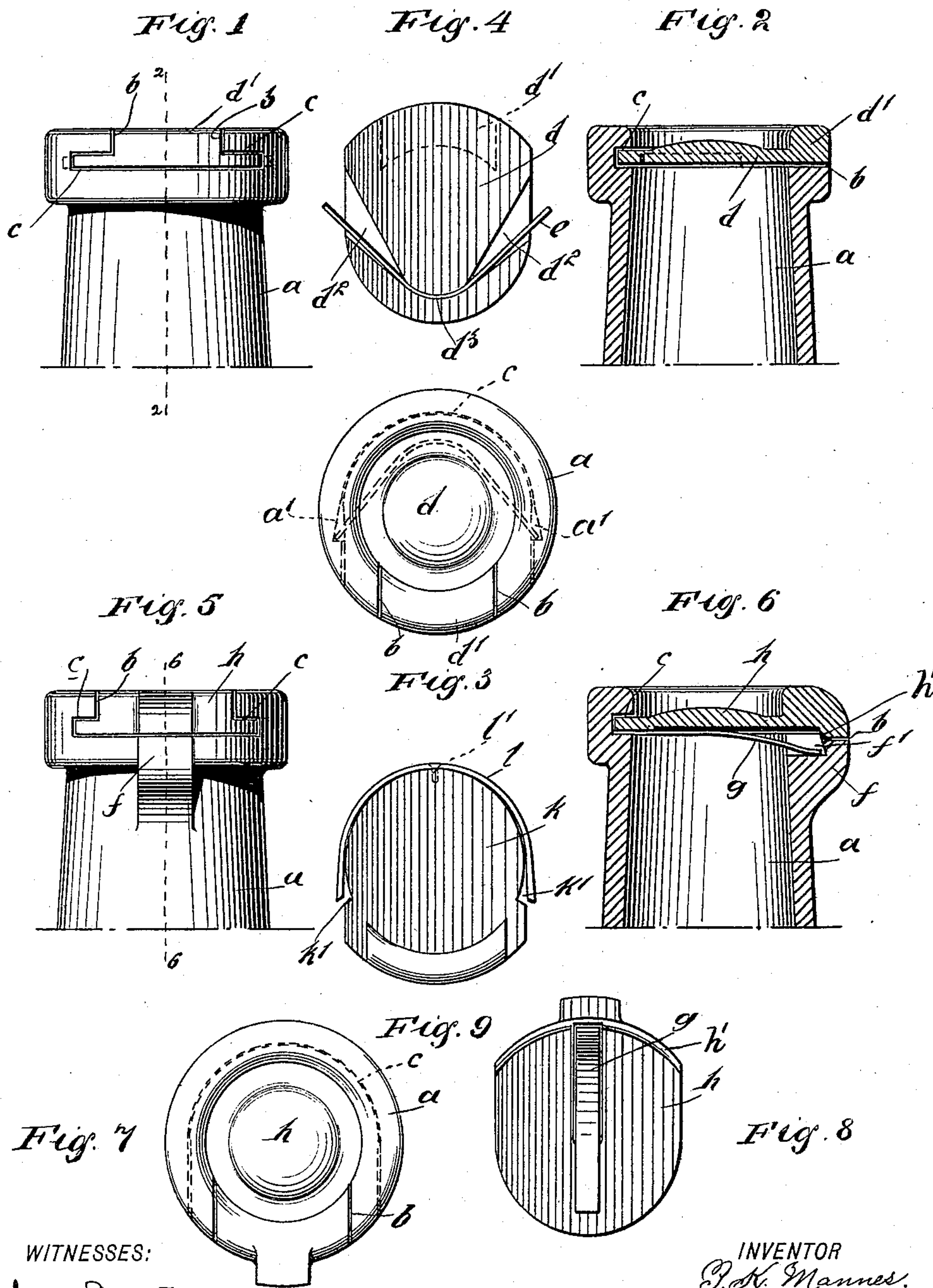


(No Model.)

P. K. MANNES.
BOTTLE CLOSURE.

No. 583,759.

Patented June 1. 1897.



WITNESSES:

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PEDER K. MANNES, OF WEST DULUTH, MINNESOTA.

BOTTLE-CLOSURE.

SPECIFICATION forming part of Letters Patent No. 583,759, dated June 1, 1897.

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To all whom it may concern:

Be it known that I, PEDER K. MANNES, of West Duluth, in the county of St. Louis and State of Minnesota, have invented a new and Improved Bottle-Closure, of which the following is a full, clear, and exact description.

The purpose of this invention is to provide a superior bottle-closure which will prevent using the bottle a second time without displaying evidence of the repetition.

This specification is the disclosure of several specific forms of my invention, while the claims define the actual scope of the conception.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of one form of the invention. Fig. 2 is a sectional view on the line 2 2 of Fig. 1. Fig. 3 is a plan view of the form of the invention shown in Fig. 1. Fig. 4 is a bottom plan view of the closure-plate. Fig. 5 is a side elevation of a modification. Fig. 6 is a sectional view on the line 6 6 of Fig. 5. Fig. 7 is a plan view. Fig. 8 is a bottom plan of the closure-plate, and Fig. 9 is a top plan of a third modification.

Referring to Figs. 1, 2, 3, and 4, the mouth *a* of the bottle is provided with an opening *b*, running through one wall of the mouth and leading to a curved groove *c*, running around the inner surfaces of the walls of the mouth *a*. Sliding through the opening *b* and with its edges movable into the slot *c* is a closure-plate *d*, having a projection *d'*, adapted to lie in and close the opening *b*, so that the mouth of the bottle will have an unbroken contiguity when the plate *d* is in position. The plate *d* closes the mouth of the bottle and is adapted to lie just above the usual cork. The bottom of the plate *d* is provided with two triangular recesses *d²*, respectively receiving the ends of a spring-plate *e*, the middle of which is securely seated within a groove *d³*, formed in the bottom of the plate *d* and connecting the recesses *d²*. The ends of the plate *e* project beyond the sides of the plate *d* and are adapted to respectively engage shoulders formed by the front walls of the recesses *a'* in the inner walls of the mouth *a* of the bottle. In placing the plate *d* in position the plate is moved

through the opening *b* so that the edges of the plate will fit into the groove *c*. The free ends of the spring-plate *e* will press into the recesses *a'* and lock therewith. It is now impossible to remove the plate *d* without fracturing the neck of the bottle at the points where the recesses *a'* are located. For indicating the position of these recesses the bottle may be provided with marks or scratches, so that upon striking these parts the free ends of the plate *e* may move out with the plate *d*.

The form of my invention shown in Figs. 5, 6, 7, and 8 consists in providing the neck of the bottle with a projecting lug *f*, located just below the opening *b* therein. The lug *f* has a recess *f'*, which receives the free front end of a spring-tongue *g*, carried by a plate *h*, which performs the same functions as are performed by the plate *d*, previously described. The lower wall or bottom of the opening is provided with an upwardly and inwardly inclined surface against the outer side of which the overhanging front edge *h'* of the plate *h* projects, to prevent an instrument from being inserted between the parts *a* and *h* to fraudulently lift the spring *g*. The plate *h* has its edges movable into the slot *c* of the mouth *a* of the bottle, as before described with reference to the plate *d*. The cap *h* is removed by striking the lug *f* a blow to fracture the lug, whereupon the plate will be free to slide through the opening *b*.

Fig. 9 illustrates a modification in the form of the plate. This modified form of plate is adapted to be used in connection with the bottle-neck constructed as in Figs. 1 and 2. Instead of setting the spring-arm *e* in recesses, such as *d²*, the plate *k* is provided with a curved spring-strip *l*, secured to the rear edge of the plate *k* and at the middle of the strip *l* by a screw *l'*. (Indicated by dotted lines in Fig. 9.) The ends of the strip *l* are free and are movable in and out of recesses *k'*, formed in the side edges of the plate *k*. The plate *k* is moved like plate *d* through the opening *b* and into the groove *c*. The free ends of the strip *l* move past the front walls of the recesses *a'* and engage therewith to hold the plate immovably in position.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A bottle having an opening in one wall of the mouth thereof, and having grooves formed in its interior walls, the grooves communicating with the opening, a closure-plate 5 capable of extending through the opening and having its edges fitted within the groove of the mouth, the closure-plate having two recesses in its lower face, the recesses being in communication with each other by a groove, 10 and a spring fitted within the groove and having its free ends respectively movable within the recesses so that the free ends of the spring may engage with the walls of the mouth of the bottle.
- 15 2. A bottle, the mouth of which has an opening running through the top edge of the mouth, the mouth also having an interior groove running horizontally around the mouth and communicating with the opening, a closure-plate 20 slidable through the opening and capable of having its edges held by the groove in the mouth of the bottle, the plate having an upwardly-extending portion at one edge, such portion serving to fill the opening in the mouth of the bottle, and a spring-pressed member 25 carried by the closure-plate and engaging with an interior portion of the mouth of the bottle, whereby to hold the closure-plate in position during the integrity of that portion of the mouth of the bottle which is engaged 30 by said spring-pressed member.
3. A bottle having an opening in the mouth thereof, and having interior grooves communicating with the opening, a closure-plate 35 slidable through the opening in the mouth of the bottle and having its edges capable of extending within the groove, and a spring-pressed member carried by the closure-plate and engaging an interior portion of the mouth of the bottle whereby to hold the closure-plate 40 in place during the integrity of that part of the mouth of the bottle which is engaged by said spring-pressed member.

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Witnesses:

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