

1,054,230.

Patented Feb. 25, 1913.

Fig. 4

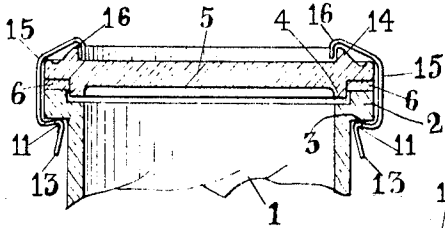


Fig. 1

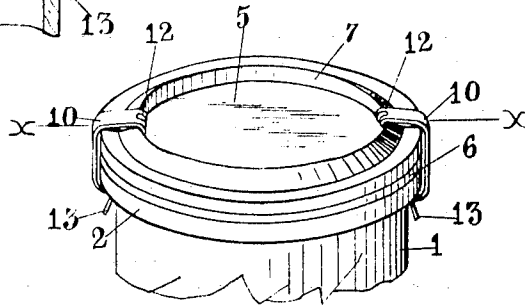


Fig. 5

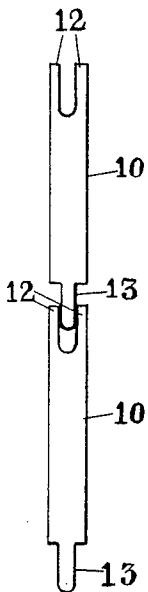


Fig. 2

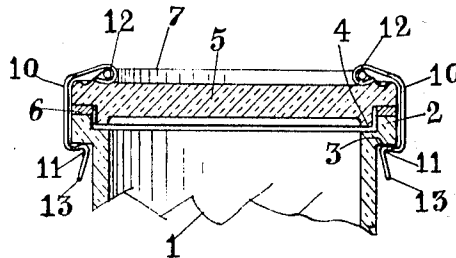
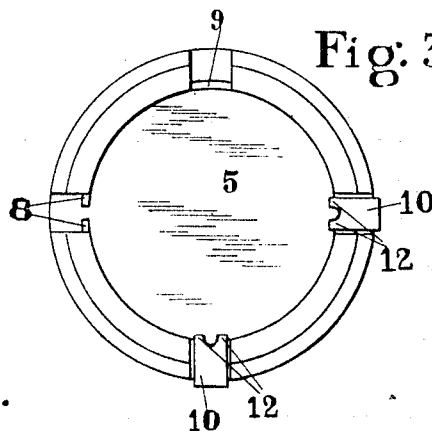


Fig. 3



Witnesses

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RICHARD E. MEYER, OF DETROIT, MICHIGAN.

VESSEL-CLOSURE.

1,054,230.

Specification of Letters Patent.

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Application filed June 26, 1909. Serial No. 504,437.

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 Vessel-Closures, of which the following is a specification, reference being had therein to the accompanying drawings.

10. This invention relates to closures for jars, bottles, cans, or the like, and more especially to means for securing the closures so as to form a hermetical joint without the use of tools or special apparatus.

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

In the drawings, Figure 1 is a view in perspective of the neck of a jar provided with a closure and fastenings that embody features of the invention; Fig. 2 is a view in section on or about line *x-x* of Fig. 1; Fig. 3 is a plan view showing the details of arrangement of the fastenings; Fig. 4 is a view in section in detail, showing a modification of the device; and Fig. 5 is a view of a clamp blank.

Referring to the drawings, a neck 1 of a jar or bottle has an inlet flange 2 whose under-face 3 forms a substantially square shoulder. The flange is adapted to receive a cover that is preferably of the same diameter as the flange 2 and is provided with a centering rib 4 on the under side. A packing ring or gasket 6 is interposed between the upper face of the flange 2 and the marginal portion of the cover 5.

An annular rib 7 concentric with and near the periphery of the cover 5 is, in a preferred form of construction, transversely slotted at intervals, with lugs 8 extending from each slot side or if desired, with a cross bar 9 as indicated in Fig. 3. A clamp 10, preferably made of spring metal, is offset near one end to form a hook 11 adapted to snap under the face 3 of the flange 2, and is bent transversely near its upper end with a pair of ears 12 at its extremity, curved to embrace and engage the lugs 8 or cross bar 9. The portion 13 of each clamp below the hook is slightly bent outwardly to form a finger pull.

As a modification, shown in Fig. 4, an annular rib 14 is formed on the upper face of the cover and clamps 15 are provided similar to the others, with the exception that

their upper ends or lugs 16 hook over and bear against the inner face of the rib 14 which makes a shoulder with the upper face of the cover, and is of considerably less diameter than the flange 3, so that the tendency of the spring clamps to contract and move the lugs 16 and hooks 11 together, forces both inwardly and precludes the possibility of the slipping off of the clamps.

As indicated in Fig. 5, a preferred form of clamp is made by cutting a flat spring metal strip along the lines indicated, the tongue of one blank being the metal removed between the ears of the succeeding blank, the former constituting the hand pull member 13 and the latter the ears 12 so that there is no waste in the cutting.

The clamps are so adjusted that they are under spring tension when hooked over the vessel neck flange and therefore tightly press the cover in place. If a gasket is placed between the cover and neck, the clamps are sufficiently stiff to slightly compress the gasket and thereby form a tight joint.

A number of clamps may be furnished for each cover and for milk bottles, tobacco jars, and the like, the permanent attachment of the clamps to the cover is a desirable feature. They do not take up packing room when shipped as they do not project beyond the vessel.

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

Having thus fully described my invention, what I claim is:

1. The combination with a vessel having an annular square-shouldered flange at its mouth, of a cover adapted to rest on the flange, a transversely slotted flange on the upper face of the cover concentric with the cover periphery, lugs on the slot sides, and clamps each consisting of a sheet metal strip whose upper end pivotally engages the lugs of a slot, and whose lower off-set end is adapted to hook under the flange.

2. The combination with a vessel having an annular square-shouldered flange at its mouth, of a cover adapted to rest on the flange, a transversely slotted flange on the upper face of the cover concentric with the cover periphery, lugs on the slot sides, and clamps, each consisting of a flat sheet metal

strip having a pair of longitudinally extending ears at one end bent to embrace the lugs of a slot and a tongue at the other end, the strip being bent transversely near the ears to lie over the lower edge and being offset near the tongue to form a hook adapted to snap under the neck flange.

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

RICHARD E. MEYER.

Witnesses:

ANNA M. DORR,

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