neck may be cut off instead of broken, if desired. The cork or stopper 4, which is ar-

anged beneath the weakened portion of the neck, is adapted to be drawn by an ordinary corkscrew, and it prevents particles of broken glass from falling into the bottle.

The upper frangible portion of the neck is provided with an interior annular groove or recess 5, which is adapted to be engaged by a rib or projection 6 of an upper stopper or plug 7, arranged within the neck of the bottle and composed of sections 8 and 9 and designed to be constructed of glass or some other suitable material which will effectually seal the mouth of the bottle and prevent access to the cork or stopper 4. The sections 8 and 9 of the plug or stopper 7 are reversely tapered and present inclined inner faces, and the rib or projection 6 is formed on the section 8, which has its enlarged end at the bottom and which is first introduced into the neck of the bottle after the same has been filled and the cork or stopper 4 is applied and it is desired to prevent the bottle from being fraudulently refilled. The section 8 is interlocked with the neck of the bottle by reason of the rib or projection fitting in the annular groove, and the two sections 8 and 9 are interlocked by means of a substantially V-shaped spring 10, which is received within recesses 11 and 12, formed in the inclined faces of the sections 8 and 9. The recesses are oblong and form upper and lower shoulders. The spring is placed in position with its bend at the top of the recess 11, and the section 9 is then inserted in the neck of the bottle, compressing the spring until the free end of the adjacent side springs into engagement with the lower shoulder of the recess 12, whereby the section 9 will be effectually prevented from being withdrawn from the neck of the bottle. After the sections 8 and 9 and the spring 10 have been placed in position it is impossible to obtain access to the contents of the bottle until the frangible portion is removed either by breaking or cutting it off, and after the top of the bottle is removed the said bottle is sufficiently mutilated or disfigured to effectually prevent any attempt to refill it fraudulently and sell it as an original package.

It will be seen that the bottle is exceedingly simple and inexpensive in construction, that it is positive and reliable in operation, and

that the contents are not permitted to come in contact with the spring or with the upper stopper or plug, so that any material may be employed in the manufacture of such parts.

- 5 Changes in the form, proportion, size, and the minor details of construction within the scope of the appended claims may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

What is claimed is—

1. In a device of the class described, the combination of a receptacle having a neck with an upper frangible portion provided
15 with an interior groove or recess, said receptacle being adapted to receive an ordinary cork or stopper in the lower portion of its neck, a plug or stopper arranged in the upper portion of the neck and split longitudi-
20 nally to form two sections one of the sections being provided with a rib or projection to interlock with the said recess, said sections being adapted to be introduced into the neck independently to enable the rib or projection
25 to be engaged with the recess or groove, and means for interlocking the two sections of the plug or stopper, substantially as described.

2. In a device of the class described, the
30 combination of a receptacle provided in its neck with a groove or recess, a stopper composed of two sections, one of the sections being provided with a rib or projection to engage the groove or recess, and a spring inter-
35 posed between the two sections and arranged to interlock the same and adapted to permit the sections to be introduced into the recep-

tacle independently of each other, substantially as described.

3. In a device of the class described, the
40 combination with a receptacle provided with a neck having an upper frangible portion, and a lower cork or stopper 4 arranged within the neck, below the frangible portion, of an upper stopper or plug arranged wholly
45 within the frangible portion of the neck and split longitudinally to form two reversely-tapered sections adapted to be introduced into the frangible portion of the neck, independ-
50 ently of each other, one of the sections being interlocked with the frangible portion of the neck, and means for interlocking the abutting faces of the said sections, substantially as described.

4. In a device of the class described, the
55 combination with a receptacle having a neck, of a plug or stopper composed of two reversely-tapered or wedge-shaped sections provided at their inner contiguous faces with recesses, one of the sections being provided at
60 its outer face with means for engaging the neck of the bottle, and a spring arranged within the said recesses and adapted to lock the parts automatically when the second section is introduced into the neck of the bottle,
65 substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WILLIAM H. BOYINGTON.

Witnesses:

H. A. SOWLE,

WM. H. PRESTON.