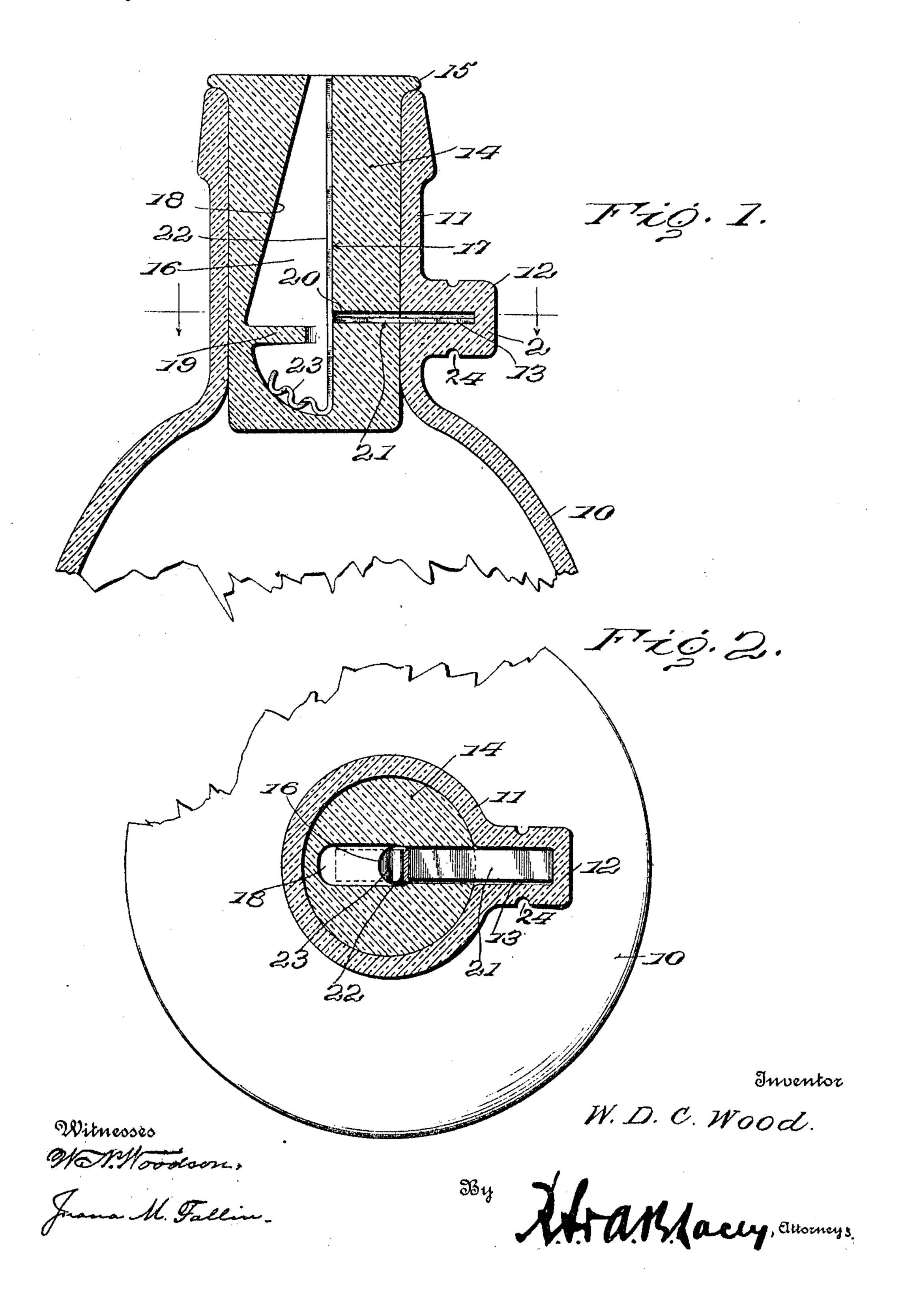
W. D. C. WOOD. NON-REFILLABLE BOTTLE. APPLICATION FILED SEPT, 13, 1910.

984,251.

Patented Feb. 14, 1911.



UNITED STATES PATENT OFFICE.

WARREN D. C. WOOD, OF HAXTUM, COLORADO.

NON-REFILLABLE BOTTLE.

984,251.

Specification of Letters Patent. Patented Feb. 14, 1911.

Application filed September 13, 1910. Serial No. 581,897.

To all whom it may concern:

Be it known that I, Warren D. C. Wood, citizen of the United States, residing at Haxtum, in the county of Phillips and State of Colorado, have invented certain new and useful Improvements in Non-Refillable Bottles, of which the following is a specification.

This invention relates to improvements in non-refillable bottles, or to bottles which cannot be used a second time without detection, and has for one of its objects to improve and simplify the construction and increase the efficiency and utility of devices of this character.

Another object of the invention is to provide a device of this character constructed wholly of glass and metal, and in which no part of the securing means comes in contact at any time with the contents of the bottle.

With these and other objects in view the invention consists in certain novel features of construction as herein shown and described and then specifically pointed out in the claim; and, in the drawings illustrative of the preferred embodiment of the invention, in which:—

Figure 1 is a vertical section of a portion of a bottle including the neck, with the improvement applied; Fig. 2 is a transverse section on the line 2—2 of Fig. 1.

Corresponding and like parts are referred to in the following description and indicated in all the views of the accompanying drawings by the same reference characters.

The improved device may be applied to bottles of any size or to bottles or like closures for containing any kind of liquid, but for the purpose of illustration is shown applied to a conventional bottle in which a 40 portion of the body is represented at 10 and the neck at 11. Formed upon one side of the neck is a projection 12 having an internal cavity or bore 13 communicating with the interior of the neck, as shown. The pro-45 jection 12 is surrounded by a breaking groove or channel 24, the object to be hereafter described. Fitting in the neck 11 is a stopper or "cork" 14, preferably of glass or similar material, and provided with a 50 flange 15 at the upper end to limit its downward movement. The stopper 14 is preferably "ground" into the neck to render it liquid tight. Formed within the stopper 14 is a longitudinal cavity 16 having one side 55 17 straight and the other side 18 inclined and with a projection 19 directed inwardly

from the inclined side, as shown. An aperture 20 is formed in the straight side of the stopper cavity and registers with the recess 13 when the stopper is disposed within the 60 bottle neck, as shown in Figs. 1 and 2.

A relatively short metal strip 21 and a relatively long metal strip 22 having a resilient lateral terminal 23 completes the improved device, and constitute the "lock" of 65 the same, and are applied as follows. After the contents have been inserted into the bottle 10 the stopper 14 with the shorter strip 21 is located in the cavity 20 and extends across the lower portion of the cavity 70 16. The stopper 14 is then so arranged that the aperture 20 registers with the recess 13. The longer strip 22 is then inserted into the cavity 16 and utilized to move the shorter strip into the recess 13, and the strip 22 75 forced downward until the yieldable extension 23 passes beneath the projection 19 when the free end of extension will "snap" beneath the projection and effectually lock the strip 22 in the stopper and likewise lock 80 strip 21 in the aperture 20 and cavity 13. This effectually "locks" the stopper into the bottle neck and it can be removed only by breaking the projection 12 which can readily be done at the break channel 24, as will be 85 obvious. The strip 21 can then be withdrawn and the stopper removed. The breaking channel 24 being comparatively remote from the neck 11, no danger exists of broken glass getting into the bottle.

The improved device is simple in construction, can be manufactured at only a slight increase of expense over that of an ordinary bottle and operates effectually to protect the manufacturer from the second 95 using of the bottle.

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

A bottle including a neck portion, a projection extending from said neck portion and having an internal recess communicating with the neck, a stopper engaging in the neck and having an outwardly opening cavity and with a lateral aperture registering with the recess of the neck projection and located intermediate the stopper recess, said stopper being further provided within its cavity with an inwardly directed stop lug located intermediate its ends and inwardly of the lateral aperture, a locking member extending through the neck aperture and into the recess of the neck projection, and

another locking member engaging in the stopper cavity and against the first mentioned locking member, said last mentioned locking member having a resilient terminal extending normally substantially at right angles thereto for engaging beneath the stop lug.

In testimony whereof, I affix my signature in presence of two witnesses.

WARREN D. C. WOOD. [L. s.]

Witnesses:

C. M. GALE, M. H. Bentson.