

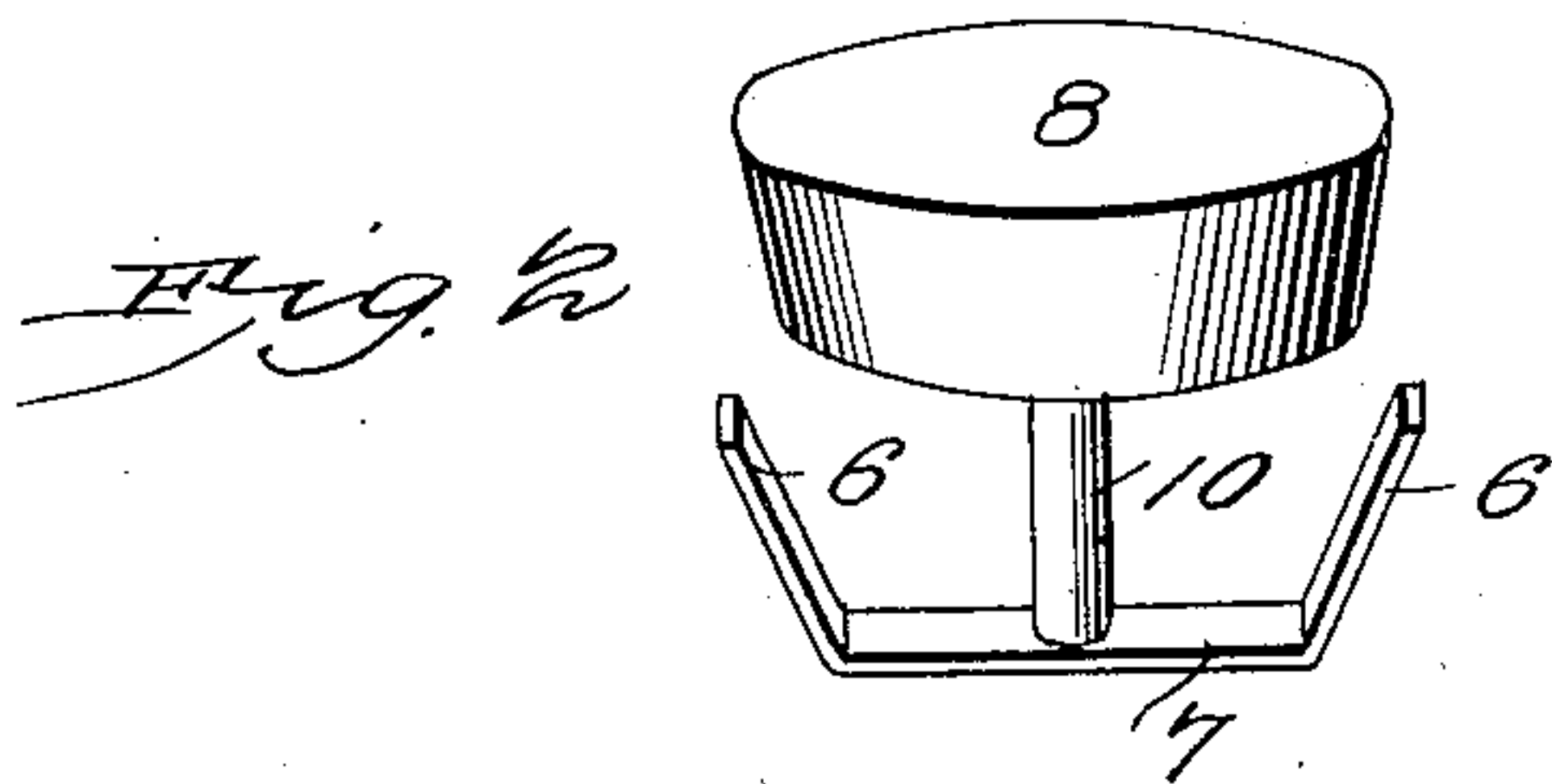
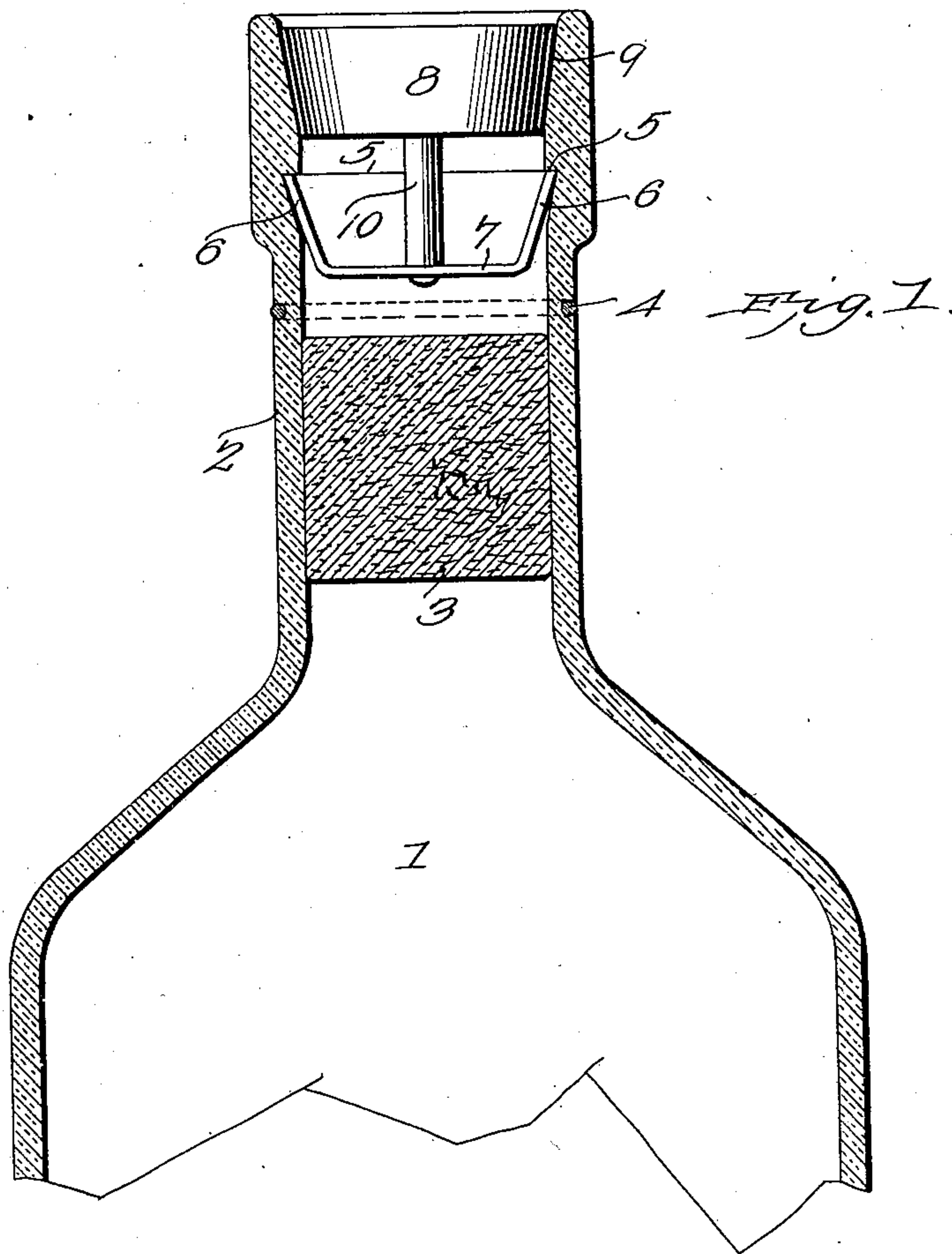
No. 713,136.

Patented Nov. 11, 1902.

W. S. McCREA.
NON-REFILLABLE BOTTLE.

(Application filed Jan. 2, 1902.)

(No. Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM S. MCCREA, OF PATTENBURG, NEW JERSEY, ASSIGNOR OF ONE-HALF TO HORATIO P. MILBERN, OF PATTENBURG, NEW JERSEY.

NON-REFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 713,136, dated November 11, 1902.

Application filed January 2, 1902. Serial No. 88,203. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM S. MCCREA, a citizen of the United States, residing at Pattenburg, in the county of Hunterdon and State of New Jersey, have invented a new and useful Non-Refillable Bottle, of which the following is a specification.

The invention relates to improvements in non-refillable bottles.

10 The object of the present invention is to improve the construction of non-refillable bottles and to provide a simple and comparatively inexpensive one which in order to obtain access to its contents will have to be sufficiently mutilated to prevent it from being afterward used as an original package, whereby it is prevented from being refilled with an imitation liquid or its contents adulterated.

20 A further object of the invention is to improve the construction of the neck of the bottle and to provide a neck which will be adapted to be easily and accurately broken and which at the same time will afford sufficient strength to prevent it from being accidentally broken.

25 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.

30 In the drawings, Figure 1 is a vertical sectional view of a portion of a bottle constructed in accordance with this invention. Fig. 2 is a detail perspective view of the guard or shield.

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

1 designates the bottle, having a neck 2 adapted to receive an ordinary cork or stopper 3 in its lower portion and provided at its intermediate portion at a point above the cork or stopper with a metal ring or band 4, which preferably consists of a piece of wire. The ring or band 4 is blown in the bottle or applied to the same while the bottle is being blown, and it is embedded in the neck and preferably has its outer face projecting slightly beyond the neck, as clearly illustrated in Fig. 1 of the drawings; but the glass of the bottle extends partially around the wire, so that the exposed portion of the latter is less than the

diameter of the wire. The wire is adapted to cause the neck to break uniformly when the upper portion of the neck receives a blow, and at the same time the neck of the bottle is continuous or solid at the weakened or frangible portion, so that there is no liability of the neck being accidentally broken off by a slight jar, as is often the case when the neck is weakened by an annular groove or recess.

60 The upper portion of the neck is provided with an interior annular shoulder 5, preferably formed by a recess and adapted to be engaged by upwardly-extending arms 6 of a locking-spring 7 of a guard or shield 8. The neck of the bottle is provided at its top with an inwardly-tapered seat 9, formed by flaring the interior of the neck and receiving the guard or shield, which consists of a metal disk or plate tapered to conform to the configuration of the seat and adapted to effectually prevent access to the cork when the locking-spring is engaged with the shoulder of the neck, whereby the upper portion of the neck must be broken off in order to obtain access to the contents of the bottle or other receptacle.

80 The guard or shield is provided with a rigid centrally-arranged depending stem 10, to the lower end of which is centrally secured the locking-spring 7, which consists of a horizontal intermediate portion and the said upwardly-extending arms 6, which diverge and which are adapted to automatically engage the interior shoulder of the neck of the bottle when the guard or shield is placed in position. The spring may be secured to the stem in any suitable manner; but the said stem is preferably reduced at its lower end to form a projection or pin and to provide a shoulder to receive the spring. The spring is perforated to permit the pin or projection to pass through it, and it is secured to the stem by upsetting the end of the pin or projection against the spring to form a head, as indicated in Fig. 1 of the drawings.

100 It will be seen that the non-refillable bottle is exceedingly simple and inexpensive in construction, that the improvements are adapted to be applied to all kinds of receptacles having necks similar to the necks of bottles, and that after a bottle has received its

original contents and the guard or shield has been placed in position access cannot be had to the contents of the bottle without sufficiently mutilating the same to prevent it from being afterward sold as an original package. It will also be apparent that the improvements will prevent any adulteration of the contents of a receptacle and that the partially-embedded ring or band weakens the neck sufficiently to permit it to be readily broken and at the same time provides a solid portion at that point to prevent the upper portion of the neck from being accidentally jarred or broken off.

What I claim is--

1. In a device of the class described, a receptacle having a neck and provided with a band embedded in the neck and adapted to form a frangible portion and providing a solid structure thereat to prevent the neck of the bottle from being accidentally broken, substantially as described.

2. In a device of the class described, a receptacle having a neck and provided with a ring or band of wire embedded in the neck and projecting slightly therefrom, the width of the exposed portion being less than the diameter of the wire, substantially as described.

3. In a device of the class described, a receptacle provided with a neck having a weakened or reduced portion, said neck being also provided at the weakened portion with a filling adapted to support the neck and capable of enabling a frangible portion to be provided without actually reducing the area or thickness of the neck at that point, substantially as described.

4. In a device of the class described, the combination with a neck having a frangible portion, of a cork or stopper located below the frangible portion, and a guard or shield composed of a disk or plate closing the upper end of the neck, a vertical stem rigid with the disk or plate and depending from the center thereof, and a horizontal locking-spring centrally secured to the lower end of the stem and having its end portions extended upward and forming a pair of diverging arms for engaging the neck, substantially as described.

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

WILLIAM S. MCCREA.

Witnesses:

GEORGE H. LARGE,

HORATIO P. MILBERN.