

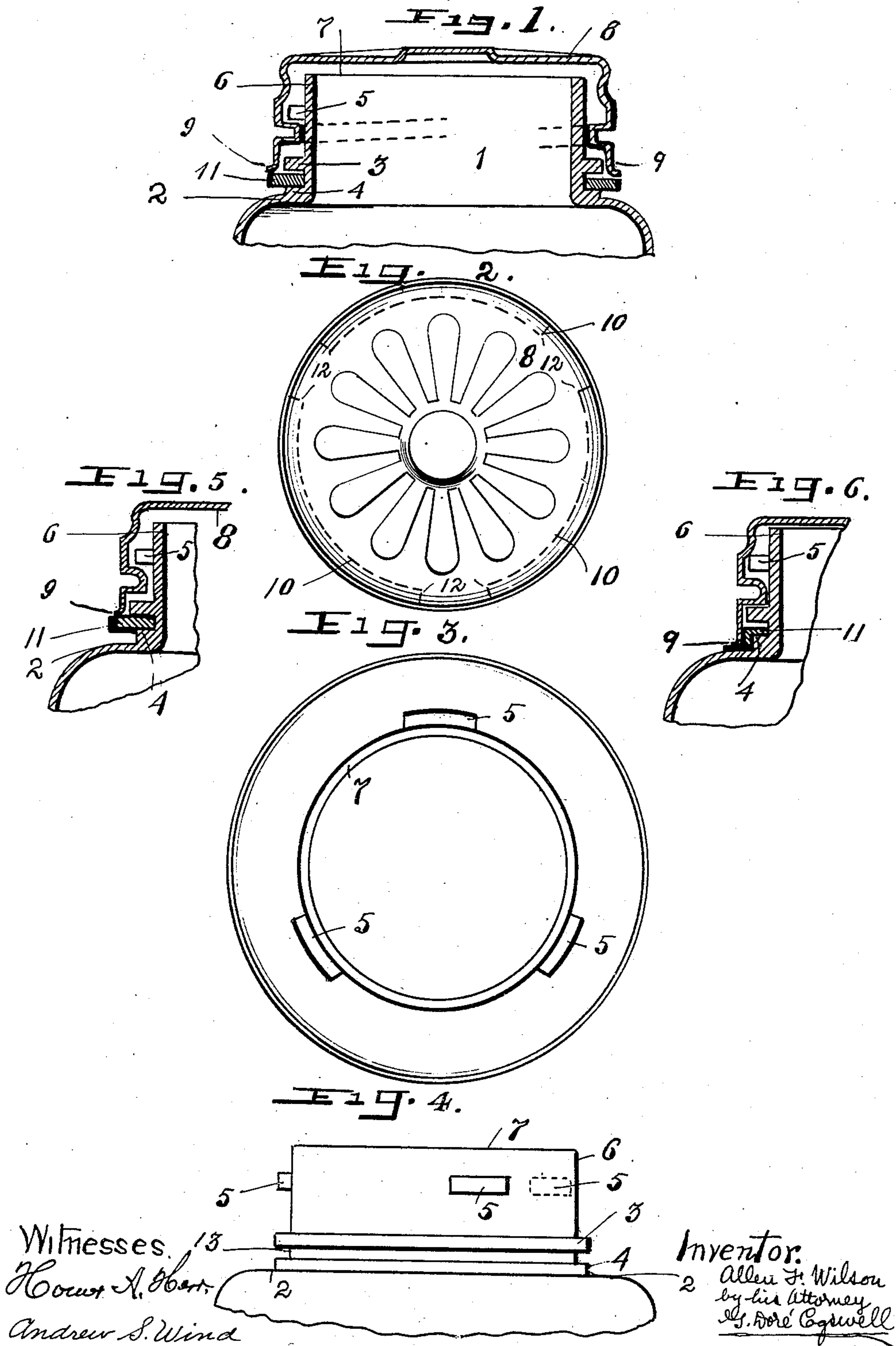
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A. F. WILSON.
CLOSURE FOR JARS OR SIMILAR VESSELS.

APPLICATION FILED MAY 26, 1904.

NO MODEL.



UNITED STATES PATENT OFFICE.

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CLOSURE FOR JARS OR SIMILAR VESSELS.

SPECIFICATION forming part of Letters Patent No. 774,014, dated November 1, 1904.

Application filed May 26, 1904. Serial No. 209,825. (No model.)

To all whom it may concern:

Be it known that I, ALLEN FURGASON WILSON, a citizen of the United States, residing at Clayton, in the county of Gloucester and State of New Jersey, have invented a new and useful Improvement in Closures for Jars or Similar Vessels so as to Make Them Air-Tight, of which the following is a specification.

This invention relates to the closing of jars and similar vessels so as to make them air-tight, and has for its object greater facility of closing and opening, greater certainty of air-tight closure, and better durability of the jars and covers for repeated use; and to this end it consists in an improved construction of cover or cap or lid and in combination therewith an improved form of neck for the jars or receptacles, between which cover, cap, or lid I interpose an improved form of packing or gasket.

The construction of my invention is shown in the accompanying drawings, in which—

Figure 1 is a vertical section of a jar neck and cap embodying this invention. Fig. 2 is a plan view of the top of said cap. Fig. 3 is a plan view of the neck; Fig. 4, an elevation of the neck. Fig. 5 shows an enlarged section of a part of the gasket and adjacent parts before closing, and Fig. 6 shows a like section of the same parts when closed.

Referring to the drawings, 1 represents the neck of a jar having a shoulder 2 where it joins the body as nearly flat as is consistent with the delivery of the jar from the mold. A short distance above the shoulder 2 is a circumferential bead 3, with a circumferential step 4 a short distance below projecting from said shoulder, leaving a groove 13 between them and above the bead a plurality of segmental projections 5. Above the projection 5 is a cylindric neck 6, terminating in a flat surface 7. The jars, as described, may be formed in a mold, and the surface 7 may be ground flat in the usual manner.

8 is the cap of such diameter near the top as to fit easily on the neck 6 and below is of such diameter as to fit closely around the segmental projections 5 and bead 3, and at the lower edge is rounded.

A gasket 11, of india-rubber, is placed around the neck 1 so as to fit closely to it, filling the groove 13 between the shoulder and circumferential step and bead 3, as shown in Fig. 5.

In the inside of the cap 8 are found a plurality of helical segments 10 with short intervening spaces 12, through which the projections 5 can pass upon placing the cap in position, so that the lower rounded edge 9 rests on the gasket 11. Upon turning the cap slightly the helical segments 10 engage the projections 5 on the neck 1 and draw the cap downwardly, causing the lower rounded edge 9 to impinge upon the gasket 11, which it compresses and forces into intimate contact with lower edge 9 of the cap, the shoulder 2 and circumferential step 4, the neck 1 and bead 3 making an effectual and air-tight sealing of the jar, as shown in Figs. 1 and 6. The top of said cap 8 consists of a series of corrugations or ribs arranged as shown, having a raised or pyramidal center extending above the level of the external edge of said cap, with plurality of ribs, corrugations, or braces extending from the said raised or pyramidal center of cap to outer edge of same, so constructed as to prevent any sinking or depression of said lid or cap from air-pressure or other causes, Fig. 2.

But very slight exertion is required to close the jar as thus constructed, and this construction by cooling of the heated contents in such cases causes the atmospheric pressure to hold the lid tightly on the jar. By turning the cap in a reverse direction the impingement of the rim 9 on the gasket ceases and air enters the jar, and the cap or lid may be taken off without difficulty.

By reason of the form of the neck and bead and circumferential step and gasket, combined with the rounded edge of the rim 9, the gasket, while effectually closing the jar or vessel, is unimpaired and can be used repeatedly.

Having described my invention, what I claim is—

1. A closing device for air-tight vessels, consisting of a cap, having a plurality of internally-projecting helical segments, in combi-

nation with a jar or similar vessel, having a neck having a circumferential bead and shoulder with a circumferential step projecting from said shoulder with an intervening
5 groove, a gasket in said groove, resting on said step, and a plurality of projecting segments in the neck above said bead and step; the plurality of internally-projecting helical
10 segments in the cap adapted to engage in the segments on the neck of jar or similar vessel and the said cap having a convex or rounded lower edge adapted to impinge on said gasket compressing it over the corner of said step to said shoulder.

15 2. A ribbed or corrugated cap, having a

raised or pyramidal center extending above the level of the external edge of said cap, with plurality of ribs, corrugations or braces extending from the said raised or pyramidal center of cap to outer edge of same, to prevent any sinking or depression of said lid or cap by air-pressure when sealed, as set forth. 20

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

ALLEN FURGASON WILSON.

Witnesses:

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