

No. 749,674.

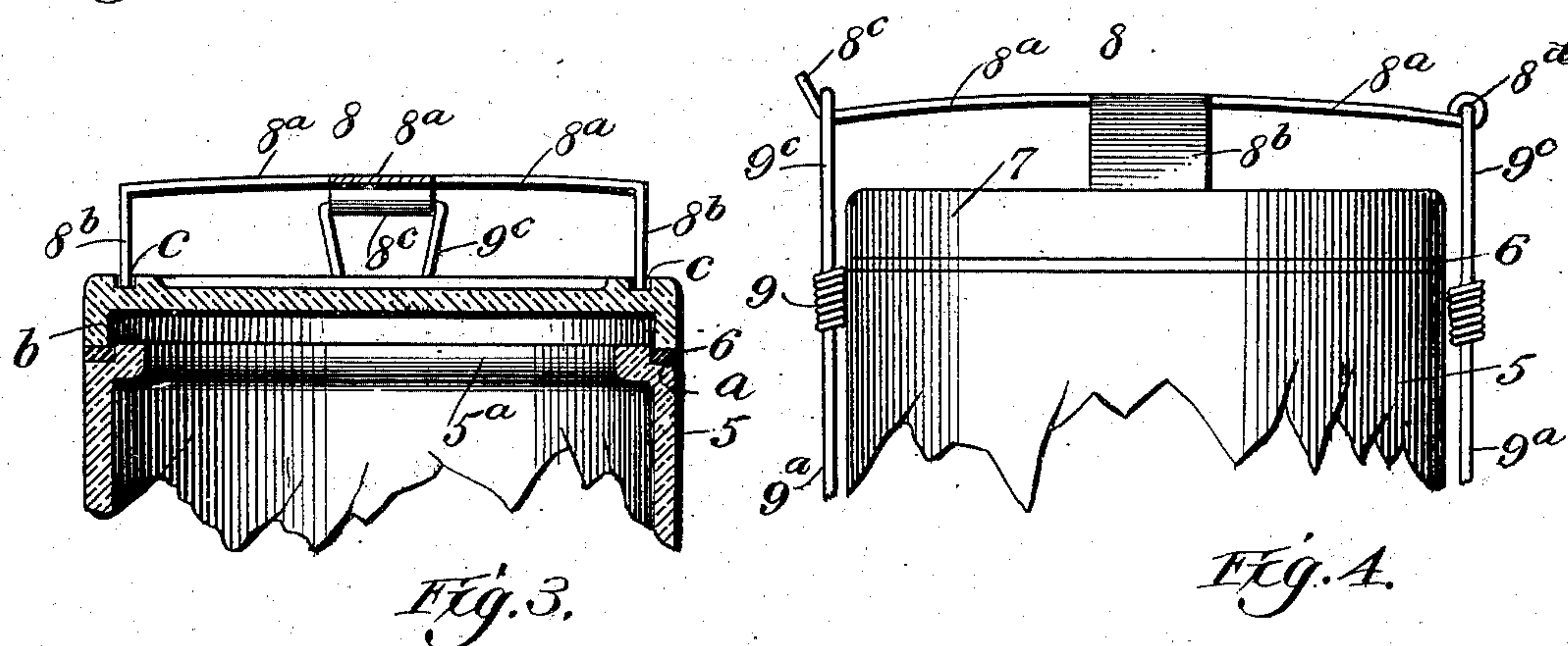
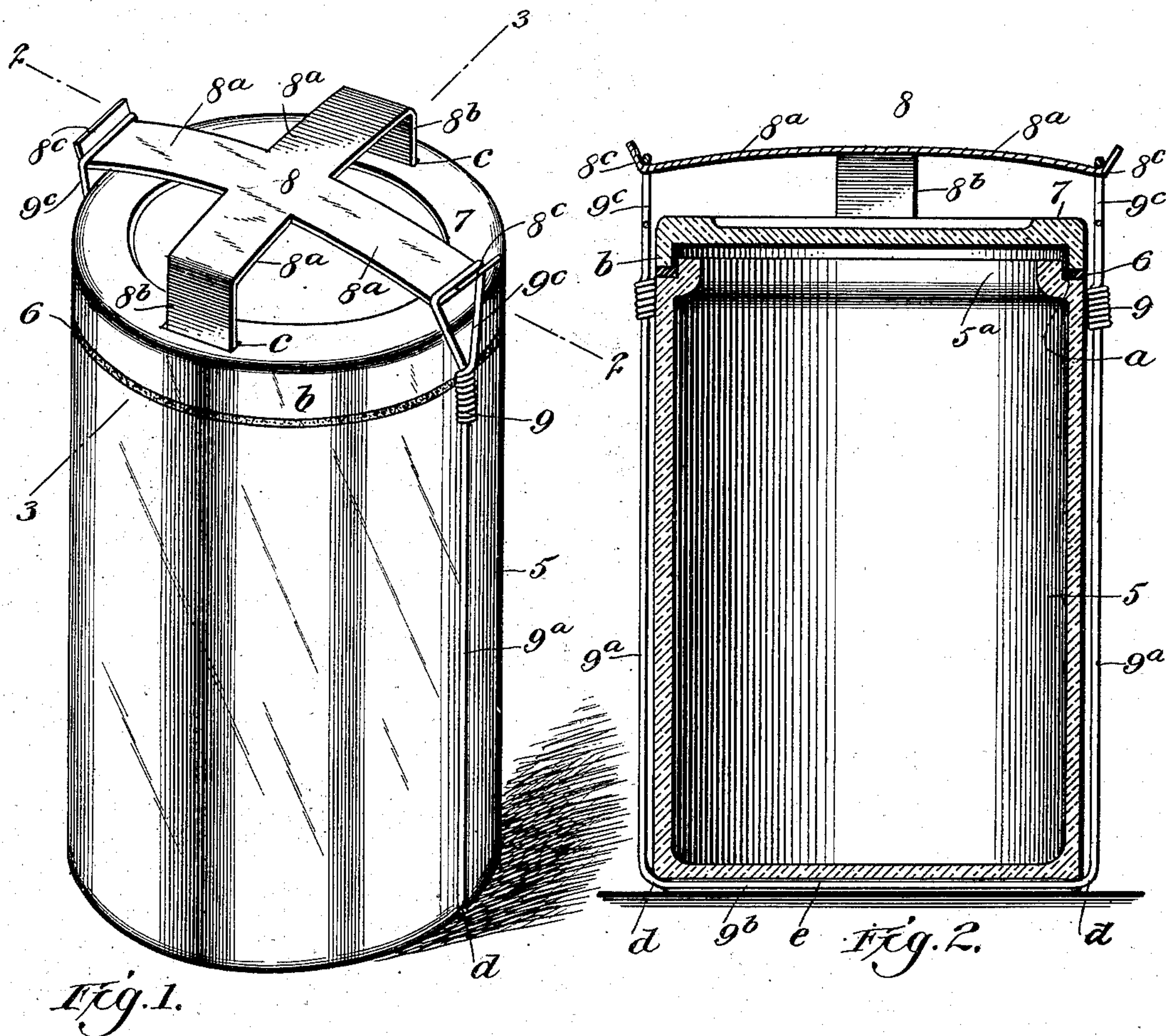
PATENTED JAN. 12, 1904.

O. N. HOFFMAN.

JAR CLOSURE.

APPLICATION FILED JUNE 4, 1903.

NO MODEL.



WITNESSES:

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JAR-CLOSURE.

SPECIFICATION forming part of Letters Patent No. 749,674, dated January 12, 1904.

Application filed June 4, 1903. Serial No. 160,030. (No model.)

To all whom it may concern:

Be it known that I, OTTO NICHOLAS HOFFMAN, a citizen of the United States, and a resident of St. Johnsville, in the county of Montgomery and State of New York, have invented a new and Improved Jar-Closure, of which the following is a full, clear, and exact description.

This invention relates to closures for fruit-jars or other similar packing-receptacles, and has for its object to provide novel details of construction for a jar-closure which are very simple, durable, inexpensive, easy to apply and release, and that will effect a reliable airtight fastening of a fruit or other jar after filling the same and dispense with the use of tools to close or open the jar.

The invention consists in the novel construction and combination of parts, as is hereinafter described, and defined in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of the improvement applied upon a jar to seal it. Fig. 2 is a vertical sectional view substantially on the line 2 2 in Fig. 1. Fig. 3 is a sectional side view substantially on the line 3 3 in Fig. 1; and Fig. 4 is a side view of the upper portion of a jar, showing a modified construction of the closure device.

The improvement may be applied to sheet-metal cans or to jars of clay or glass constructed essentially as shown embodying the following details:

The body 5 of the jar, which is cylindrical and may have any desired capacity, is open at the upper end and provided with an inwardly and upwardly projected annular flange 5^a, that forms the rim of the jar-mouth. The inward and upward disposal of the flange 5^a affords a flat annular seat *a* directly above the side wall of the jar for the reception of the circular pliable joint-ring 6, formed of rubber or other available material. The lid 7 for the closure of the open mouth of the jar 5 is preferably of the same material as the body of the jar, is circular peripherally

and mainly flat, and has a depending flange *b* at its circular edge of such diameter as will permit the flange to seat upon the joint-ring 6 when the jar is to be closed, the lower face of the flange *b* being level, and thus adapted to bear equally on the entire surface of the joint-ring.

The improved means for clamping the lid 7 upon the joint-ring 6 is preferably constructed of two pieces, comprising a four-armed yoke 8 and a bail-clamp 9. The yoke 8 is preferably formed of resilient sheet or plate metal having four arms 8^a, that radiate from a common center and are equally spaced apart, so that they are alined in pairs, as shown in Fig. 1. Two of the oppositely-projected arms 8^a are provided with a depending leg 8^b, said legs having equal length and being adapted to seat within shallow depressions or pockets *c*, formed in the upper surface of the lid 7 at an equal distance from the center of said lid. Upon the ends of the other pair of arms 8^a two similar upwardly-turned keeper-ears 8^c are formed and the length of said arms is so proportioned that the ears may project slightly outside of the periphery of the lid 7 when the yoke is in place thereon. The bail-clamp 9 is preferably formed of wire-rod material and is bent at two points *d*, so as to provide two parallel side bars 9^a, spaced apart by the cross-bar 9^b.

Across the bottom wall of the jar 5, in its outer side and intersecting the center thereof, a channel *e* is formed of suitable dimensions to permit the complete embedment of the cross-bar 9^b therein when the bail-clamp 9 is to be put into service. At the upper end of each side bar 9^a a coupling-loop 9^c is formed, these loops being shaped to receive the keeper-ears 8^c. The length of the side bars 9^a and coupling-loops 9^c together is such that when the yoke 8 is mounted upon the lid 7 and the legs 8^b on said yoke have seated engagement within the pockets *c* it will require manual compression applied upon the upper side of the arms 8^a, whereon the ears 8^c are formed, to effect an engagement of the loops with the keeper-ears.

To conveniently apply the fastening device after the jar has been filled and the lid is placed

thereon over the joint-ring 6, the loop member 9^c on one of the side bars 9^a is engaged by an appropriate keeper-ear 8^c, and simultaneously the legs 8^b are seated in the pockets *c*.
 5 Pressure is now applied upon the other arm 8^a, so as to spring it toward the lid 7, and at the same time the adjacent loop 9^c is manipulated so as to hook it over the depressed arm. It will be seen that this operation is very convenient and is quickly effected, resulting in
 10 putting such draft strain on the bail-clamp as will render the side bars thereof taut and clamp the lid 7 securely upon the joint-ring 6, which will be so compressed by the flange *b* on
 15 the lid 7 as to insure an air-tight joint between said lid and the jar-body 5. To release the clamping device from the lid of the jar, either ear 8^c may be unhooked from the arm 8^a it is engaged with by depressing said arm and at
 20 the same time giving the engaged loop 9^c an outward pull, which will obviously release the bail-clamp from the four-armed yoke.

In Fig. 4 a slight modification is shown, which consists in forming a hinge-joint between the end of one of the arms 8^a and a
 25 respective coupling-loop 9^c by forming a tubulation 8^d on the end of said arm in place of an ear 8^c and engaging said tubulation with the coupling-loop, whereby the device will be
 30 adapted for quick attachment upon a jar and disconnection, as may be desired, the operation being essentially as hereinbefore described.

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

35 1. A jar-closure, embodying a yoke having a plurality of arms, two of said arms pressing on the jar-lid, and a bail-clamp embracing the bottom and sides of the jar, the upper ends of said clamp detachably engaging the other arms
 40 of the yoke.

2. A jar-closure, embodying a yoke having arms, two of said arms having depending legs

seating on the jar-lid, and a bail-clamp adapted to longitudinally embrace the jar, the ends of said clamp having detachable engagement with
 45 the other arms of the yoke.

3. A jar-closure, embodying a four-armed yoke of resilient metal, two of said arms having depending legs adapted to seat on the jar-lid, and a bail-clamp longitudinally embracing
 50 the jar, the ends of said clamp having loops adapted to engage the ends of the other arms on the yoke.

4. The combination with a jar-body, and a lid thereon, of a closure device, comprising a
 55 resilient yoke having four arms, two of said arms seating in pockets in the lid, and a clamp formed of wire, bent to embrace the jar longitudinally, the upper ends of the clamp having loops that detachably engage the ends of
 60 the other pair of arms.

5. The combination with a jar-body and a lid thereon, the jar having a transverse groove in its bottom wall, and the lid being provided with two pockets disposed oppositely, of a clo-
 65 sure device, comprising a resilient yoke formed of plate metal, and having four evenly-spaced arms, two of said arms having similar depending legs, and the other arms being provided with upturned keeper-ears on their ends, and a
 70 rectangular looped bail-clamp formed of wire, the upper ends of the clamp having loops thereon, the looped lower end of the clamp seating in the groove in the jar-bottom, the upper loops engaging the keeper-ears when
 75 the yoke is pressed toward the lid and presses said lid upon the jar.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

OTTO NICHOLAS HOFFMAN.

Witnesses:

O. M. ELLIS,

L. L. CASWELL.