(No Model.)

G. W. COATES & A. J. SCHUTZ.

NON-REFILLABLE BOTTLE.

No. 589,164. Patented Aug. 31, 1897.

FIG. 1.

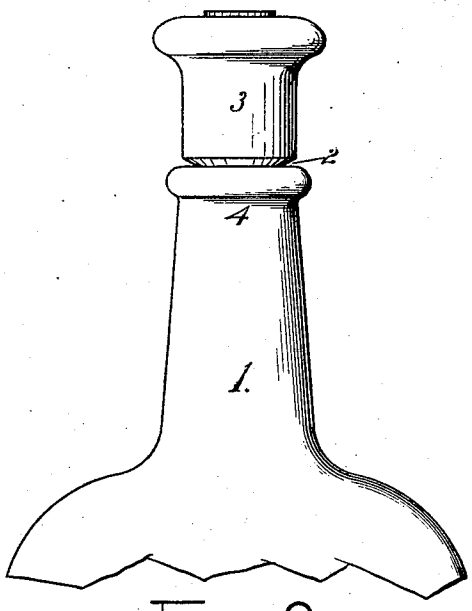
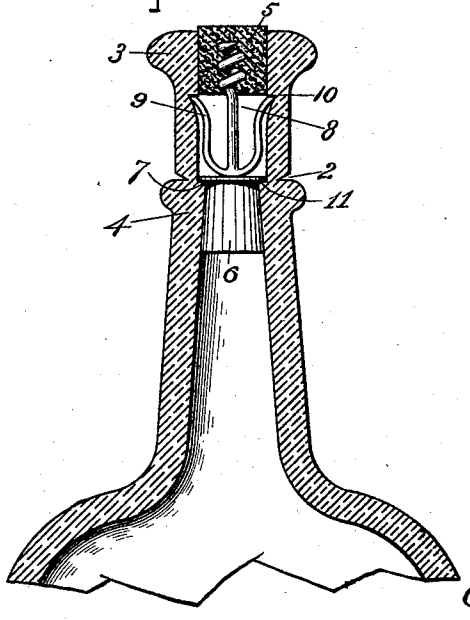


FIG. 2.



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UNITED STATES PATENT OFFICE.

GEORGE W. COATES AND ALBERT J. SCHUTZ, OF SCHUTZ MILLS, ILLINOIS.

NON-REFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 589,164, dated August 31, 1897.

Application filed April 20, 1897. Serial No. 633,010. (No model.)

To all whom it may concern:

Be it known that we, GEORGE W. COATES and ALBERT J. SCHUTZ, citizens of the United States, residing at Schutz Mills, in the county of Greene and State of Illinois, 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.

The object of the present invention is to improve the construction of non-refillable bottles and to provide a simple, inexpensive, and efficient one which in order to obtain access to its contents will have to be sufficiently mutilated to prevent it from afterward being used as an original package, thereby avoiding any liability of the original contents being adulterated or the fraudulent sale of an imitation liquid.

A further object of the invention is to provide a non-refillable bottle having a corkscrew adapted to lock an upper cork in the neck of the bottle to compel the breakage of the latter in order to obtain access to a lower cork and capable of affording ready means for withdrawing the lower cork after such breakage.

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

In the drawings, Figure 1 is an elevation of a non-refillable bottle constructed in accordance with this invention. Fig. 2 is a vertical sectional view of the same.

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

1 designates a bottle provided at its neck with a frangible ligament 2, formed by an exterior annular groove and dividing the neck into upper and lower portions 3 and 4, the upper portion being breakable. The upper and lower portions 3 and 4 of the neck of the bottle receive the upper and lower corks or stoppers 5 and 6, and the opening or bore of the upper portion of the neck of the bottle is enlarged to form an interior annular shoulder 7 at the upper edge of the lower portion 4 of the neck. The upper cork or stopper 5, which is of greater diameter than the lower cork or stopper, for a purpose hereinafter described, is locked in the upper portion 3 of the neck by a corkscrew 8, which after the said upper portion 3 is broken off is adapted to be employed for extracting the lower cork.

The corkscrew 8, which is inverted, has its spiral portion engaging and embedded in the upper cork and it is provided at the lower end of its shank with a substantially U-shaped spring 9, forming a handle and providing upwardly-extending arms which diverge and interlock with grooves or recesses 10 of the upper portion of the neck. The grooves or recesses 10 form interior horizontal shoulders, which are engaged by the terminals of the resilient handle of the corkscrew, as clearly shown in Fig. 2 of the accompanying drawings.

The lower cork or stopper is provided at its upper face with a metal disk or shield 11, which rests upon the annular shoulder 7, and as the upper cork or stopper is of greater diameter than the lower cork or stopper it is impossible to force both corks through the neck and into the body of the bottle. The metal shield, which engages the shoulder 7, also assists in preventing such a result.

In order to obtain access to the contents of the bottle, the upper portion 3 of the neck must be broken off, which is accomplished by a light blow, and the corkscrew 8 is then removed from the severed portion of the bottle and is employed for extracting the lower cork or stopper.

The bottle is readily corked by first introducing the lower cork or stopper and then inserting the upper cork or stopper, which is previously attached to the corkscrew. The sides or arms of the resilient handle of the corkscrew spring outward and automatically engage the shoulders 10, thereby locking the upper cork or stopper against withdrawal.

It will be seen that the bottle is simple and comparatively inexpensive in construction, that it is absolutely necessary to mutilate it in order to obtain access to its contents, and that such mutilation will prevent it from being afterward used as an original package, thereby rendering it impossible to adulterate the original contents of the bottle or to sell fraudulently an imitation liquid. It will also be apparent that the corkscrew locks the upper cork or stopper in place and enables

the lower cork or stopper to be extracted after the upper portion of the neck has been broken off.

What we claim is—

1. In a device of the class described, the combination of a bottle having a neck with a breakable upper portion, a lower removable cork arranged within the neck and located below the breakable portion, and a removable corkscrew located within the space between the corks and adapted when the neck of the bottle is broken to be employed for withdrawing the lower cork, said corkscrew engaging the upper cork and the neck and serving as a catch or locking device to retain the upper cork in the neck, whereby the latter must be broken to obtain access to the contents of the bottle, substantially as described.

2. In a device of the class described, the combination of a bottle having a neck with a breakable upper portion, said neck being provided with oppositely-disposed upper and lower shoulders 7 and 10, a removable lower cork arranged within the neck below the breakable portion, an upper cork arranged in the breakable portion of the neck, a metal disk covering the lower cork and arranged on the lower shoulder 7, and an inverted corkscrew embedded in the upper cork and provided with a substantially U-shaped spring-handle engaging the upper shoulder 10 and locking the upper cork in the neck to prevent its withdrawal without breaking the latter, said corkscrew being adapted for withdrawing the lower cork when the upper portion of the neck is severed from the lower portion, substantially as described.

3. In a device of the class described, the combination of a bottle having a neck with a breakable portion, a removable lower cork arranged within the neck below the breakable portion, an upper cork, and a corkscrew arranged within the space between the corks and adapted for withdrawing the lower cork when the neck of the bottle is broken, said corkscrew being embedded in the upper cork and provided with resilient arms forming a handle and engaging the breakable portion of the neck, whereby the same must be severed from the lower portion of the neck in order to obtain access to the contents of the bottle, substantially as described.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in the presence of two witnesses.

GEO. W. COATES.
ALBERT J. SCHUTZ.

Witnesses:
HARRY SCHUTZ,
ADA SCHUTZ.