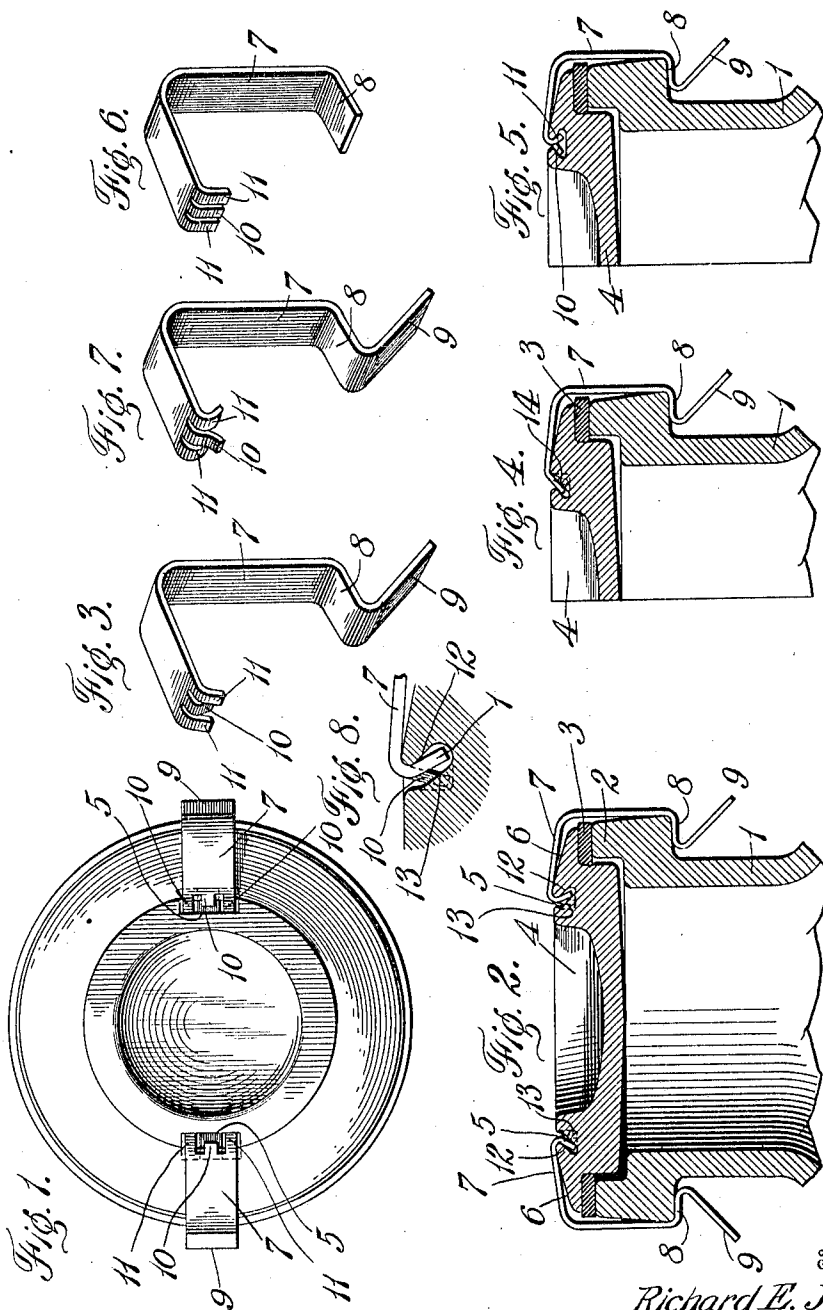


R. E. MEYER.
JAR CLOSURE.
APPLICATION FILED DEC. 11, 1911.

1,054,231.

Patented Feb. 25, 1913.



Witnesses
Chas. W. Stauffer
A. M. Dow

Inventor
Richard E. Meyer,

By *Carthage H. H. H.*
Attorneys

UNITED STATES PATENT OFFICE.

RICHARD E. MEYER, OF DETROIT, MICHIGAN.

JAR-CLOSURE.

1,054,231.

Specification of Letters Patent.

Patented Feb. 25, 1913.

Application filed December 11, 1911. Serial No. 664,953.

To all whom it may concern:

Be it known that I, RICHARD E. MEYER, a citizen of the United States of America, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Jar-Closures, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to vessel closures and more especially to means for securing them without the aid of tools in such manner that a hermetical joint is obtained.

The invention consists in the matters hereinafter set forth and more particularly pointed out in the appended claims.

Referring to the drawings, Figure 1 is a plan view of a vessel closure equipped with fastening means that embody features of the invention; Fig. 2 is a view in vertical section of the parts shown in Fig. 1; Fig. 3 is a view in detail, enlarged, of a clamping member; Fig. 4 is a view in detail of a modification of the device; Fig. 5 is a view in detail, showing another modification of the invention; Fig. 6 is a view in detail in perspective of the clamping member shown in Fig. 4; Fig. 7 is a view in detail in perspective of the clamping member shown in Fig. 5; and Fig. 8 is an enlarged view of a portion of the construction of Fig. 1.

Referring to the drawings a vessel neck 1 has an annular mouth rim 2 surmounted preferably by an elastic packing ring 3. A closure 4 is seated in the neck of the bottle within the flange and on the ring with clamping recesses .5 formed at intervals around the top, the upper annular face 6 of the cover sloping downwardly preferably toward the outer margin.

A clamp is formed of a strip of spring metal 7 bent near its lower end to form a shoulder 8 adapted to underlie the lower face of the flange 2 with a finger pull 9 extending outwardly from the neck of the bottle. The other end portion of the strip is bent inwardly so as to bear near its outer extremity at the inner edge of the face 6. This end of the strip is longitudinally slotted to form fingers 10 and 11 adapted to enter the recess 5.

As shown in Figs. 1, 2 and 8 the outer marginal wall 12 of the recess is undercut and the finger 10 is forced outwardly to hook under this by contact with an inclined

lug 13 when the clamp is inserted and the spread fingers thus hold the clamp interlocked with the cover.

In Figs. 4 and 6 the strip finger 10 is curved to underlie the inner face of the recess which is undercut, by contact with a lug 14 sloping inwardly, the clamp being retained as before by the spread fingers.

The constructions of Figs. 5 and 7 necessitate the initial spreading or bending of the clamp fingers as indicated, so that they may be forced through the narrow throat of the recess and then spring out to hold the clamp in place. It is essential in the proper operation of the parts that the face 6 of the closure and the vertical face of the flange 2 do not bear against the clamp so that as the latter tends to contract when sprung into place it engages only on the angle of the flange 2 and the corner of the recess and thus draws the parts firmly together. The finger pull 9 may be omitted as indicated in Fig. 6, and the clamp stands at an interval from the neck 1 to allow a band or label to be placed around the neck.

By this construction a closure is obtained which is readily applied to the mouth of a vessel without the aid of tools, the joint between the closure and vessel being tight and the closure being removable also without the use of an opening device.

Obviously, changes in the details of construction may be made without departing from the spirit of the invention and I do not care to limit myself to any particular form or arrangement of parts.

What I claim is:—

1. The combination with a vessel having an outer shoulder adjacent its mouth, of a closure adapted for the mouth and provided with recesses in its upper face with undercut margins and clamps each consisting of a spring strip bent to hook under the vessel shoulder and to enter a recess, the portion entering the recess being formed into fingers yieldingly spread to engage under the undercut portions of the walls.

2. The combination with a vessel having an exteriorly flanged mouth, of a closure adapted to seat on the mouth and provided with recesses having undercut walls, and clamps each consisting of a spring strip bent near its outer end to hook under the flange of the mouth and provided at the other end with longitudinally disposed

fingers bent to spread out under the undercut margins of the recess when forced into the latter.

- 5 3. The combination with a vessel having an exteriorly flanged mouth, of a closure adapted to seat on the mouth and provided with recesses having undercut walls, and clamps each consisting of a spring strip bent
10 near the outer end to hook under the flange of the mouth and provided at the other end with longitudinally disposed fingers, each recess having a lug adapted to force the fingers of an inserted clamp apart within the recess.

- 15 4. The combination with a vessel having

a shoulder adjacent its mouth, of a closure adapted for the mouth and provided with recesses in its upper face, and clamps each consisting of spring strips formed to hook under the vessel shoulder and to enter one
20 of said recesses, the clamp portion entering the recess comprising fingers adapted to be spread to engage the opposite walls of said recess.

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

RICHARD E. MEYER.

Witnesses:

ANNA M. DORR,
C. R. STICKNEY.

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