

F. RUMRILL.
BOTTLE STOPPER.

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915,116.

Patented Mar. 16, 1909.

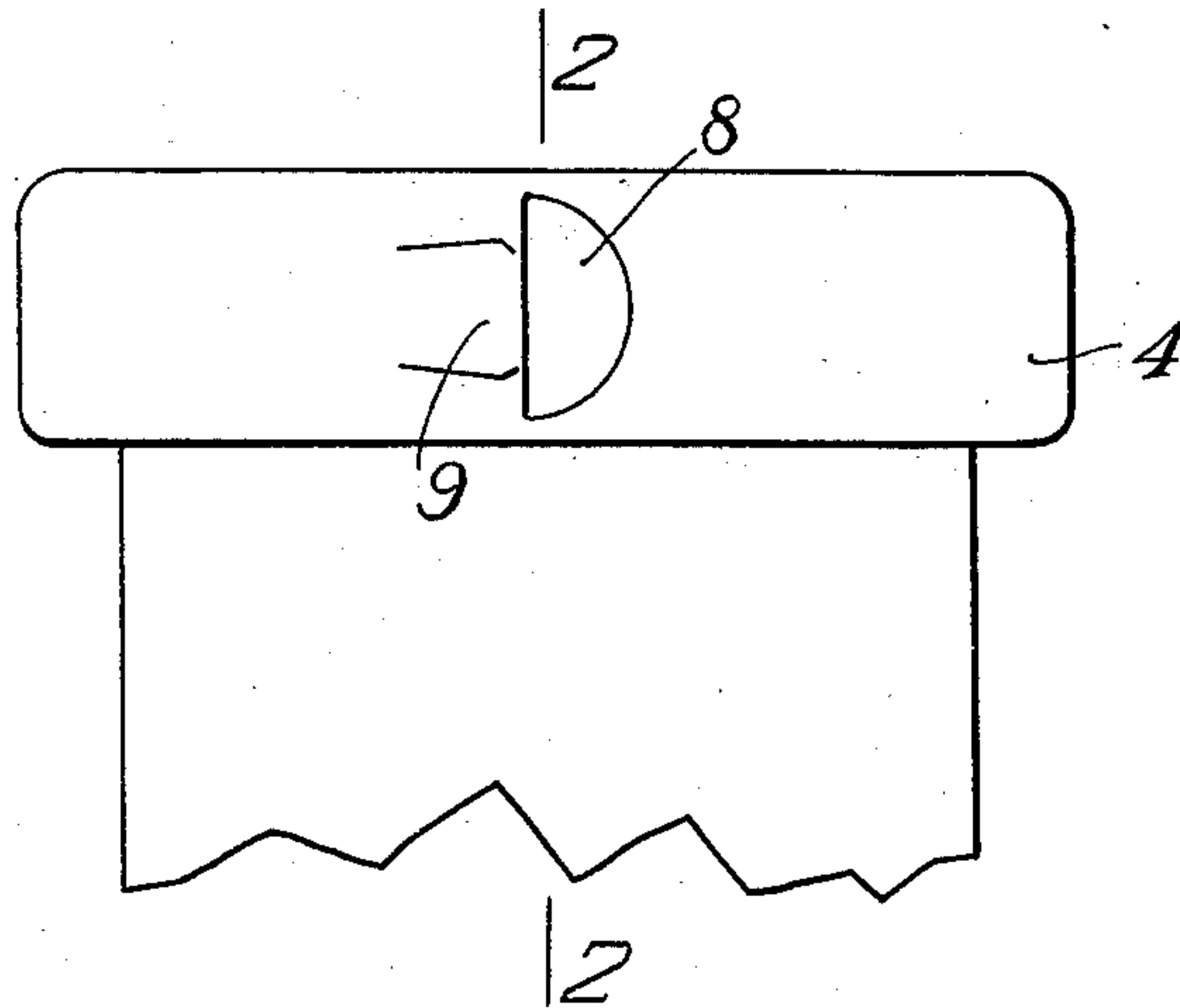


FIG. 1.

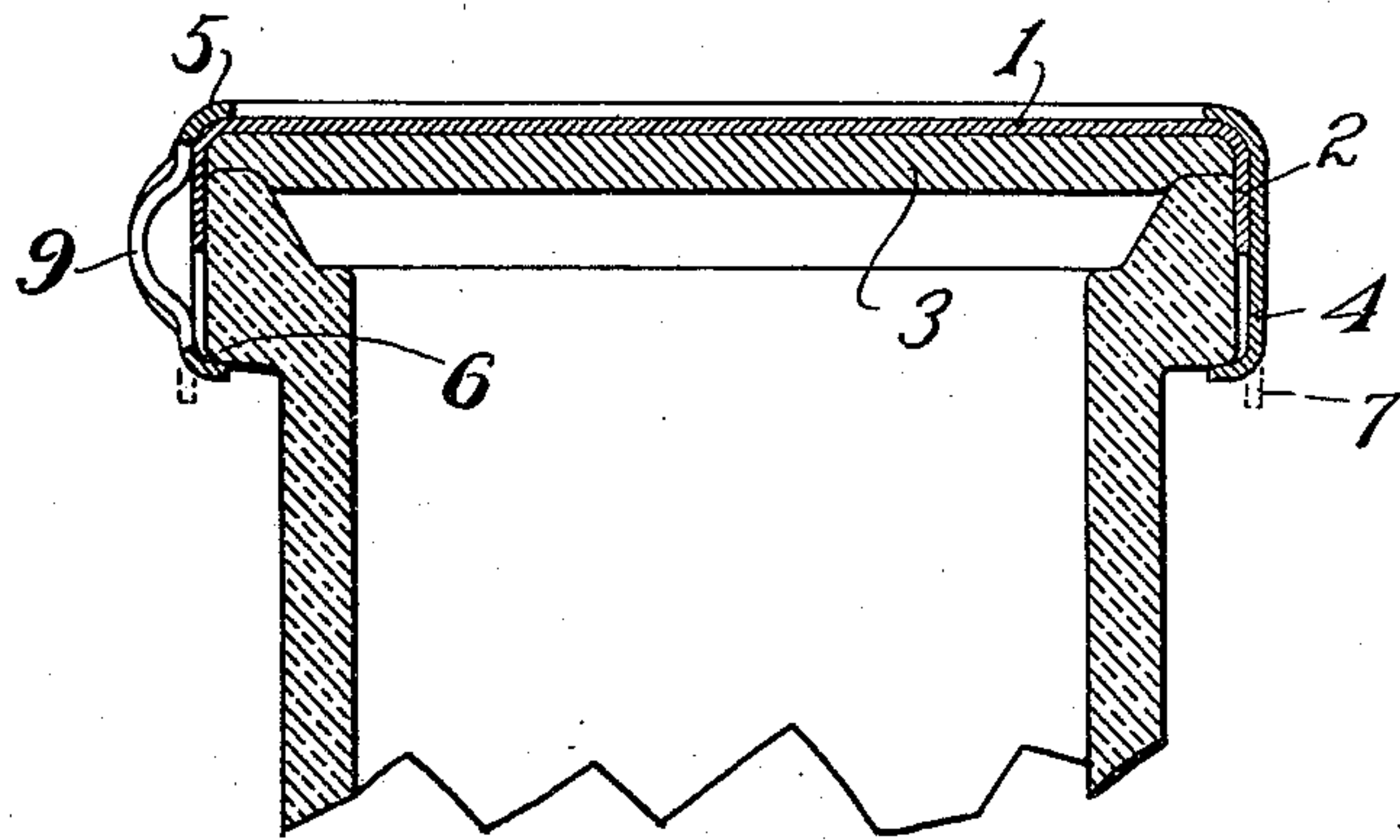


FIG. 2.

WITNESSES

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UNITED STATES PATENT OFFICE.

FRANK RUMRILL, OF BOSTON, MASSACHUSETTS.

BOTTLE-STOPPER.

No. 915,116.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, FRANK RUMRILL, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Bottle-Stoppers; 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.

The present invention relates to an improvement in bottle stoppers.

The object of the invention is to reorganize and improve the construction of sheet metal stoppers for bottles and the invention consists in the bottle stopper hereinafter described and particularly defined in the claims.

In the accompanying drawing illustrating the preferred form of the invention, Figure 1 is an elevation of a bottle stopper embodying this invention in position on a bottle neck, and Fig. 2 is a sectional elevation of the same.

The illustrated embodiment of the invention is described as follows:—The stopper consists of a cap provided with a marginal integral flange 2, which incloses the packing disk 3 and fits over the mouth of the bottle. This cap is secured in place over the mouth of the bottle by means of a retaining ring 4, which at its upper edge is provided with a flange 5 which engages the upper surface of the cap, and at its lower edge is provided with a corresponding flange adapted to engage the shoulder 6 on the bottle neck. In applying the cap to the bottle, the lower edge of the ring 4 extends down into the position indicated in dotted lines at 7 in Fig. 2, then, while pressure is applied to the upper flange of the retaining ring to press the packing 3 against the bottle mouth, the lower edge of the retaining ring is bent into the position indicated in full lines in Fig. 2 whereby the cap is securely held in place on the bottle and the closure maintained tight.

The retaining ring 4 is provided with an opening 8 which extends from a point near the upper flange to a point near the lower

flange whereby the ring is weakened to the extent of the metal cut out of it. The ring is, therefore, easily broken at this weakened place. In order to facilitate the breaking of the ring, the metal upon one side of the opening 8, as at 9, is bulged outward, as seen most clearly in Fig. 2, and any convenient implement may be thrust into the opening and by prying on it the retaining ring is broken. Bottle caps of this character are adapted for use on pickle bottles, jam jars, tin cans and the like, and a can opener or ice pick or any other convenient implement may be employed to break the retaining ring. It is to be observed that the portions of the retaining ring above and below the weakening opening 8 are continuous unweakened tension portions which prevent the ring from stretching and thereby becoming loose. Also that because the tension portions are undistorted they are not liable to be bent in such a way as to cause a lengthening of the ring.

The form of the opening in the retaining ring is of no consequence. The opening may be unitary or plural; the only requirement is that the retaining ring shall be so weakened as to be rendered readily frangible.

The form of the provision for the engagement of the breaking implement is, in the broader aspects of the invention, immaterial but the form in which a bulge is formed in the ring adjacent to the weakening opening therein so as to afford access for the breaking implement is preferred because it can be made at the same operation at which the opening is made.

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

1. A bottle stopper consisting of a cap for closing the mouth of a bottle and a retaining ring having continuous undistorted flanges at its top and bottom edges for engaging the upper side of the cap and a shoulder on the neck of the bottle and provided with a weakening hole between the flanges extending near to both flanges so that the ring may be easily broken at this place, substantially as described.

2. A bottle stopper consisting of a cap for closing the mouth of a bottle, and a retaining ring having continuous undistorted flanges at its top and bottom edges for engaging the upper side of the cap and a shoulder on the neck of the bottle and provided with a weakening hole between the flanges, the ring being bulged outward alongside of

the hole to receive a breaking implement, substantially as described. 10

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

FRANK RUMRILL.

Witnesses:

HORACE VAN EVEREN,
ALICE ACKROYD.