J. SCHIES.

JAR CLOSURE.

APPLICATION FILED AUG. 23, 1909.

941,538. Patented Nov. 30, 1909.

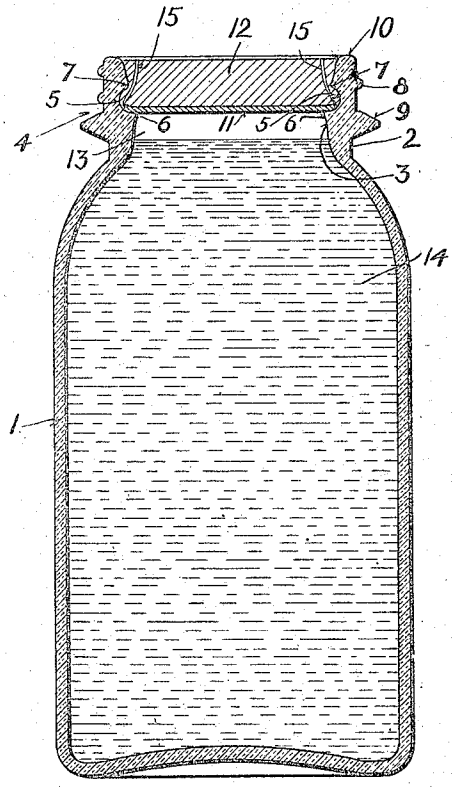

Fig. 1.

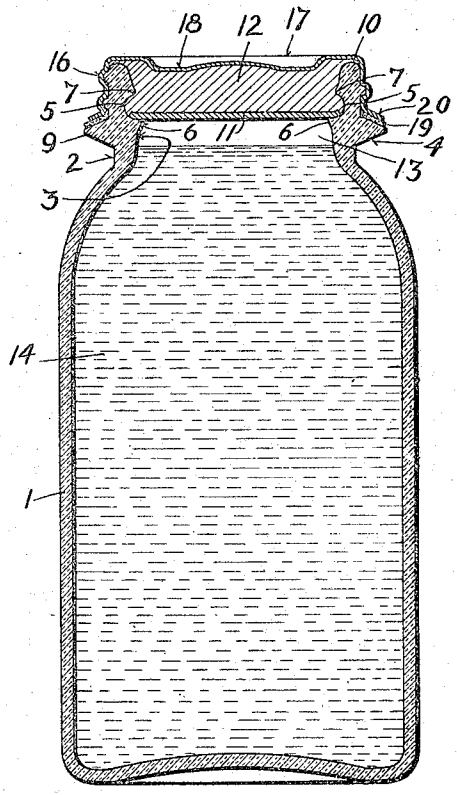

Fig. 2.

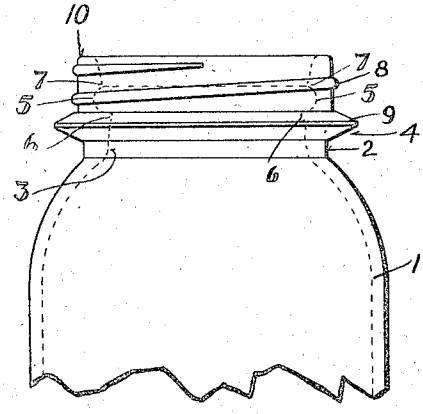

Fig. 3.

Witnesses:
Homer Bradford
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UNITED STATES PATENT OFFICE.

JOHN SCHIES, OF ANDERSON, INDIANA.

JAR-CLOSURE.

941,538. Specification of Letters Patent. Patented Nov. 30, 1909.

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To all whom it may concern:

Be it known that I, JOHN SCHIES, a citizen of the United States, residing at Anderson, in the county of Madison and State of Indiana, have invented certain new and useful Improvements in Jar-Closures, of which the following is a specification.

It is the object of my invention to provide a new and improved jar-closure having interior and exterior closing means arranged to co-act and so arranged that secure closing means for the jar may be obtained without danger of seepage of air therethrough.

The invention will be readily understood from the following description and claims, and from the drawing, in which latter:

Figure 1 is a central vertical longitudinal section of my improved device, showing the jar partly broken away, and prior to the application of the screw-top thereto. Fig. 2 is a similar view of the same with the screw-top in position; and, Fig. 3 is a side elevation of the jar, partly broken away.

1 represents the jar, the neck 2 of which has a mouth 3 comprising a lip 4 provided with an inner annular groove 5 having a lower annular ledge 6 and an upper annular wall 7. The said lower annular ledge has an inner face which is of less diameter than the diameter of the inner face of the upper annular wall of said groove. The said groove with its lower ledge and upper wall are preferably respectively confined within their own horizontal planes without extending into each other's horizontal planes; that is to say, the said groove, lower ledge and upper wall are respectively located the same distance from the bottom of the jar throughout their circumferences.

The outer face of the lip is provided with an integral thread 8, the said lip having an outer annular ledge 9 at the base of said thread of greater diameter than said thread. In this manner the said lip is provided at its inner face with an annular groove, having a lower ledge and an upper wall and an outer thread and outer ledge, the lip forming the common support for the groove, the thread and the outer ledge. The said thread is located between said outer ledge and the outer end 10 of said lip, the inner and outer ledges being preferably located at substantially the same level on opposite sides of said lip.

For sealing the jar a flexible disk 11 of cardboard or other preferably porous substance which is preferably of slightly greater diameter than the upper wall of said inner groove is forced or flexed past said upper annular wall into said inner groove for causing said disk to rest upon said inner ledge, the said upper wall preventing retraction of said disk. A body of sealing material, shown at 12, is then poured in hot state upon the disk, which in turn heats the air in the slight space 13 in the interior of said jar under said disk and above the body 14 of the contents of the jar. This body of air being thus heated will expand and find relief through the sealing composition, forming vents therein, for instance as indicated at 15, thereby rarefying the air in the space 13. When the air has been thus rarefied, and prior to cooling of said air, a screw-top 16, the transverse web 17 of which has a preferably annular depending portion 18, is received about the thread on the outer periphery of the lip and screwed down for causing the said depending portion to be received within said lip for contacting the upper surface of the body of sealing material, thereby pressing upon the same, and causing the same to spread for closing the vents formed in said sealing material by the escape of air therethrough. A sealing ring 19 of rubber or suitable composition is received between the lower flaring foot 20 of the screw-top and the ledge 9 on the outer face of the lip of the jar. In this manner a secure seal is formed for the jar.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent is:

1. A glass jar having a mouth comprising an annular lip formed with an annular groove on its inner face and a protruding thread and outer annular ledge on its outer face, the said inner annular groove formed with an inwardly extending annular ledge and an upper wall, the inner face of said inwardly extending annular ledge being of less diameter than the diameter of the inner face of said upper wall of said groove, and the said outer protruding thread being located on said lip between the said outer ledge and the outer end of said lip, substantially as described.

2. In combination, a glass jar having a mouth comprising an annular lip formed with an annular groove on its inner face and an outer protruding thread and outer annular ledge on its outer face, the said inner annu-

lar groove formed with an inwardly extending annular ledge and an upper wall, the inner face of said inwardly extending annular ledge being of less diameter than the diameter of the inner face of said upper wall of said groove, and the said outer protruding thread being located about the outer face of said lip between the said outer ledge and the outer end of said lip, a flexible disk of greater diameter than said diameter of the inner face of said upper wall arranged to be flexed past said upper wall and received in said groove upon said inner ledge, a cushion-ring received upon said outer ledge, a body of sealing material received in hot state upon said flexible disk between said disk and the outer end of said lip for having exhaust-vents formed therein by expansion of the air between said disk and the contents of said jar, and a screw-top received about said outer thread and having a depending portion received within said lip for contacting said sealing-material and spreading the same for closing said exhaust-vents, and said screw-top provided with an annular foot arranged to press upon said cushion-ring by screwing said top about said outer thread, substantially as described.

In testimony whereof, I have signed my name hereto in the presence of two subscribing witnesses.

JOHN SCHIES.

Witnesses:
CLARA SCHIES,
GERTRUDE SCHIES.