

W. WEBSTER.

India Rubber Packing Former.

No. 47,477.

Patented April 25, 1865.

Fig. 3.

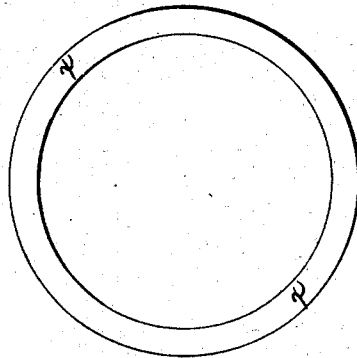


Fig. 2.

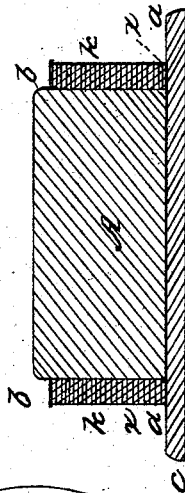
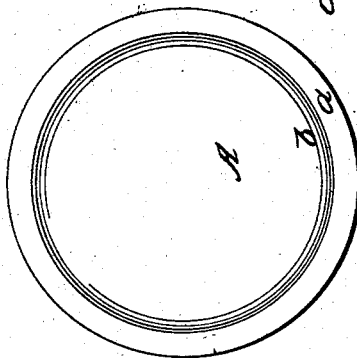


Fig. 1.



Witnesses:  
H. R. R. Peck  
J. B. Morton

Inventor:  
W. Webster

# UNITED STATES PATENT OFFICE

WILLIAM WEBSTER, OF MIDDLETOWN, OHIO.

## IMPROVED INDIA-RUBBER PACKING-FORMER.

Specification forming part of Letters Patent No. 47,477, dated April 25, 1865.

*To all whom it may concern :*

Be it known that I, WILLIAM WEBSTER, of Middletown, Butler county, Ohio, have invented a new and useful device for preparing packings for fruit cans, which I denominate "the India-Rubber Packing-Former" for Sealing Fruit-Cans; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Figure I represents a top view of my device; Fig. II represents a vertical section taken through the center of Fig. I, with the packings thereon; Fig. III, the pressure-ring.

The object of my invention is to obviate a very important obstacle and objection to the use in a successful and general way of that class of fruit-cans which require the india-rubber annular packing to effect the perfect sealing thereof. The practical difficulty to which I refer is universal in the attempted use of this class of cans. This annular rubber-packing, as an article of commerce, is furnished to the trade compressed in packages, in which they are promiscuously placed without regard to the form they may assume from being thus thrown together. The result of this mode of packing causes the rings to assume every variety of irregular form. From the nature of the material, as well as the character of the article itself, it is an unavoidable result that these packings become so deranged and irregular, and require much time and great care in applying them by hand to the use for which they were designed. In order to reduce these rings of india-rubber to the true annular form in which they came from the hose, it has been the practice to manipulate them for a sufficient length of time. This treatment or mode of preparing the rings is very tedious. The nature of the material is such that the operation of re-forming them by hand cannot to a great extent be successfully accomplished; and for this reason the use of fruit-cans requiring the india-rubber-ring packing have been discarded to a great extent. Purchasers who have once attempted the use of such cans, and having obtained the packings in the condition above referred to, have found the difficulties so great in applying the packings that many have

been compelled to forego the advantages of the use of such cans altogether.

The difficulties above referred to may be readily illustrated and proven by taking one of the ring-packings in their regular form and condition described and applying it to the can upon which my patent of September 8, 1863, was granted, or to that of my patent dated February 16, 1861; or to any other of similar construction.

My present improvement is designed to facilitate the use of these india-rubber packings and enable a person to apply them with rapidity, and without the risk of imperfectly sealing the cans.

To enable others to make and use my invention, I will now describe the manner of constructing and using the same.

The prominent features of my improved device for preparing india-rubber annular packings for use are a cylinder and a base. The cylinder may be made of any suitable material, either solid or hollow, as seen in the accompanying drawings, and the base consists of a flange or annular plate of metal or other material, which plate surrounds the foot of the cylinder, as represented in the drawings at *a*. This base or flange stands at right angles to the periphery of the cylinder, and should be permanently fastened to the same.

Although the material, of which my "former" may be constructed may be chosen with a view to the taste or the fancy of the manufacturer, yet for cheapness I have found tin to be preferable. When made of tin, it may be secured in position for use by a simple weight placed within the cylinder, which stands on end, as represented.

To enable the attendant to place the packings upon the former with greater facility, the top edge of the cylinder may be slightly beveled or chamfered; but this is not indispensable, although advantageous.

When the cylinder is made of sheet metal or equivalent material, the entire area thereof may be occupied by a cylindrical weight closely fitting within the metal cylinder, and such weight may be turned in a lathe from wood, and this weight may be made with a cone-extension which will project several inches above the metal cylinder,

In the accompanying drawings, the packing-former is represented as a hollow cylinder A, standing upon the projecting base *a*, with the top edge chamfered, as seen at *b*. K indicates the rubber packings.

To use my packing-former does not require either practice or the exercise of peculiar slight or art; but any one capable of performing the least difficult labor may readily apply the packings to the former with great rapidity, and thus accomplish in a perfect manner in a few minutes what has heretofore required the most expert and practiced manipulators several hours to accomplish imperfectly. The packing-former is placed in any convenient position for use, as upon a table, standing upon its base, and the packings or flat india-rubber rings are placed upon or around the top of the cylinder A, and when a sufficient number, or any desired number, are thus placed, the operator or attendant thrusts them firmly down upon the base or flange *a*. In order to cause the entire mass of packings to assume and retain the true annular form, the metal ring *x* seen in the drawings is placed around the cylinder and pressed firmly upon the packings, where it will remain by its own gravity, or by reason of its friction upon the cylinder. The packings should remain upon the packing-former sufficient length of time to cause them to retain the true annu-

lar form, which will depend to some extent upon the degree of the temperature of the surrounding atmosphere. The annular pressure-ring *x* corresponds with the flange-base *a*, and the packings are so compressed between them as to cause each to retain the exact form of the pressure ring *x* after being removed from the cylindrical former A.

The purpose of giving to the projecting weight the conical form is to facilitate the placing of the deranged ring-packings upon the cylinder. My device may, however, be successfully used without the use of a weight of any particular form, as will appear obviously.

Having fully described my improved packing-former for sealing fruit-cans, what I claim, and desire to secure by Letters Patent as my invention, is—

1. The cylindrical packing-former A, for preparing india-rubber annular packings for sealing fruit-cans in the manner described, and represented in the accompanying drawings.

2. The pressure-ring *x*, or its equivalent, in combination with the flange or base *a*, applied and used in the manner and for the purpose specified.

W. WEBSTER.

In the presence of—

H. P. K. PECK,

JAS. E. CAMPBELL.