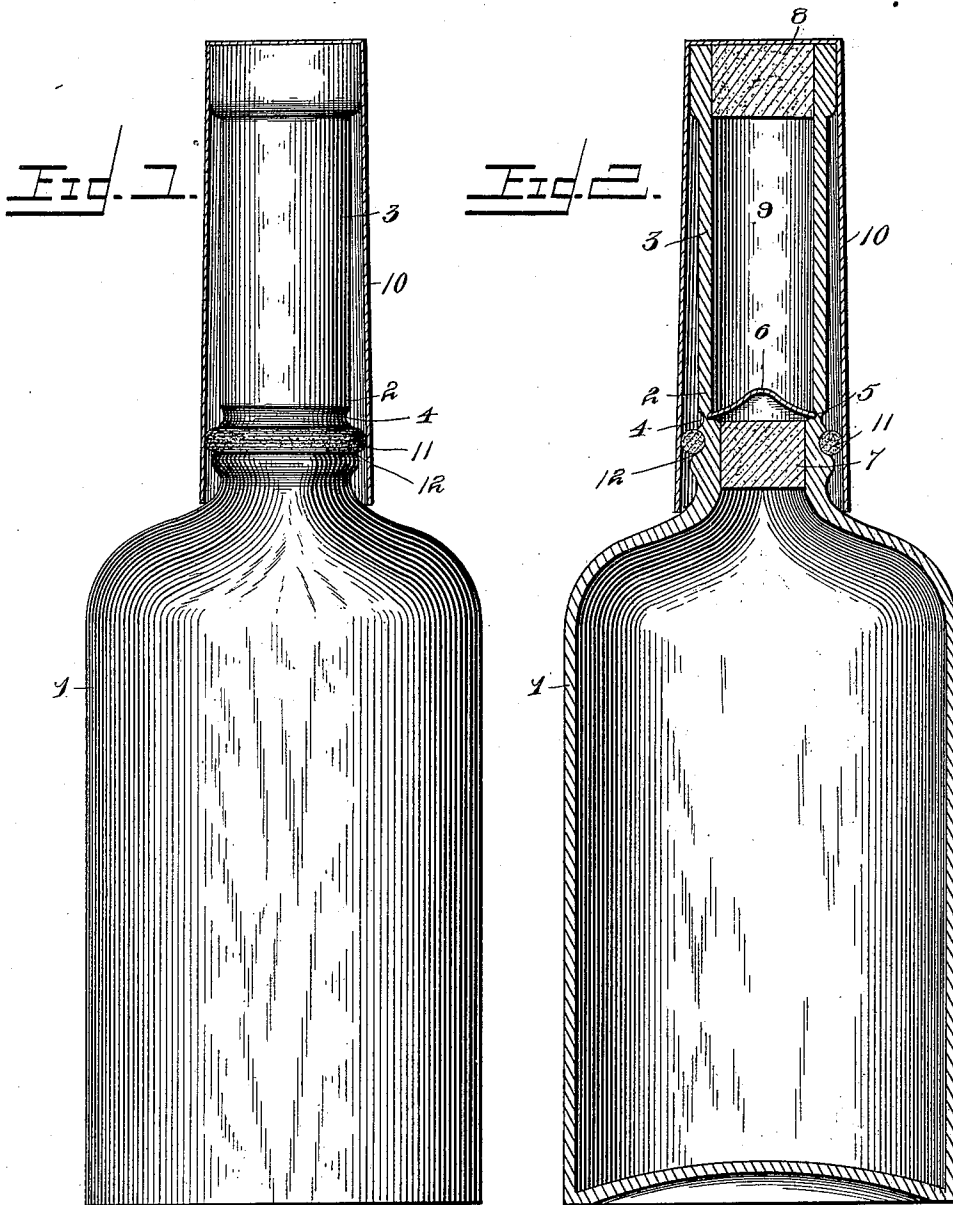


(No Model.)

E. C. BARTLETT.
NON-REFILLABLE BOTTLE.

No. 587,295.

Patented Aug. 3, 1897.



Witnesses

A. J. LaVare,
J. F. Riley

By his Attorneys,

C. Snow & Co

Inventor
Edward C. Bartlett.

UNITED STATES PATENT OFFICE.

EDWARD CHARLES BARTLETT, OF LORAIN, OHIO.

NON-REFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 587,295, dated August 3, 1897.

Application filed June 26, 1896. Serial No. 597,023. (No model.)

To all whom it may concern:

Be it known that I, EDWARD CHARLES BARTLETT, a citizen of the United States, residing at Lorain, in the county of Lorain and State of Ohio, have invented a new and useful Non-Refillable Bottle, of which the following is a specification.

The invention relates to improvements in antirefilling bottles.

10 The object of the present invention is to provide a bottle which, in order to obtain access to its contents, will have to be sufficiently mutilated to prevent it from being afterward refilled and sold in imitation of its original appearance.

15 The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

20 In the drawings, Figure 1 is a side elevation, partly in section, of an antirefilling bottle constructed in accordance with this invention. Fig. 2 is a vertical sectional view of the same.

25 Like numerals of reference designate corresponding parts in both figures of the drawings.

30 1 designates a bottle having its neck 2 provided with a frangible upper portion 3, adapted to bear a trade-mark, name, advertisement, or the like, and designed to be broken off from the bottle in order to obtain access to the contents of the same, whereby the bottle is mutilated in order to effectually prevent the same from being refilled and sold in imitation of its original appearance, and also to prevent the original contents of the bottle from being adulterated. The neck of the bottle is provided at the lower terminus of its frangible upper portion with an exterior groove 4, which reduces the thickness of the bottle at that point to provide a frangible ligament, and the neck is also provided on its interior at the same point with an annular groove 5, with which is interlocked a plate or shield 6, which is located above a lower cork or stopper 7.

40 The opening of the lower portion of the neck of the bottle is of slightly less diameter than the opening of the upper portion. The lower portion of the neck receives the said cork or stopper 7, and the upper portion or mouth of

the neck receives an upper cork or stopper 8. The shield or plate 6, which is preferably conical, concavo-convex, or otherwise dished, is expanded after it is placed within the neck of a bottle by a suitable plunger to force its peripheral edge into the groove 5, and it is constructed of steel to prevent it from being cut away or otherwise mutilated to obtain access to the lower cork, whereby the frangible upper portion of the neck of the bottle has to be broken off in order to dislodge the plate or shield 6. After the plate or shield 6 has been removed by breaking off the frangible upper portion of the bottle the lower cork may be readily withdrawn.

70 The shield or plate 6 is made conical for a twofold purpose: first, by reason thereof it cannot be readily drilled, for any attempt to drill the plate would cause it to revolve. Furthermore, making the plate in this shape gives it sufficient elasticity, so that when forced down in the neck of the bottle by means of a plunger the plate will spring outward and be caused to engage the groove 5.

75 The space between the upper and lower corks provides a sample compartment or chamber 9, and the upper cork 8 may be readily withdrawn to afford access to the sample chamber without breaking off the frangible upper portion.

80 The bottle is provided with a drinking-cup 10, conforming to the configuration of and arranged on the neck of the bottle, and it is retained thereon by an elastic ring 11, seated in an exterior groove 12 of the lower portion of the neck of the bottle and frictionally engaging the interior of the drinking-cup. The elastic ring 11 is located below the annular groove 5 and the frangible ligament formed by the same and the exterior groove 4, and the drinking-cup serves to cover and protect the frangible upper portion of the neck of the bottle. By locating the elastic ring below the frangible ligament there is no liability of the upper portion of the bottle being accidentally broken off in removing or replacing the drinking-cup.

85 The drinking-cup serves two functions. In the first place it sustains and strengthens the bottle-neck and prevents the neck from breaking at the line of separation. The cup being made of metal there is no danger of the neck

being broken while the cup is in place. Secondly, when removed from the neck it serves as a drinking-cup to test the liquid in the sampling-chamber 9. It will be observed in
 5 this connection that the convex plate 6 forms the bottom for said chamber, keeping the liquid therein from affecting the cork 7 below.

It will be seen that the bottle is exceedingly simple and inexpensive in construction, that
 10 it provides a sample-chamber, and that it is absolutely impossible to obtain access to its contents without sufficiently mutilating it to prevent it from being afterward refilled and sold in imitation of its original appearance.
 15 It will also be apparent that while preventing refilling it will also prevent any adulteration of its original contents without mutilating it to such an extent as to prevent a sale of it.

I am aware that it is not new to provide a
 20 pocket-flask with a cup formed to fit upon the upper part of the flask. I am also aware that it has been proposed to seal a fruit-jar by means of a cylindrical ring made of rubber or other elastic material interposed between the
 25 neck and the cover of the jar, the neck and the cover each having a corresponding groove for the reception of the ring; but I am not aware that a non-refillable bottle has ever been devised in which the neck is provided
 30 with a breakable portion and a cup arranged so as to surround said neck and sustain the same and protect it from injury.

What I claim is—

1. A device of the class described comprising
 35 ing a bottle provided with a frangible ligament and having an inner groove 5 and an

exterior groove 12, upper and lower corks arranged within the neck of the bottle and forming an intermediate sample-chamber, a shield located above the lower cork and interlocked
 40 with the groove 5, an elastic ring seated in the exterior groove 12 of the neck and located at a point below the frangible ligament, and an inverted cup covering and protecting the frangible portion of the neck and frictionally
 45 engaging the elastic ring whereby it is retained in place, substantially as described.

2. In a non-refillable bottle, a bottle-neck provided with a frangible ligament at an intermediate point, and a cork arranged within
 50 the neck of the bottle below the plane of the ligament, an upper cork closing the top opening to the neck, the space between the two corks forming an intermediate sampling-chamber 9, an inverted cup fitting tightly
 55 over the upper portion of the neck of the bottle and extending down and around the neck, covering the frangible portion thereof and contacting with the neck below said frangible
 60 portion, the said cup being adapted to be readily removed without the breaking of the neck and when in position serving as a protector for the latter, all substantially as described.

In testimony that I claim the foregoing as
 65 my own I have hereto affixed my signature in the presence of two witnesses.

EDWARD CHARLES BARTLETT.

Witnesses:

ED. GILLMORE,
 TOM GILLMORE.