

(No Model.)

J. L. WHEELER.

JAR.

No. 280,888.

Patented July 10, 1883.

Fig. 1

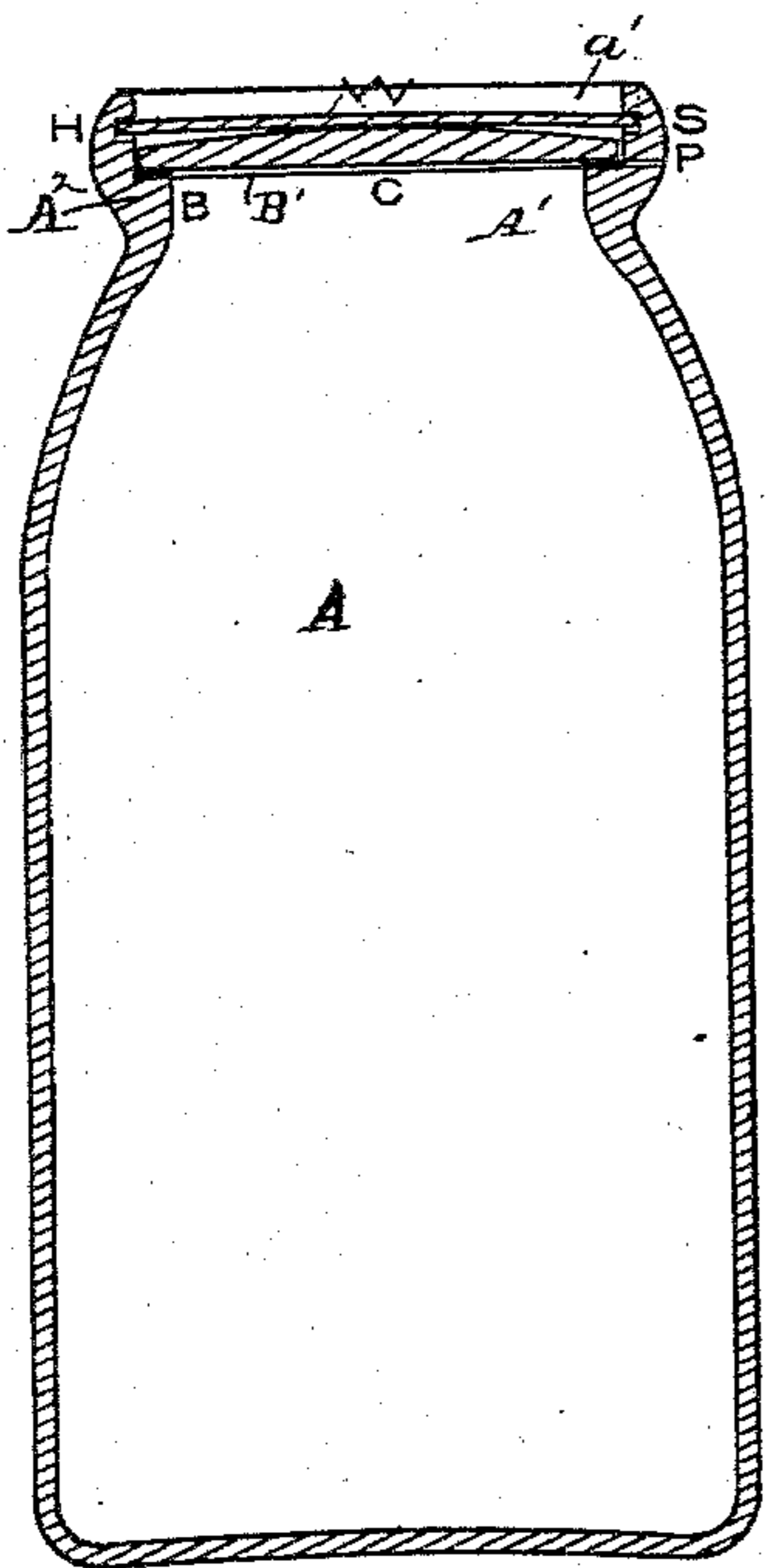


Fig. 2

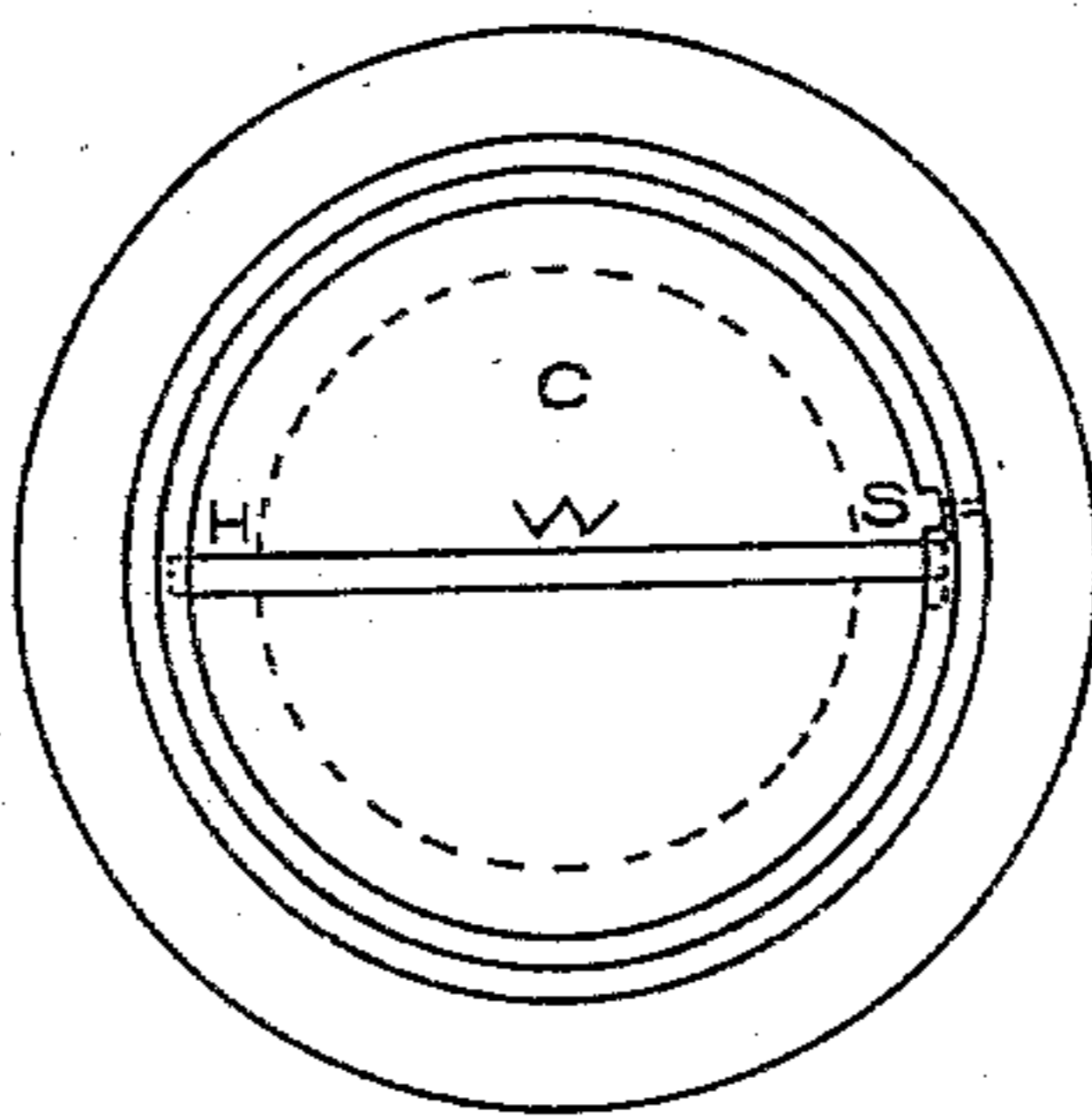
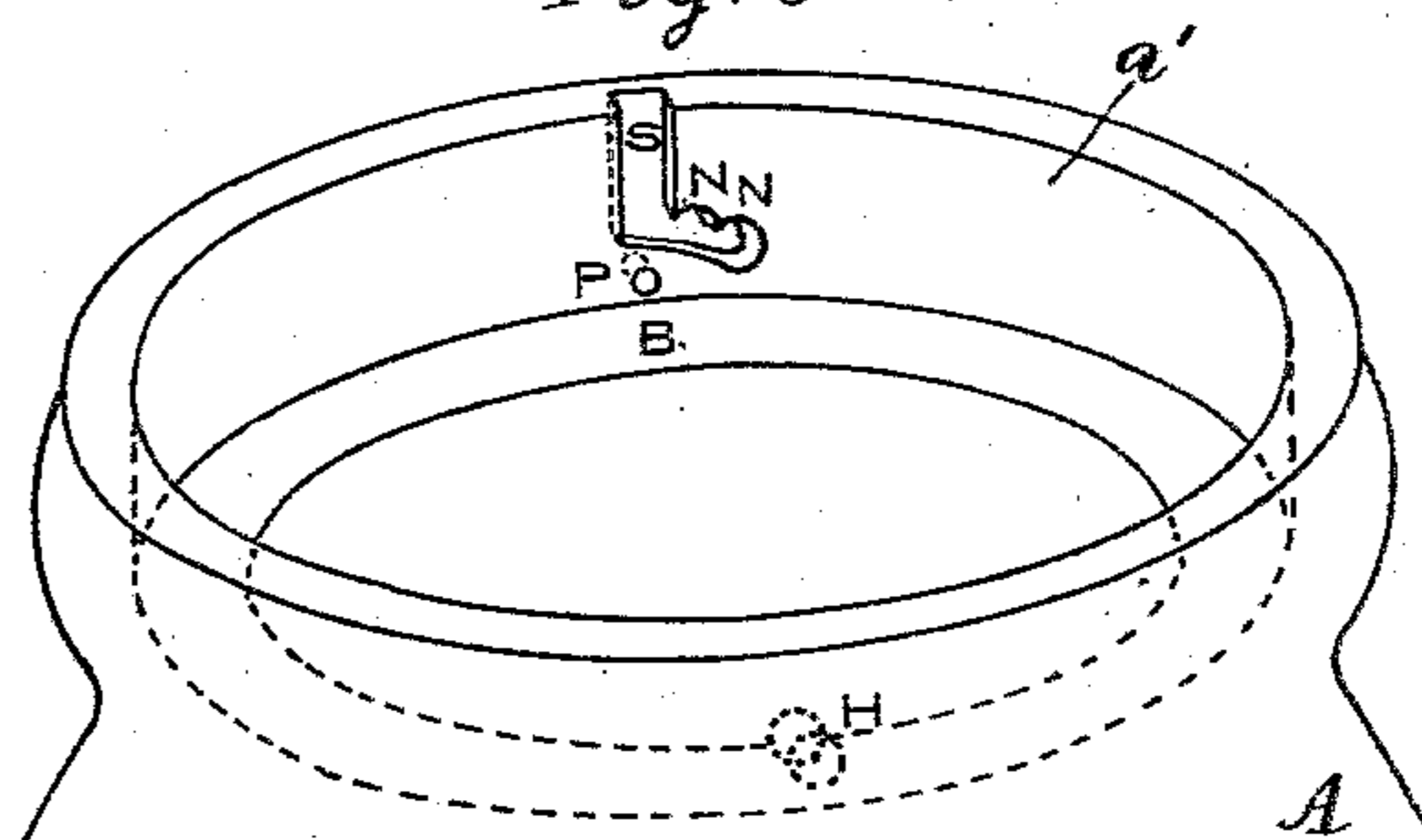


Fig. 3



Witnesses:

N. K. Law  
J. C. Turner

Inventor:

James L. Wheeler  
by Doubleday & Bliss  
attys.

# UNITED STATES PATENT OFFICE.

JAMES L. WHEELER, OF STILLWATER, MINNESOTA.

JAR.

SPECIFICATION forming part of Letters Patent No. 280,888, dated July 10, 1883.

Application filed November 20, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES L. WHEELER, a citizen of the United States, residing at Stillwater, in the county of Washington and State of Minnesota, have invented certain new and useful Improvements in Jars, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to improvements in the jars which are used for the preserving of fruit and similar purposes, and which are to be hermetically sealed.

Figure 1 is a vertical section of a jar having my improvements applied thereto. Fig. 2 is a top plan view of the same, and Fig. 3 is a perspective of the mouth of the jar.

A represents the body of the jar proper, which is usually made of glass, though it may be of earthenware, or of any of the materials used in making these vessels. The neck portion A' is formed with a comparatively thick part, A<sup>2</sup>, in order that it may provide a support for the rising annular wall a', and also provide a comparatively wide shoulder at B. Upon this shoulder B there is placed an annular rubber gasket, B', which may be of the ordinary character.

C is the cover or closing-piece, having a plain bottom, and of a diameter such as to fit snugly within the wall a'. The upper face of the cap-piece is crowned—that is to say, the center part of it is highest, the surface sloping down toward the edge from said center portion.

W represents a fastening-strip of wire, or suitably-shaped piece of metal, it being formed preferably of metal having considerable elasticity. One end is secured in a small socket or recess, H, formed on the inside of the wall a'. In the same wall, but diametrically opposite to the socket or recess H, there is formed a slot, S, having a vertical portion and a part inclined thereto. The inclined part of the slot is made in such shape and so related to the vertical portion that it shall act to hold the end of the holding strip or piece W firmly in place after it has been pressed down upon the cover C. In order to insure a permanent engagement between the holding strip or piece W and the walls of the slot S, I form notches or recesses N in the upper side of the inclined

part of said slot, into which the end of the part W can spring, and which will prevent lateral disengagement.

The method of sealing the jar with the devices which I have described will be readily understood. It consists in simply placing the cap upon the rubber gasket, and clamping it tightly in place by means of the holding strip W, one end of which is inserted in the socket or recess H, and the other end is then sprung downward in the slot S until it engages with one of the notches, N N, or with the upper wall of the inclined part of the slot. At P there is a small aperture through the wall a' in the same horizontal plane as that occupied by the gasket. When the cap is secured tightly in place, the gasket insures that the air shall not enter through this aperture P; but when the cap is loosened, the aperture permits the entrance of air to a sufficient extent to destroy the vacuum which has been formed below the cover by the hermetical sealing. As a result, the cap can be easily removed, it not being held upon its seat by the pressure of the outside air. The wall a' is rounded or swelled, as will be seen, in order to provide sufficient thickness of material outside of the socket or recess H and the slot S.

It will be seen that the cover and fastening devices are situated entirely below the upper edge of the neck portion A', said neck part being formed according to the simplest and cheapest method of making glass jars—that is to say, made with a smooth, plane, or square top; and below this smooth, plane edge the fastening-strip and the parts which hold it are situated. In consequence, I can pack the jars (both before and after they have been filled with the materials to be preserved therein) with an assurance that there shall be no interference with the fastening devices from outside objects, and the jars can be packed closely and tightly together.

I am aware that metallic cans have been provided with inwardly-projecting shoulders, sockets, removable cover, fastening-strips resting upon the cover, and sockets to hold the fastening-strips; but the articles of this kind with which I am acquainted have had ears or projections extending upwardly from the upper edge of the neck-wall to carry the sockets

for the holding-strips, and the objections incident to these vessels are what I claim to obviate. Moreover, the articles of this class above referred to have been arranged to have  
5 one end or the other project beyond or through the socket to the outside. When the elastic fastening-strip thus passes to the outside, it is practically impossible to keep it perfectly tight under all circumstances, especially when  
10 packing and transporting.

What I claim is—

1. The combination, with the jar having the inwardly-projecting shoulder, B, to receive a rubber gasket, and the smooth, plane-edged  
15 neck-wall provided with a socket or recess H, and with the angular slot or socket S, having the graduated notches N, of the cover-piece C, crowned upon its upper surface, and an elastic holding-strip adapted to have one end fit in  
20 the socket or recess H and the other in said slot S, substantially as set forth.

2. The combination, with the jar having the inwardly-projecting shoulder B to receive a rubber gasket, and a plane or square-edged

neck-wall, and provided with a socket or recess, H, extending from the inner surface of the neck-wall partially through it, and with the angular slot or socket S, having the notches N, of the cover-piece C, and the elastic holding-strip W, adapted to have one end fit in the  
30 recess or slot S and the other end in the socket H, the wall at the outer end of the socket preventing the holding-strip from passing through said wall, substantially as set forth.

3. The combination of the cap or covering-  
35 piece, the elastic strip for holding it in place, and the jar having a plane or square upper edge, having means inside of the neck-wall for securing the cap and the holding-strip, and having its outer surface continuous and un-  
40 perforated at the points where the holding-strip is secured inside, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES L. WHEELER.

Witnesses:

R. H. BRONSON,  
GEO. H. PRINCE, Jr.