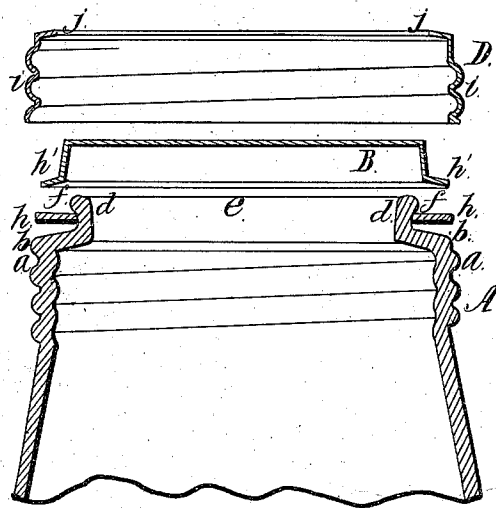


*S. B. Rowley,*

*Fruit Jars*

*No 97,964, Patented Dec. 14, 1869.*



*Inventor:*

*S. B. Rowley*  
*By his Attys*  
*H. Rowley*

*Witnesses:*  
*Wm. Albert Steel*  
*Rowbotham*

# UNITED STATES PATENT OFFICE.

S. B. ROWLEY, OF PHILADELPHIA, PENNSYLVANIA.

## IMPROVEMENT IN FRUIT-JARS.

Specification forming part of Letters Patent No. 97,964, dated December 14, 1869.

*To all whom it may concern :*

Be it known that I, S. B. ROWLEY, of Philadelphia, Pennsylvania, have invented an Improvement in Preserving-Vessels; and I do hereby declare the following to be a full, clear, and exact description of the same.

My invention consists in the combination of a screw-ring, a thin metal cap, and a gum-elastic ring, with a jar, having a rib, over which the gum ring and cap fit, a shoulder between which and a flange on the cap the gum ring is compressed, and screw-threads adapted to those on the screw-ring, by turning which direct pressure is applied to the gum ring, the whole of the parts being arranged and adapted to each other, as described hereafter, so as to hermetically close the mouth of the jar.

In order to enable others skilled in the art to make and use my invention, I will now proceed to describe its construction and operation, reference being had to the accompanying drawing, which forms a part of this specification, and in which are represented the upper portion of a jar, and the several parts composing the cover, detached from each other.

A represents the upper portion of a preserving-jar, on the exterior of which is formed a screw-thread, *a*, the latter terminating at the shoulder *b*, above which projects the annular rib or flange *d*, surrounding the mouth *e* of the jar. On the outside, at the upper edge of this rib, is a lip or projection, *f*, over which the gum-elastic ring *h* must be stretched before it can reach the shoulder *b*. B is the cap, of thin metal, formed by dies to the shape shown in the drawing, the recess in the under side of the cap being such that the cap will fit freely over the annular rib *d*, so that the flange *h'* of the cap may bear on the gum-elastic ring. D is a ring, of thin metal, on the vertical portion *i* of which is formed a screw-thread adapted to that on the neck of the jar, the internal horizontal flange *j* of the ring being arranged to bear on the top of the flange *h'* of the cap, so that in screwing down the ring D, the annular gum-elastic ring will be compressed between the flange *h'* of the cap and the shoulder *b* of the jar, thus producing a perfectly tight joint.

I am aware that a screw-ring, or, as it may be termed, an annular nut, D, of metal has been adapted to a screw formed on a jar, and has been arranged to compress a gum-elastic ring, not to a shoulder, *b*, however, formed below the mouth of the jar, as shown in the drawing, but against the upper edge of the mouth, as illustrated and described in the patent granted to Charles G. Imlay, May 23, 1865.

As the licensee and manufacturer of this invention, I have found that the objection to this plan of pressing the gum ring against the upper edge of the mouth is, that the latter must be subjected to the tedious operation of grinding, in order that it may be sufficiently true and even. The edge, too, is easily broken during the grinding, or afterward, and the jar is thereby rendered useless, defects which are obviated by the shoulder *b*, forming below the mouth a smooth and true bed for the gum ring.

A similar shoulder has been heretofore used, but in combination with a glass stopper, to which a downward pressure was imparted by a screw passing through a yoke and bearing on the center of the stopper, as seen in the patent, granted November 4, 1862, to T. G. Otterson, and in the patent of N. S. Gilbert, January 29, 1861, and December 17, 1861.

The difficulty of making the glass stopper true, and the consequent imperfection of the joint, have been the main objections to this device, which are overcome, however, by the use of the thin metal cap, to the flange of which, and consequently to the gum ring, direct pressure is applied by a screw-ring, in the manner described.

It will thus be seen that two important advantages are attained by my improvement, namely, the smooth and true bed for the ring, and the application of direct pressure to the true flange of the cap immediately above the gum ring and its shoulder.

I wish it to be distinctly understood, therefore, that I do not desire to claim separately any of the parts or features represented and described; neither do I claim broadly the combination, with a jar, of a screw-ring, cap, and packing, which is compressed between

the cap and a shoulder on the jar, by the action of the screw-ring, as this has been heretofore done; but

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

The combination of the screw-ring D and its flange *j*, the thin metal cap B and its flange *h'*, the rib *d*, shoulder *b*, and screw-thread *a* of the jar, and the gum ring *h*, the whole being constructed, arranged and adapt-

ed to each other, as and for the purpose herein set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

S. B. ROWLEY.

Witnesses:

C. E. FOSTER,

W. J. R. DELANY.