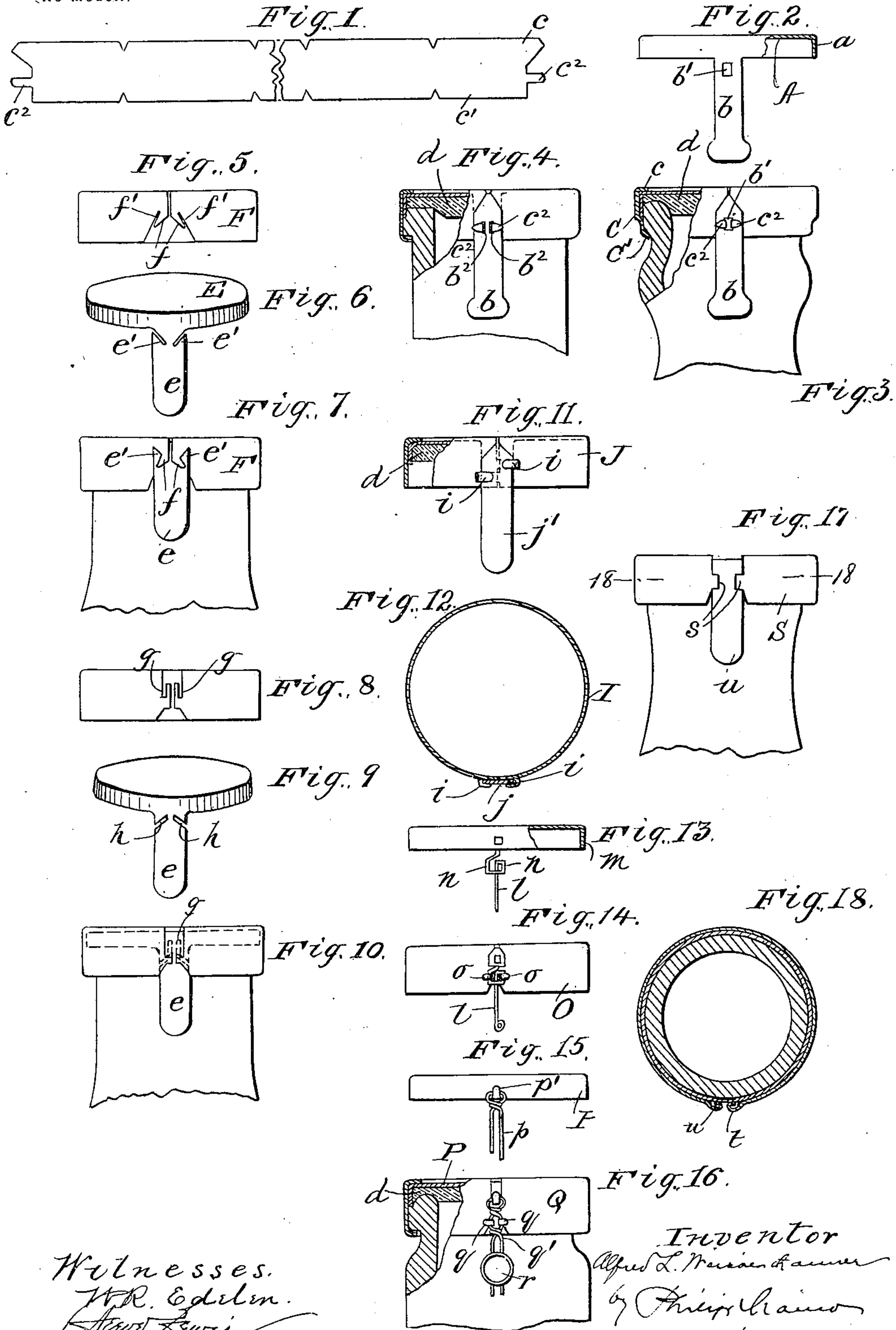


A. L. WEISSETHANNER.
CLOSURE FOR JARS, BOTTLES, &c.

(Application filed Feb. 28, 1900.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses.
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2 Sheets—Sheet 2.

Fig. 19.

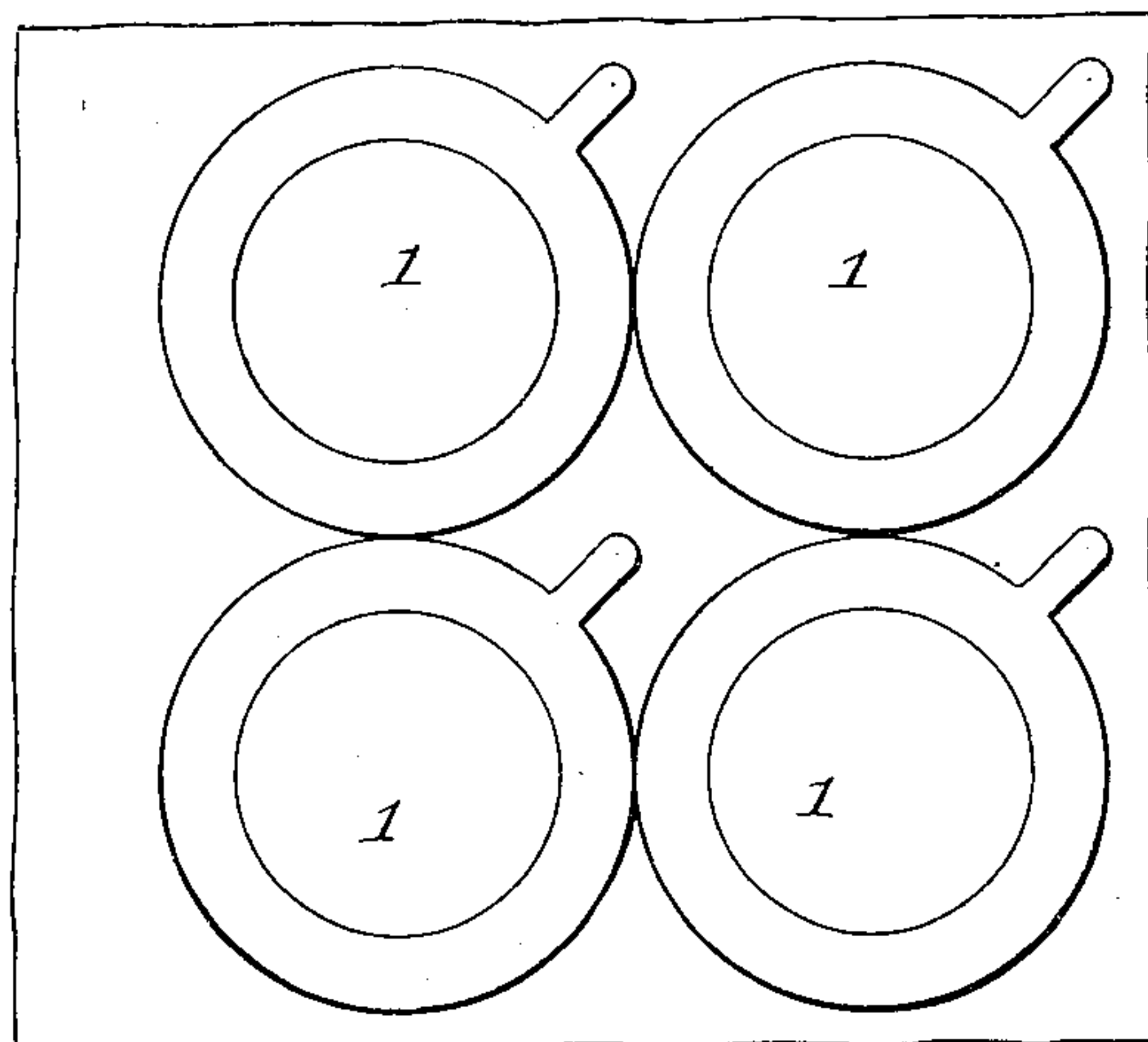


Fig. 20.

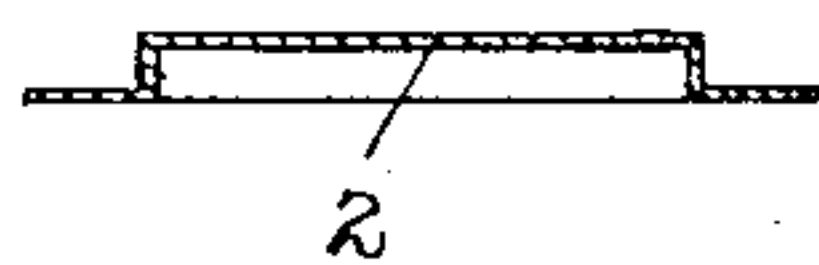


Fig. 21.

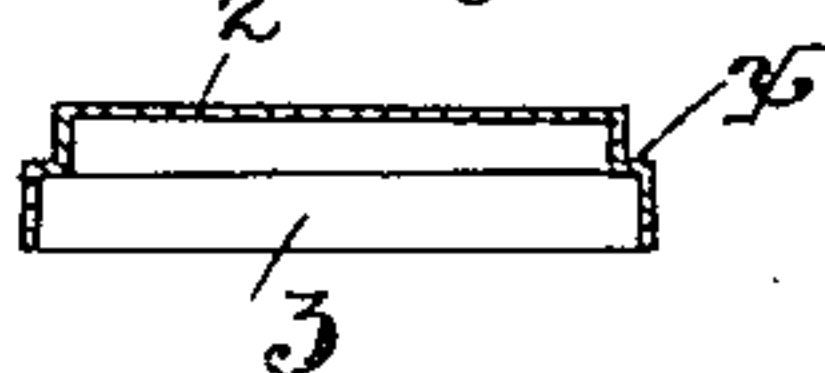


Fig. 22.

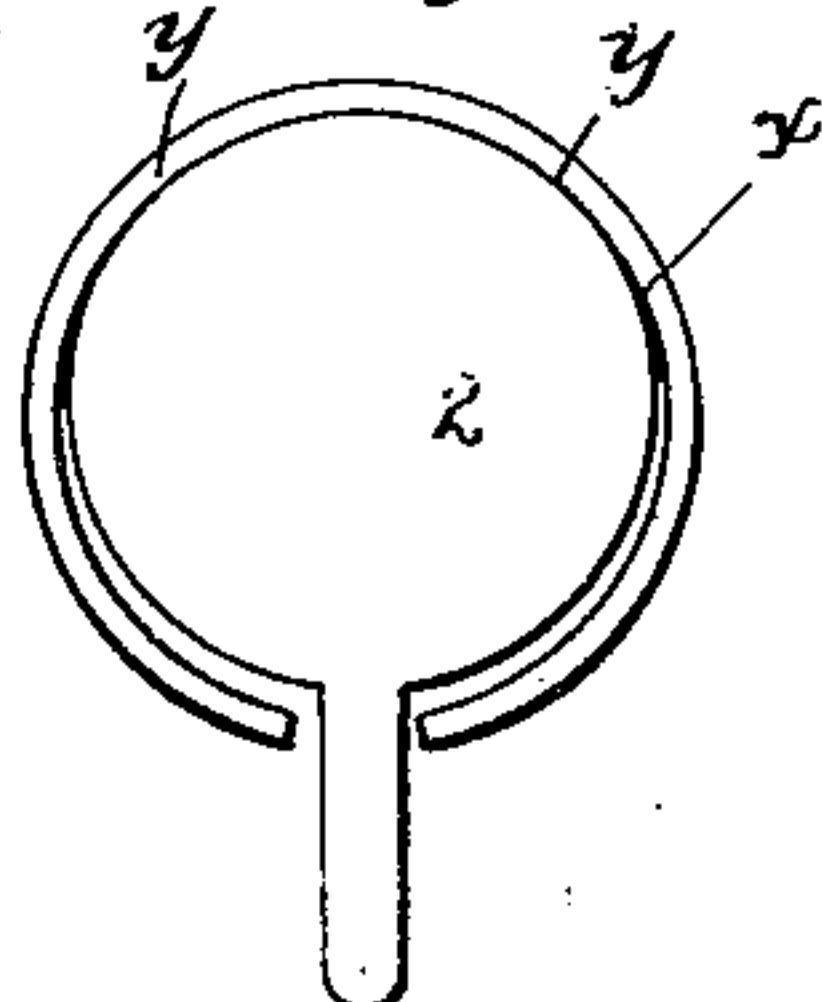


Fig. 25.

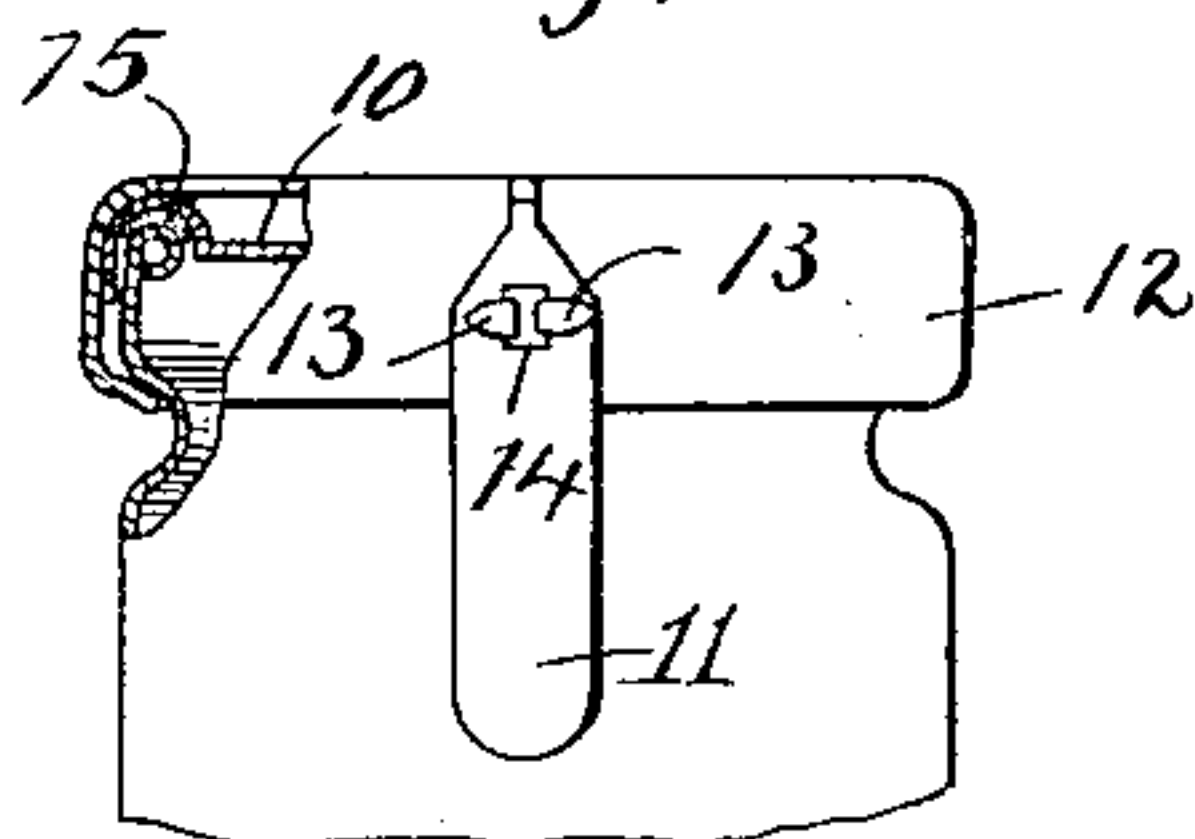


Fig. 24.

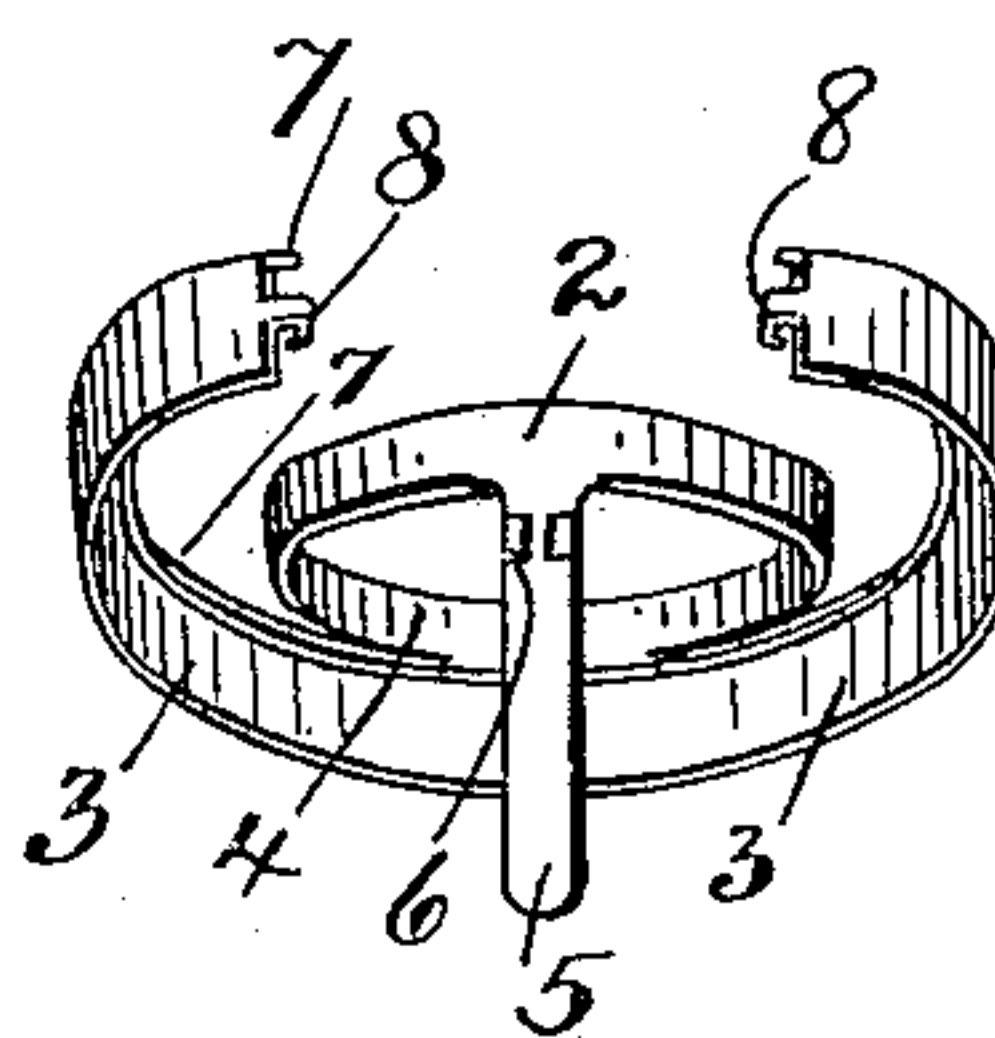
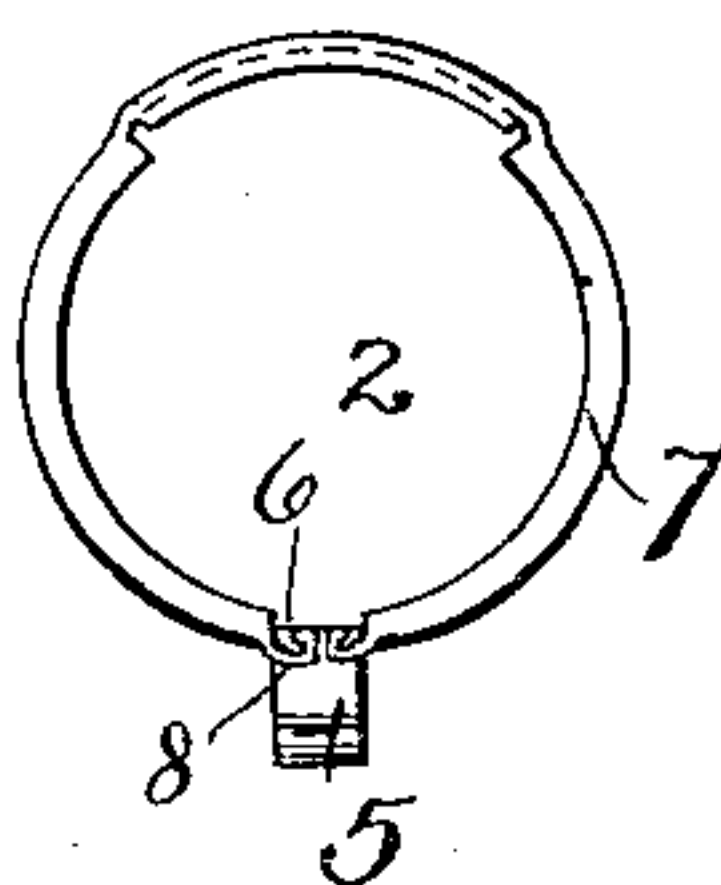


Fig. 23.

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UNITED STATES PATENT OFFICE.

ALFRED L. WEISSENTHANNER, OF NEW YORK, N. Y.

CLOSURE FOR JARS, BOTTLES, &c.

SPECIFICATION forming part of Letters Patent No. 663,480, dated December 11, 1900.

Application filed February 28, 1900. Serial No. 6,874. (No model.)

To all whom it may concern:

Be it known that I, ALFRED L. WEISSENTHANNER, a resident of the city of New York, in the State of New York, have invented a new and useful Improvement in Closures for Jars, Bottles, and the Like, which invention is fully set forth in the following specification.

Many closures have been commercially employed for sealing bottles, jars, cans, and other receptacles, consisting of a cover or cap held in place by a spring, bail, band, or other medium. In opening these closures it is necessary to remove, disengage, or release the securing medium in order to free the cover or cap, so that it can be removed. Such closures are impracticable for use with sparkling beverages or waters or other liquids packed under pressure, for the reason that upon loosening or partially removing or disengaging the band or other securing medium the pressure in the receptacle lifts the cover from its seat, and before the operator has had time to completely remove the parts of the closure a portion of the sparkling or charged liquid splutters and bubbles out of the receptacle, not only entailing a material loss in liquid, but causing great annoyance and inconvenience.

Caps made of one piece of metal, such as the "crown seal," patented by Painter, of Baltimore, have been used to a large extent for closing bottles; but such closures require the use of a special tool or implement for opening the bottle and are believed to be impracticable for closing receptacles having a large mouth, such as jars, cans, and the like.

The object of my present invention is to provide, in a closure consisting of a cover or cap and a band or other medium for securing the cover or cap in place, means whereby the securing-band may be released or disengaged to free the cover, and said cover removed or pulled off of the receptacle by one and the same operation or movement, thereby obviating the objections above referred to. Said means consists, essentially, of a tongue or its equivalent—such as a wire, for example—secured to the cover or cap, and when the parts of the closure are in place engaging with or engaged by the securing-band for holding the latter in its contracted condition. By pull-

ing on the tongue or its equivalent the consumer may by one and the same operation or movement not only loosen the securing-band, but remove the cover from the receptacle, completely opening the latter (even when it contains sparkling liquid) so quickly that its contents have no chance to escape or run out before the cover or cap is entirely removed.

The invention may be embodied in many different forms, some of which are, by way of example, illustrated in the accompanying drawings, wherein—

Figure 1 represents a blank suitable for forming a securing-band for holding the cover in place on a receptacle. Fig. 2 represents a cap or cover constructed in accordance with the invention. Fig. 3 represents, partly in elevation and partly in section, the securing-band and cap of Figs. 1 and 2 applied to a bottle for closing the same. Fig. 4 is a view similar to Fig. 3, showing a slightly-different form of closure. Figs. 5 and 6 are detailed views of still another form of securing-band and cover, and Fig. 7 is an elevation showing the securing-band and cap of Figs. 5 and 6 as applied for closing a bottle. Figs. 8, 9, and 10 are views similar to Figs. 5, 6, and 7 of still another embodiment of the invention. Fig. 11 is a view, partly in section and partly in elevation, showing a cap and securing-band as assembled for application to a receptacle, representing still another embodiment of the invention. Fig. 12 is a horizontal sectional view of Fig. 11. Fig. 13 is a detailed view of another form of cap, and Fig. 14 shows the cap of Fig. 13 and a securing-band assembled ready for application to close a receptacle. Fig. 15 is a detailed view of another form of cap; and Fig. 16 is a view, partly in section and partly in elevation, showing this cap as applied in closing a receptacle. Fig. 17 is an elevation showing another form of the invention applied to a receptacle; and Fig. 18 is a horizontal sectional view on line 18, Fig. 17. Fig. 19 indicates the manner of cutting from a sheet of metal blanks suitable for forming caps and securing-bands in the manner indicated in Figs. 20 to 23. Fig. 20 is a sectional view of one of these blanks after the central elevated portion has been formed. Fig. 21 is a similar view after the peripheral flange has been formed. Fig. 22 indicates the manner

of dividing the blank shown in 21 in such manner as to form the securing-band and cap. Fig. 23 is a perspective view of the closure shown in Fig. 22, and Fig. 24 shows the closure of Fig. 23 applied to a receptacle; and Fig. 25 is a view, partly in section and partly in elevation, showing an embodiment of the invention applied to a tin or other metallic receptacle.

The closures illustrated in the drawings are constituted by two essential parts—first, a cap or cover, and, second, a securing-band for holding said cap in place. In applying the cap it is customary to interpose between the same and the upper edge of the mouth of the receptacle an elastic packing.

In Fig. 2, A represents a cap constructed in accordance with the invention, said cap having a depending flange *a* around its outer edge, from which flange at one side of the caps depends a tongue *b*, having an eye or opening *b'* therein.

In Fig. 1 I have shown a blank such as is suitable for forming a band C for securing the cap of Fig. 2 in place on a receptacle in the manner indicated in Fig. 3, wherein the securing-band is shown as having an intumed flange *c* around its upper edge overhanging the top of the cover A and an intumed flange *c'* about its lower edge engaging under a shoulder on the neck of the bottle. A packing-washer *d*, of cork or other suitable material, is interposed between the cover A and the upper edge of the receptacle, and the flange *a* of the cover engages closely about the mouth of the bottle. When the parts are assembled, the tongue *b* projects out between the ends of the band C, and projections *c² c²* at the extremities of said band are passed outwardly through the eye or opening *b'* and bent over to form hooks for securing the band in its proper contracted condition, all as clearly shown in Fig. 3. To quickly open the receptacle, it is only necessary to pull upwardly on the tongue *b*. This has the effect of disengaging hooks or projections *c² c²* from the eye *b'*, thereby loosening the securing-band and freeing the cover, which is thereupon entirely removed from the receptacle.

Fig. 4 illustrates another embodiment of the invention, which is substantially the same as Fig. 3, except that the projections *c² c²* at the extremities of the securing-band engage through separate eyes or openings *b² b²* in the tongue *b*, and the mouth of the receptacle is of different form.

In the arrangement shown in Figs. 5, 6, and 7 the tongue *e* on cover E has teeth or projections *e' e'* on its edges formed by oblique slots, which interlock with teeth or projections *f f*, similarly formed on the extremities of band F, Fig. 5. When the parts are applied in effecting the closure of a receptacle, the projections *e' e'* on the tongue *e* pass outwardly through the slots *f' f'*, which form the

projections *f f* at the ends of the securing-band F.

Figs. 8, 9, and 10 illustrate a construction similar to that of Figs. 5, 6, and 7, except that the projections or teeth *g g* at opposite ends of the securing-band, Fig. 8, project upwardly and pass inwardly through slots *h h*, Fig. 9, in the edges of the tongue on the cover and rest beneath said tongue, as clearly shown in dotted lines, Fig. 10.

In Figs. 11 and 12 the projections *i i* at opposite extremities of the securing-band I pass each other beneath the tongue *j'* on the cover J and are hooked about the opposite edges of said tongue *j'*, as clearly shown in said figures of the drawings.

The tongue instead of being formed integral with the cover, as in the embodiments of the invention above described, may be secured to the cover, as shown in Figs. 13 and 14. In these figures the tongue is made of a wire *l*, secured at one end to the depending flange *m* of the cover and bent to the peculiar configuration shown in Fig. 13, forming two openings *n n*, through which projections *o o* at opposite ends of the securing-band O are hooked when the parts are assembled, as clearly shown in Fig. 14.

Figs. 15 and 16 show another form of wire tongue. A wire *p* is looped through an eye *p'* on the flange of cover P and twisted in the manner clearly indicated in Fig. 15. When the parts of the closure are assembled, as shown in Fig. 16, the wire tongue is brought out between the extremities of the securing-band Q, engaged with the projections or hooks *q q* on said extremities, respectively, and then twisted, as shown at *q'*. The ends of the wire forming the tongue may then be secured to the receptacle, as by a seal *r*.

In the embodiment of the invention shown in Figs. 17 and 18 intumed hooks *s s* on the extremities of the securing-band S engage outturned hooks *t t* on opposite edges of the tongue *u*.

Instead of forming the cover or cap and the securing-band separately, as illustrated in the above-described figures of the drawings, these parts may be formed together or integrally from a single piece of metal in the manner indicated in Figs. 19 to 24. Fig. 19 shows how the blanks 1 may be cut from a sheet of metal with the least possible waste of material. Blank 1 is next operated upon to form the central elevated part 2, Fig. 20, which is later to become the cover or cap, and the peripheral edge of the blank is then bent downwardly to form part 3, Fig. 21, which is later to become the securing-band. The parts 2 and 3 are now divided along the line *x*, except for a short distance *y y* at the rear, as clearly shown in Figs. 22 and 23. As shown in the latter figure, the closure consists of a cap 2, having a depending flange 4 about its edge and a tongue 5, on which are formed hooks or lugs 6, and a securing-band 3, hav-

ing an inturned flange 7 about its upper edge and hooks or lugs 8 at its opposite extremities. When applied to a receptacle in the manner indicated in Fig. 24, the flange 7 engages over the edge of the cap and the hooks 8 on the ends of the securing-band interlock with the lugs or hooks 6 on the tongue 5.

Fig. 25 represents the embodiment of the invention as the same may be applied to a tin or other metallic receptacle. The cap or cover 10 has a tongue 11, which is brought outwardly between the ends of a securing-band 12 in the manner indicated, projections 13 13 on the extremities of the band being hooked through an eye or opening 14 in tongue 11. A packing 15 is interposed between the upper edge of the receptacle and the cover, and the lower edge of securing-band 12 is bent into a recess extending about the receptacle.

It will be readily understood that in the various embodiments of the invention above described a consumer may by pulling upwardly upon the tongue (whether the same be formed integrally with the cover or by a wire attached to the cover or whatever its form) release the securing-band and remove the cover from the receptacle by practically one and the same operation or movement as already explained with reference to Fig. 2.

As is apparent from the drawings and the foregoing description, the invention may find embodiment in many forms without departing from the principle thereof, the distinguishing and broad feature of the invention being the provision of a tongue which upon being pulled not only acts upon the medium for securing the cover in place to release the latter, but also drags said cover from over the mouth of the receptacle, all by practically one and the same operation or movement.

What I claim is—

1. In a closure for receptacles, a cover or cap for closing the receptacle, a tongue on said cover, and a securing-band the opposite ends of which engage said tongue when the parts are in position for closing a receptacle.

2. In a closure for receptacles, a cover or cap for closing the receptacle, a tongue on said cover, and a securing-band having projections on its opposite ends engaging the tongue when the parts are in position for closing a receptacle.

3. In a closure for receptacles, a cover or cap for closing the receptacle, a tongue on said cover, and a securing-band having projections or hooks at its opposite ends, each engaging an opening or recess in the tongue when the parts are in position for closing a receptacle.

4. In a closure for receptacles, a cover or cap for closing the receptacle, a tongue on said cover, and a securing-band having projections at its opposite ends hooked in opposite directions through a single opening in the tongue when the parts are in position for closing a receptacle.

5. In a closure for receptacles, a cover or cap having a depending flange around its outer edge, a tongue depending from said flange, a securing-band engaging about the flange on the cover, and projections on the opposite ends of the securing-band engaging each end of the securing-band hooked outwardly through an opening in the overlying part of the tongue.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

ALFRED L. WEISSENTHANNER.

Witnesses:

GEO. ALEXANDER,
JULES H. DOMMERGUE.