A. B. CADMUS.

LOCKING DEVICE.

APPLICATION FILED JAN. 29, 1915.

1,308,697. Patented July 1, 1919.

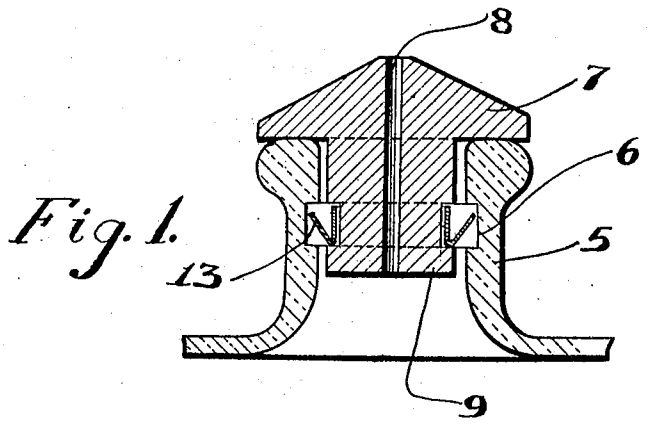


Fig. 1.

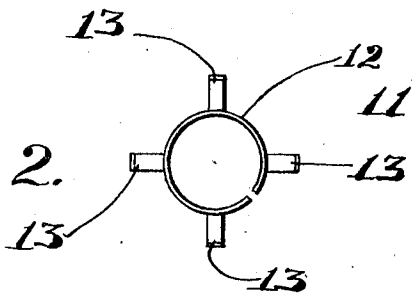


Fig. 2.

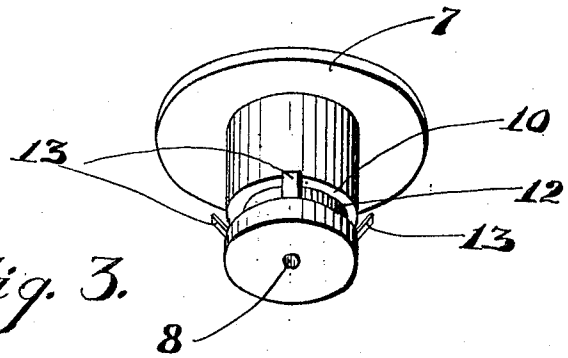


Fig. 3.

Witnesses
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UNITED STATES PATENT OFFICE.

ALFRED B. CADMUS, OF NEW YORK, N. Y.

LOCKING DEVICE.

1,308,697. Specification of Letters Patent. Patented July 1, 1919.

Application filed January 29, 1915. Serial No. 5,075.

To all whom it may concern:

Be it known that I, ALFRED B. CADMUS, a citizen of the United States, residing at New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Locking Devices; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention has for its object to provide a simple and efficient device for reliably and permanantly securing such telescopic members as a bottle top or cap within the neck of a bottle against disengagement.

Another object is the provision of a locking device formed from a single piece of sheet metal.

With these and other objects in view, the invention consists in the novel construction, arrangement and formation of parts as will be hereinafter specifically described, claimed and illustrated in the accompanying drawing, in which:

Figure 1 represents a fragmental sectional view through the upper portion of a bottle, showing the application thereto of the locking device.

Fig. 2 represents a top plan view of the locking device removed.

Fig. 3 represents a perspective view of the bottle cap or top removed.

Referring to the drawing in detail, wherein simiar reference numerals designate corresponding parts throughout the several views, the numeral 5 indicates the neck of a bottle or other receptacle having an internal annular groove 6. The top 7 for the bottle is formed with a central aperture 8 and a concentric enlargement 9 having an annular groove 10 therein. The locking member is designated generally by the numeral 11 and includes a split ring 12 having a plurality of angularly directed teeth 13. The ring 12 is seated within the annular groove 10 in the enlargement 9, and the tongues 13 project angularly toward the open end of the bottle neck 5 and are adapted to spring behind the shoulder formed by the wall of the groove 6 to lock the top 7 against removal. The width of the annular groove 10 is sufficient to permit the spring tongues 13 of the ring 12 to swing inwardly as the enlargement 9 is inserted in the neck 5 of the bottle.

While I have here shown the locking device 11 as applied to use on a bottle for securing a cap or top therein, it will be understood that the locking device may be used for locking any two telescopically engaged members against disengagement.

What I claim is:

In combination, a hollow body, a solid member having a central bore telescopically engaged in said hollow member, said members having annular grooves formed in their adjacent faces, the solid member having an outwardly extending integral flange arranged to engage the outer surface of the hollow member, and a locking device movably seated in the groove in the inner member and including a resilient split ring and a plurality of angularly directed tongues adapted to engage the walls of the groove in the outer member to lock said members against disengagement.

In testimony whereof I affix my signature in presence of two witnesses.

ALFRED B. CADMUS.

Witnesses:
EDWARD G. KUH,
GILBERT KUH.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."