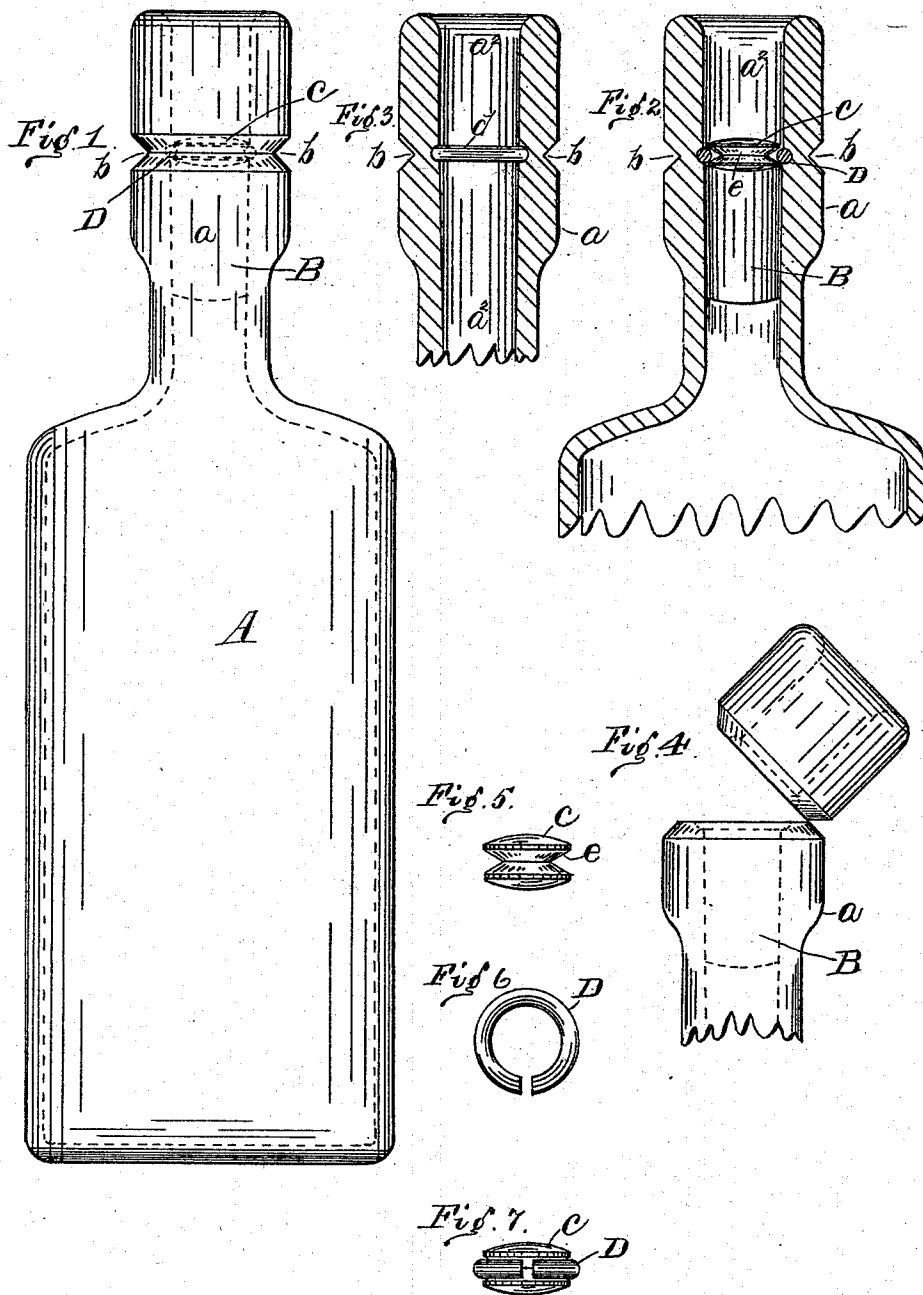


(No Model.)

E. C. SHUMARD.
BOTTLE.

No. 530,288.

Patented Dec. 4, 1894.



Witnesses
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UNITED STATES PATENT OFFICE.

EUGENE C. SHUMARD, OF MILFORD, OHIO, ASSIGNOR OF ONE-HALF TO
OLIVER P. WILLIAMS, OF SAME PLACE.

BOTTLE.

SPECIFICATION forming part of Letters Patent No. 530,288, dated December 4, 1894.

Application filed July 27, 1894. Serial No. 518,762. (No model.)

To all whom it may concern:

Be it known that I, EUGENE C. SHUMARD, a citizen of the United States, residing at Milford, Clermont county, State of Ohio, have invented certain new and useful Improvements in Bottles, of which the following is a specification, reference being had to the accompanying drawings.

The object and nature of my invention will be fully apparent from the description and claims hereinafter contained.

In the drawings, Figure 1, is a side elevation of a bottle embodying my invention, and Fig. 2, is a vertical section through the neck of the bottle shown in Fig. 1. Fig. 3, is a view similar to that of Fig. 2, with the stopper and fastening device removed. Fig. 4, illustrates the top of the neck broken off for the purpose of removing the stopper. Fig. 5, is an edge view of the disk which forms one portion of the fastening device, and Fig. 6 is a top view of a ring adapted to engage around said disk. Fig. 7 is a view similar to Fig. 5, with the expansible ring in position on said disk.

My invention consists of the means, or the substantial equivalents thereof, herein shown and presently to be described, by reason of which a portion of the neck of a bottle, containing my invention, must be first broken off before the cork can be removed, and by this means prevent a second use of the bottle, for the purposes hereinafter set forth.

In the drawings, A, represents a bottle having a neck *a*, the latter having an external peripheral groove, *b* and an internal groove *d* on a plane with said external groove.

B, represents a stopper which is adapted to be passed down through the opening *a*² within the neck and rest therein, as shown, beneath the internal groove, *d*.

C, represents a disk having around its edge a groove, *e*, within which is fitted an expansible stop-piece D, which latter preferably consists of a suitable cut-ring, as shown.

The disk, C, is preferably formed of metal, but may be formed of any other hard substance which will resist the action of a bor-

ing-tool, and the ring D is preferably formed of spring-metal.

The operation of my invention is as follows: The stopper is first driven to place, after which the expansible locking-device, shown in Fig. 7, is inserted within the neck of the bottle—sufficient space intervening between the adjacent ends of the cut-ring to permit the latter to contract while being lowered or forced to place. As soon as the disk and its ring reach the internal groove, *d*, said ring will immediately expand within said groove, thus securely locking the disk in position on top of the stopper. The diameter of the disk, above and below its groove, is somewhat larger than the normal internal diameter of ring D; and, when locked to place in the manner aforesaid and as shown in Figs. 1 and 2, it is impossible to remove said disk without first breaking off the top of the neck, as shown in Fig. 4.

If desired, the stopper, disk and ring may all be driven to place by one and the same operation.

The cork is removed by giving the top of the neck a slight blow, which will cause the neck to break or separate on a plane with the grooves *b* and *d*, at which time the disk and ring will drop from place, when the stopper may be removed in the usual manner.

The primary advantage of my invention consists in the means afforded the manufacturer or dealer of any special brand of liquid from having their or his bottles re-filled, by an unscrupulous competitor with liquid of the same class or name, as the breaking of the neck of the bottle renders the latter unfit for use, without detection.

If desired, the name or trade-mark of the manufacturer or dealer may be blown into the neck of the bottle, partially above and partially beneath the parting-groove, in which event the breaking of the neck would effectually destroy said name or mark.

The additional cost of the disk and ring, for each bottle, is quite small, and they may be reused a number of times, if so desired.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a bottle, the internal groove *d* and external groove *b* formed on the same plane in the neck of said bottle, in combination with
5 a disk having a peripheral groove *e*, and a metallic cut-ring, the latter engaging within the grooves *d* and *e*, substantially as set forth.

2. As a new article of manufacture, a stopper-fastener consisting of a metallic disk having a peripheral groove with a metallic cut-ring fitted in said groove, as set forth.

EUGENE C. SHUMARD.

Witnesses:

O. M. HILL,

O. P. WILLIAMS.