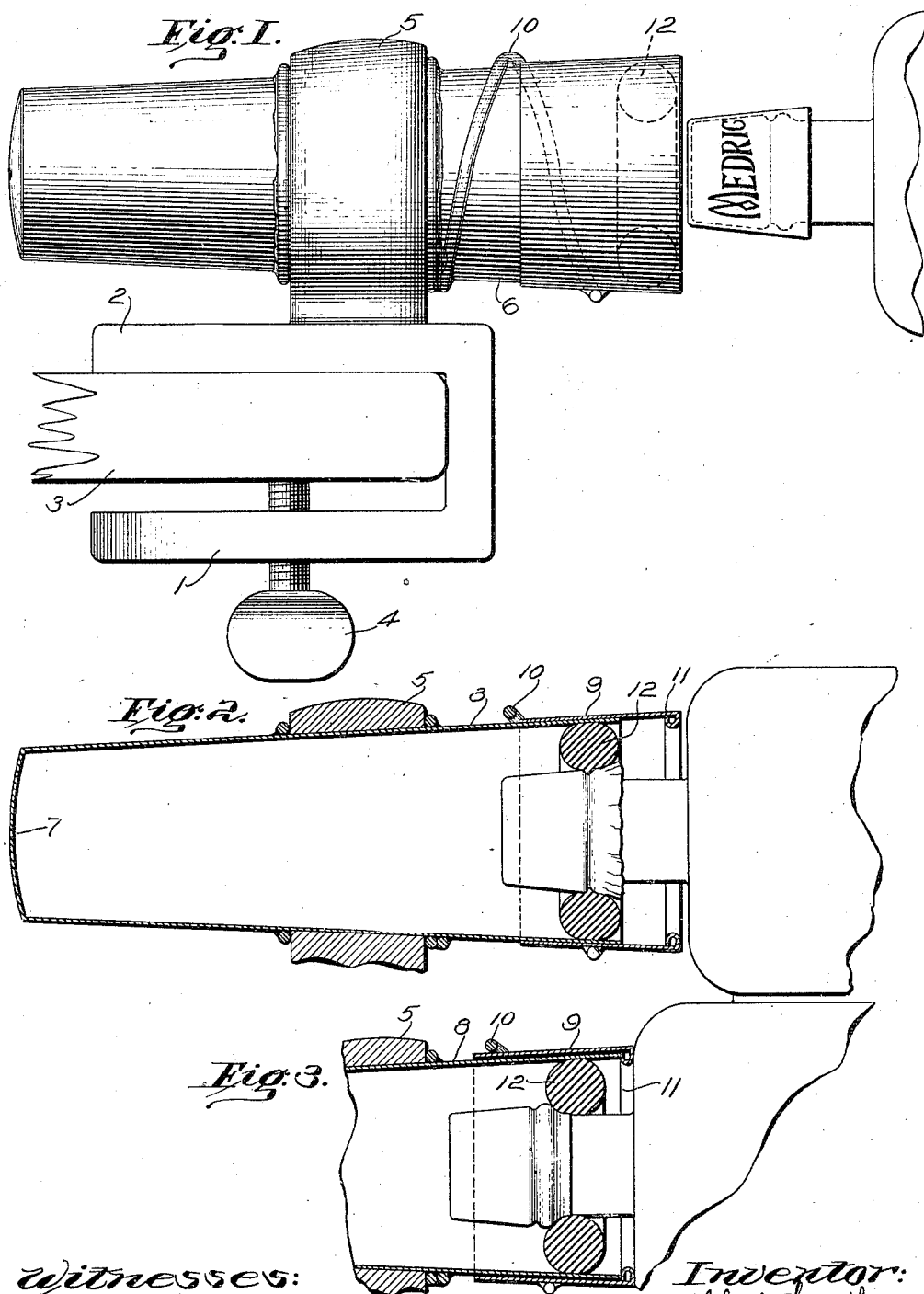


C. GENTLE.
CAPSULING DEVICE.
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1,038,869.

Patented Sept. 17, 1912.



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UNITED STATES PATENT OFFICE.

CUTHBERT GENTLE, OF DORCHESTER, MASSACHUSETTS.

CAPSULING DEVICE.

1,038,869.

Specification of Letters Patent.

Patented Sept. 17, 1912.

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To all whom it may concern:

Be it known that I, CUTHBERT GENTLE, a subject of the King of England, residing at Dorchester, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Capsuling Devices, of which the following is a specification.

The present invention relates to devices for pressing capsules over the closed necks of filled bottles and more particularly to an improvement upon the capsuling device illustrated and described in Letters Patent of Great Britain granted to Cuthbert Gentle and David Denholm, No. 1320 of 1891. The capsuling device disclosed in this patent comprises a suitable support, a hollow frusto-conical chamber carried thereby, and a resilient ring arranged to engage the peripheral walls of the interior of the chamber and roll thereon over a capsule loosely placed upon the closed neck of a bottle inserted into the chamber. This device effectively pressed the capsule into position on quart bottles which are usually provided with long cylindrical necks and which for a number of years were the only bottles provided with capsules by the trade. In later years, however, it has become desirable to capsule pint and half-pint bottles as well as quart bottles. But pint and half-pint bottles are made with short necks rising from wide shoulders. It was discovered that it is impossible to capsule pint and half-pint bottles with the capsuling device described in the British patent hereinbefore referred to owing to the fact that the square shoulders on the bottles struck the end of the chamber before the rubber ring had completely rolled the capsule into position on the neck of the bottle.

The object of the invention is to produce a device adapted to effectively capsule various styles of bottles whether provided with long or short necks.

To this end the invention consists in the features and combinations of constructions hereinafter described and set forth in the claims.

The various features of the present invention will be readily understood from an inspection of the accompanying drawing illustrating the preferred form of the invention, in which,

Figure 1 is a side elevation of the capsuling device and showing a short necked bot-

tle with a fancy capsule loosely applied thereto about to be inserted into the chamber; Fig. 2 is a longitudinal sectional elevation through the chamber of the capsuling device showing the extent to which the capsule is pressed into position by the resilient ring at the time the shoulders of the bottle engage the chamber; and Fig. 3 is a sectional detail showing the manner in which the length of the chamber is decreased to increase the neck area over which the resilient ring rolls the capsule.

The illustrated embodiment of the invention is provided with a pair of arms 1 and 2 arranged to embrace the ledge of a table 3 and be clamped thereto by a thumb screw 4. The arm 2 carries a suitable support 5 for a hollow frusto-conical chamber 6 open at its wider base and closed at the narrower base except for a small vent 7. (Fig. 2). The chamber 6 is formed in sections 8 and 9, the section 8 being carried by the support 5, and the section 9 being arranged to telescope upon the section 8. Coiled around the chamber with its ends soldered respectively to the sections 8 and 9 is a spring 10 constructed to hold the chamber in extended position. The section 9 is provided with a lip 11 which holds a resilient ring 12 in place upon the peripheral walls of the interior of the chamber.

In using the device the neck of the bottle to which the capsule has been loosely applied is forced into the opening in the ring 12. As the pressure continues the ring rolls along the interior wall of the chamber over the capsule on the neck of the bottle. (Fig. 2). As the ring rolls toward the narrower base of the frusto-conical chamber the pressure of the ring on the capsule increases until the capsule is pressed into the angle between the surface of the neck and the bead formed thereon at which time the shoulders of the bottle strike the lip 11. Continued pressure on the bottle causes the section 9 to telescope on the section 8 against the tension of the spring 10 until limited by the lip 11 thus permitting the neck of the bottle to pass farther into the chamber and the ring to roll the capsule over the bead and down smooth upon the surface of the bottle. As soon as the pressure on the bottle is relieved the spring 10 pushes the bottle away from the chamber and the parts are restored to the position of Fig. 1. In capsuling long necked bottles the neck

is inserted into the chamber as in the case of short necked bottles, but as there is no shoulder to engage the lip 11 the neck may be pushed in until the capsule is rolled into position when the bottle may be withdrawn.

It will be clear to those skilled in this class of devices and with the object of the present invention in view that changes may be made in the details of structure, the described and illustrated embodiment of the invention being intended as an exploitation of its underlying essentials the features whereof are definitely stated in their true scope in the claims herewith.

What is claimed as new, is:—

1. A device for pressing capsules over the closed neck of a bottle, having, in combination, a hollow chamber consisting of a plurality of frusto-conical sections, a resilient ring arranged to engage and roll along the peripheral walls of the interior of the chamber, and means permitting one section of the chamber to telescope upon another during the capsuling operation, substantially as described.

2. A device for pressing capsules over the closed neck of a bottle, having, in combination, a hollow chamber consisting of a plurality of frusto-conical sections, a resilient ring arranged to engage and roll along the

peripheral walls of the interior of the chamber, and means permitting one section of the chamber to telescope upon another under contact with the shoulders of a bottle as its neck is passed into the chamber for the capsuling operation, substantially as described.

3. A device for pressing capsules over the closed neck of a bottle, having, in combination, a hollow chamber, a resilient ring arranged to engage the peripheral walls of the interior of the chamber and roll thereon over the closed neck of a bottle inserted into the chamber, and means permitting the length of the chamber to be decreased to increase the neck area over which the ring rolls, substantially as described.

4. A device for pressing capsules over the closed neck of a bottle, having, in combination, a support, a hollow sectional chamber carried thereby, a spring coiled around the exterior of the chamber and connected to each of the sections, and a resilient ring arranged to engage and roll over the interior peripheral walls of the chamber, substantially as described.

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