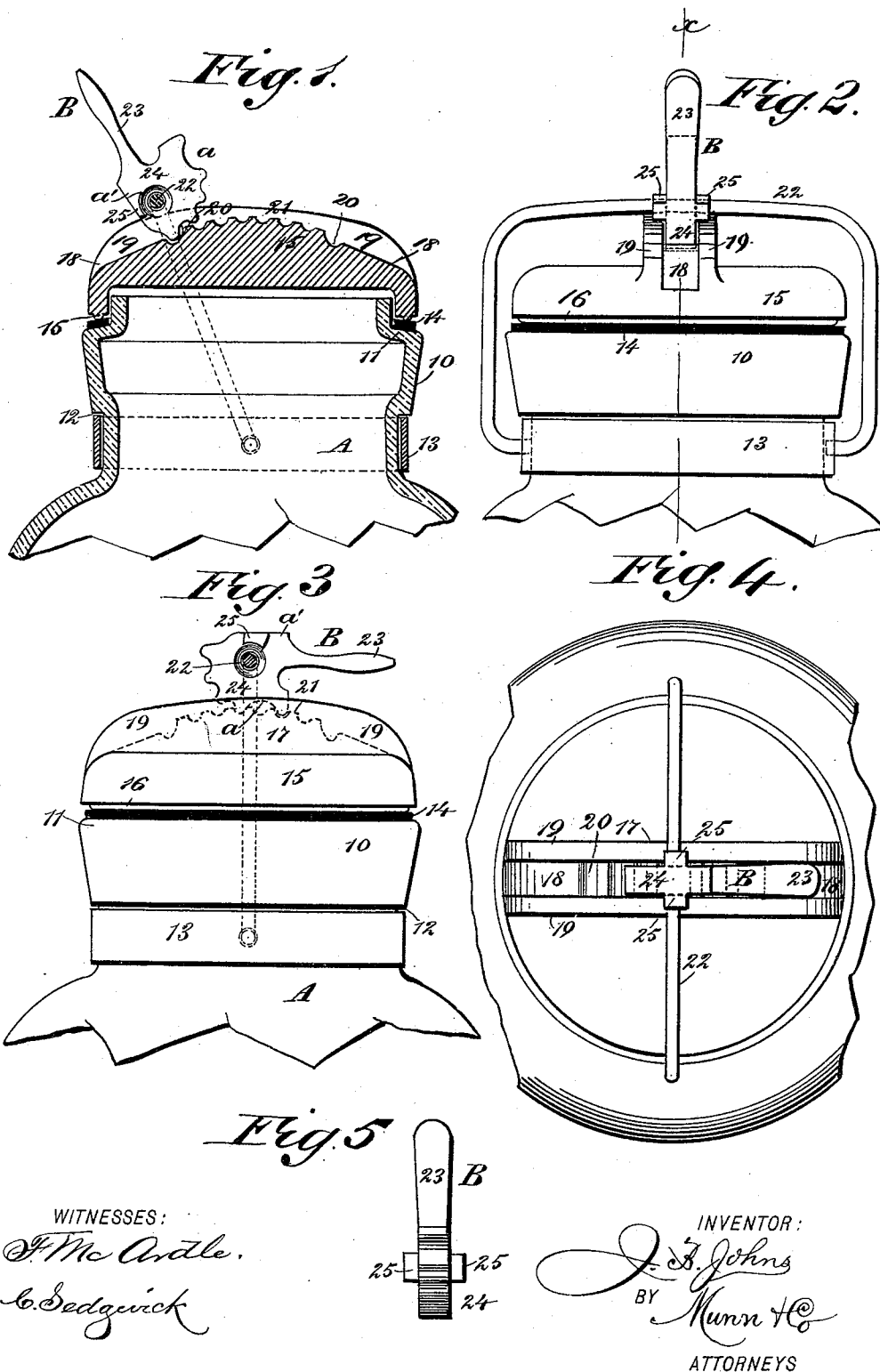


(No Model.)

J. B. JOHNS.
FRUIT JAR COVER AND LOCK THEREFOR.

No. 471,483.

Patented Mar. 22, 1892.



UNITED STATES PATENT OFFICE.

JOHN B. JOHNS, OF FINDLAY, OHIO.

FRUIT-JAR COVER AND LOCK THEREFOR.

SPECIFICATION forming part of Letters Patent No. 471,483, dated March 22, 1892.

Application filed April 13, 1891. Serial No. 388,721. (No model.)

To all whom it may concern:

Be it known that I, JOHN B. JOHNS, of Findlay, in the county of Hancock and State of Ohio, have invented a new and useful Improvement in Fruit-Jar Covers and Locks. Therefor, of which the following is a full, clear, and exact description.

My invention relates to an improvement in covers for fruit-jars and similar receptacles, and also to a locking device to be used in connection with the cover.

The object of the invention is to provide a cover of simple and durable construction and to provide a bail-lock capable of being conveniently and expeditiously applied to or removed from the cover and which when applied will cause the cover to hermetically seal the jar.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

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

Figure 1 is a vertical section taken, practically, on the line *xx* of Fig. 2. Fig. 2 is a side elevation of the cover and lock; and Fig. 3 is another side elevation taken at a right angle to the elevation illustrated in Fig. 2, the bail being in section. Fig. 4 is a plan view of the device, and Fig. 5 is a detail view of the lock-lever located upon the bail.

The neck A of the jar is preferably so formed as to provide an annular embossed band or ring 10 between the body and the upper edge, thus producing an upper shoulder 11 and a lower shoulder 12. A band 13 or the equivalent thereof is secured upon the neck A below the ring 10, the said band being prevented from slipping upward by the ring-shoulder 12. Upon the upper ring-shoulder 11 a gasket 14, of any suitable material, is located, and upon this gasket the cap or cover 15 is adapted to bear. The cap or cover is made to conform to the contour of the neck of the bottle, and is preferably circular. The lower edge of the cap or cover is provided with an annular rib 16, which bears directly upon the gasket 14, and on the up-

per face of the cover a semicircular rib 17 is formed. The rib 17 is provided at each end with a central longitudinal convex channel 18, the side walls 19 of which channels are sufficiently high to constitute guards, and the guards extend from side to side of the cap, as illustrated in Figs. 1, 3, and 4.

Immediately at the inner ends of the channels or slideways 18 a deep recess 20 is formed, and the convexed surface between the recesses 20 and between the guards is provided with a series of transverse grooves, forming a series of teeth 21. This intermediate section of the rib virtually represents a segment of a gear.

A bail 22, preferably of spring-wire, is pivoted at its ends in opposite sides of the band 13. The bail is adapted to extend transversely over the rib 17, and upon the body-section of the bail a lock-lever B is loosely mounted. This lock-lever comprises a handle 23 and a body-section 24, which body-section is shaped as a mutilated gear, the teeth thereof being adapted to mesh with the teeth upon the central portion of the cover-rib 17. The inner tooth of the set is spaced some distance from the next tooth, as illustrated at *a* in Fig. 1, and the opening in the body-section through which the bail passes is eccentrically located. Thus a cam action is in a measure imparted to the segmental toothed body of the lever. Opposite the opening in the body of the lever through which the bail passes ears 25 are formed, one at each side, said bars being adapted to travel upon the guard-walls 19 when the body engages with the base-wall of one end of the channel 18.

In operation the cover is placed upon the gasket 14 and turned until the bail 22 extends transversely across the rib 17. The end of the body of the lever is now placed upon the base-wall of one end of the channel 18, and the lever is slid upward therein, with the ears 25 resting upon the guard-walls 19 of the channel 18 until the outer tooth or the tooth near the convexed edge enters the recess 20 at the inner end of the channel. This tooth now serves as a fulcrum upon which the lever, through the medium of the handle-section 23, is rocked over the toothed surface of the rib until the cover or cap has been pressed downward upon the neck of the jar

as tightly as possible. This point will be reached when the bail is almost over the center of the rib. The next movement is to press the handle-section of the lever downward to the horizontal position shown in Fig. 3, whereupon the extreme inner tooth and the one next thereto will be located one at each side of the central portion of the rib, and the fulcrum of the lever will be at one side of the center of the cover, thus forming a secure lock, as shown in Figs. 3 and 4.

The lock-lever and the cap or cover may be made of glass, hard rubber, metal, or any desired material.

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

1. In a jar-cover and lock therefor, the combination, with a jar and a bail pivotally connected therewith, of a cap provided with a transverse channel having teeth in its bottom and a locking-lever eccentrically mounted on the bail and provided with a semicircular surface having teeth for engaging the teeth 25 of the cap, substantially as described.

2. In a jar-cover and lock therefor, the combination, with a band, a bail pivoted to the band, and a lock-lever loosely mounted upon the bail, comprising a handle-section and a 30 cam-body section provided with a toothed

semicircular surface, the said body-section being eccentrically mounted upon the bail, of a cap or cover provided with an annular rib on its lower edge and with a convexed rib on its upper surface, said rib being provided 35 with a series of teeth and convexed guarded channels, as and for the purpose specified.

3. The combination, with a jar the neck of which is provided with an embossed ring or band forming an upper and a lower shoulder, a ring or band encircling the neck below the lower shoulder, a gasket located upon the upper shoulder of the neck, a bail pivotally attached to the encircling band, and a lock-lever, comprising a handle and a cam-body section 45 eccentrically and loosely mounted upon the bail, the said body-section being provided with teeth, of a cap or cover provided with a rib at its lower edge adapted to engage with the gasket, a rib formed upon the upper face 50 of the cap or cover, having a convexed upper surface and provided in said surface at its ends with longitudinal convex channels and with teeth between the channels adapted to receive the teeth of the lock-lever, as and for 55 the purpose specified.

JOHN B. JOHNS.

Witnesses:

M. D. SHAFER,
M. C. SHAFER.