A. RICHARDS.

CLOSURE FOR JARS.

APPLICATION FILED JAN. 3, 1913.

1,067,758. Patented July 15, 1913.

Fig. 1.

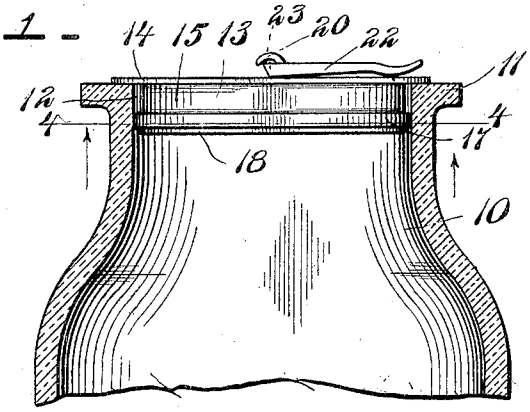


Fig. 3.

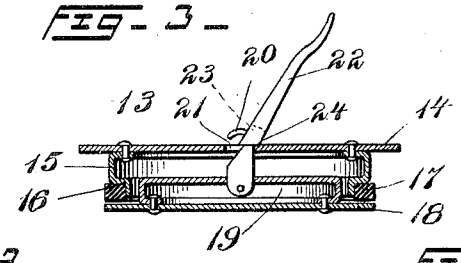


Fig. 2.

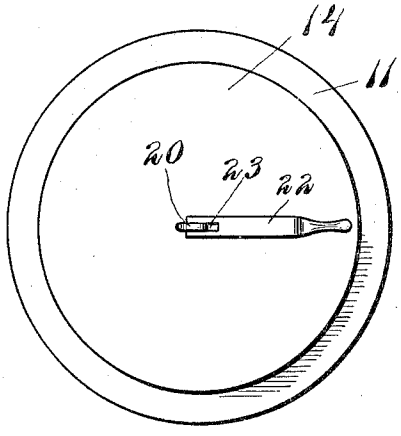
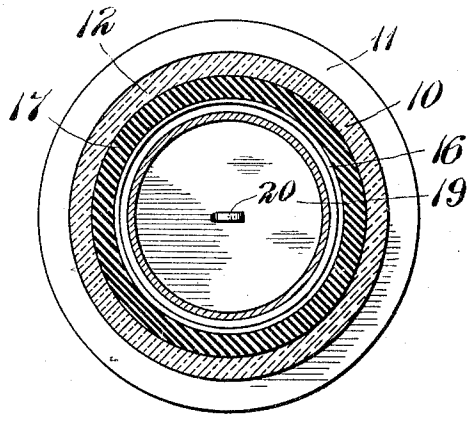


Fig. 4.



Witnesses

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CLOSURE FOR JARS.

1,067,758. Specification of Letters Patent. Patented July 15, 1913.

Application filed January 3, 1913. Serial No. 740,027.

To all whom it may concern:

Be it known that I, ALFRED RICHARDS, a citizen of the United States, residing at Joplin, in the county of Jasper and State of Missouri, have invented new and useful Improvements in Closures for Jars, of which the following is a specification.

An object of the invention is to provide a closure, particularly adaptable for use on preserving jars and the like for hermetically sealing a jar.

The invention embodies, among other features, a closure which is simple and durable in construction and which can be quickly and readily applied to a jar for the purpose of hermetically sealing the same.

A still further embodiment of the invention resides in a structure which can be removed from the jar as readily as the same is attached thereto and which, in its application to the jar, does not require any exceptional skill or strength on the part of the operator.

In the further disclosure of the invention reference is to be had to the accompanying drawings, constituting a part of this specification, in which similar characters of reference denote corresponding parts in all the views, and in which:

Figure 1 is a side elevation of my device, showing the same applied to a jar, the jar being shown in section; Fig. 2 is a plan view of the device, showing the same in applied position; Fig. 3 is a vertical sectional view taken on the line 3—3 in Fig. 2; and Fig. 4 is a horizontal sectional view taken on the line 4—4 in Fig. 1, looking in the direction of the arrow.

Referring more particularly to the views, I disclose a jar 10 having the usual annular flange 11 encircling the opening 12 of the jar, and a closure 13 for closing the opening 12 to hermetically seal the jar.

The closure 13 comprises a cover plate 14 of a greater diameter than the opening 12 of the jar and which is adapted to lie upon the annular flange 11 as shown, the said cover plate having an annular member 15 secured to or formed with the cover plate and depending from the under side thereof, the said annular member being of less diameter than the opening 12 and reduced at its lower end to form an annular seat 16 adapted to receive a rubber or other flexible washer 17, which is preferably of slightly less diameter than the seat 16 and is expanded thereon.

A clamping plate 18 of less diameter than the opening 12 of the jar is adapted to engage the under face of the washer 17 and exert a pressure on the washer to force the periphery of the washer against the circular wall of the jar forming the opening 12 and the said clamping plate has secured to the upper face thereof a stirrup 19, on which is mounted to swing a hook member 20, projecting through an opening 21 in the cover plate 14, a cam-like operating lever 22 having the hook end of the hook member passed through an opening 23 therein so that when a downward pressure is exerted on the free end of the lever 22 the clamping plate 18 will be moved upwardly into engagement with the washer 17 and force the periphery of the washer against the wall of the jar forming the opening 12, as will be readily seen by referring to the views.

In the application of the closure 13 to the jar 10, when it is desired to hermetically seal the jar, the closure is arranged to close the opening to the jar when the lever 22 is in its uppermost position, the clamping plate 18 at this time being slightly spaced from the washer 17. Now when the closure 13 has been placed on the jar 10 in the manner shown, a downward pressure is exerted on the free end of the lever 22, thus pressing the free end of the lever against the cover plate 14 and the said lever having a fulcrum 24, which engages the cover plate when the lever is pressed downwardly, it will be seen that the inner end of the lever will be forced upwardly and away from the cover plate, thus imparting an upward movement to the hook member 20 and moving the clamping plate 18 upwardly and into engagement with the under face of the washer 17, thus exerting sufficient pressure on the washer to force the same outwardly or expand the washer so that the periphery thereof will engage the wall of the jar forming the opening 12 and hermetically seal the opening.

From the foregoing description and by referring to the views, it will be readily seen that the closure described can be as easily removed from the jar 10 as the same is applied thereto, it being simply necessary to move the free end of the lever 22 upwardly, thus releasing the upward pull on the hook member 20 and permitting the same to move

downwardly and space the clamping plate 18 from the washer 17, thus resulting in the contraction of the washer away from the wall of the jar forming the opening 12, so that the closure 13 can be readily removed from the jar. The device described can be preferably stamped from sheet metal or the like, and can be cheaply manufactured to efficiently accomplish the desired result.

Having thus described my invention, I claim:

As a new article of manufacture, a closure for jars comprising a cover plate adapted to repose upon the jar, an annular member depending from the cover plate to extend within the opening of the jar, an annular seat formed on the lower end of the said member by striking a portion thereof inwardly to reduce the same, a washer supported on the seat and encircling the same, with the said washer normally spaced from the wall forming the opening of the jar, a clamping plate, a stirrup secured to the upper face of the clamping plate and having the medial portion thereof spaced from the clamping plate, with the ends of the stirrup adjacent the point of connection of the clamping plate lying between the clamping plate and the said annular member and inclosed by the clamping plate, the annular member and the said cover, a hook member having pivotal connection with the stirrup and projecting upwardly through an opening in the cover plate, and a cam lever having the hook member connected thereto and adapted to lie on the cover plate so that the cam lever, when actuated, will exert an upward pull on the hook member and move the clamping member into engagement with the washer to expand the periphery thereof against the wall forming the opening of the jar.

In testimony whereof I affix my signature in presence of two witnesses.

ALFRED RICHARDS.

Witnesses:

FRED LANGGEUDT,

CHAS. O'NEAL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."