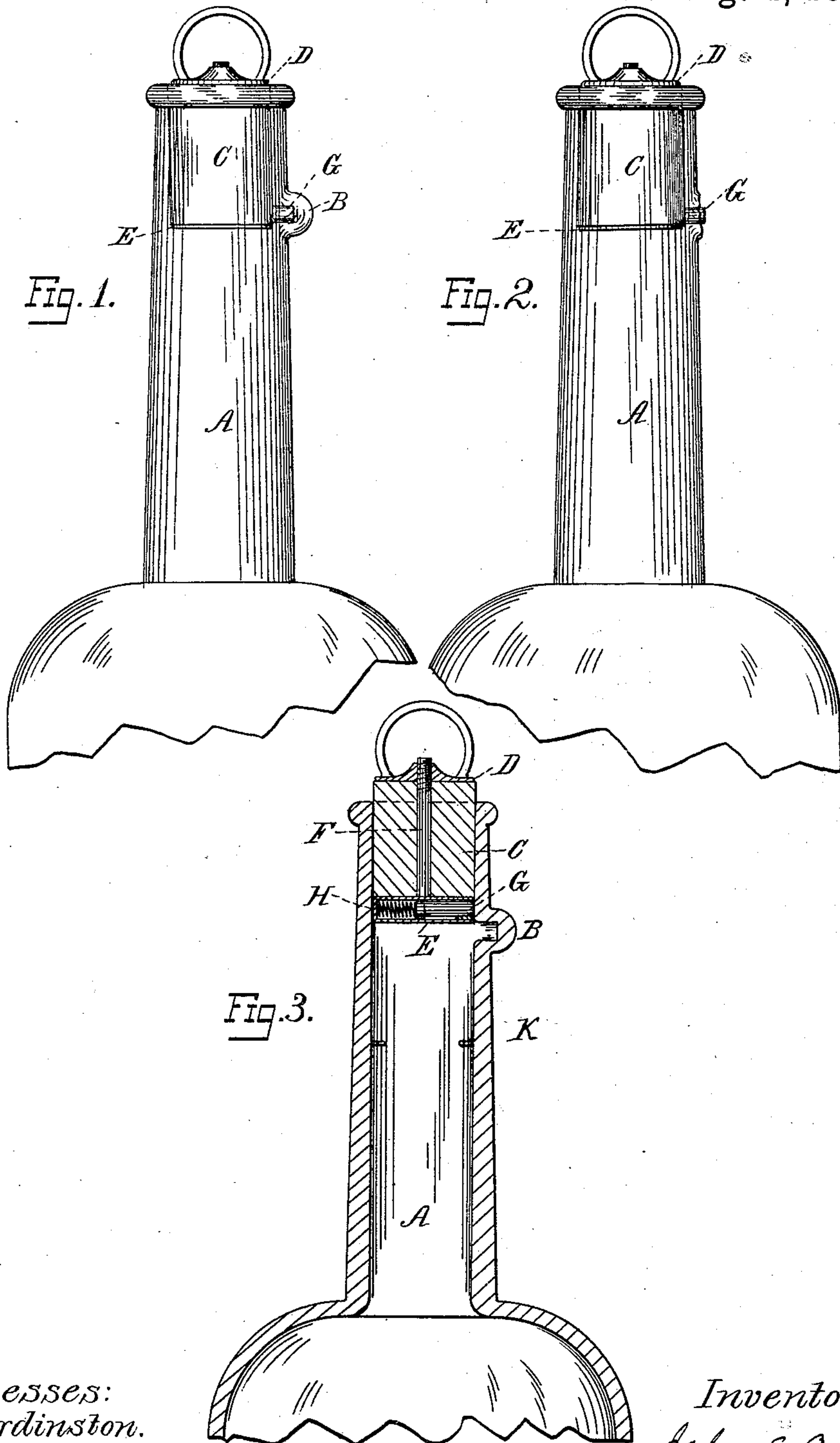


(No Model.)

J. E. ORR.
BOTTLE STOPPER.

No. 479,833.

Patented Aug. 2, 1892.



Witnesses:
W. C. Jirdinston.
J. Geo. Kemper

Inventor:
John E. Orr
by *Sturges & Allen*
Attorneys.

UNITED STATES PATENT OFFICE.

JOHN E. ORR, OF COVINGTON, KENTUCKY, ASSIGNOR TO RICHARD P. ERNST,
OF SAME PLACE.

BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 479,833, dated August 2, 1892.

Application filed August 5, 1891. Serial No. 401,751. (No model.)

To all whom it may concern:

Be it known that I, JOHN E. ORR, a citizen of the United States, residing in Covington, in the county of Kenton, State of Kentucky, have invented certain new and useful Improvements in Bottle-Stoppers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to an improvement in bottle-stoppers, and is designed to provide a stopper which cannot be removed from its place without destroying the bottle, thus preventing bottles used for any special kind or make of goods from being refilled with a spurious article.

It consists in blowing the bottle with a small hollow teat in the neck or upper portion, arranged to receive a spring-bolt attached to the cork or stopper, which bolt can only be withdrawn, in order to extract the cork, by breaking off the teat, and thus destroying the bottle.

The novel features of my invention will be more fully hereinafter set forth in the specification.

In the accompanying drawings, Figure 1 is an elevation of the neck or upper part of a bottle, showing my improved stopper. Fig. 2 is a similar elevation showing the teat broken off so that the stopper may be withdrawn. Fig. 3 is a vertical longitudinal section of same, showing the stopper partly inserted.

A is the neck of an ordinary glass bottle, on the side of which is blown a hollow teat or chamber B.

C is a cork or stopper of any common form and material. On the upper and lower ends of the cork C are plates or disks D E, connected by the rod F, passing through the cork C. To the lower plate E or at any convenient point in the stopper is attached a spring-bolt G, properly housed and so arranged that the spring H throws the end of the bolt when free outwardly. As the cork C is inserted in the bottle, as seen in Fig. 3, the bolt is pressed back by the inner wall of the neck until it comes opposite the teat B, when it is shot into said teat. The stopper cannot now be removed, but is securely locked, as there is no means of withdrawing the bolt G.

In order to open the bottle or remove the stopper, I break off the teat B. The bolt can then be pushed back and the stopper withdrawn. The stopper is uninjured and can be used again; but the bottle is destroyed.

I do not limit myself to any particular form or material of bottle, bolt, or stopper, and I am aware that seal-locks have been made for car-doors and the like, incased in glass or transparent material, so as to make the inner workings visible, &c., and do not claim the use of glass in a seal-lock.

Instead of the hollow teat B, the bottle may be provided with a thin annular bead K, Fig. 3, or projections extending inwardly in the neck of the bottle, so that the bolt G may be passed below it and then be thrown out against the wall of the neck. This may be done either by providing a slot in the bead K and then turning the cork or by inserting the cork with a thin strip of metal or in a cork-compressor, which is then withdrawn. In this construction the cork can only be withdrawn by breaking the bead K or projection, and, while the bottle is not destroyed, its character is altered, so as to show any fraudulent use of it.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a bottle-stopper, the combination, with the stopper and spring-bolt therein, of a destructible groove or recess in the neck of the bottle to receive said bolt, whereby said stopper is locked until the groove or recess is destroyed, substantially as shown and described.

2. In a bottle-stopper, the combination of a spring-bolt attached to the stopper and a thin hollow teat in the neck of the bottle, opening inwardly to receive the bolt and adapted to be broken from the outside to release the same, substantially as shown and described.

3. A self-locking bottle-stopper consisting of a cork or stopper provided with a spring-bolt, a thin hollow teat in the bottle to receive said bolt and adapted to be broken from the outside to release the bolt, and plates on either end of the stopper, connected by a rod, substantially as shown and described.

4. A bottle-stopper consisting of a cork reinforced by end plates joined by a rod passing through the cork and a spring-bolt with

a destructible recess in the neck of the bottle to receive same, substantially as shown and described.

5. In combination with a stopper provided with a bolt, a bottle constructed with a thin hollow teat opening internally to receive said bolt and adapted to be broken on the outside

to release the bolt, substantially as and for the purpose described.

JOHN E. ORR.

Witnesses:

ARTHUR STEM,
THEO. KEMPER.