

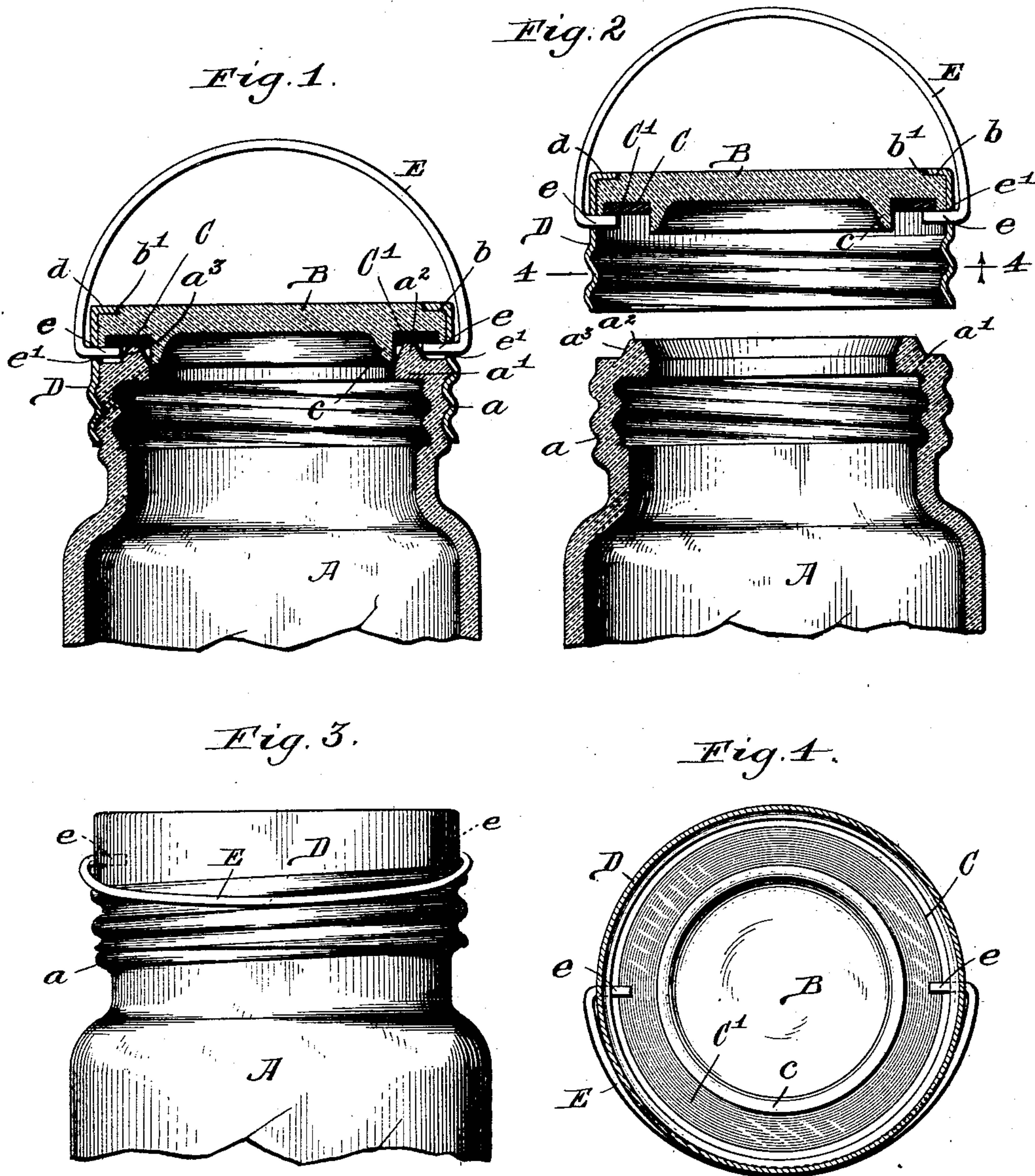
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J. W. FARNOFF.  
CLOSURE FOR JARS, CANS, &c.

(Application filed Feb. 27, 1902.)

(No Model.)



Witnesses:  
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# UNITED STATES PATENT OFFICE.

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## CLOSURE FOR JARS, CANS, &c.

SPECIFICATION forming part of Letters Patent No. 710,961, dated October 14, 1902.

Application filed February 27, 1902. Serial No. 95,843. (No model.)

*To all whom it may concern:*

Be it known that I, JAY W. FARNOFF, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Closures for Jars, Cans, &c.; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in closures for jars, cans, &c., but more particularly to closures for fruit-jars in which a cap is provided to close the opening of the jar by means of a threaded annulus designed to engage corresponding threads on the jar.

The primary object of my invention is to so combine the separable parts of a closure, which in the embodiment shown in the drawings consist of a threaded annulus or outer member, a cap or inner member, and a rubber washer, that they are detachably connected together in a manner to permit the threaded annulus or outer member to be turned and secured to the jar without causing the cap or inner member and the washer to turn with the same, thus preventing the wear on the washer and allowing the cap or inner member and the said washer to accommodate itself to any unevenness of the jar.

Other objects are to so combine the separable parts of a closure by means of a bail that the latter may turn with the annulus or outer member when forcing the cap or inner member against the upper end of the jar, and thus provide a convenient handle to carry the jar to so connect the bail to the threaded annulus or outer member that the ends thereof will confine and hold the cap or inner member and the washer in the said annulus, and that the said bail may be easily removed to permit the parts of the closure to be separated for cleansing.

To this end the invention consists of the new and novel arrangement and combination of parts, as will first be described with reference to the accompanying drawings, which form a part of this specification, and then

pointed out in the claims at the end of the description.

Referring to the drawings, Figure 1 is a central vertical section of the upper part of a fruit-jar having my improved closure applied thereto. Fig. 2 is a similar section showing the closure detached from the jar. Fig. 3 is a side elevation of the upper end of the jar, the bail being shown as swung down to engage one of the external grooves forming the thread of the jar. Fig. 4 is a horizontal section on line 4 4, Fig. 2, looking up, the bail being swung to one side to engage one of the external grooves forming the screw-thread.

Referring to the drawings in detail, like letters of reference refer to like parts in the several figures.

The letter A designates the jar, which has its neck provided with an external screw-thread  $a$  and at its upper end has an inwardly-projecting annular flange  $a'$  and a collar or annular rib  $a^2$ , which forms a shoulder  $a^3$ . The rib  $a^2$  has its sides inclined for a purpose to be disclosed hereinafter.

The cap is designated by the letter B and when used in connection with a fruit-jar is formed of glass or any vitrious or other material suitable for the purpose. The outer surface may be flat, oval, or of any other form, and it has a depressed outer rim  $b$ , which forms a shoulder  $b'$ . The inner face of the cap is provided with an annular groove C, in which a rubber washer C' is placed. The inner center portion of the cap may be finished in any suitable manner, but, as shown, is dished and has an annular rib  $c$ , which is designed to enter the opening in the jar, the inclined inner side of the rib  $a^2$  on the jar aiding in directing the annular rib  $c$  into said opening.

D designates the screw-threaded metallic annulus, having at its upper end an inwardly-projecting flange  $d$ , which bears against the depressed rim  $b$  of the cap and fits closely against the shoulder  $b'$ .

The cap B fits loosely in the annulus, and the two can be quickly assembled or disassembled, as may be desired; but for convenience in handling when removing the closure from the jar or when securing the same there-



to a bail E is provided. This bail has inwardly-projecting ends  $e$ , which enter apertures  $e'$ , formed in the screw-threaded annulus at diametrically opposite points, and pass underneath the outer rim and the rubber washer, thus preventing displacement of the two and avoiding accidental detachment of the parts. The inwardly-projecting ends  $e$  of the bail are made of sufficient length to strike the outer inclined side of the rib  $a^2$ , which tends to force the said ends outward as the closure is tightened on the jar and prevents the bail from striking the upper edge of the annulus. By preference the washer is countersunk to bring its outer face below the face of the cap, which prevents the inner ends of the bail bearing against said washer and wearing or otherwise injuring the same.

By the arrangement of the parts as described an annular space  $e^2$  is provided between the annulus and the collar  $a^2$  on the jar, and in this space the inwardly-projecting ends  $e$  of the bail are adapted to travel when securing or detaching the closure to the jar.

When the closure is secured to the jar, the bail forms a convenient handle to carry the same, and its connection to the annulus is such that when swung to one side the center portion of the bail will snap into a groove forming a part of the threaded portion of the metallic annulus. This provides a very convenient and positive lock for the bail and prevents the same from swinging to and fro when inverting the jar to test the same before storing. It also forms a compact device which can be conveniently packed for transportation.

It is obvious that when securing the closure to the jar the metallic annulus is turned with the bail and simply forces the cap and washer against the upper end of the jar without causing them to turn, which permits the cap to accommodate itself to any unevenness of the jar and also prevents the grinding action on the washer, which action generally wears the washer and causes the same to stretch, thereby becoming uneven and permitting air to enter the jar.

In disassembling the parts of the closure for the purpose of cleansing the same it is simply necessary to spring the ends of the bail out, which permits the cap and washer to be

withdrawn from the metallic annulus with ease.

It is to be understood that this closure may be as readily used on pickling-cans, paint-cans, or any other vessels without departing from my invention and that minor changes in construction, form, or shape may be made in the closure as well as the jar without sacrificing any advantages of my invention or departing from the essence thereof.

Having thus described my invention, what I claim is—

1. The combination with a jar having a tapering collar, of an annulus designed for engagement with said jar, a cap held in said annulus, and a bail having inturned ends which pass through said annulus and lie underneath said cap to prevent displacement of the same, said inturned ends bearing against the said tapering collar to prevent the bail from striking the upper edge of said annulus, substantially as set forth.

2. The combination with a jar having a collar projecting from the upper end thereof, a cap bearing against said collar, an annulus engaging the upper end of the jar and serving to hold the cap firmly against said collar, an annular space between said collar and the annulus, and a bail having inturned ends which pass through said annulus and are adapted to travel in said annular space, said inturned ends serving to hold the cap in the annulus, substantially as set forth.

3. The combination with the jar, of a cap having an annular groove on its inner face near its periphery and being designed to close the opening of the jar, a washer held in said groove and being somewhat thinner than the depth of the same, an annulus designed for connection to the jar, and serving to hold the cap firmly against the upper end of the same, and detachable fastening means having inwardly-projecting studs which pass through said annulus and lie underneath said washer and the surrounding portion of said cap, substantially as set forth.

In testimony whereof I have affixed my signature in the presence of two subscribing witnesses.

JAY W. FARNOFF.

Witnesses:

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