(Model.)

2 Sheets—Sheet 1.

H. BUCHHOLZ.

CLAMP FOR JARS.

No. 339,083. Patented Mar. 30, 1886.

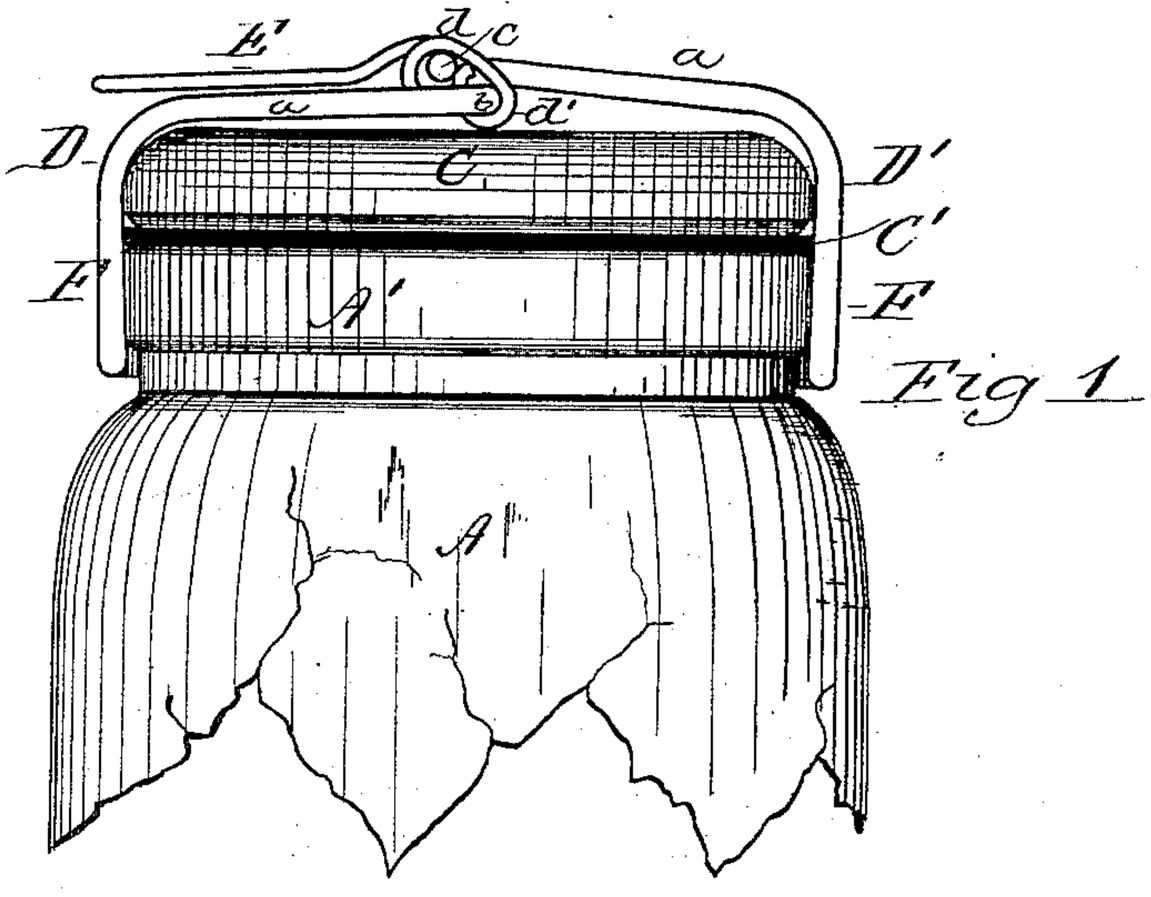

Fig 1

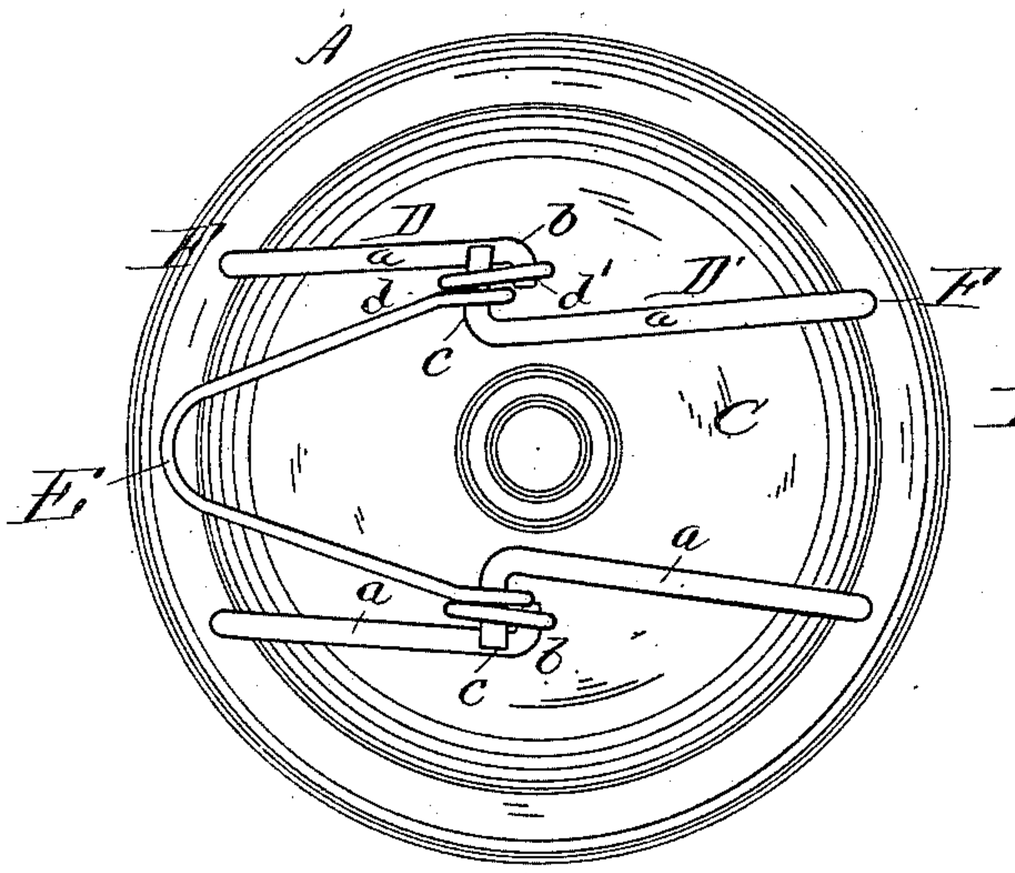

Fig. 2

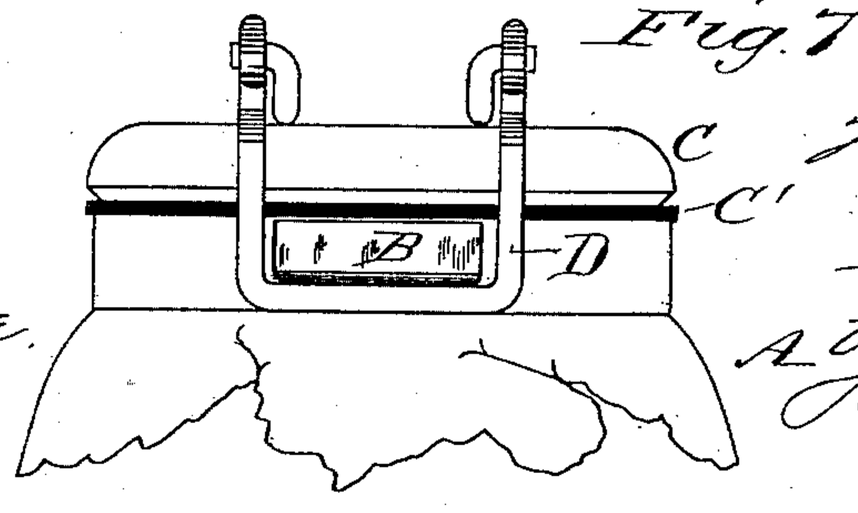

Fig. 3

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(Model.) 2 Sheets—Sheet 2.

H. BUCHHOLZ.

CLAMP FOR JARS.

No. 339,083. Patented Mar. 30, 1886.

Fig. 3

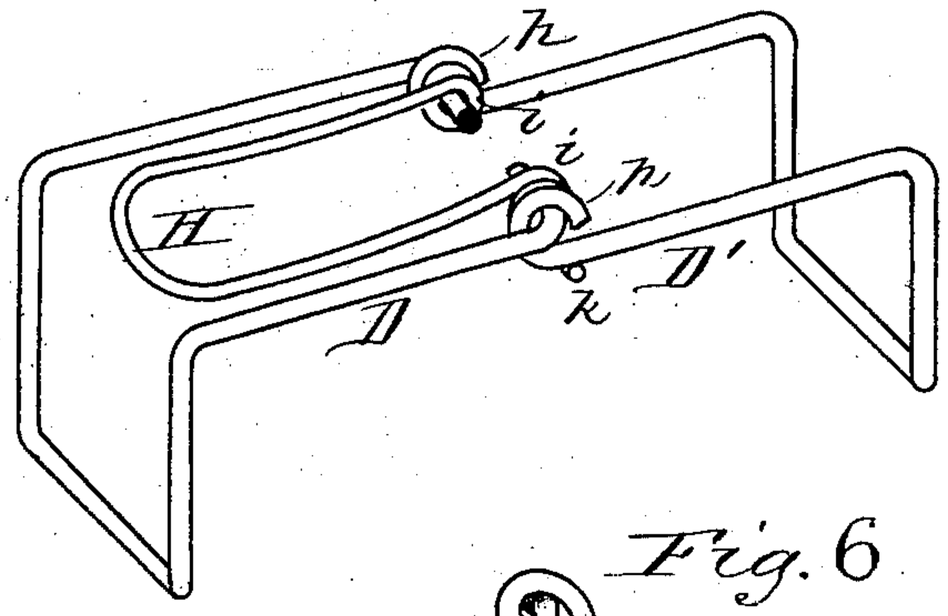


Fig. 6

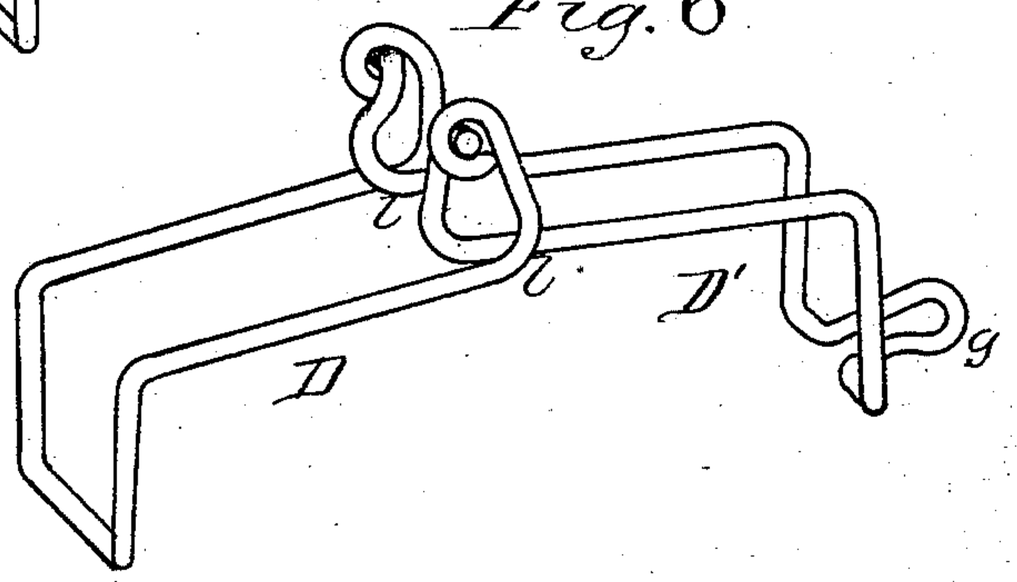


Fig. 3a.

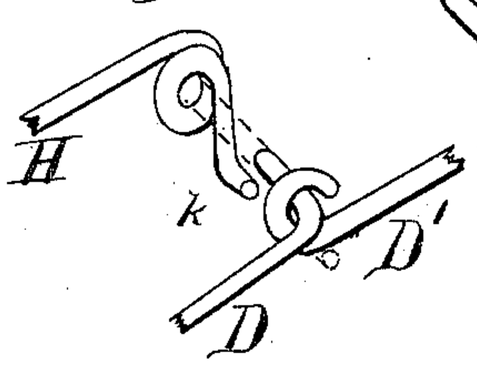


Fig 4

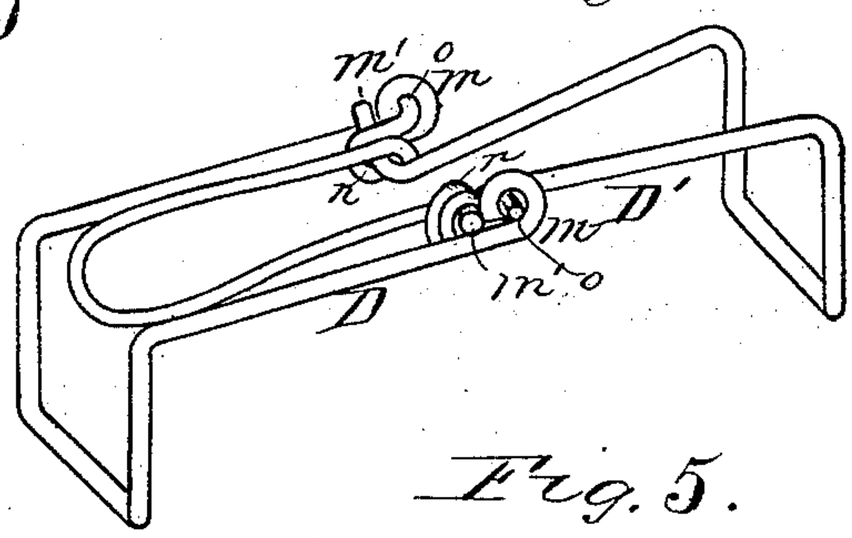
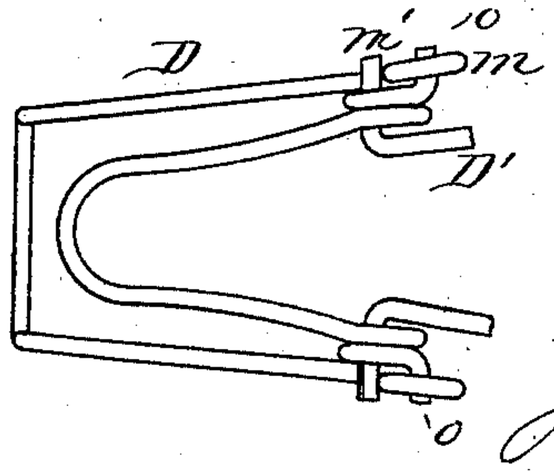


Fig. 5.



Witnesses
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UNITED STATES PATENT OFFICE.

HERMANN BUCHHOLZ, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO HENRY MILLER, OF SAME PLACE.

CLAMP FOR JARS.

SPECIFICATION forming part of Letters Patent No. 339,083, dated March 30, 1886.

Application filed December 19, 1885. Serial No. 186,127. (Model.)

To all whom it may concern:

Be it known that I, HERMANN BUCHHOLZ, a subject of the Emperor of Germany, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Clamps or Fastenings for Preserving-Jars; and I do hereby declare the following to be a full, clear, and exact description of the invention, reference being had to the accompanying drawings, which form part of this specification.

This invention has relation to fastenings or clamps for the covers, lids, or caps of preserving-jars, and has for its object the provision of a novel construction of wire fastening or clamp which may be readily applied and secured to jars of ordinary construction, and which do not require encircling wires, bands, or other like contrivances to hold them in place or to afford a purchase for the clamps.

In fastenings or clamps for preserving-jars it has been heretofore customary to employ a wire which is wound or wrapped around the neck of the jar, and which constitutes the medium through which the leverage to secure the clamp is applied. This wire is not only unsightly, but is an expense to the manufacturer, increasing the cost of preserving-jars. Moreover, the clamps depending upon the wire as a part of the fittings are difficult to open and seal, and on account of the small surface pressing upon the cap are not always capable of effecting a perfectly close seal.

My invention contemplates dispensing altogether with the wire ring around the neck of the jar and provides a clamp which depends upon no other attachments to the jar, and which may be entirely removed when necessary to unseal the jar, hence may be made and sold as an article of manufacture separate and independent of the jars, and readily applied by the users.

My invention consist in the novel construction of wire clamp, as hereinafter described and claimed.

My invention is capable of several modifications, and in the accompanying drawings Figure 1 is a side view of a preserving-jar having applied to it one of the forms of clamp or fastening embodying my invention. Fig. 2 is a plan or top view of the same. Figs. 3, 4, 5, 6, and 7 represent modifications. Fig. 3ª is a perspective view of a detached portion of the clamp shown in Fig. 3.

The jar represented at A is of the usual form of preserving-jars, and for the purposes of my invention is formed either with a bead or collar, A′, encircling its neck, or with lugs B B, Fig. 7, and when the latter are employed they may be beveled on their under surfaces, so that the clamp or fastener may be fastened by turning it around until its catches or loops tightly engage with the lugs, as will be hereinafter more particularly explained.

The cap or cover C is of the ordinary flanged sort fitting over the mouth of the vessel, a rubber gasket or ring, C′, being interposed between the cap-flange and the upper edge of the neck bead or shoulder A′.

The clamp or fastening as shown in Figs. 1 and 2 consists of three parts—viz., the clamping-loops D D′ and the lever E. The loops D D′ are each formed by bending a length of stout wire to the form of a staple, or approximately so, so as to produce two legs or sides, *a a*, each of which is then bent to an L shape. The ends of one loop, D, are then turned inwardly, as shown at *b*, while the ends of the other loop, D′, are bent outwardly, as shown at *c c*. These bent ends are coupled together by the loop-lever E, which is bent so as to produce double eyes *d d′* on each end, the ends of the loop D being passed through the eyes *d′* and the ends of the loop D′ through the eyes *d*. The ends or pintles *c c* are thus brought slightly above the plane of the pintles *b b*. Now, by moving the loop-lever E to and fro the two loops are drawn toward or forced away from each other, and the distance between the catch-portions F F, which forms the connections between the legs of the loops, decreased or increased.

The clamp as described is applied to a jar after the cap is in place by being so placed as to embrace the neck with the depending portions G of the loops, the lever being raised so as to separate such depending portions sufficiently for the purpose. The loop-lever is then pressed down toward the cap and thus causes the loops to be drawn inwardly, the parts F F catching under the shoulder A′. When the lever is thrown back for the pur-

pose of allowing the clamp to be applied, its eyed portion *d d'* lies horizontally, or nearly so, while the pintles *b c* are about on a horizontal line. When, however, the lever is pressed down, the eyes impinge upon the top of the cap, and in assuming the position shown in the drawings press tightly upon the cap, causing the rubber gasket to be compressed and the joint tightly sealed.

The clamp is removed by simply raising the lever and releasing the loops from the shoulder.

In the modification shown in Fig. 3 the loop D only has its ends bent to form pintles, the loop D' having its ends bent to form eyes *h h*, through which the pintles are inserted, while the loop-lever H is bent at its ends to form eyes *i i*, which encircle or receive the inner ends of the pintles and terminate in outwardly-bent fingers *k*. This form of clamp is applied to the jar in the same way as the one already described; but the loops are drawn together by the lifting action of the fingers *k*, which, impinging upon the cap, are forced under the eyes *i i*.

In the modification represented in Figs. 4 and 6, the loops are respectively formed with eyes *m* and outwardly-turned pintles *m'*, while the loop-lever is formed with eyes *n*, through which the pintles pass, and terminates itself in outwardly-projecting pintles *o*, which pass through the eyes on the other loop. In operating this form of clamp the movement of the lever to a locking position draws the pintles on one loop over the eyes on the other loop and locks said pintles against the back of the loop-eyes. This is a preferred form of clamp, on account of the slight play which is allowed the lever after the clamp is locked, and which allows the lever to be readily taken hold of and manipulated.

The modification shown in Fig. 5 is a form of clamp in which the lever is dispensed with, the loops being bent upwardly at their ends and one provided with pintles which pass through eyes formed on the other. One of the loops is formed with a handle, *g*, by which the clamp is manipulated. In this form of clamp the shoulders or bends *l* form fulcrums or bearings through which the clamping action is produced.

The jar may either have the full collar or only the projections or lugs B B.

Having now described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A clamp or fastening for preserving-jars, consisting of two wire loops, each bent in two directions at right angles to each other, and forming catches to engage with a shoulder or with lugs on the neck of a jar, and a locking-lever pivotally connected to and coupling the two loops together, substantially as described.

2. In fastenings for preserving-jars, the combination of the clamping-loops, each formed of a length of wire bent in two directions at right angles to each other, so as to form catches and pivotally-connecting portions, said loops being coupled together pivotally and adapted for application to a jar unprovided with an encircling wire or cord, substantially as described.

3. The detachable clamp or fastening for preserving-jars, consisting of two wire loops, each bent horizontally and vertically, and provided with a locking-lever, said loops and lever being pivotally connected together, substantially as described.

4. A clamp or fastening for preserving-jars, consisting of two wire loops, each bent horizontally and vertically, and a connecting and locking lever, one of said loops having its ends bent to form pintles and the other having its ends bent to form eyes, the lever having its ends bent so as to form both eyes and pintles, which are coupled, respectively, with the pintles and eyes of the loops, substantially as described.

5. The combination, with a jar having a sealing-cap and formed with a collar or lugs to receive a clamp, of a detachable clamp or fastening consisting of two loops bent vertically and horizontally, and a locking-lever, said loops and lever being pivotally coupled together, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand this 17th day of December, 1885.

HERMANN BUCHHOLZ.

Witnesses:

A. A. MOORE,

JOHN F. ATCHESON.