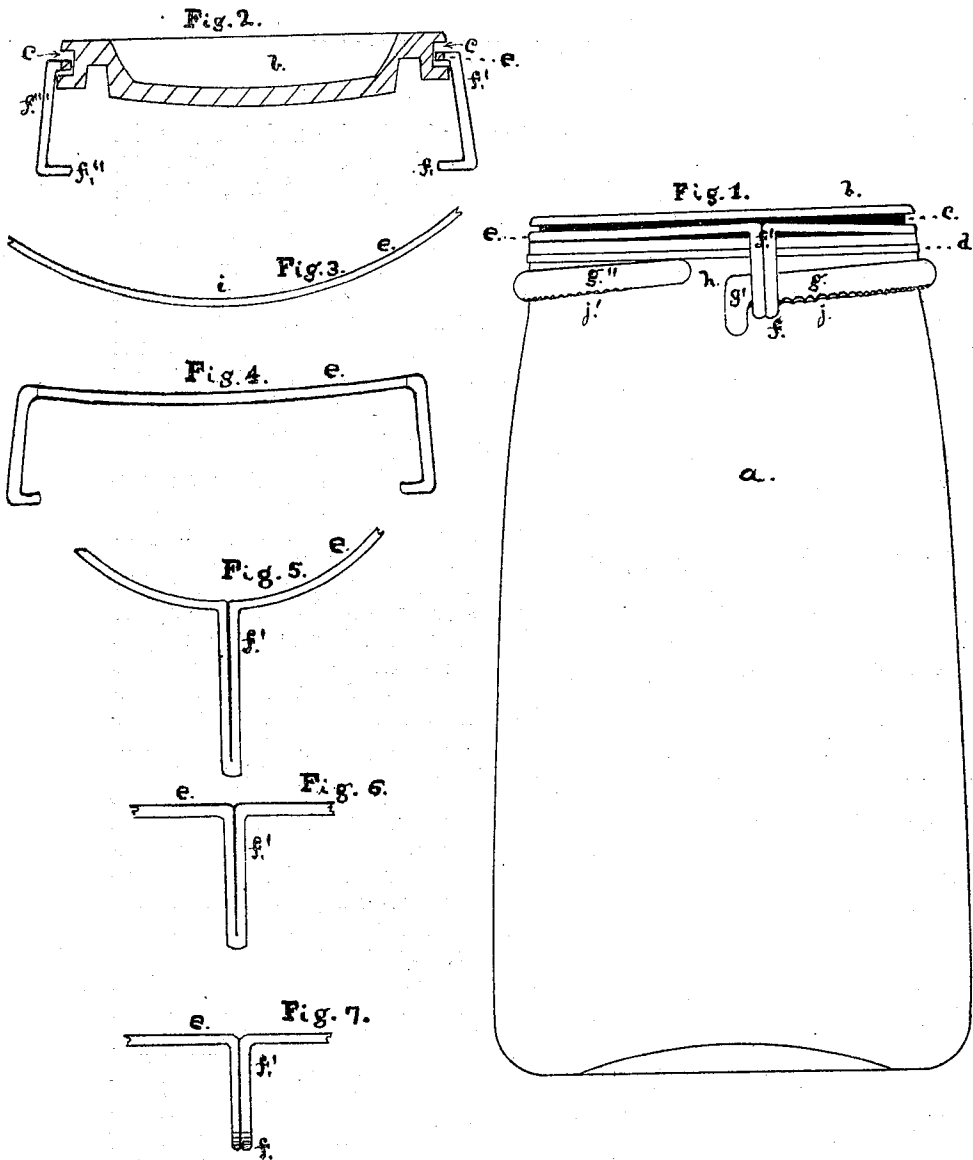


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Improvement in Fruit-Jars.

No. 129,235.

Patented July 16, 1872.



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Witnesses.

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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN FRUIT-JARS.

Specification forming part of Letters Patent No. 129,235, dated July 16, 1872.

SPECIFICATION.

Specification describing certain Improvements in Fruit-Jars, invented by CHARLES G. IMLAY and WILLIAM L. IMLAY, of the city and county of Camden, New Jersey.

The object of our invention is to make a convenient and durable sealing or closure of the mouths of fruit-jars and similar vessels; and our invention consists of, first, a ring-clamp, made as will be described; and second, of a groove in the sides of the cover, made larger than the ring of the clamp, for a purpose which will be described; and third, in the arrangement and construction of the various parts, all of which will be apparent as we describe them.

Figure 1 is a side elevation of our jar. Fig. 2 is a perpendicular section of our cover with clamping-ring in its groove. Fig. 3 is a part of the metallic ring, out of which the ring-clamp is made. Fig. 4 is a side view of the ring-clamp detached and completed. Fig. 5 is a view of the first bending given to the ring; Fig. 6 of the second bending; and Fig. 7 of the last bending, or of the hook, for the screw-thread of the jar.

In Fig. 1, *a* is the jar, and *b*, the cover, with *d*, the rubber gasket, between them; and *c* is a groove or recess in the cover, about twice as wide as the ring-clamp; and *e* is the ring-clamp, having the downward-bent hook *f* as a part of it. It will be noticed that at the right and left hand sides, the ring has a broad bearing on the bottom of the groove in the cover; but at the middle, near *f'*, the ring-clamp does not quite touch the bottom of the groove. The object of this is to provide for a method of preserving fruit and other substances—viz., the providing an elasticity to our locking devices—so that when fruit is put uncooked in our jars, with or without sugar or other substances, and the jar is heated in water, or by steam, or hot air, the air in the jar, while the cover is closed tightly down on the jar, may expand, slightly lift the cover, by the elasticity thus given, and thus cook and preserve the fruit with safety to the jar, the groove *c* and the ring *e* being made intentionally to meet this use of the jar. The ring-clamp is either left divided or is soldered or rivetted at the upper part of *f'*, where it is bent downward to near the lower part of *f'*, where it is bent, and hooks under the corru-

gations, of any suitable size and form, on the under side of the screw-threads or inclines, which have their lower ends as at *g'* and *g'''*, (the latter not shown in the drawing, but being at the end of the incline *g''*), curved downward, to form stops for the ring-clamps on opposite sides of the jar, and leaving the open spaces *h* and *h'* (the latter not shown) on opposite sides of the jar, for the ends *f* and *f''* of the ring-clamp to enter and go under the upper ends of the threads or inclines *g* and *g''*. All this is true, be the jar and cover of glass, or tin, or other material.

In Fig. 2 the cover *b* is seen cut, or is a perpendicular section, made after one of its forms. The groove *c* is seen with the ring-clamp in it, at points at right angles to Fig. 1.

Fig. 3 is a part of a metallic ring, preferably of galvanized steel, welded into one complete ring, and is of any suitable size and strength. It may be cast, cut out of one piece, or made of two or more pieces. At *i* is the portion selected to be bent by hand, pinchers, or by a machine, which makes the fold *f'* in it, as seen in Fig. 5. Next, this fold *f'* is bent downward until it appears as seen in Fig. 6, when the lower end is bent inward, hook-shaped, as seen in Fig. 7 and Fig. 2. When the spring-arching is given and completed, the clamp is as seen in Fig. 4, as also in Fig. 1. The same in shape of result is true of the ring-clamp if made of two or more parts, and soldered or rivetted at the lines of the folding, as at *f'*, Fig. 1, or of other convenient arts of making the metal ring of one or more pieces.

Our jar can be used in any of the ways well known to the public and in common use; but the further design is to fill the jar full of uncooked fruit or other article, and its covering fluid or fluids, if any are used; then take the cover with its attached clamp-ring and insert the ends of the clamp-ring by the spaces *h* *h'* beneath the threads *g* *g''*, and turn the ring until the clamps strike the stops *g'* *g'''*, when the jar is closed. Now, put the jar and contents, undisturbed, into water, steam, or hot air to be heated according to the schedule of times and degrees of temperature we have so often published by circulars to the public.

The other uses and advantages of our invention are apparent to those skilled in the art to which it appertains.

Claims.

1. We claim the metallic ring *e*, when constructed and arranged for the purpose of fitting or being inserted into, or made to hold, the cover of a jar fast to the jar by the groove *c* in a jar-cover, substantially as set forth.
2. The ring-clamp *e*, in combination with the groove *c* in the cover of the jar, whether the elasticity described is given or not given to the ring, as set forth.
3. We claim the cover *b* with its clamp *e*, in combination with the jar *a*, arranged and constructed substantially as shown and described.

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