

No. 724,256.

PATENTED MAR. 31, 1903.

W. E. BROWN.
JAR CLOSURE.

APPLICATION FILED JUNE 3, 1902.

NO MODEL.

Fig. 1.

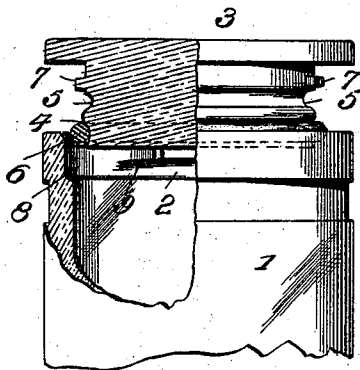


Fig. 2.

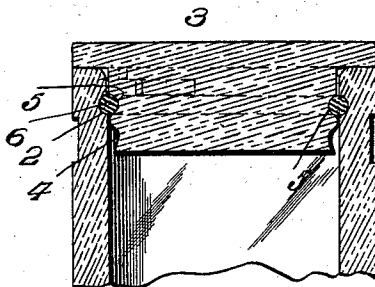


Fig. 3.

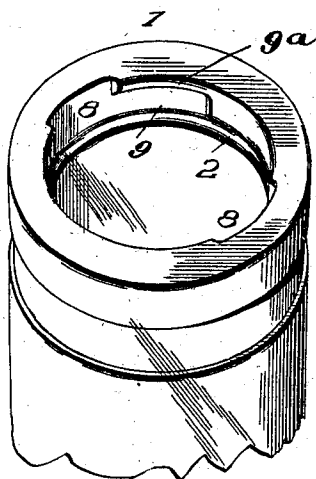
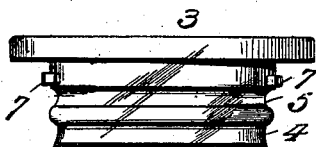


Fig. 4.



Inventor

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UNITED STATES PATENT OFFICE.

WILLIAM E. BROWN, OF LOS ANGELES, CALIFORNIA, ASSIGNOR TO B-W
AUTOMATIC JAR & BOTTLE COMPANY, OF LOS ANGELES, CALIFORNIA,
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JAR-CLOSURE.

SPECIFICATION forming part of Letters Patent No. 724,258, dated March 31, 1903.

Application filed June 3, 1902. Serial No. 110,095. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM E. BROWN, of Los Angeles, in the county of Los Angeles and State of California, have invented certain new and useful Improvements in Jar-Closures; 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.

The object of this invention is to provide a jar or bottle closure so constructed that in forcing the closure home and securing the gasket-ring in proper position not only will the vessel be made air-tight, but the closure or stopper will be securely locked as against accidental displacement by internal pressure. The invention will be hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a vertical section and side elevation. Fig. 2 is a similar view with the stopper forced home. Fig. 3 is a perspective view of the upper portion of the jar with the stopper removed. Fig. 4 is an edge view of the stopper.

On the interior of the jar, bottle, or other vessel 1, near the upper end, is an annular groove 2, of approximately semicircular formation in cross-section. The stopper 3 has on its neck or reduced cylindrical portion two annular grooves 4 and 5, the former being at or very near the lower end of the neck and separated from groove 5 by a space approximately equal to the distance between the upper edge of groove 2 and the top edge of the vessel.

6 is a gasket-ring of suitable material, preferably rubber, and circular in cross-section, so that it will snugly fit within groove 5 of the stopper and groove 2 of the vessel and prevent all leakage. To insert the stopper, the ring being first positioned on the lower end thereof, within groove 4 and made to rest on the upper edge of the jar, pressure upon the stopper will force the latter into the jar-opening, the ring going with it, but at the same time riding up on the stopper, so that when it reaches the groove 2 it will also be in line, or approximately so, with groove 5, the

stopper being thus drawn to its seat with a quick snap. The lower groove 4 is not really essential, as any provision for temporarily holding the ring will suffice, sufficient space being provided between such temporary rest for the ring and the groove 5 as to insure the coincidence of the ring and grooves 2 and 5 when the stopper is forced home.

In the inward travel of the stopper, with the ring compressed between it and the jar, the coil or twist or roll given the ring is not usually uniform, with the result that the flanged end of the stopper will not fit snug against the end of the jar. To effect the proper centering of the ring in its seat, it is necessary to give the stopper a slight axial turn, whereupon the flanged end of the stopper will be drawn tight against the jar at every point.

To avoid all danger of forcing the stopper by working or fermentation of the contents of the jar, it is essential that the stopper be locked. By my invention I contemplate effecting this locking in the turning of the stopper to center the gasket-ring in its seat. From diametrically opposite points on the stopper project side lugs 7, which in positioning the stopper in the first instance coincide with cut-outs 8 in the jar. After the stopper is forced inward the axial turning thereof to seat the ring will place the lugs in ways 9, extended laterally from the cut-outs beneath overhanging portions 9^a, thereby locking the stopper as against working of the contents. To remove the stopper, it is necessary to first turn it axially to bring lugs 7 in line with cut-outs 8, clearing the overhanging portions 9^a, whereupon by equal outward pressure of the thumbs against diametrically opposite points of the stopper the latter will be quickly forced outward, the ring aiding in this result once it is unseated. As the stopper is withdrawn from the jar the ring will be around its end in groove 4 if the stopper be provided therewith.

The advantages of my invention are apparent. It will be observed that I have provided simple and highly-efficient means for effectively sealing and locking a "processing jar"—that is, a jar to be used for food products and then subjected to treatment.

Not only is the closure air-tight, but it is securely locked as against displacement by internal pressure. The operation is quickly accomplished, since the locking device is actuated by the movement necessary to properly seat the sealing-ring.

I claim as my invention—

1. A jar or other vessel having an annular groove near its upper end, a stopper or closure having a corresponding annular groove near its upper end, a gasket-ring carried by the stopper and designed to be seated in the grooves of the jar and stopper when said grooves are brought into coincidence by the inward movement of the stopper, said stopper being turned axially to center the ring in its seat in said grooves, and means for locking said stopper in place, said stopper being so locked by such means when it is so turned axially, as set forth.

2. A jar or other vessel having an annular groove near its upper end, and also having opposite cut-outs, and ways leading from the inner ends of said cut-outs, a stopper or closure having a corresponding annular groove near its upper end, a gasket-ring carried by the stopper and designed to be seated in the grooves of the jar and stopper when said

grooves are brought into coincidence by the inward movement of the stopper, which latter is turned axially to center the ring in its seat in said grooves, lugs projecting laterally from the stopper near the upper end thereof and designed to be passed through said cut-outs and fit in said ways, when the stopper is turned axially, as set forth.

3. A jar or other vessel having an annular groove near its upper end and also having cut-outs and overhanging portions, a stopper or closure having an annular groove, a gasket carried in such groove of the stopper designed to be seated in the groove of the jar, lugs projecting laterally from the stopper designed to be passed through said cut-outs and fit beneath said overhanging portions, such lugs being extended beneath such portions when the stopper is turned axially to center the ring in the grooves, as set forth.

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

WILLIAM E. BROWN.

Witnesses:

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J. L. FLEMING.