

Ira Buckman, Jr

# Fruit Jar Cover.

No. 121,232.

Patented Nov. 28, 1871.

Fig. 1.

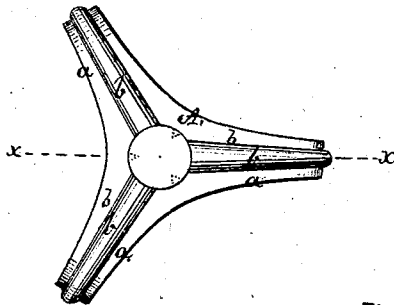


Fig. 2.

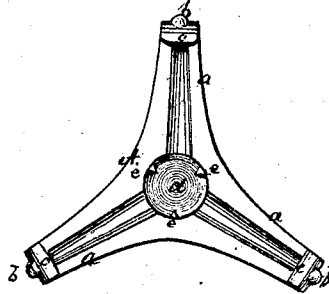


Fig. 4.



Fig. 3.

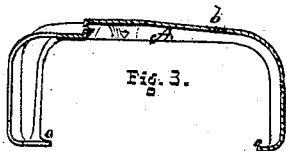


Fig. 6.



Fig. 7.



Fig. 9.

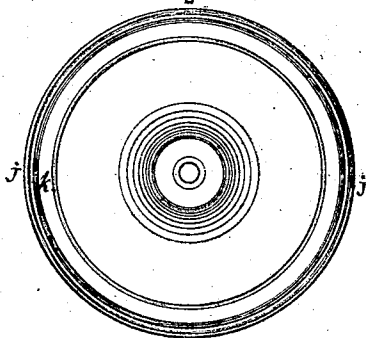


Fig. 5.

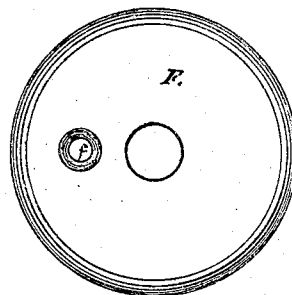


Fig. 8.



Fig. 10.

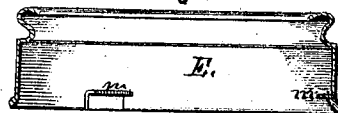


Fig. 11.



Fig. 12.

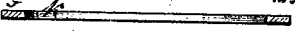
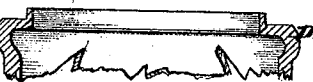


Fig. 13.



Witnesses.

Chas H. Poole  
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# UNITED STATES PATENT OFFICE.

IRA BUCKMAN, JR., OF WILLIAMSBURG, NEW YORK.

## IMPROVEMENT IN CLAMPS FOR FRUIT-JARS.

Specification forming part of Letters Patent No. 121,232, dated November 23, 1871; antedated November 10, 1871.

*To all whom it may concern:*

Be it known that I, IRA BUCKMAN, JR., of Williamsburg, in the county of Kings and State of New York, have invented certain new and useful Improvements in Clamps for Fruit-Jars; and the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 represents a top view of my corrugated metal clamp. Fig. 2 is an under-side view of the same, showing the center recess and rubber spring and fastening points. Fig. 3 shows an edge view of the sheet-metal corrugated clamp-fastening. Fig. 4 shows the rubber spring detached. Fig. 5 represents a top view of a glass cover, with a slight central indentation and orifice for vent pressed into the glass. Fig. 6 shows an edge view section of the same as they have hitherto been cast or pressed. Fig. 7 is a similar sectional view of a glass-jar cover, showing my improvement in the mode of pressing the hole for the vent. Fig. 8 shows a sectional view of same with the vent filled with a cork and wax. Fig. 9 is an under side view of a jar cover, showing the serrated seat or bearing. Fig. 10 represents a sectional view of the corrugated flexible sleeve-fastening. Fig. 11 is a section through the center of the cover, showing the filled vent in the center and the serrated bearing under side the rim. Fig. 12 shows a sectional view of the rubber gasket. Fig. 13 shows a sectional view of the top of the mouth of a jar broken off.

My invention relates to hermetically-sealed fruit-jars, and is an improved method of constructing a corrugated clamp of light sheet metal, pressed and struck up in the proper form, whereby the necessary strength is secured.

To enable others to make and use my improvement I will describe it more fully, referring to the drawing and to the letters marked thereon.

My improved clamp, A, as shown in Figs. 1, 2, 3, is made of fine roll-brass, or may be made of non-corrosive metal pressed in the desired form, the central portion of the arms *a a a* being struck up from the under side so as to form central ribs *b b b* on the top. At the same time the

arms are bent into the proper shape to form the clasps *c c c* to hold on under the neck of the jar; a circular recess, *d*, is struck up in the center of the clamp, in which are sharp points *e e e* to secure the rubber spring B. Thus a complete, strong, light, flexible, and durable clamp is produced at a very small cost of labor and material.

Molded glass covers F are shown in Figs. 5, 6, 7, 8, provided with a tapering orifice, *f*, pressed in the cover, for the purpose of self-sealing, and also for giving vent for opening the jar. A small cork, *i*, is inserted in the lower portion of the aperture *f*, filling it about midway, the space above it being filled with wax *h*, as shown in Figs. 8 and 11, the wax and cork being perforated with a sharp smooth tapering instrument, so as to allow the escape of the rarefied air when the jar and contents are heated for hermetically sealing. At the same operation the heat will melt the wax sufficiently to close the orifice, so that the vacuum caused by the cooling of the jar will hold the cover in its place.

When a jar is to be opened it is only necessary to puncture the wax and cork, so that the vacuum will be supplied with air from without and the cover will be free to be removed.

I make an improved corrugated annular sleeve, E, with hook-catches *m m* cut or struck in to form clasps to be placed on the neck of the jar D, and may be used as a substitute for the corrugated clamp A, the top portion of the sleeve being corrugated and the edge turned over in an S-shaped form, so as to come below a right angle of the top on which it rests, so as to be slightly yielding to the contraction and expansion of the jar, thus equalizing the pressure on the neck and preventing the unnecessary breakage of jars. The sleeve or shield E, as shown in Fig. 10, varies from those in common use in that it will spring and yield sufficiently to affect the purposes above mentioned, while others are rigid. They also are a greater protection to the neck of the jar, for the reason that the catches *m m* are very light and thin and present but little surface to the neck of the jar, and have but little bearing upon the glass; as it is a well-known fact that any considerable

body of metal coming in contact with the surface of glass in any form, whether plate or cylindrical, has the tendency to break it, and thousands of fruit-jars are annually broken and lost by the action of the bearing surfaces of the screw-caps and sleeves and the other forms of the metal clamps that are used.

What I claim as my invention, and desire to secure by Letters Patent, is—

A clamp for securing caps or covers upon fruit-jars, struck up from sheet metal, and having its arms corrugated, as set forth.

IRA BUCKMAN, JR.

Witnesses:

J. B. WOODRUFF,

J. B. LYONS.

(58)