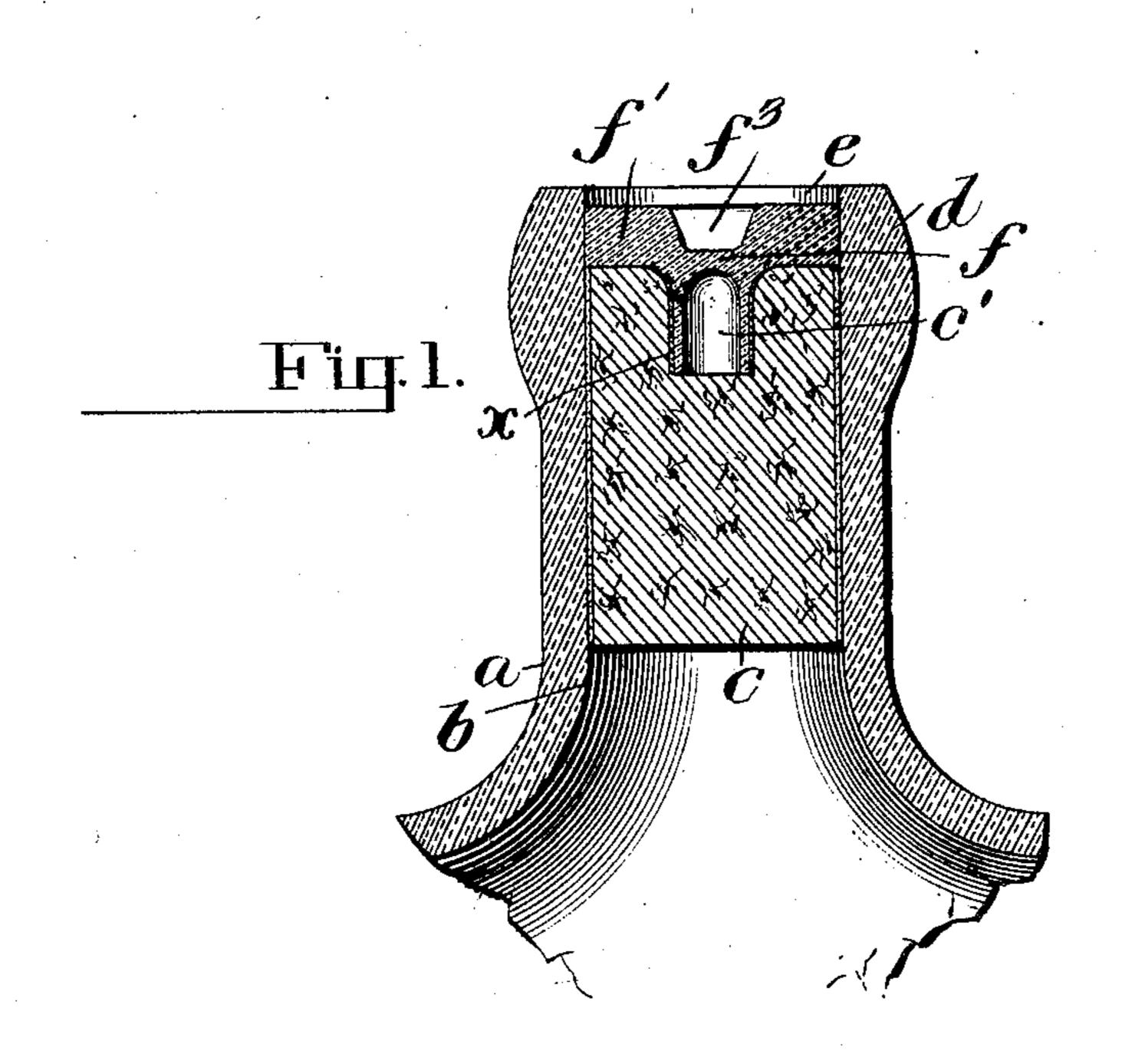
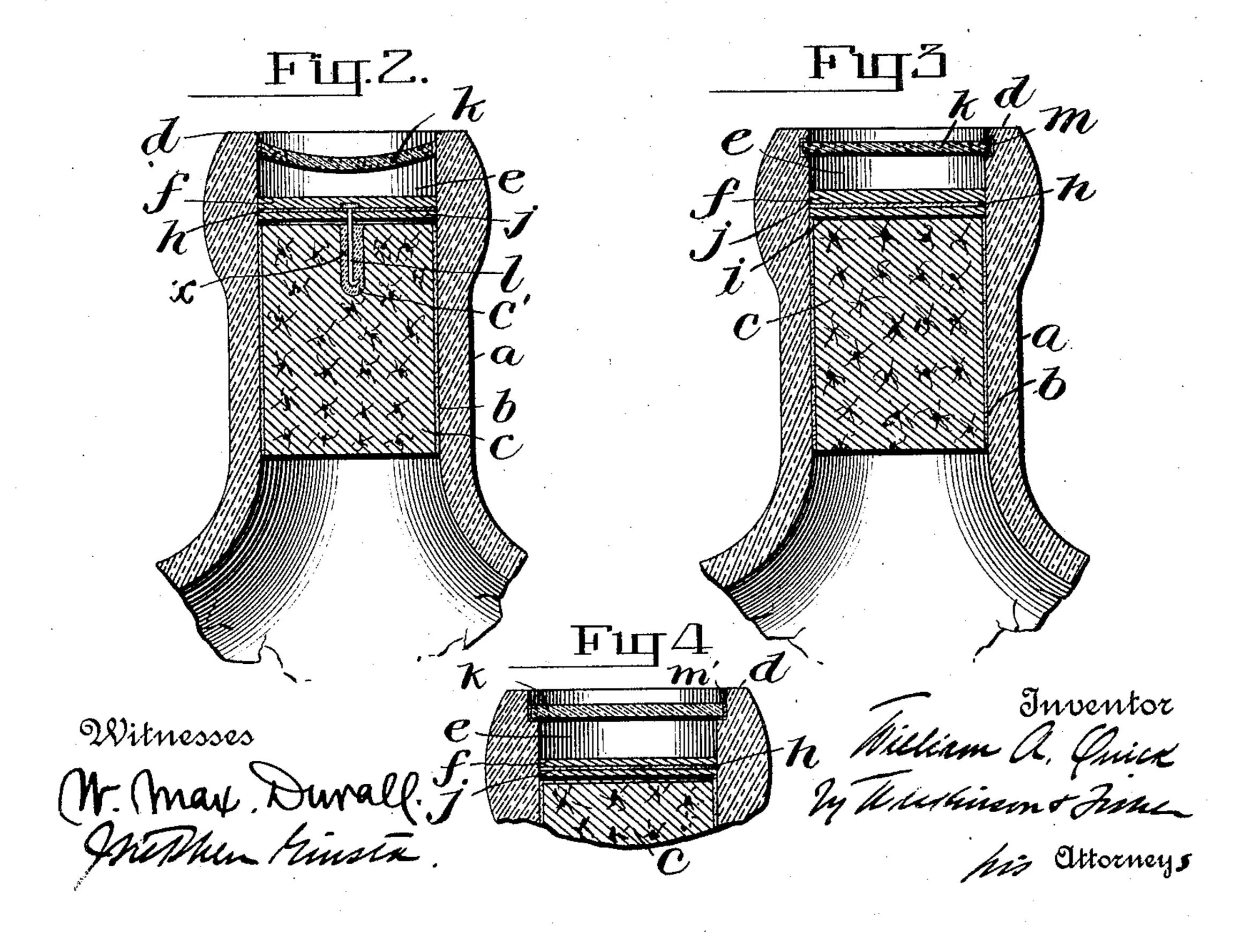
W. A. QUICK.
SEAL FOR BOTTLES AND OTHER ARTICLES.
APPLICATION FILED APR. 18, 1906.





UNITED STATES PATENT OFFICE.

WILLIAM ALEXANDER QUICK, OF NORTH FITZROY, VICTORIA, AUSTRALIA.

SEAL FOR BOTTLES AND OTHER ARTICLES.

No. 827,665.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, WILLIAM ALEXANDER Quick, a subject of the King of Great Britain and Ireland, residing at North Fitzroy, 5 in the State of Victoria, Commonwealth of Australia, have invented certain new and useful Improvements in Seals for Bottles and other Articles; and I do hereby declare the following to be a full, clear, and exact de-10 scription of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The object of this invention is to provide simple means of attractive appearance for 15 securely sealing bottles and vessels with a view to prevent fraudulent refilling or adul-

teration.

The invention is of that class in which the opening of the vessel (hereinafter called 20 "bottle") necessitates the breaking in a manner which cannot be disguised of a member which is combined with the bottle. This distinctive member once broken will be unfit for reuse. In its original condition it will 25 bear molded on or in or attached to it some distinguishing feature—for example, a trademark or a special device of any suitable nature and in any suitable color or colors—and if this member be found intact by the pur-30 chaser he may be sure that the bottle containing it has not been tampered with. The breaking of the member will not leave any unsightly or broken parts of the bottle itself, value of the latter (as a bottle) for further use 35 being in no way diminished by opening it.

The invention is illustrated in the draw-

ings herewith.

Figure 1 is a view in vertical section of part of the upper part of a bottle with my 40 seal in position. Figs. 2 to 4 illustrate similar parts of bottles with modifications of the sealing device.

In the views the bottle-neck is marked a. It has an ordinary or smooth inner surface b; 45 but in some cases any suitable internal annular groove or recess, as m, Fig. 3, which may, if desired, be open at the top—that is, with its side carried up as indicated at m', Fig. 4—is

also provided.

c is the cork—any ordinary cork, except that its top may be recessed. It is inserted in any usual way, but is driven below the top or rim d of the bottle to a sufficient extent to allow a space e for placing over the cork 55 (within the said rim) the brittle seal men-

The size and shape may vary according to convenience.

f is a brittle seal or plate, usually of glass or chinaware, bearing any desired distinctive 60 feature, as (on either side) engraving or lettering, at the will of the manufacturer. It may be convenient to have molding uppermost, as on the brittle seal center forming the base of a depression f^3 , referred to below, or 65 the distinguishing-mark may be on the part j below referred to. This seal fits the bottleneck at or near the lower part of space e, so that the seal cannot be pried out intact. The seal is either united to the neck, as by sealing- 70 wax or the like g, (too little space being taken up by the latter to allow an instrument to be inserted by which to remove the seal,) or it is united to cork c or to both cork and neck. By uniting it to the cork by means of an 75 easily cut or broken material the broken seal can be readily removed after the cork is drawn, and it is to be noted that any objectionable fragments of glass that may adhere to the cork when it is first drawn may thus 80 be disposed of.

Seal f must be thin throughout or must have a thin center to allow the corkscrew to easily break through it. As shown, the whole seal is thin except in Fig. 1, where 85 there is a thick rim f' and a thin recessed center, in which construction there is also illustrated an easily-broken downwardlyprojecting part f^2 , which may be tubular. This downward projection enters recess c^{\prime} 90 and is cemented, as at x, to the cork. I usually interpose between the seal and cork a coating, facing, or piece j of linen, fabric, sheet-rubber, paper, rubber solution, varnish, or other suitable adherent. Part j is united 95 to the seal or to seal and cork, as indicated by

lines h i. When I omit any adherent to the cork top except one which will be removed by the corkscrew, as in Fig. 3, explained below, 100 there is the useful result that when the cork is extracted the broken glass seal over it can be at once thrown away, leaving a cleantopped easily-reinserted cork for temporary further use. The broken seal will be in prac- 105 tically a mass, (or mainly so,) because it will have a facing adherent to it for the purpose of keeping it so. When a varnish or like coating is used as a facing, it is in some cases provided on both sides of seal f. No glass 110 flies upward when the seal is broken by the tioned below. Cork-recesses c' are shown. I insertion of a corkscrew. The thick guard

or rim of the seal in Fig. 1 will not break when the corkscrew is inserted, and this rim protects the thin recessed center from breakage until the corkscrew is introduced. 5 The central depression is marked f^3 . In Fig. 2 the connection of seal to cork is by a pin, wire, rod, screw, hook, staple, barbed, or other suitable elongated member 1, the head of which is fastened or embedded in the seal, 10 the rest extending downward therefrom. The cork is provided with a central hole c', which when the cork is inserted is filled with cement x. The seal is then dropped into place with member 1 in the hole, and when the cement 15 dries the cork and seal will be found firmly united.

A guard k is (when desired) provided, consisting of a tough and sufficiently transparent cover, as of celluloid, which a corkscrew can perforate without breaking it into fragments. An air-space separates this guard from seal f. The guard serves various purposes, one being to prevent a thin seal not otherwise protected from becoming accidentally broken during the handling the bottle receives before it is opened, and when guard k is used the seal can be inspected through it.

m and m', Figs. 3 and 4, show different forms of a groove in which the rim of the 3° guard may be forced or secured.

The invention may be varied considerably in minor details while adhering to matter claimed

When the seal is broken, the fragments will

enter a cork-recess (as c', Fig. 1) when pro- 35 vided, which may be in all cases desired.

What I claim as my invention, and desire to secure by Letters Patent of the United Sates, is—

1. The combination with a bottle, of a closure therefor comprising a cork provided with a recess therein, of a seal comprising a body portion provided with projecting means adapted to be anchored against movement within said recess of said cork, substantially 45 as described.

2. The combination with a bottle, of a closure therefor comprising a cork, a seal, and a transparent guard disposed above said seal, substantially as described.

3. A bottle-sealing device comprising a seal, an anchoring-pin, one end of said pin connected to said seal and the other end bent to form a hook, and a recessed cork, said pin adapted to be cemented in the recess of said 55 cork, substantially as described.

4. In a bottle-closure, the combination with a sealing device comprising an anchoring-pin fastened to said seal, a recessed cork, means for anchoring said pin in said recessed 60 cork, and a transparent guard disposed above said seal, substantially as described.

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

WILLIAM ALEXANDER QUICK.

Witnesses:

GEORGE G. TURRI, BEATRICE M. LOWE.