(No Model.)

A. IBERT, Jr.

BOTTLE STOPPER.

No. 577,139. Patented Feb. 16, 1897.

FIG. 1.

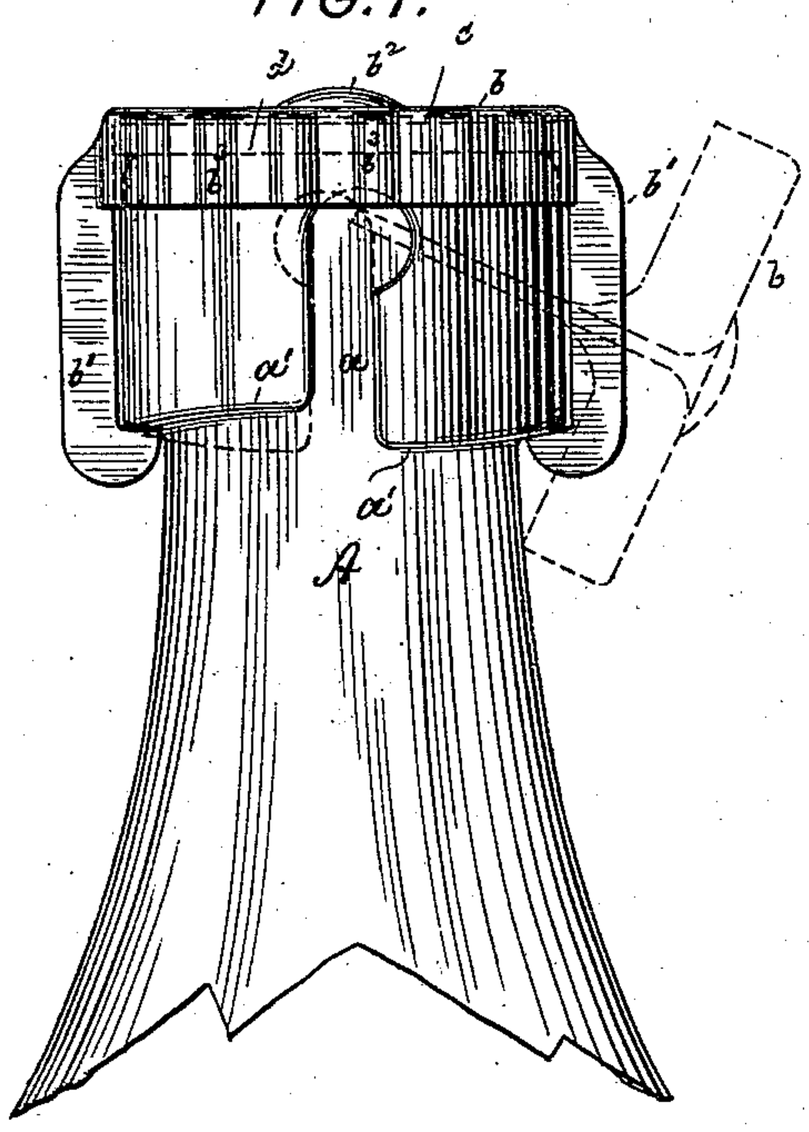


FIG. 2.

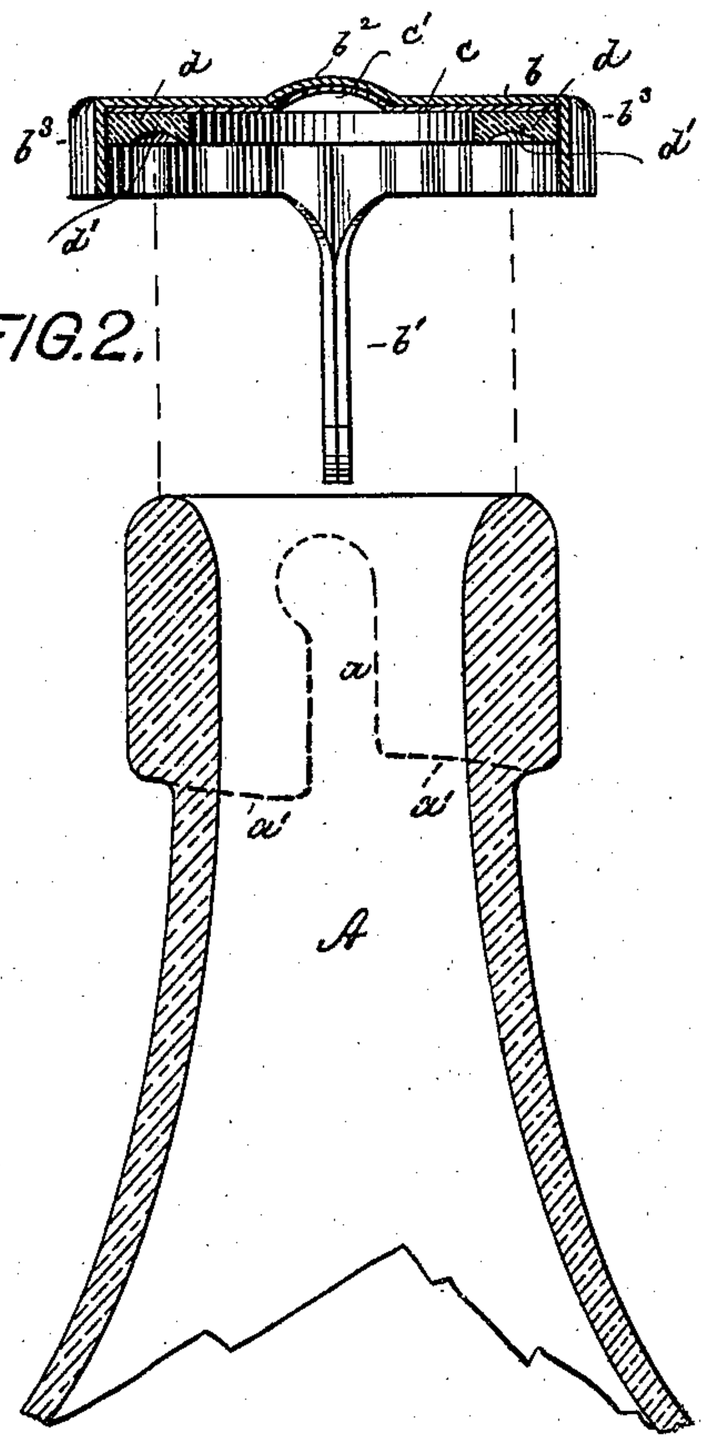
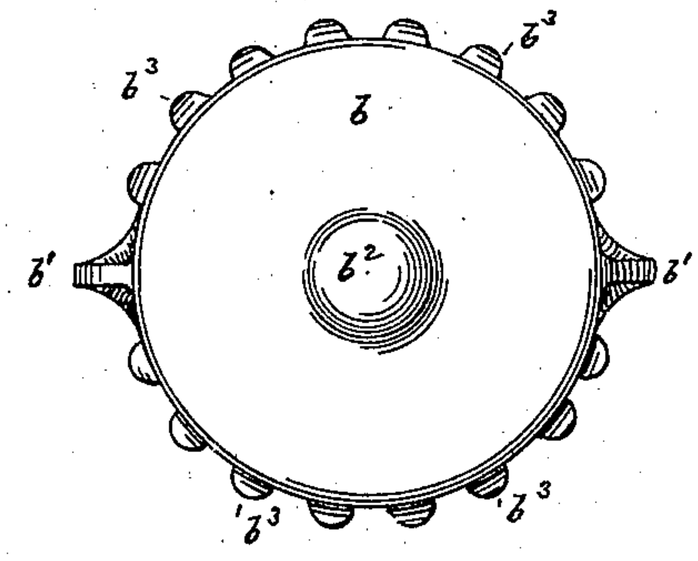


FIG. 3.



Witnesses:
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Willie Miller.

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UNITED STATES PATENT OFFICE.

ANTHONY IBERT, JR., OF BROOKLYN, NEW YORK.

BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 577,139, dated February 16, 1897.

Application filed October 31, 1896. Serial No. 610,691. (No model.)

To all whom it may concern:

Be it known that I, ANTHONY IBERT, Jr., of Brooklyn, Kings county, New York, have invented an Improved Bottle-Stopper, of which the following is a specification.

This invention relates to that class of bottle-stoppers in which the stopper is permanently secured to the bottle and is opened and closed by a partial rotation.

The object of the invention is to facilitate the manipulation of the stopper, avoid friction, and diminish the wear on the washer.

In the accompanying drawings, Figure 1 is a side view of my improved bottle-stopper. Fig. 2 is a longitudinal section through the same, and Fig. 3 a plan.

The letter A represents a bottle, the head of which is provided with the upright grooves *a* and the inclined lower edges *a'*.

The stopper is composed of a cap *b*, made with two depending hook-shaped arms *b'*, adapted to engage the grooves *a* when the bottle is opened and the edges *a'* when the bottle is closed. Within the cap *b* there is contained a rigid revoluble disk *c*, made, preferably, of aluminium and held against the inner face of the cap by an annular washer *d*, made of leather, rubber, or similar flexible material. This washer is provided with a groove *d'*, adapted to fit tightly upon the upper edge of bottle A. The disk *c* may be bulged centrally, as at *c'*, to fit into a corresponding central bulge b^2 of cap *b*, and thus insure a centering of the disk during the rotation of the cap. The periphery of the cap *b*, above the arms *b'*, is preferably knurled, as at b^3, to offer a surface by which the cap may be tightly grasped during rotation.

When the bottle is closed, the hooked arms *b'* engage the lowermost ends of the inclined planes *a'*. To open the bottle, the cap *b* is revolved until the hooks enter the grooves *a*, when the stopper can be raised off its seat and swung downward, (dotted lines, Fig. 1.)

The disk *c* and the washer *d* do not participate in the rotary movement of the cap *b*, but remain stationary upon the bottle-mouth, so that frictional wear of the washer is prevented. Moreover, as the friction between the disk *c* and cap *b* is comparatively small, the stopper may be rotated with considerably less effort than would be necessary to carry the washer along the bottle edge.

The knurls b^3 constitute a convenient means for rotating the stopper without grasping the arms *b'*, so that any danger of bending the arms and cap is avoided.

What I claim is—

1. A bottle-stopper composed of a cap having a knurled rim, a pair of depending hook-shaped arms, a rigid disk contacting with the inner face of the cap, and a flexible washer below the disk, all being so constructed that the cap is revoluble around the disk and washer, substantially as specified.

2. A bottle-stopper composed of a centrally-bulged cap, a pair of depending hook-shaped arms, a centrally-bulged rigid disk engaging the bulged cap, and a flexible washer below the cap, all being so constructed that the cap is revoluble around the disk and washer, substantially as specified.

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