

No. 712,990.

Patented Nov. 4, 1902.

W. YUILLE.
NON-REFILLABLE BOTTLE.

Application filed Mar. 13, 1902.

(No Model.)

Fig. 1.

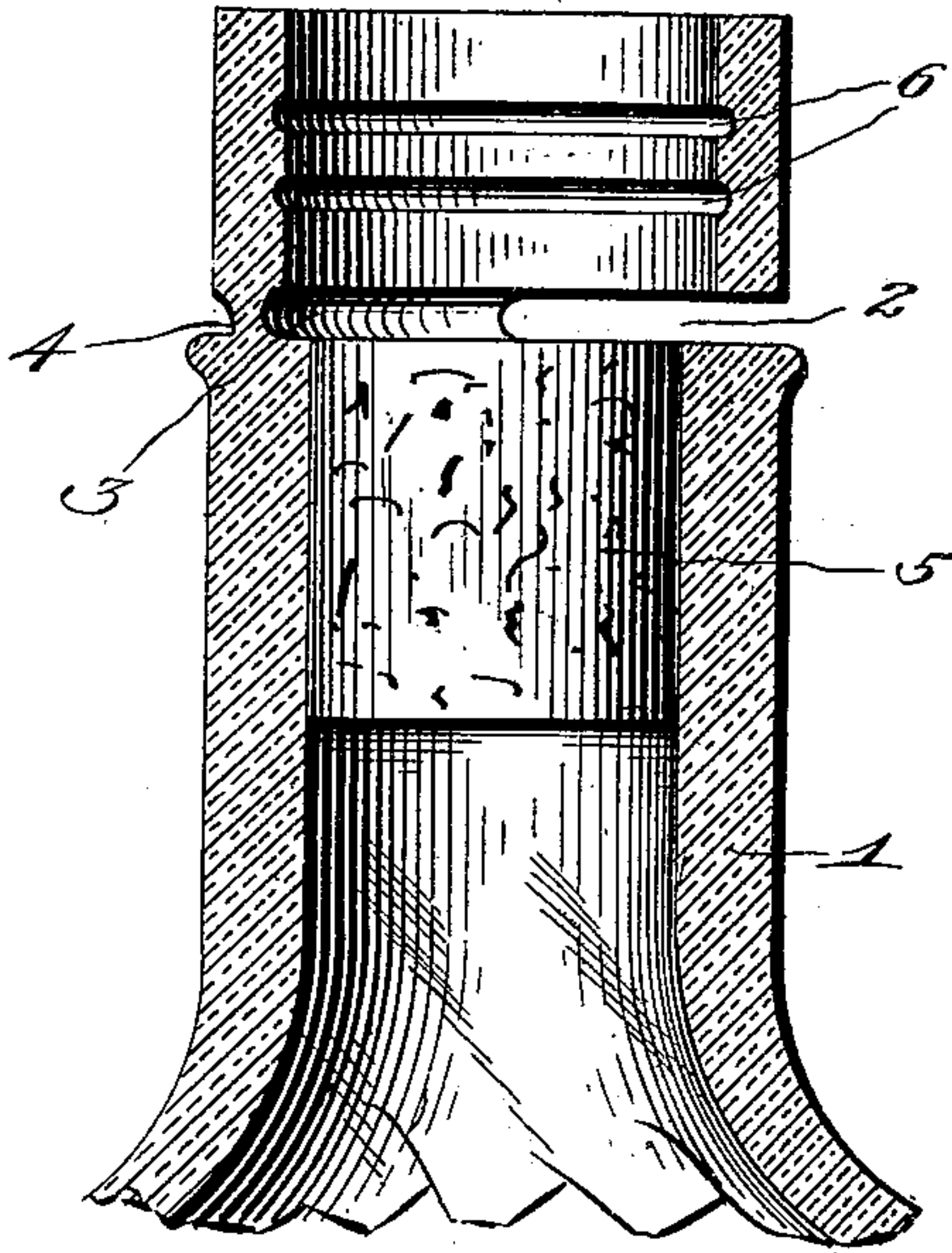


Fig. 2.

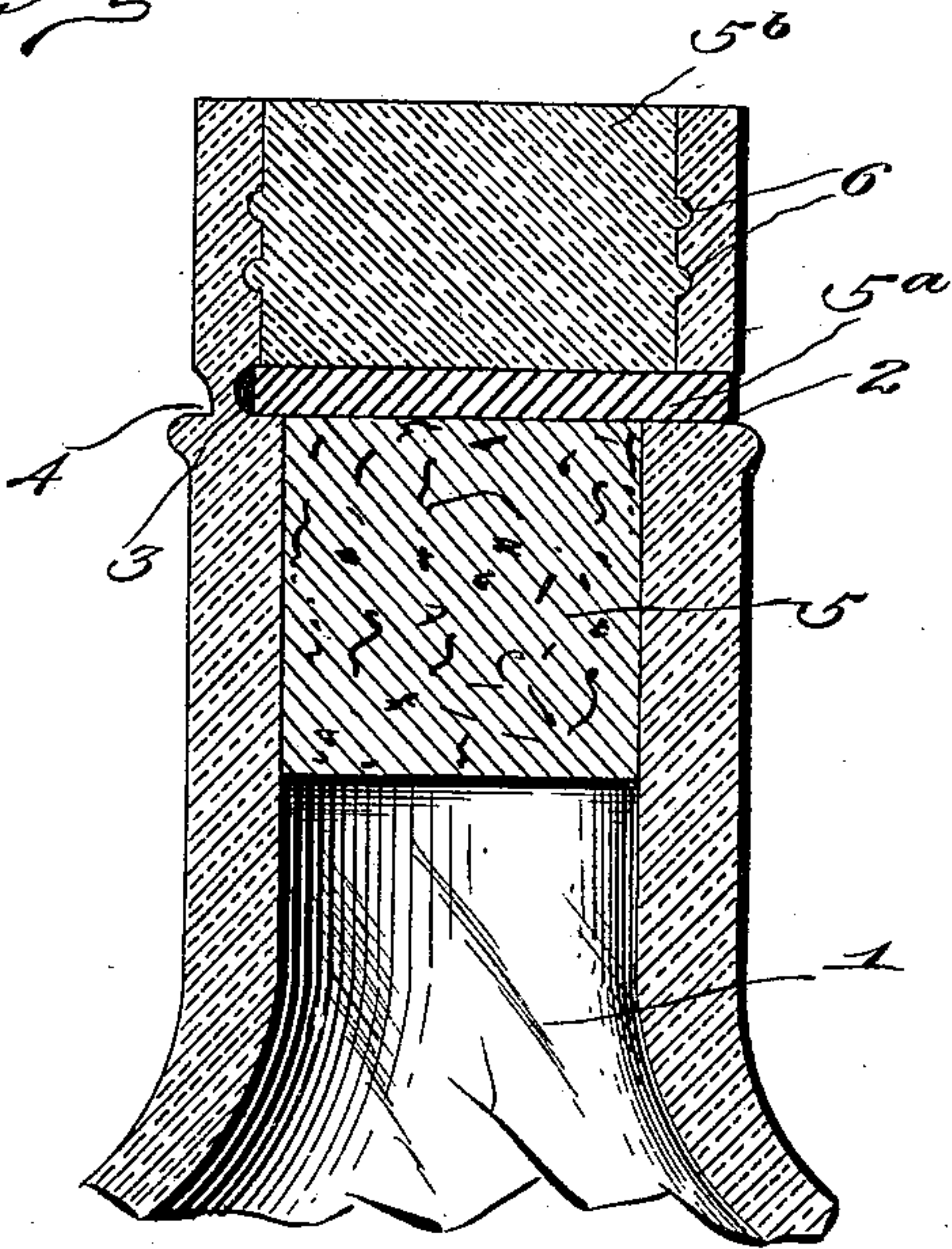
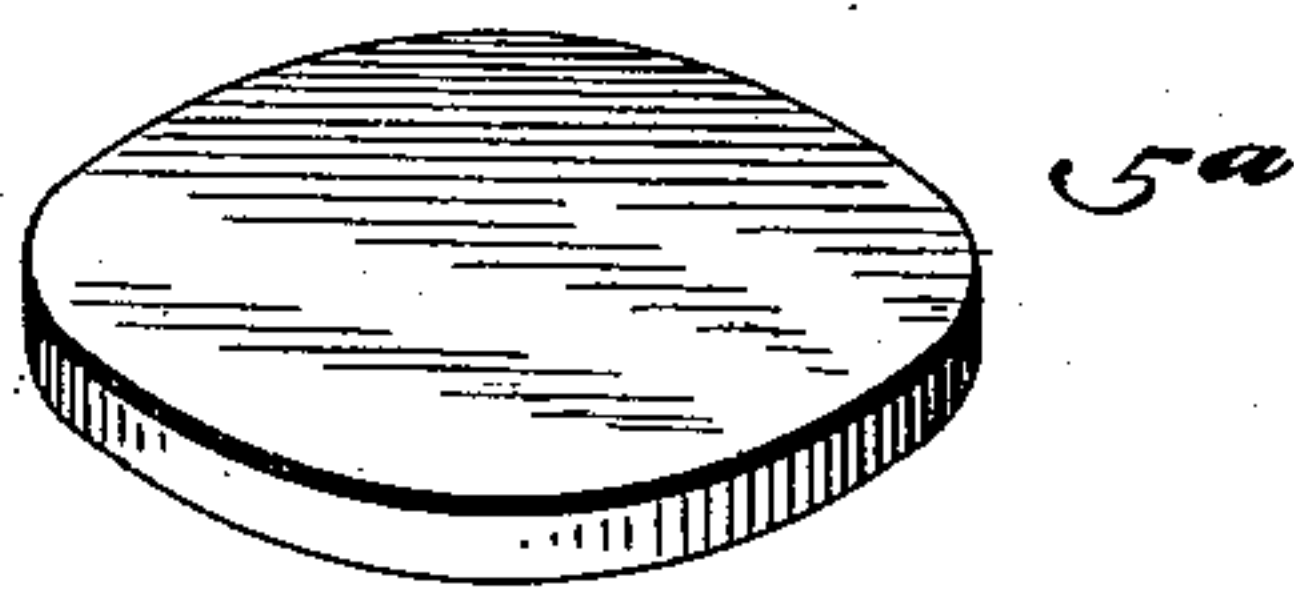


Fig. 3.



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WILLIAM YUILLE, OF MOBILE, ALABAMA.

NON-REFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 712,990, dated November 4, 1902.

Application filed March 13, 1902. Serial No. 98,057. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM YUILLE, a citizen of the United States, residing at Mobile, in the county of Mobile and State of Alabama, have invented certain new and useful Improvements in Non-Refillable Bottles; and I do 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.

The invention relates to non-refillable bottles—bottles of that class which cannot be refilled and sold to the trade as original packages after their contents have once been decanted without giving notice to the purchaser of the fraud contemplated.

The object of the invention is to provide a bottle of this character which shall be simple of construction, durable in use, comparatively inexpensive of production, and efficient for the purpose for which it is designed.

With this and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts, which will be hereinafter more fully described, and particularly pointed out in the appended claim.

In the accompanying drawings, Figure 1 is a vertical longitudinal sectional view of the neck of a bottle or other container, showing the stopper placed therein. Fig. 2 is a similar view showing the disk placed in position and confined in place by the molten seal, and Fig. 3 is a detail perspective view of the disk.

In the drawings, 1 denotes the neck, having a slot or opening 2 formed partially around the same near its upper end, and 3 denotes an lined internal groove formed on the interior wall of the bottle-neck the remaining portion of its circumference. If desired, a second groove 4 may be formed on the bottle-neck in its outside and opposite the groove 3, thus weakening the neck at this point. The neck above the slot or opening 2 and the grooves 3 and 4 has an internal diameter greater than the internal diameter of the neck below the opening and grooves to permit of the ready insertion of a cork 5 without straining the weakened portion of the neck formed by the grooves, so that said cork 5 may be easily slipped into

the open end of the bottle and be forced down into the position shown in the drawings, the strain incident to the forcing of this cork to its position being resisted by the solid thick neck portion. After the cork has been inserted the upper end may be trimmed off by inserting a sharp instrument through the opening 2. A disk 5^a, preferably of asbestos, is now inserted and closes the opening 2 and fits the groove 3. A seal 5^b, preferably of molten glass, is poured into the open neck of the bottle and entirely seals the bottle. In order to prevent this seal when it becomes hardened from being extracted, I form the interior wall of the neck of the bottle above the grooves 3 and 4 with annular grooves 6, into which the molten glass flows, and thus locks said molten glass when it cools off and becomes hard against extraction. It will be observed that the disk completely covers the upper end of the cork and projects into the groove 3 and closes the opening 2, so that when the molten glass is poured into the open end of the neck there is no liability of its working down between the sides of the stopper and inner wall of the neck.

When it is desired to remove the contents of the bottle, that portion of the neck above the grooves 3 and 4 is broken off, which may easily be done owing to the weakening of the neck at that point where the grooves 3 and 4 and opening 2 are located, and the rough edges smoothed off at the point of fracture. The stopper 5 is now removed, and the liquid may be poured from the bottle over the edge of what was the base-wall of the opening 2.

From the foregoing description, taken in connection with the accompanying drawings, the construction, mode of operation, and advantages of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, and details of construction may be made within the scope of the invention without departing from the spirit or sacrificing any of the advantages thereof.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

The combination with the neck of a bottle
or other container having a transverse open-
ing and an aligned interior groove, the interior
wall of the bottle above said groove and open-
5 ing being of greater circumference than that
portion below, of a disk inserted into the neck
of the bottle and having its periphery pro-
jecting into the groove and the opening afore-
said, and a molten seal let into the neck of

the bottle above the disk, substantially as set
forth.

In testimony whereof I have hereunto set
my hand in presence of two subscribing wit-
nesses.

WILLIAM YUILLE.

Witnesses:

GEO. E. SAGE,
J. F. JOHNSTON.