T. EARLE.

Fruit-Jar Cover.

No. 45,594. Patented Dec. 27, 1864.

Fig. 3.

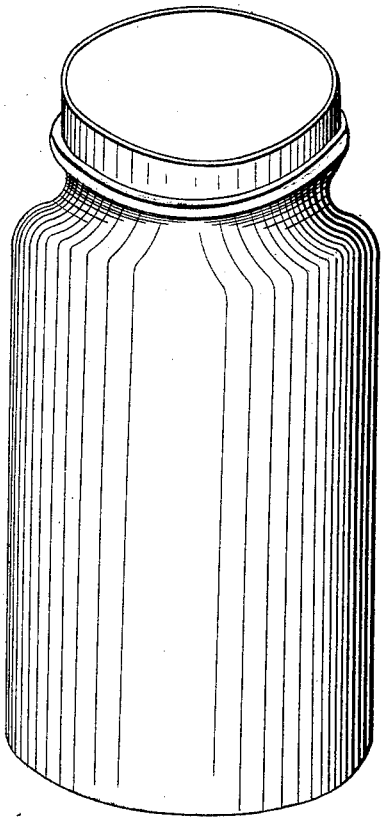


Fig. 2.

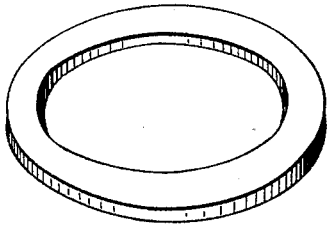
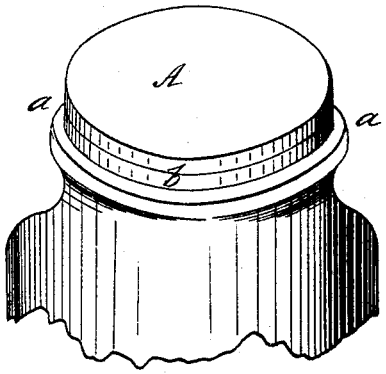


Fig. 1.




**Witnesses:**

Benj. F. Thurston

W. B. Vincent

**Inventor:**

Timothy Earle

# UNITED STATES PATENT OFFICE.

TIMOTHY EARLE, OF VALLEY FALLS, RHODE ISLAND.

## IMPROVED PRESERVE-JAR.

Specification forming part of Letters Patent No. **45,594**, dated December 27, 1864.

*To all whom it may concern:*

Be it known that I, TIMOTHY EARLE, of Valley Falls, in the county of Providence and State of Rhode Island, have invented a new and useful Improvement in the Method of Sealing Preserve-Jars; and I do hereby declare that the following specification, taken in connection with the drawings making a part of the same, is a full, clear, and exact description thereof.

Figure 1 is a view of the neck of the jar with the cover upon it. Fig. 2 represents the packing-ring. Fig. 3 is a view of the jar with the cover in place and the joint packed.

The use of a packing-ring of rubber placed between the cover and a flange upon the neck of the jar, for the purpose of hermetically closing the joint between the two, is well understood. I have found, however, that a large proportion of the jars and covers which for the purpose are obtained from the glass factories, have their surfaces so imperfectly fitted to each other that when the cover is upon the jar the joint will be more open at some points than at others, and thereby make it difficult to pack it tight.

Instead of using a packing-ring between the cover and the neck of the jar, and holding down the cover by pressure, I stretch the ring around the neck of the jar and the side of the cover, so as to break the joint, relying upon the contractile force of the rubber and the preponderance of the pressure of the external atmosphere over that within the jar, when the contents have been, as is customary, introduced into the jar while in a heated state, to close the joint and exclude the admission of air. The neck of the jar should be made with a surrounding flange, *a*, a portion of the neck rising above the top surface of this flange, as shown at *b*, upon which is the usual lip (not shown in the drawings) to hold the cover A in place. The diameter of the cover should be the same as the diameter of the neck at *b*, so that when the cover is upon the jar the external surfaces of the two will coincide.

In order to seal the jar the rubber band, Fig. 2, is placed with its edges resting upon the flange *a*, and embracing both the side of the cover and the portion of the neck *b*, closes the joint.

I have found that this method herein described is not only entirely effectual, even in cases where the cover fitted the jar quite imperfectly, but that it dispenses with any arrangement for exercising compression upon the cover, as is necessary when the packing-ring is placed between the cover and the neck, while the jar can be unsealed, without any special contrivances for admitting air to relieve the external pressure of the atmosphere upon the cover, by simply slipping off the band.

I am aware that an elastic band has been used for a similar purpose attached permanently to the cover of the jar, and held by an elastic clamp; and also that a detached rubber band, in combination with a flaring flange on the lid, with a rib and groove on the neck of the jar, as well as a combined metallic and rubber band in combination with a beveled-edged cover, have been employed for the purpose of hermetically sealing a preserve-can. I therefore do not claim, broadly, the method of sealing a jar by the use of an elastic pressure-band applied to cover the joint between the lid and the neck; but

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

The use of a cover, A, the external surface of whose sides, when the cover is in place, shall be coincident with the external surface of the neck of the jar, in combination with an elastic pressure-band, and a flange, *a*, on the neck of the jar, substantially as described, for the purposes specified.

TIMOTHY EARLE.

Witnesses:

BENJ. F. THURSTON,

W. B. VINCENT.