

J. REID.

MEANS FOR PREVENTING REFILLING OF BOTTLES.

APPLICATION FILED MAY 25, 1903.

NO MODEL.

Fig.9.



Fig.10.

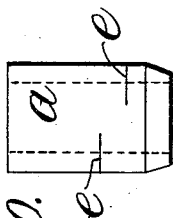


Fig.11.

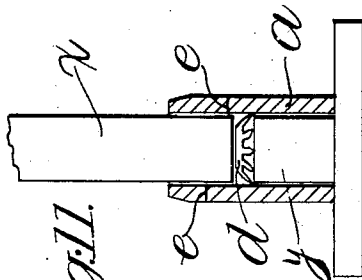


Fig.1.

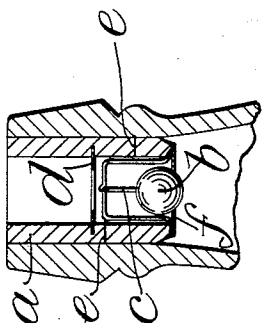


Fig.2.

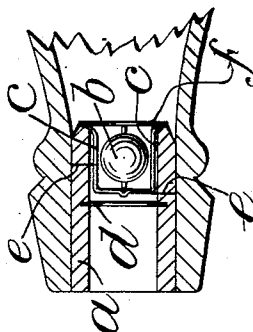


Fig.3.



Fig.4.

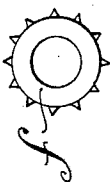


Fig.5.

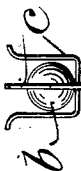


Fig.6.



Fig.7.



Fig.8.



Witnesses:

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JOHN REID, OF BELFAST, IRELAND.

MEANS FOR PREVENTING REFILLING OF BOTTLES.

SPECIFICATION forming part of Letters Patent No. 738,238, dated September 8, 1903.

Application filed May 25, 1903. Serial No. 158,607. (No model.)

To all whom it may concern:

Be it known that I, JOHN REID, a subject of the United Kingdom of Great Britain and Ireland, have invented a certain new and useful
 5 Improved Means for Preventing the Refilling of Bottles, of which the following is a specification, such as will enable others skilled in the art to which it appertains to make and use the same.

10 My invention relates to an improved device which I call a "cork" or "stopper" for bottles, and is designed to prevent the bottles with which it is used from being refilled unless the said cork or stopper is broken.

15 My improved corks or stoppers are suitable for use with many kinds of bottles and may vary in size according to requirements.

In carrying out my invention I use a cork of tubular or sleeve-like shape designed to fit
 20 into the neck or mouth of the bottle with which it is to be used. Into this tubular cork I insert a disk of metal of larger diameter than the tube or bore of the cork and having a serrated or toothed outer edge, which edge
 25 at the time of insertion is bent or folded back to allow the disk to pass into the tube or bore of the cork. When at the required position in approximately the center of the cork, the serrated or toothed edge is bent outward
 30 by suitable tools, which press it into the cork. This disk is perforated with one or more holes. Into the lower end of the cork I fit a small cage-like frame open on its lower side. This
 35 cage is preferably made of two pieces of inverted-U-shaped wire crossing each other at the center of their curved ends. The cage can be held in position in the cork by binding the ends of the wires into the cork or by any other suitable means. Below this cage I at-
 40 tach a ring or disk of metal or other suitable material having a hole in its center. This ring is attached in any suitable manner, as by inserting its edge into or around the cork. A ball, preferably of glass or porcelain, is
 45 placed in the cage and is free to drop onto the ring when the cork is upright. This ball fits closely into the hole in the ring, thus preventing any liquid from being poured into the
 50 bottle when the same is in an upright position. When the bottle is turned over, the

ball runs or falls forward in the cage and allows the contents of the bottle to be poured out. The tubular cork is slit in one or more places to render it fragile, and thereby liable to break if an attempt is made to withdraw it. 55

I will now describe my invention with reference to the accompanying drawings, in which—

Figure 1 shows a sectional view of the neck of a bottle in an upright position and shows 60 one of my improved corks or stoppers with the ball resting on the ring, completely stopping or filling the hole in the same. Fig. 2 shows a view similar to Fig. 1, but shows the neck of the bottle in a horizontal position and 65 the ball away from the ring, resting in the wire cage. Figs. 3 to 10, inclusive, are detailed views of the various parts of my improved stopper or cork. Fig. 11 shows a sectional view of the tubular cork and a simple 70 pair of tools which can be used to flatten the disk and insert the edge or teeth of the same into the cork.

a is the tubular cork with slits *e e*.

b is the ball. 75

c is the wire cage.

d is the toothed disk.

f is the ring with hole *g*, into which the ball
b drops and fits when the bottle is upright.

x y are the pair of tools or dies which fit 80 the tubular cork and between the faces of which the disk is flattened, so that the teeth enter the cork.

The tubular portion of my invention can be made of cork or any other suitable material, and the cage, disk, or ring may be made 85 in various shapes.

It will be seen that my invention supplies a very simple and effective stopper or cork which prevents bottles from being refilled 90 unless the stopper is withdrawn, which it will be very difficult to do without breaking the tubular portion.

The bottle must be filled in the first instance before the stopper is inserted. 95

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

1. A device for preventing the refilling of bottles consisting of a tubular cork, a perforated disk inserted in said cork, a cage and 100

ball carried within said cork, and a ring at-
tached to said cork adapted to allow liquid
to pass out of the bottle when inverted, said
tubular cork being slit or cut so that it can-
5 not be removed without breaking, substan-
tially as herein described and set forth.

2. In a device for preventing the refilling
of bottles, a tubular cork with slits or cuts as

and for the purposes herein described and set
forth. 10

In witness whereof I have hereunto set my
hand in presence of two witnesses.

JOHN REID.

Witnesses:

ARTHUR S. MEGAW,
ANNIE M. THOMPSON.