

(No Model.)

R. B. CALCUTT.
FRUIT JAR AND COVER.

No. 495,299.

Patented Apr. 11, 1893.

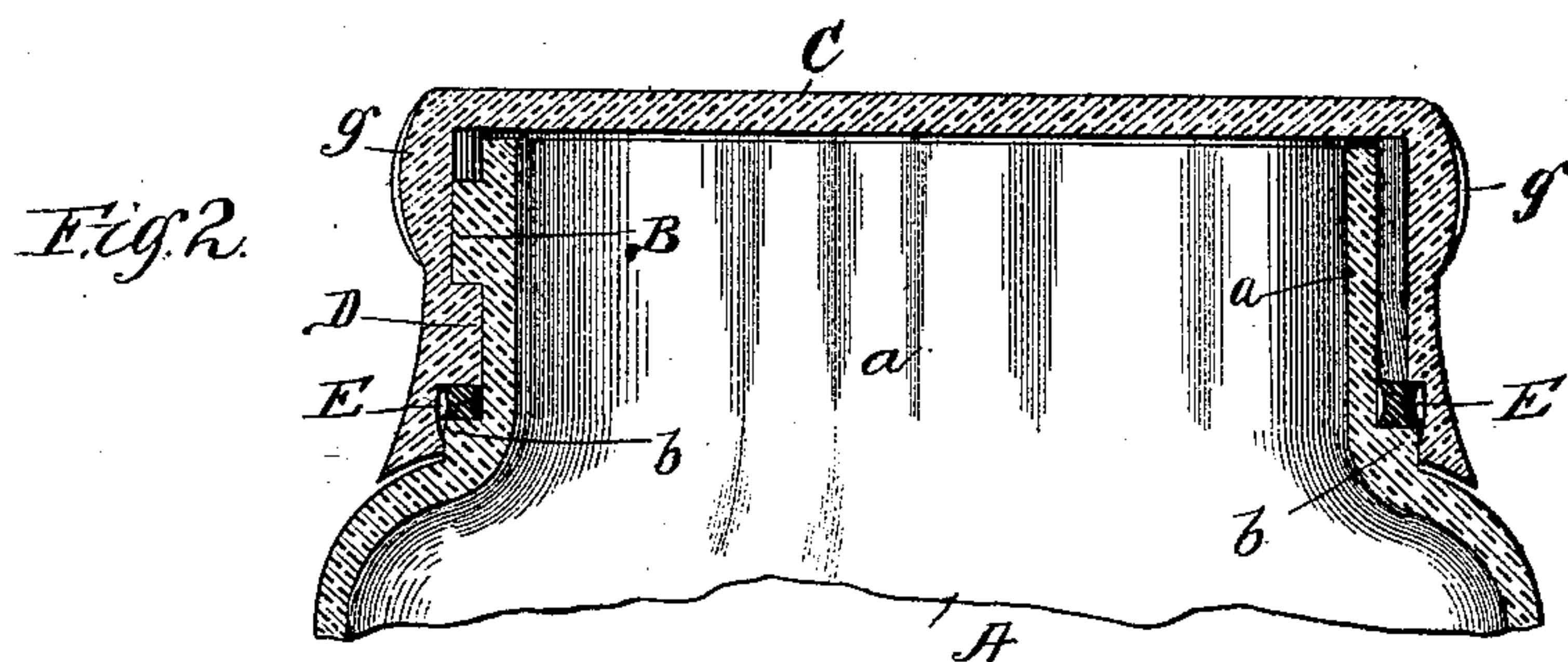
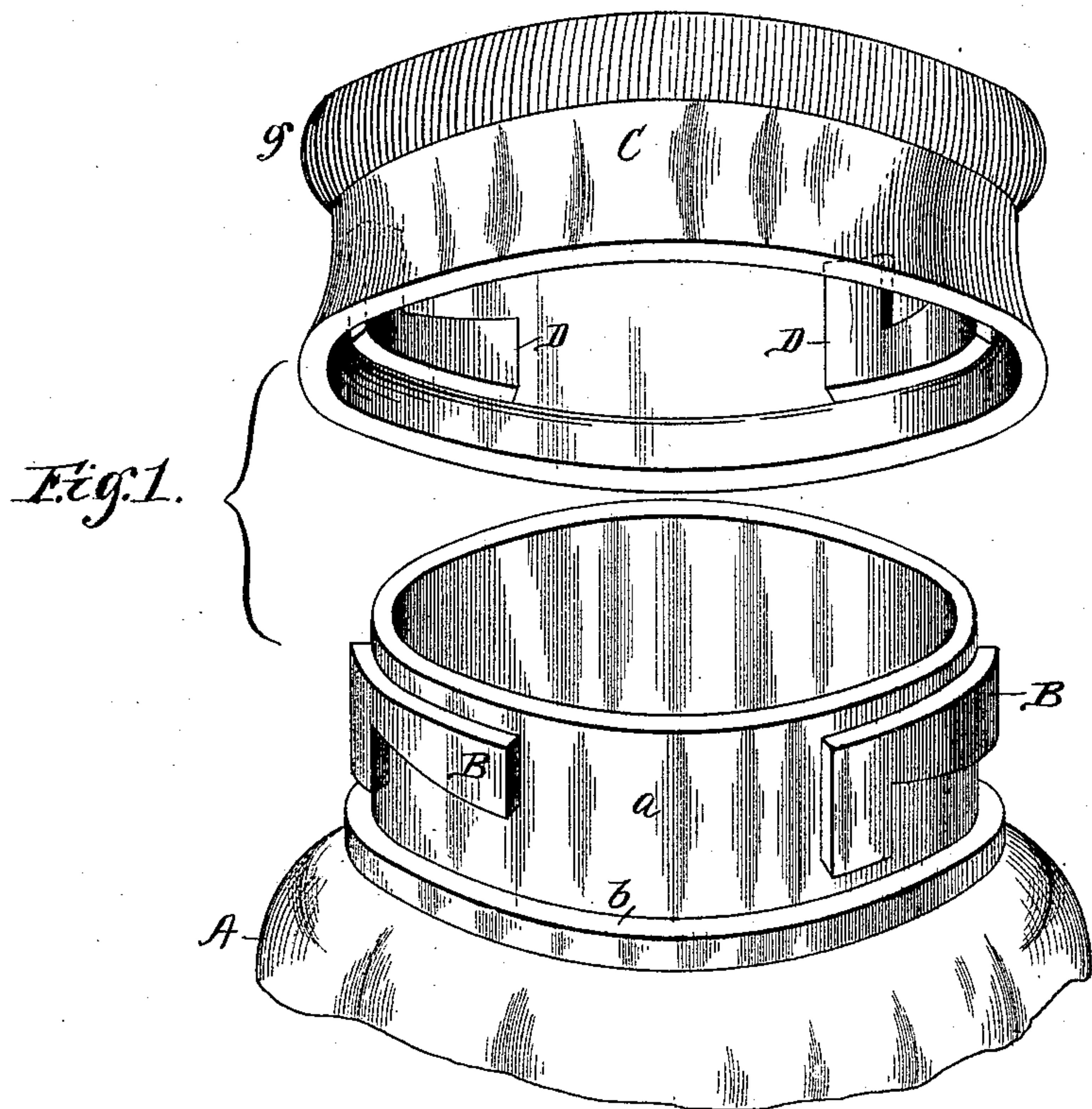
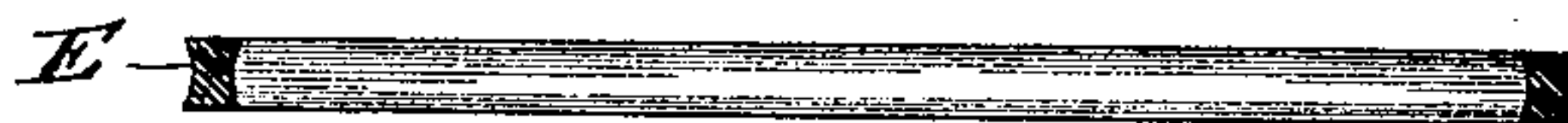


Fig. 3



Witnesses.

Wm. M. Phelps.

Wm L. Heming

Inventor:

Reginald Boice Calcutt.

By Frank Thomas Co.

Atty.

UNITED STATES PATENT OFFICE.

REGINALD BOICE CALCUTT, OF CHICAGO, ILLINOIS.

FRUIT-JAR AND COVER.

SPECIFICATION forming part of Letters Patent No. 495,299, dated April 11, 1893.

Application filed May 31, 1892. Serial No. 434,904. (No model.)

To all whom it may concern:

Be it known that I, REGINALD BOICE CALCUTT, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Fruit-Jars and Covers, of which the following is full, clear, and exact description, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention relates more particularly to the means and method of securing the cover to the fruit jar and hermetically sealing the same so as to prevent the possibility of ingress of air or egress of the gas or vapor emanating from the fruit or provision preserved therein. Its construction being practically of one material, namely, glass or a similar substance as cheap and durable; substantially as hereinafter fully described and as illustrated in the drawings in which:—

Figure 1, shows the perspective view of a jar and its cover, the latter being removed from the jar, and shown in perspective above the same. Fig. 2, is a transverse vertical section through the top of the jar with the cover secured thereon. Fig. 3, is a detail view showing the packing ring.

In the drawings A represents a fruit jar of any suitable shape or design, the neck *a* of which is, preferably, made less in diameter than the body thereof and provided at its base with a flat seat *b* which forms the connecting surface between the said neck and the shoulders of the jar. The outer circumference of this neck is provided with a corresponding series of inverted L-shape lugs B, B, the horizontal portions of which project from the neck, preferably, on the same plane as the edges of the mouth of the jar, and the vertical portions of which extend to and terminate a short distance above the seat *b*. The length of the horizontal portions of these lugs depends upon their number; thus if there were but two they would extend a distance corresponding to one quarter of the circumference of the neck; if there were three lugs the length of the horizontal portions would be one sixth of the circumference of the neck; and if there were four lugs the length of each would correspond to one eighth of said circumference. For convenience of manufacture I prefer to have but three lugs and to

make the length of the horizontal portions of each lug a little less than one sixth of the circumference of the said neck, so that when in use they will permit the cover to lock easily as will hereinafter be more fully explained.

The cover C is, preferably, made of the same material as the jar, although it may be made of metal. The diameter of the inner circumference of the cover is the obverse of that of the periphery described by the outer faces of the lugs B, and it is provided with a corresponding series of L-shape lugs D, which are equal in number and in proportions to the lugs B of the neck of the jar. These lugs D are L-shape and have their horizontal portions projecting inward from the inner circumference of the cover at a point removed a suitable distance from the annular edges of the same, and extend from the vertical portion of the lugs in a direction opposite that in which the horizontal portions of lugs B extend from the vertical part thereof. The length of the horizontal portions of the lugs D corresponds to the length of the horizontal portions of the lugs B, thus, there is a space between each one of these lugs D slightly greater than the length of the horizontal portions of lugs B, and vice versa. Thus when the cover is placed upon the neck of the jar and the horizontal portions of the lugs on the neck of the jar are brought in vertical register with the spaces between the lugs D of the cover, or vice versa, said cover can be pushed down over the neck or the jar until the horizontal part of said lugs D come just below the plane of the horizontal portion of lugs B, whereupon, by turning the said cover to the left until the ends of the horizontal portions of lugs D strike against the vertical portions of lugs B, the said cover will be securely locked to the jar. Before placing the cover on the jar in this way I place around the neck of the jar so that it will rest upon the seat *b* and come below the lower ends of the vertical portions of lugs B, a rubber ring E, or ring of similar material. The length of the sides of the cover are such, and the lower portions of these sides are flared outward in such manner that when said cover is secured on the jar the under edges of the lugs D will press down upon and compress the ring E on its seat, and the edges of said cover will lap

against the shoulders of the jar below the plane of said seat, as set forth. Thus when the cover is turned to lock it to the jar the expansion of said ring E securely holds the cover on the jar and at the same time hermetically seals the same.

In order to facilitate the compression of ring E I prefer to concave the vertical sides thereof, substantially as shown in the drawings. This permits the compression of said ring and its subsequent expansion much better than if said ring were perfectly rectangular in cross-section.

In order to prevent the possibility of the cover being accidentally turned and unlocked from the jar, through the handling of the latter, I prefer to incline the under edges of the lugs B, so that the breadth of said lugs at their ends will be greater than at the point where they connect with their vertical portions, and then to incline the upper edges of the horizontal portion of the lugs D, correspondingly. This construction of the lugs would enable them to interlock and hold the cover on the jar more securely than were the edges perfectly horizontal and parallel with the edges of the jar and cover. To turn the cover when secured upon the jar it would cause the rubber band to be compressed, and additional effort would have to be exerted to do this over what would be required were said engaging edges of the horizontal portion of the lugs parallel with the edges of the cover or jar.

My reason for causing the lugs D of the cover to project from the inner circumference of the same, at a point removed about one eighth to one quarter of an inch from the annular edges thereof, is to enable the cover to be easily fitted and centered over the mouth of the jar, so that it would be easy by turning the same to bring the position of the lugs B in proper register to secure the cover in place.

I am aware that it is old to secure covers to fruit jars by means of lugs on the inner surface of the sides of the cover catching under lugs projecting from the neck of the jar when the same is revolved in the one direc-

tion or another. However, these have been so located that, in view of the difficulties of manufacture, the pressure of the cover down over the jar was not equal all around, and the consequence was that the hermetic sealing of the jar was not so successfully accomplished, as to preclude the possibility of the outside atmosphere getting in and injuring the products within the jar. My invention avoids this unevenness of pressure and assures an equal distribution of pressure all around besides possessing other features different entirely from what is shown by the prior state of the art.

In order to aid in obtaining a hand grasp upon the cover when it is desired either to fasten said cover on to the jar or to remove it therefrom I have provided the outer circumference of the sides of the cover with a milled bead *g*. This milled bead is, preferably, located next the top of the cover, but it is obvious it can be located below the top edge of the same some distance if desired. It is also apparent that instead of having a milled bead the entire outer circumference of the sides of the cover might be milled or fluted if desired and the same result be accomplished.

What I claim as new is—

The combination with a jar having a flat seat surrounding and projecting out from the base of the neck of the same, from the outer edge of which the shoulders of said jarslope, and having said neck provided with a series of inverted L-shaped lugs, as described, of a packing ring resting upon said seat and surrounding said neck, and a cover the inner circumference of the sides of which is provided with a series of L-shaped lugs which are made with reference to and engage the lugs on the neck of the jar, and the lower edges of the sides of which lap down over and past said seat and the ring thereon, as and for the purpose set forth.

REGINALD BOICE CALCUTT.

Witnesses:

FRANK D. THOMASON,
A. A. HALL.