

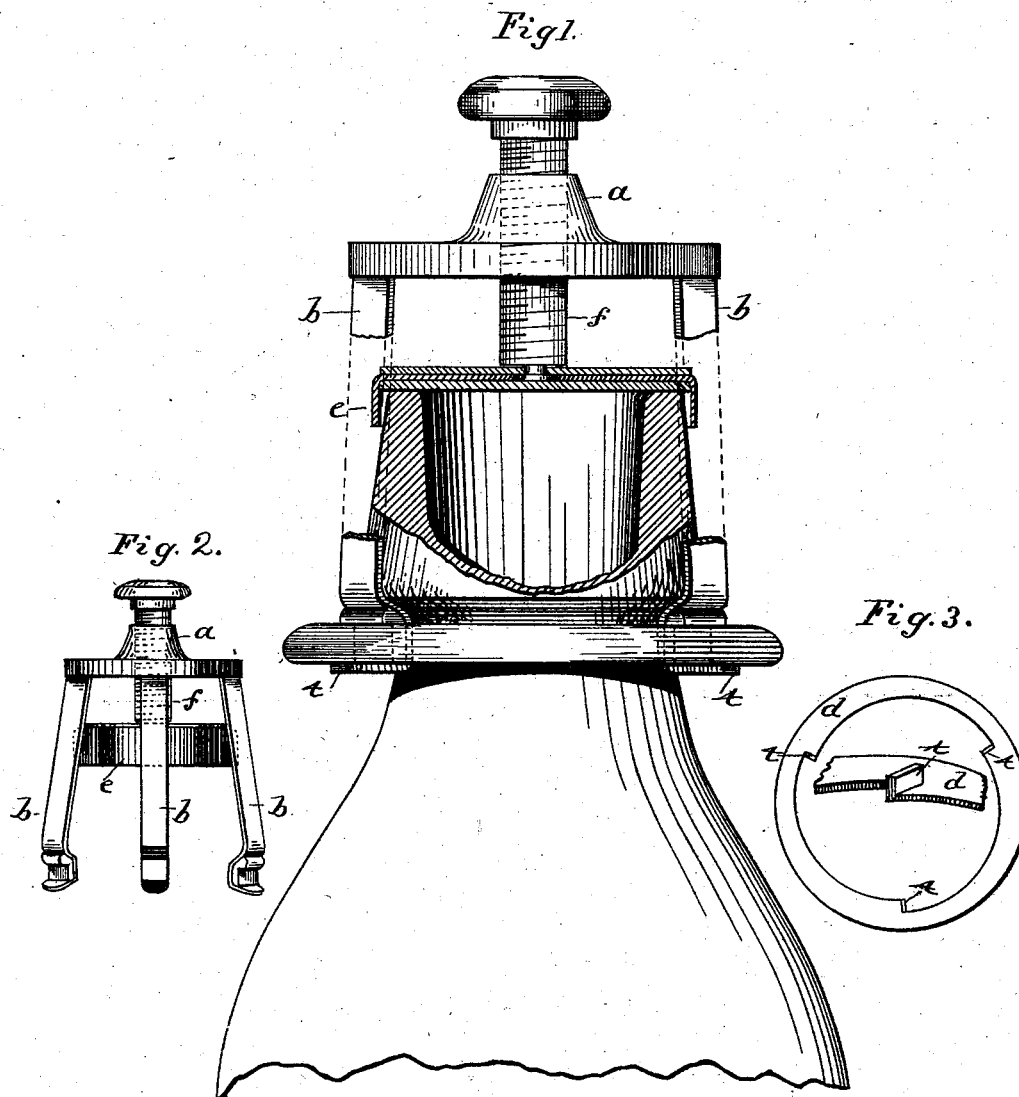
(No Model.)

P. J. CARMEN.

APPARATUS FOR STOPPING BOTTLES.

No. 259,815.

Patented June 20, 1882.



WITNESSES:

Thos. Houghton.
John A. Kemou

INVENTOR:

P. J. Carmien
BY *Wm. L.*

ATTORNEYS.

UNITED STATES PATENT OFFICE.

PIERRE JACQUES CARMEN, OF ISSY, NEAR PARIS, FRANCE.

APPARATUS FOR STOPPING BOTTLES.

SPECIFICATION forming part of Letters Patent No. 259,815, dated June 20, 1882.

Application filed October 11, 1881. (No model.) Patented in France April 12, 1881, No. 142,277; in Belgium August 23, 1881, No. 55,518, and in England August 25, 1881, No. 3,720.

To all whom it may concern:

Be it known that I, P. J. CARMEN, of Issy, near Paris, in the Republic of France, have invented an Improvement in Stopping Bottles, of which the following is a specification.

The object of the invention is to provide an air-tight stopper for bottles, jars, and analogous devices which will be secure when in position on the vessel, but may be readily removed and replaced, as hereinafter described.

Figure 1 of the drawings is an elevation partly broken away. Fig. 2 shows an elevation of the cap-nut and parts connected therewith. Fig. 3 is a detail view, showing the construction of the ring which fits about the neck of the bottle.

In the drawings, *a* represents a cap-nut, having the downwardly-projecting elastic arms *b*, with hooks *b'* at the lower end to enter openings adjacent to the projections *t* at right angles to the horizontal face of the ring. From the projection *t* each cavity decreases gradually by an inward incline of the interior surface of the ring toward the center. By this construction of the ring it can be moved in the hooks until the latter are firmly clamped to the bottle-neck, while each hook is prevented from escaping out of its own cavity by the projections *t*, against which the foot-pieces *b²* strike.

Through the cap-nut *a* passes a thumb-screw, *f*, swiveled at its lower end in a capsule, *e*, formed of a downwardly-flanged me-

dian piece, of sheet metal or other suitable material, covered on top and bottom by a disk, preferably made of rubber or other elastic material.

As shown in Fig. 1 of the drawings, the cap-nut is first connected to the neck-ring *d* on the bottle, the ring *d* then moved until the hooks *b'* are clamped securely to the bottle-neck, the capsule placed over the open end of said neck, and the screw *f* turned until the elastic material on the inside of capsule has been compressed so as to exclude the entrance of air or the egress of liquid.

Having thus described all that is necessary to a full understanding of my invention, what I claim as new is—

1. The combination, with the capsule *e* and swiveled screw *f*, of the cap-nut *a*, having elastic arms *b*, with end hooks, *b'*, and foot-pieces *b²*, and the bottle-neck ring *d*, having projections *t*, and an inclined interior surface between said projections, whereby the capsule may be clamped to the mouth of the bottle, as described.

2. The combination, with the hook-ended bands *b b'*, having foot-pieces *b²*, of the ring *d*, having a projection, *t*, between the adjacent ends of its interior inclines, whereby the hooks *b'* cannot escape from one incline to another.

PIERRE JACQUES CARMEN.

Witnesses:

ROBT. M. HOOPER,
ERNEST CISSIER.