

No. 721,897.

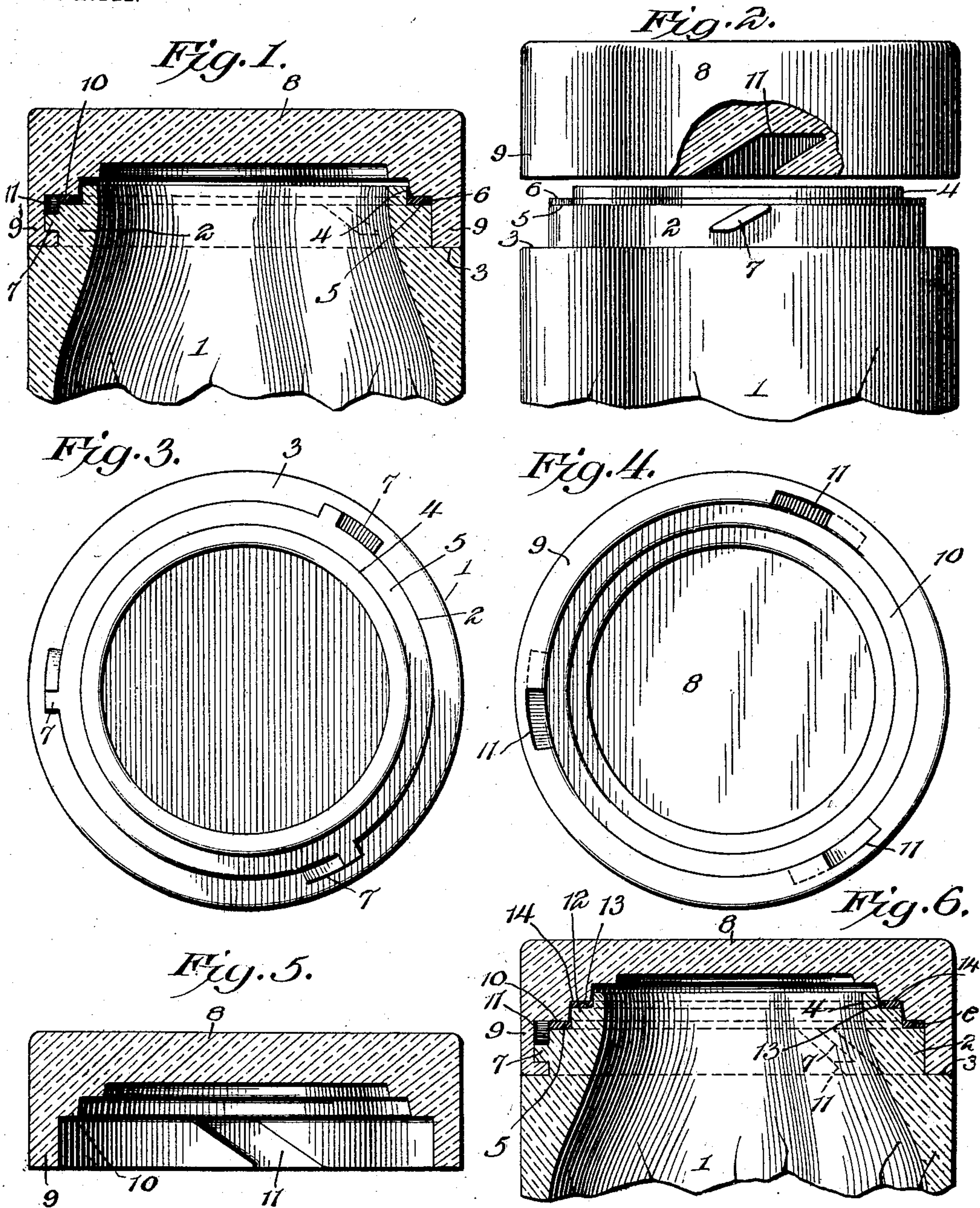
PATENTED MAR. 3, 1903.

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CLOSURE FOR JARS, BOTTLES, JELLY GLASSES, &c.

APPLICATION FILED JULY 24, 1902.

NO MODEL.



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UNITED STATES PATENT OFFICE.

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CLOSURE FOR JARS, BOTTLES, JELLY-GLASSES, &c.

SPECIFICATION forming part of Letters Patent No. 721,897, dated March 3, 1903.

Application filed July 24, 1902. Serial No. 116,859. (No model.)

To all whom it may concern:

Be it known that we, JOHN W. KUNKEL, residing at Lazearville, and CLARENCE ROBINSON, residing at Wellsburg, in the county of Brooke and State of West Virginia, citizens of the United States, have invented a new and useful Closure for Jars, Bottles, Jelly-Glasses, &c., of which the following is a specification.

10 This invention relates to air-tight closures for receptacles, and while applicable to any character of receptacle is particularly adapted for sealing fruit-jars. It is designed to facilitate the application and removal of the
15 cover, to maintain an air-tight closure between the receptacle and the cover, and to have the latter form a flush continuation of the body of the jar, so as to avoid projections, and thereby permit of close packing of a
20 plurality of jars.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in
25 the accompanying drawings, and particularly pointed out in the appended claim, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claim without departing from the spirit or sacrificing any of the
30 advantages of the invention.

In the drawings, Figure 1 is a sectional view taken through the cover and neck portion of a jar embodying the present improvements.
35 Fig. 2 is a side elevation showing the cover in position to be applied to the jar, a portion of the cover being broken away to show one of the locking-recesses therein. Fig. 3 is a top plan view of the jar. Fig. 4 is an inverted
40 plan view of the cover. Fig. 5 is a longitudinal sectional view of the cover. Fig. 6 is a view similar to Fig. 1, showing a double seal form of the invention.

Like characters of reference designate corresponding parts in all of the figures of the
45 drawings.

Referring to the accompanying drawings, 1 designates the body of the jar, which is preferably cylindrical in shape and is provided at its upper end with a reduced cylin-
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dricul neck 2, whereby the upper end of the jar, at the outer side of the neck, forms an angular shoulder 3. An annular flange 4 rises from the top of the neck 2, flush with the inner side thereof, whereby the top of the neck
55 forms a seat 5, which is adapted to receive a suitable packing-ring 6, the flange 4 forming a guard to prevent displacement of the packing-ring and to obviate contact of the contents of the jar with the ring. Upon the ex-
60 terior of the neck 2 are a plurality of lugs or projections 7, preferably three in number, which are spaced at equal intervals around the neck of the jar. Each projection is flush with the top of the neck and inclines down-
65 wardly and transversely of the jar, with its lower end terminated short of the shoulder 3.

For closing the open top of the jar there is provided a solid cover 8, which is cylindrical in shape and has a diameter corresponding
70 to that of the jar, so that when seated thereon it forms a flush continuation of the jar, and thereby obviates projections. The under side of this cap or cover is hollowed out to form a pendent peripheral flange 9, which
75 is designed to embrace the neck 2 and rest upon the shoulder 3. The cap or cover is further hollowed out to form an inner annular shoulder 10, which is designed to rest upon the packing-ring 6, the depth of the
80 shoulder being sufficient to permit of considerable compression of the ring before the back of the cap or cover engages the top of the neck - flange 4. The inner side of the
85 flange 9 is provided with sockets or recesses 11, which correspond in number and disposition to the lugs or projections 7 upon the neck of the jar and have their lower ends opening outwardly through the lower edge of
90 the cap or cover, so as to receive the lugs when the cover is placed downwardly upon the neck of the jar, as will be understood by reference to Fig. 2 of the drawings. These
95 sockets or recesses are inclined so as to correspond with the inclinations of the lugs or projections and are of a depth to readily receive the latter when the cap or cover is placed downwardly upon the jar. When the
100 lugs or projections have been received in the recesses, the cap or cover is turned upon the

neck of the jar, whereby the projections acting as cams ride over the rear inclined faces of the sockets or recesses, and thereby draw the cap or cover downwardly into snug engagement with the packing-ring 6 and the shoulder 3 of the jar.

As illustrated in Fig. 6, it will be seen that the neck of the jar may be provided with an additional intermediate shoulder 12 between the shoulder 5 and the flange 4, or, in other words, the neck may be provided with a stepped series of peripheral flanges, the additional flange being designed to support another packing-ring 13, the cap or cover being provided with an additional annular shoulder 14 to bear upon the packing-ring 13, whereby a double seal is formed between the cover and the neck of the jar.

From the foregoing description it is apparent that the present invention dispenses with all external fastenings, and it is merely necessary to place the cover downwardly upon the neck of the jar and then turn the same slightly to form an air-tight connection between the cover and the jar and at the same time to secure the cover, through the agency of the cam-lugs 7 and the recesses 11, to the jar, so as to prevent accidental displacement thereof.

A very important feature of the invention resides in the fact that the external peripheries of the jar or cover and cap are flush, thereby obviating projections, and, furthermore, the packing-ring is securely housed between the jar and the cover and is thereby

protected against the action of the external air and the contents of the jar.

What we claim is—

The combination of a cylindrical jar having a reduced cylindrical neck with a flat annular shoulder extending from the base of the neck to the outer edge of the body of the jar, an upstanding annular flange rising from the inner side of the neck, the top of the neck being flat to form a packing-ring seat, a series of integral cam projections upon the exterior of the neck and terminated short of the top of the body of the jar, a packing-ring upon the packing-ring seat and embracing the neck-flange, and a cylindrical cap or cover having a pendent peripheral flange to embrace the neck and rest upon the top of the jar, and also provided with an inner annular shoulder to embrace the neck-flange and bear upon the packing-ring, the inner face of the cover-flange being provided with a series of inclined sockets or recesses corresponding to the projections and opening outwardly through the lower edge of the flange, and the exterior of the cap or cover being flush with the exterior of the jar.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in the presence of two witnesses.

JOHN W. KUNKEL.

CLARENCE ROBINSON.

Witnesses:

MELVIN BASFORD,

JOHN COCHRANE.