(No Model.)

M. L. DEERING.

JAR FASTENER.

No. 545,684. Patented Sept. 3, 1895.

Fig. 1.

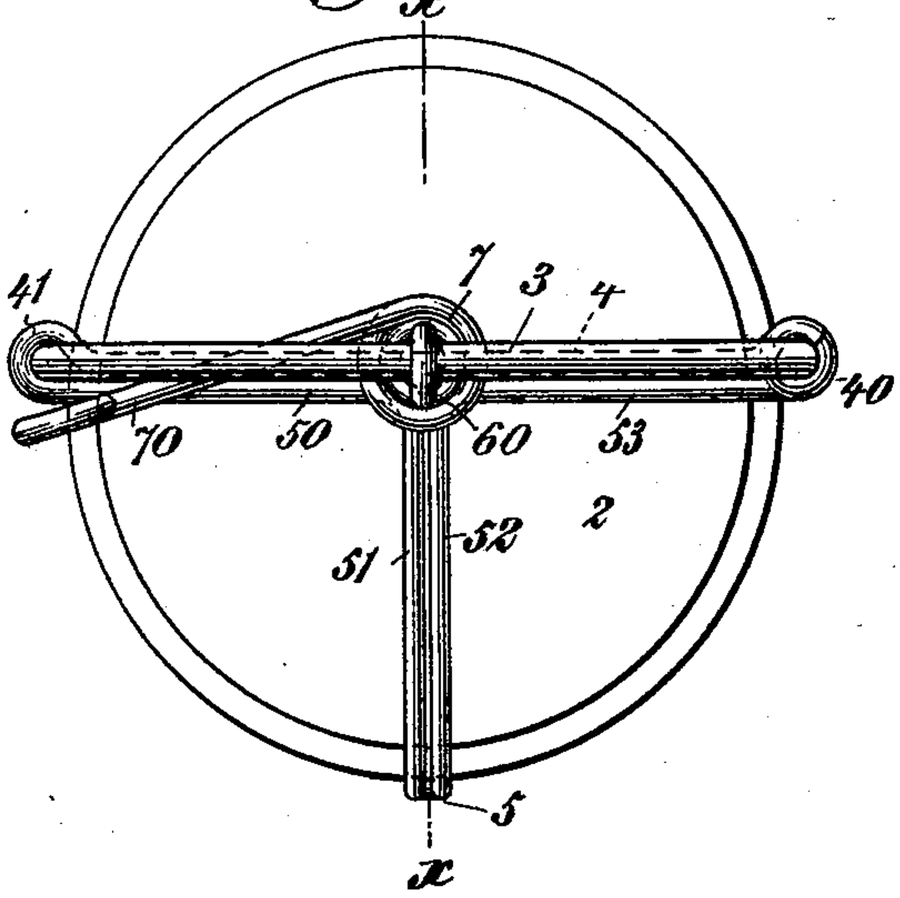
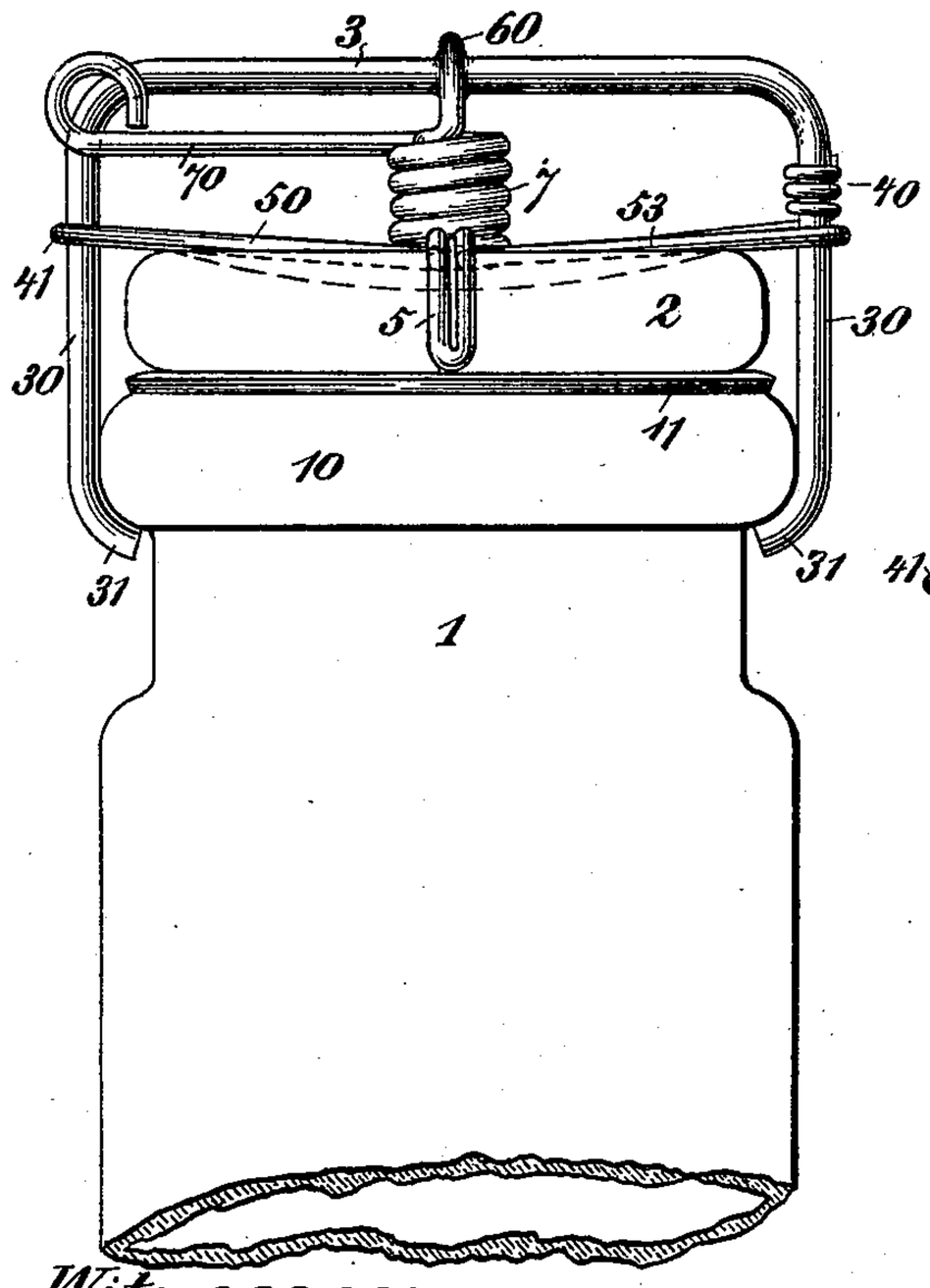


Fig. 2.



Witnesses:-

D. A. Hayward

A. F. Thompson.

Fig. 3.

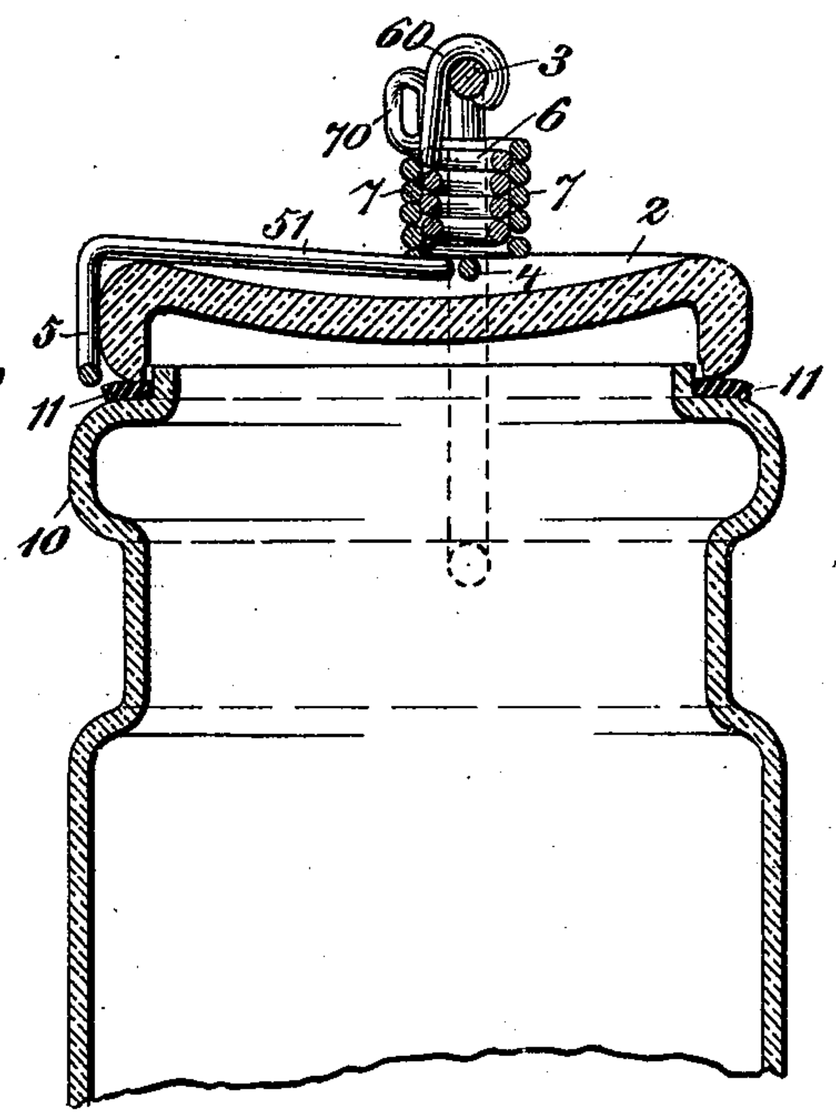
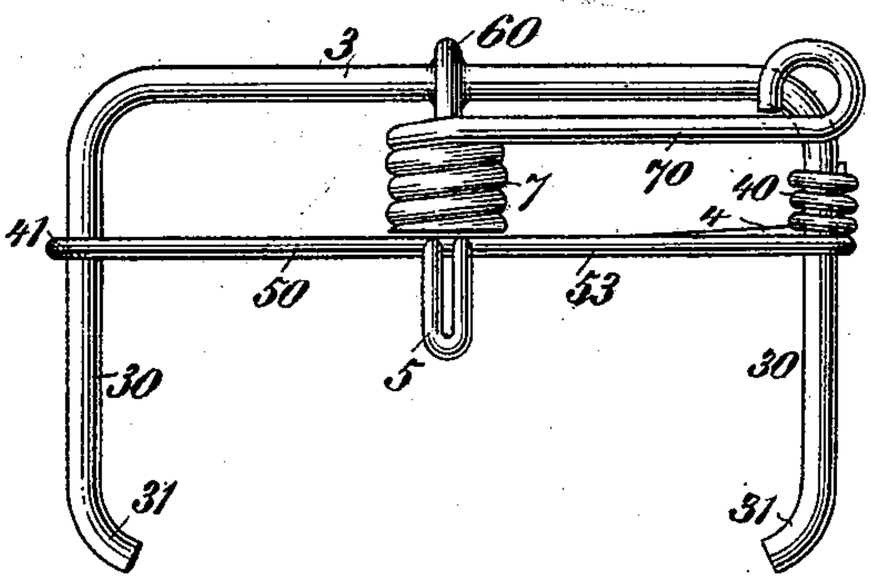


Fig. 4.



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UNITED STATES PATENT OFFICE.

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JAR-FASTENER.

SPECIFICATION forming part of Letters Patent No. 545,684, dated September 3, 1895.

Application filed June 21, 1895. Serial No. 553,550. (No model.)

To all whom it may concern:

Be it known that I, MARK L. DEERING, of Brooklyn, in the county of Kings and State of New York, have invented a certain new and useful Improvement in Jar-Fasteners, of which the following is a full, clear, and exact description, reference being made to the accompanying drawings, forming part of this specification.

This invention relates to improvements in fastening devices which are adapted to secure the cover of a jar—such as a fruit or preserve jar—in its seat so as to faciliate and render permanent the sealing of the jar; and the invention consists of a fastening device comprising a yoke, a vertically-movable bar spanning the yoke and secured by its ends to the arms thereof, and a cam adapted to depress the bar against the cover of the jar, the device having its several parts constructed and arranged substantially as described and claimed herein.

In the accompanying sheet of drawings, Figure 1 is a top view of the the fastener applied to a jar; Fig. 2, a view of the jar and fastener in elevation; Fig. 3, a vertical section of the jar and fastener in the plane *x x* Fig. 1; and Fig 4 shows the fastener alone in elevation.

Similar reference-numbers designate like parts in the different views.

The object of this invention is to simplify and otherwise improve the structure of the jar-fastener, which comprises a cross-bar that is adapted to bear upon the cover of the jar at or near the margin thereof and at places on opposite sides of its center, so as to distribute the pressure on the cover and not subject it to a strain upon the center that might be great enough to break it.

This fastener may be made entirely from wire and its several parts may be formed by automatic machinery. Its necessary cost is therefore much less than that of the fastener now in use, which it most nearly resembles, and on which itis an improvement.

The jar 1 is provided near its mouth with a bead-like projection 10, on which is the seat for the rubber packing-ring 11 and cover 2. The upper surface of the cover is slightly concave, as indicated in Fig. 3.

The yoke of the fastener is made by bending a strip of metal, preferably a piece of steel wire, into the form represented in the drawings. It has the main part or section 3 and arms 30 extending downward from it at right angles, the lower ends of the arms being bent inward, as shown at 31. The cross-bar 4, which is made from smaller wire than that of the yoke, extends from one arm of the yoke to the other, being parallel to the main section of the yoke when there is no strain upon it and preferably directly underneath that section, and it is secured to the yoke by bending the wire at the ends of the cross-bar around the arms 30 of the yoke in such a manner that the cross-bar may move freely up and down thereon. At one end of the cross-bar the wire is coiled several times around the arm, as shown at 40, to prevent the cross-bar from turning too much. The piece of wire from which the cross-bar is made is longer than is required for the cross-bar alone, and from that part which is not needed for the cross-bar is formed a stop 5, which projects laterally from the cross-bar and yoke and renders it easy to locate the fastener in its proper position on the jar. This part of the wire extends from the coil or eye 41, at the left end of the cross-bar in Figs. 1, 2 and 4, parallel to and by the side of the cross-bar nearly to the middle thereof, as shown at 50, thence outward from the cross-bar horizontally and at right angles thereto, as shown at 51, for a distance substantially equal to one-half the diameter of the cover of the jar, thence vertically downward and back, forming the stop at 5, and thence horizontally back to the cross-bar and along the cross-bar, as shown at 52 and 53, to the arm of the yoke, around which the end of the wire is bent.

To the yoke, at the middle of the main section 3, is fixed a device having the function of a cam or screw and adapted to apply pressure in a downward direction upon the cross-bar 4. It consists of two coils of wire, one within the other, the inner coil 6 being rigidly secured to the yoke by means of the part 60 bent around the section 3 and the outer coil 7 being adapted to travel up and down on the inner coil, as a nut travels on a bolt and being provided with a finger-piece or handle 70,

whereby it may be turned. The bottom of the coil 7 rests normally against the cross-bar 4 when the coil is in its highest position and the cross-bar lies upon the cover of the jar.

To apply the fastener to a jar and secure the cover of the jar in its seat by means thereof the fastener is placed on the jar with the cross-bar resting on the cover close to its edge. Then it is moved horizontally, so that the inwardly-bent parts 31 of the arms of the yoke pass under the bead 10 on the jar, and when the stop 5 is in contact with the edge of the cover the coil 7 is turned by means of the handle 70, as indicated in Fig. 2, depressing the cross-bar 4 against the cover so as to hold it securely in its seat. The cross-bar bears against the cover, as will be seen, at places near the edge, where the cover is best adapted to resist strain, the middle of the cross-bar being bent downward by the pressure into the concave face of the cover. Furthermore, the cross-bar acts as a tie to prevent the arms 30 of the yoke from spreading and slipping off the bead 10. It therefore enables the yoke to be made from comparatively small wire. Hence fasteners constructed as above described have all the advantages of those comprising a yoke made from malleable or wrought iron and a cross-bar extending through the yoke at right angles to its length, while they are made from lighter materials, in less time, and with less labor and expense than are fasteners of the other construction.

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

1. A jar fastener comprising a yoke having the main section 3 and arms 30 with inwardly bent portions 31 at their lower ends, a vertically movable cross-bar 4 spanning the yoke and secured by its ends to the arms thereof, and a cam or screw mounted on the yoke and adapted to depress the cross-bar, substantially as described.

2. A jar fastener comprising a yoke having the main section 3 and arms 30 with inwardly bent portions 31 at their lower ends, a vertically movable cross-bar 4 spanning the yoke and secured by its ends to the arms thereof, a cam or screw mounted on the yoke and adapted to depress the cross-bar, and a stop 5 projecting laterally from the cross-bar and yoke and adapted to make contact with the edge of the jar cover, substantially as described.

3. A jar fastener comprising a yoke formed from wire and having the main section 3 and arms 30 with inwardly bent portions 31 at their lower ends, a vertically movable cross-bar 4 spanning the yoke and secured by eyes or coils at its ends to the arms of the yoke, and a cam or screw mounted on the yoke and adapted to depress the cross-bar, substantially as described.

4. A jar fastener comprising a yoke formed from wire and having the main section 3 and arms 30 with inwardly bent portions 31 at their lower ends, a vertically movable cross-bar 4 spanning the yoke and secured by eyes or coils at its ends to the arms of the yoke, a stop 5 formed from the same piece of wire as the cross-bar and projecting laterally from the cross-bar and yoke and adapted to make contact with the edge of the jar cover, substantially as described.

5. A jar fastener comprising a yoke having the main section 3 and arms 30 with inwardly bent portions 31 at their lower ends, a vertically movable cross-bar 4 spanning the yoke and secured by its ends to the arms thereof, and a device for depressing the cross-bar composed of an inner coil 6 fixed to the yoke, and an outer coil 7 provided with a handle 70 and adapted to bear against the cross-bar, substantially as described.

MARK L. DEERING.

In presence of—
JOHN ENGEL,
CHAS. COLEMAN MILLER.