(No Model.)

A. LEMIEUX.

ANTIREFILLING BOTTLE.

No. 589,604. Patented Sept. 7, 1897.

FIG. 2.

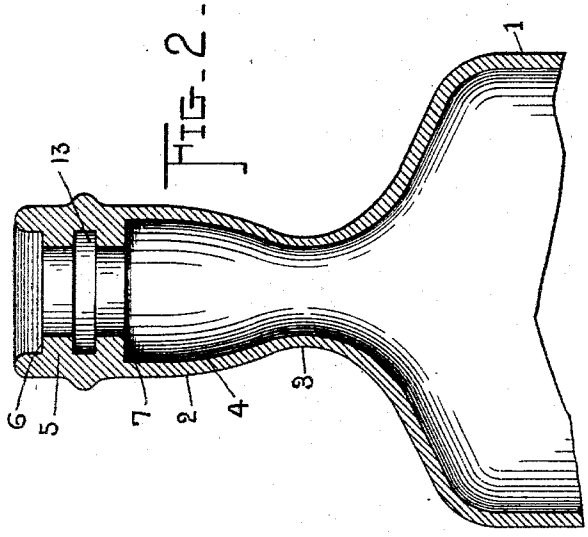


FIG. 4.

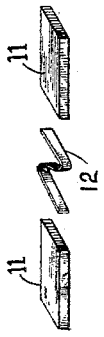


FIG. 1.

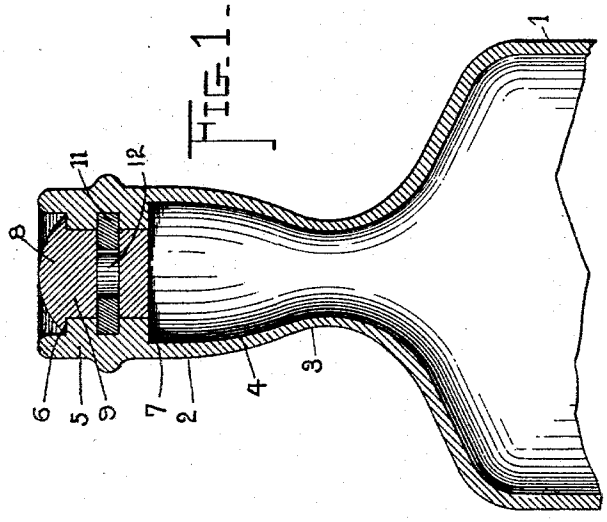
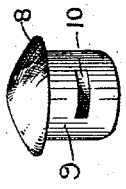


FIG. 3.



WITNESSES

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ALEXANDRE LEMIEUX, OF MONTREAL, CANADA.

ANTIREFILLING BOTTLE.

SPECIFICATION forming part of Letters Patent No. 589,604, dated September 7, 1897.

Application filed November 27, 1896. Serial No. 613,526. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDRE LEMIEUX, a subject of the Queen of Great Britain, residing at Montreal, Canada, have invented certain new and useful Improvements in Antirefilling Bottles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to antirefilling bottles; and it has for its object to provide simple, cheap, and efficient means whereby in order to remove the contents of the original package the neck or a portion of the bottle must necessarily be fractured, thus rendering the bottle unfit for further use.

The invention consists in an improved bottle and stopper therefor embodying certain novel features and details of construction, as hereinafter fully described, illustrated in the drawings, and pointed out in the claim.

In the accompanying drawings, Figure 1 is a vertical sectional view through a bottle constructed in accordance with this invention. Fig. 2 is a similar view taken through the neck of the bottle prior to the application of the cork or stopper. Fig. 3 is a detail perspective view of the stopper. Fig. 4 is a detail perspective view of the spring-actuated catches, showing also the interposed actuating-spring.

Similar numerals of reference designate corresponding parts in the several figures of the drawings.

The improvement contemplated herein may be utilized in connection with a bottle of any form or size, the principal feature of the invention residing in the formation of the neck of the bottle and the stopper to be placed therein.

1 designates the body of the bottle, and 2 the neck thereof, which at or near its point of junction with the body of the bottle is reduced or contracted in size, as indicated at 3, thus weakening the bottle at such point and increasing the liability of the neck to fracture and become detached from the main body of the bottle.

The neck 2 is substantially cylindrical and has a cylindrical bore 4, interrupted intermediate its ends by means of an inwardly-projecting annular flange or thickened portion 5, forming spaced annular shoulders 6 and 7, the shoulder 6 forming a seat for the enlarged head 8 of the stopper and the shoulder 7 serving to prevent the extraction of the broken stopper in the event of the same being driven downward into the lower portion of the neck.

The stopper (indicated at 9) is cylindrical in form and fits snugly into the neck of the bottle within the flanged or thickened portion 5. This stopper is provided with a substantially rectangular aperture 10, extending through it from side to side, and within said aperture are arranged two opposing catches 11, which are also substantially rectangular in cross-section. Between said catches is interposed an expansive spring 12 for forcing said catches apart and causing them to project from the stopper at opposite sides, as shown in Fig. 1. Within the neck of the bottle the latter is provided with grooves or recesses 13 to receive the projecting ends of the catches 11.

If desired, the grooves 13 may be made continuous or in the form of an annular groove extending entirely around the inner surface of the flange 5 within the neck of the bottle.

After the bottle has been filled the catches 11 are forced into the stopper and the stopper is then inserted in the neck of the bottle and depressed. When the catches 11 reach the plane of the groove or grooves 13, said catches are thrust in opposite directions by means of the spring 12 and caused to enter the groove or grooves 13, thereby locking the stopper securely in place and defeating any subsequent attempt to remove the same. In any forcible attempt to remove the stopper 9 the neck of the bottle will become fractured at the contracted part 3 thereof, thus rendering the bottle unfit for further use and making it clearly apparent that the original contents of the bottle have been removed.

Having thus described the invention, what is claimed as new is—

A bottle provided as to its neck with an internal annular flange or thickened portion forming an annular upwardly-facing shoulder adjacent to the mouth and provided at an intermediate point in its height with an annular groove, a stopper fitting snugly within the neck and having a head forming an annu-

lar shoulder resting upon the annular shoulder in the neck and also provided with a diametrical opening extending therethrough, oppositely movable and sliding blocks or catches of rectangular shape in cross-section fitting within said opening and having parallel adjacent edges, and a Z-shaped spring formed from a flat strip of spring metal having its end portions arranged in parallel relation and at acute angles to the intermediate connecting portion which extends obliquely, the end portions of the spring adapted to bear flatwise throughout their entire length against the adjacent edges of the blocks or catches, substantially as described.

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

ALEXANDRE LEMIEUX.

Witnesses:
A. G. YON,
J. Z. BROSSARD.