C. J. JOHNSON.

JAR CLOSURE.

APPLICATION FILED NOV. 2, 1911.

1,040,207.

Patented Oct. 1, 1912.

2 SHEETS—SHEET 1.

Fig. 1

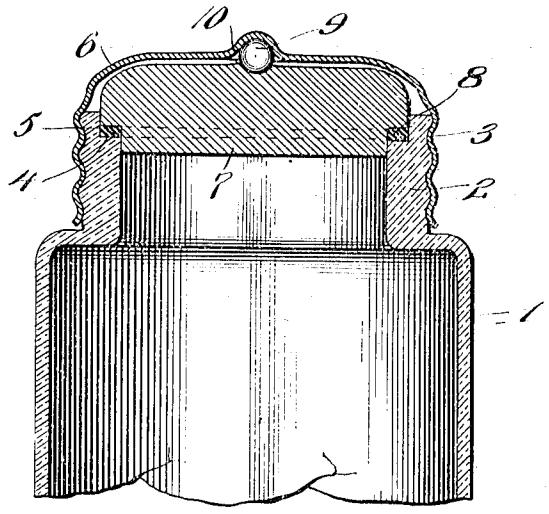
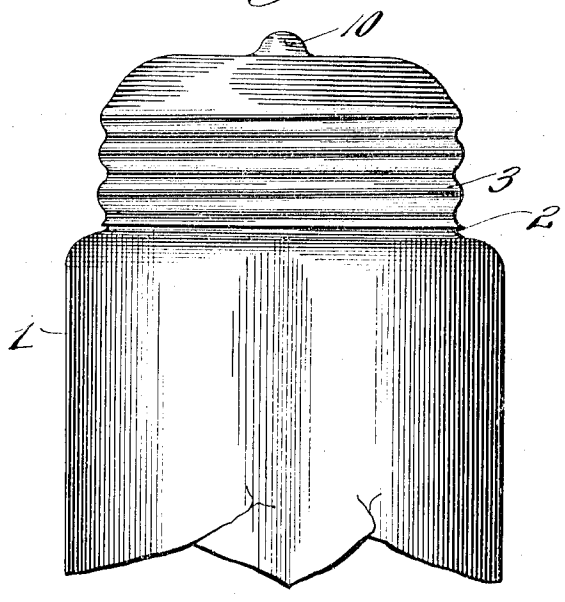


Fig. 2



Witnesses

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2 SHEETS—SHEET 2.

Fig. 3

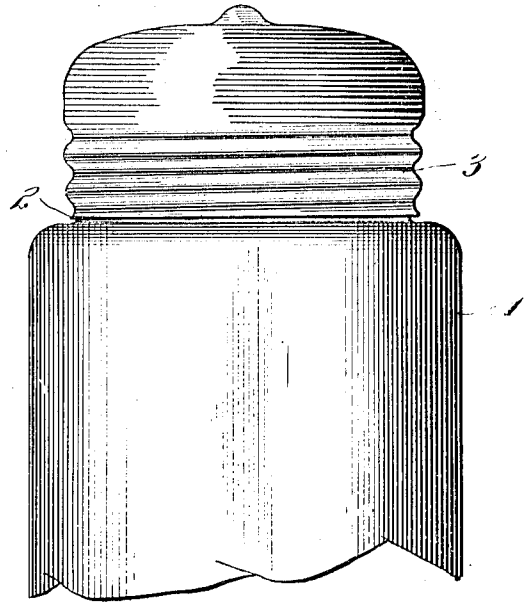


Fig. 4

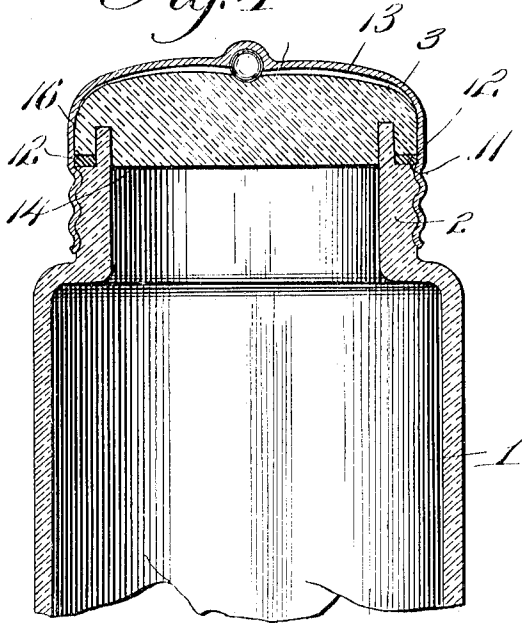
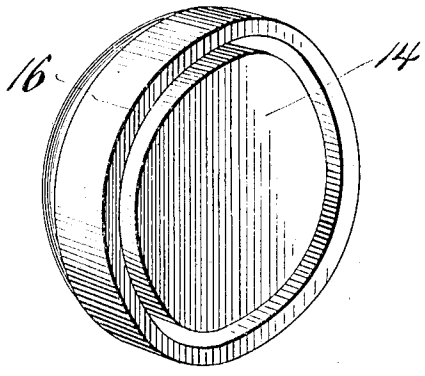


Fig. 5



Witnesses

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UNITED STATES PATENT OFFICE.

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JAR-CLOSURE.

1,040,207. Specification of Letters Patent. Patented Oct. 1, 1912.

Application filed November 2, 1911. Serial No. 658,128.

To all whom it may concern:

Be it known that I, CARL J. JOHNSON, a citizen of the United States, residing at De Kalb, in the county of Dekalb and State of Illinois, have invented new and useful Improvements in Jar-Closures, of which the following is a specification.

This invention relates to jar closures and more particularly to that type employing a screw top.

The universally used jar of the present day embodies a receptacle with a shouldered neck or flange provided with threads to receive a cap, the neck being surrounded by a gasket upon which the cap screws. In screwing the cap down on this type of jar the gasket frequently becomes wrinkled and where an intermediate cap is not used, and frequently in the latter case as well, the pressure is unequal around the jar so that the liability of air getting into the jar is greater at some points that at others.

It is the object of this invention to avoid these difficulties and broadly speaking consists in providing a jar with an intermediate pressure disk or cap and arranging between the same and the screw cap an anti-friction ball which centralizes the pressure of the cap upon the disk in such a manner that the pressure is distributed equally around the disk and upon the packing gasket, the ball permitting free rotation in the screw cap.

Further objects of the invention will appear as the following specific description is read in connection with the accompanying drawing, which forms a part of this application, and in which:—

Figure 1 is a vertical sectional view. Fig. 2 is a side elevation. Fig. 3 is an elevation of a modified form of jar with parts broken away. Fig. 4 is a sectional view therethrough with the cap applied. Fig. 5 is a perspective view of the cap looking from the under side.

Referring more particularly to the drawing, 1 represents a jar of ordinary form having the exteriorly threaded neck 2 which is adapted to receive the screw cap 3. The neck is internally recessed to form a seat 4 for the gasket 5. The packing member is shown as comprising a disk 6 having a depending circular lug 7 which is smaller than the disk and forms a shoulder 8 which is adapted to rest upon the gasket 5, the projection 7 entering the neck through the gasket and preventing displacement thereof. The upper side of the disk is provided with a circular recess and loosely seated in the recess is an anti-friction member in the shape of a ball 9 whose upper end is seated in a bowl-shaped recess 10 formed in the cap 3. It will be noticed that when the cap is screwed down it will rotate upon the ball and the ball will rotate upon the disk so that there will be little friction between the parts and the pressure will be central upon the disk so that it bears upon the gasket evenly all around.

In the modified form shown in Figs. 3, 4 and 5, the jar is provided with the usual threaded neck. Upon its upper end an external shoulder 11 is produced upon which is seated the packing gasket 12. The disk 13 is somewhat similar in form to the one shown in Figs. 1 and 2 but has formed on its inner side a reinforcing lug or projection 14 and is provided with the overhanging flange 16 which bears against the gasket and pressed into place by the disk. This lug 14 enters the neck and reinforces the entire structure. It may be dispensed with if desired and the cap used without the same. This strengthening of the disk at the bottom limits material at the top and thereby provides a greater space for the cap and the anti-friction ball.

Having thus described the invention, what I claim as new is:—

1. In a device of the class described, a receptacle having a threaded neck, a gasket receiving shoulder thereon, a gasket mounted on the shoulder, a closing cap seated on the gasket, means to hold the closing cap upon the gasket, and a centrally positioned anti-friction device loosely interposed between the cap and said means.

2. In a device of the class described, a re-

ceptacle having a threaded neck, a gasket receiving shoulder therein, a gasket mounted on said shoulder, a closing disk seated upon the gasket and extending into the same, a screw cover mounted upon the neck, and a centrally positioned anti-friction ball loosely arranged between the cover and the disk.

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

CARL J. JOHNSON.

Witnesses:
H. L. TYMESEN,
E. J. WEEKS.