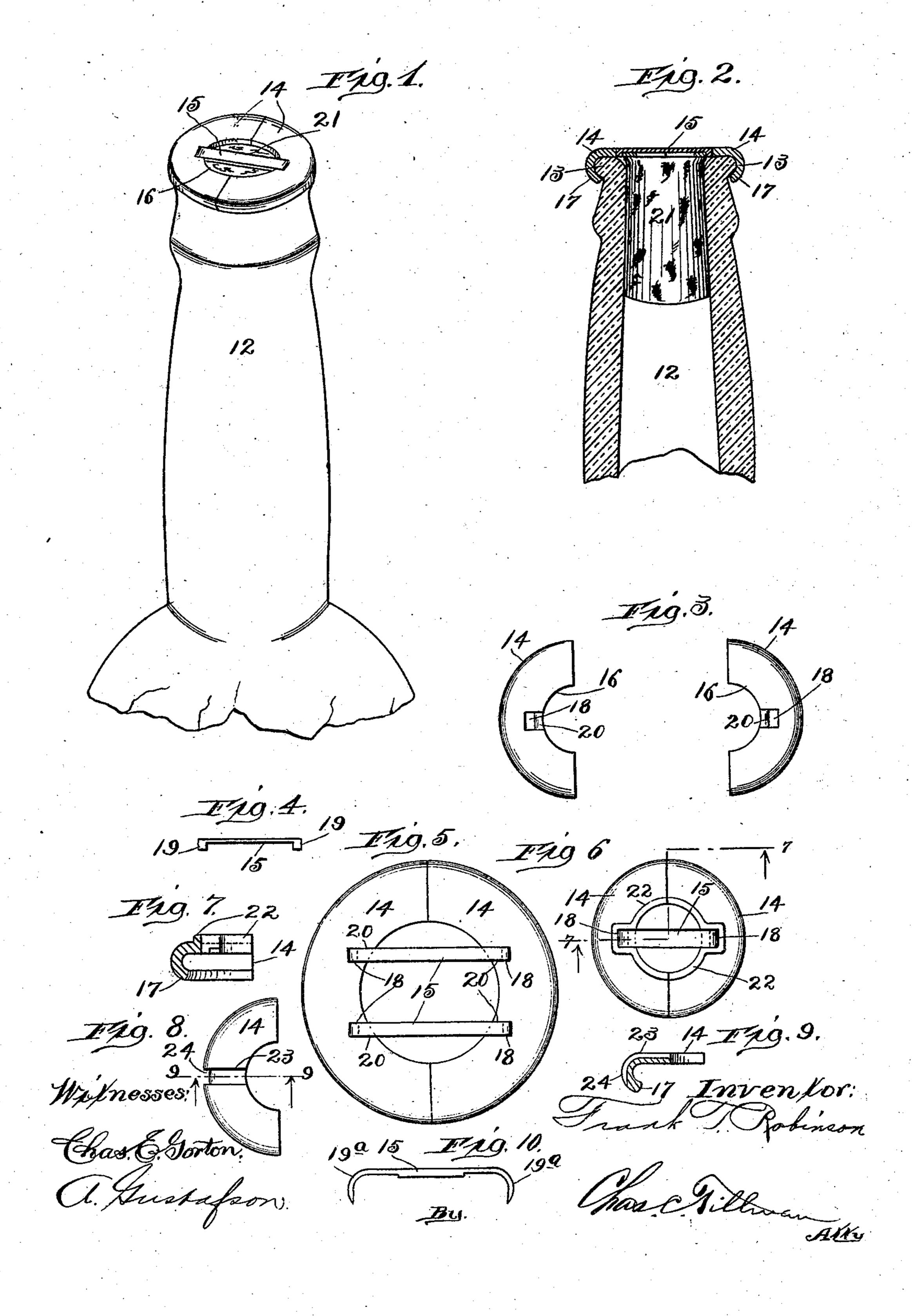
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FRANGIBLE SEAL FOR BOTTLES. APPLICATION FILED JULY 20, 1904. RENEWED NOV. 16, 1906.



UNITED STATES PATENT OFFICE.

FRANK T. ROBINSON, OF CHICAGO, ILLINOIS, ASSIGNOR TO TWIN BOTTLE-CAP COMPANY.

FRANGIBLE SEAL FOR BOTTLES.

No. 854,844.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, Frank T. Robinson, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Frangible Seals for Bottles, of which the following is a specification.

This invention relates to improvements in a frangible or breakable seal or cap, and while it is more especially intended to be used for whisky, beer, champagne, sauce, and other bottles, yet it is applicable to other vessels, such as jugs, jars, cans, and the like, and it consists in certain peculiarities of the construction, novel arrangement and operation of the parts thereof, as will be hereinafter more fully set forth and specifically claimed.

The principal object of the invention, is to provide a seal which shall be simple, and in20 expensive in construction, strong, durable, and easily applied to the vessel, and when in position thereon, cannot be removed without breaking a portion of the seal, thus preventing the bottle or vessel being opened, without disclosing the fact, and thereby protecting the purchaser of original packages against imposition by having the genuine article contained in the original package removed, and the package refilled with an inferior or adulterated substitute.

The details of construction and arrangement of the parts of the invention are as hereinafter set forth, and shown in the accompanying drawing, in which—

Figure 1, is a perspective view of a portion of a bottle, showing a seal embodying one form of my invention, in position thereon. Fig. 2, is a central vertical sectional view through the neck of the bottle and the seal. 40 Fig. 3, is a detached plan view of two members of the seal. Fig. 4, is a view in side elevation of the connecting or locking link. Fig. 5, is an enlarged plan view of the seal, illustrating a modification in the construction 45 thereof, and showing the parts assembled. Fig. 6, is a similar view of like parts, showing another modification in its construction. Fig. 7, is a cross sectional view, taken on line 7, 7, of Fig. 6, looking in the direction indi-50 cated by the arrows. Fig. 8, is a plan view, of one of the members of the seal showing a further modification in its construction. Fig. 9, is a sectional view, taken on line 9, 9, of Fig. 8.—and—Fig. 10, is a view in side elevation of a modification in the construction 55 of the connecting link used in the last named modification.

Like numerals of reference refer to corresponding parts throughout the different views of the drawing—

The reference numeral 12, indicates the neck of a bottle, which may be made of any suitable size, form and material, but as usual, is provided at its upper end with an annular bead 13, which projects externally as shown. 65 The cap or seal comprises two members 14, which are counter-parts of one another, and a connecting or locking link 15, which unites said members together. Each of the members 14, may be made of any suitable size, 70 form, and material, but preferably semi-circular in shape, and of glass. The meeting edges of the members 14, are cut away, as at 16, and the outer edge of each of said members is downturned, and bent inwardly, as at 75 17, to engage or take under the bead 13, on the mouth of the bottle. as is clearly shown in Fig. 2, of the drawing. Each of the members 14, is provided at about its middle, with a vertical opening 18, to receive the down- 80 turned ends 19, of the connecting or locking link 15, (see Fig. 4 of the drawing).

Extending from the middle portion of the edge of the cut away portion 16, in each of the members 14, to the opening 18, therein, 85 is a recess or depression 20, which will permit the upper surface of the link 15, to lie flush with the upper surface of the members 14, and will also hold said link at a slight distance from the top of the cork 21, (see Fig. 2), 90 so that the link 15, which is preferably made of porcelain, may be broken by a slight tap or stroke.

Instead of providing each of the members 14, with one opening 18, and one recess 20, 95 at its middle portion, I may form each of said members with a plurality of openings 18, and recesses 20, for the reception and retention of a plurality of links 15, as is shown in Fig. 5 of the drawing, in which case, the said openings and recesses will be located to one side of a line drawn through the middle of each of said members.

In order to protect the link 15, from being accidentally broken, I may sometimes provide each of the members 14, on the upper surface of its inner edge, with an upwardly projecting bead or rib 22, which will also ex-

tend around the outer portion of the opening \ 18, as is clearly shown in Figs. 6 and 7 of the

drawing.

In Figs. 8, 9, and 10, I have shown another 5 modification in the construction of the seal, which consists in forming each of the members 14, at about its middle, with a diametrical depression 23, and at the outer end of said depression, a vertical recess 24, which 10 depressions and recesses are for the reception and retention of the connecting link 15, which in this modified construction, is provided with slightly curved downturned ends 19^a, as is clearly shown in Fig. 10 of the 15 drawing.

From the foregoing and by reference to the drawing, it will be readily seen, and clearly understood, that while I have shown the seal applied to the neck of a bottle, yet it is ap-20 plicable to other packages or vessels, and that by placing the members 14, on the bottle or vessel so that their downturned edges 17, will engage the bead 13, they may be slid so that their inner edges will meet or 25 be approximated when the connecting or locking link 15, the ends of which shall have been dipped in cement, may be placed so as to lie in the recesses 20, and openings 18, therefor, when the cement will become har-30 dened and unite the members of the seal together in such a manner that they cannot be removed without breaking the link which may be done by a light stroke with a suitable instrument. It is evident that when the 35 construction illustrated in Figs. 6 and 7 is employed, the rib 22, which projects some distance above, the link 15, will prevent the latter being accidentally broken by being jammed against another bottle or otherwise.

Having thus fully described my invention, what I claim as new, and desire to secure by

Letters Patent, is—

1. A frangible seal for bottles and the like, comprising two members each having its 45 outer edge turned down and bent inwardly

and provided on its upper surface with an opening, and a connecting link having its ends downturned and located in said open-

ings, substantially as described.

2. A frangible seal for bottles and the like, 50 comprising two partly circular members each having its outer edge downturned and bent inwardly and provided on its upper surface with an opening, and a connecting link having its ends downturned and located in 55 said openings, substantially as described.

3. A frangible seal for bottles, and the like, comprising two members each having its outer edge downturned and bent inwardly and provided on its upper surface with a 60 transverse depression and an opening, and a connecting link having its ends downturned, said link located in the depressions and its downturned ends in said openings, substan-

tially as described. 4. A frangible seal for bottles and the like, comprising two members each having its outer edge downturned and bent inwardly and provided on its upper surface with a transverse depression and an opening, each 70 of said members also being provided with an upwardly extending bead on its inner edge and around the outer edge of said opening, and a connecting link having its ends downturned and located in said depressions and 75 openings, substantially as described.

5. A frangible seal for bottles and the like, comprising two semi-circular members each having its outer edge downturned and bent inwardly and provided at its inner edge with 80 a plurality of transverse recesses and openings, and a plurality of links each having its ends downturned and located in said recesses and openings, substantially as de-

scribed.

FRANK T. ROBINSON.

Witnesses:

CHAS. C. TILLMAN, A. Gustafson.