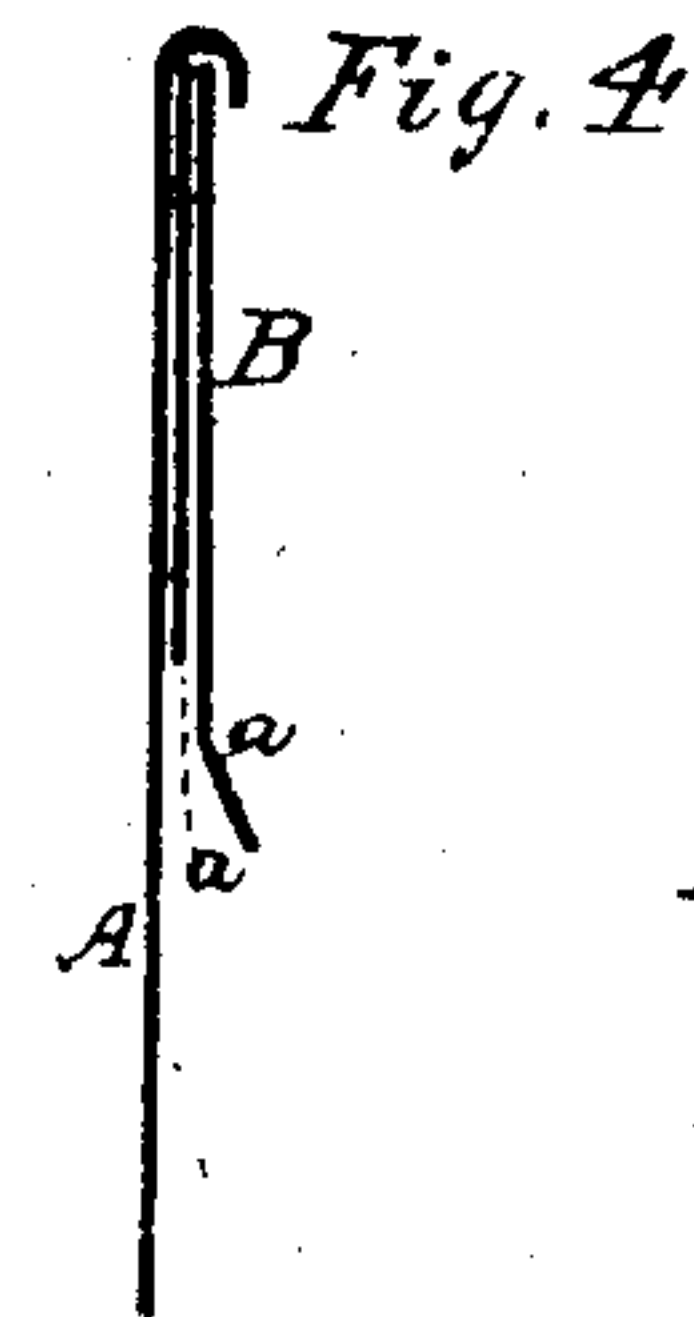
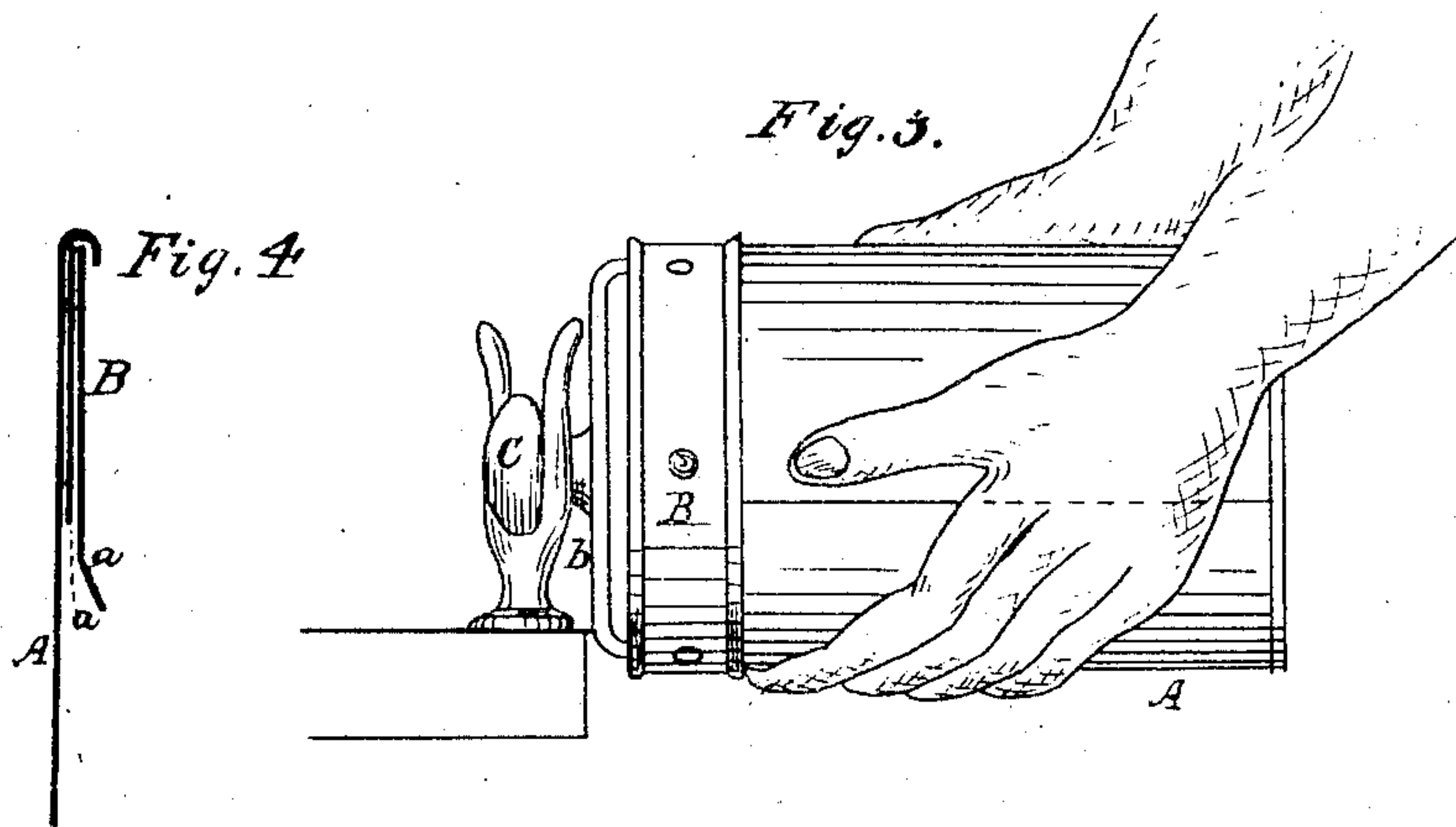
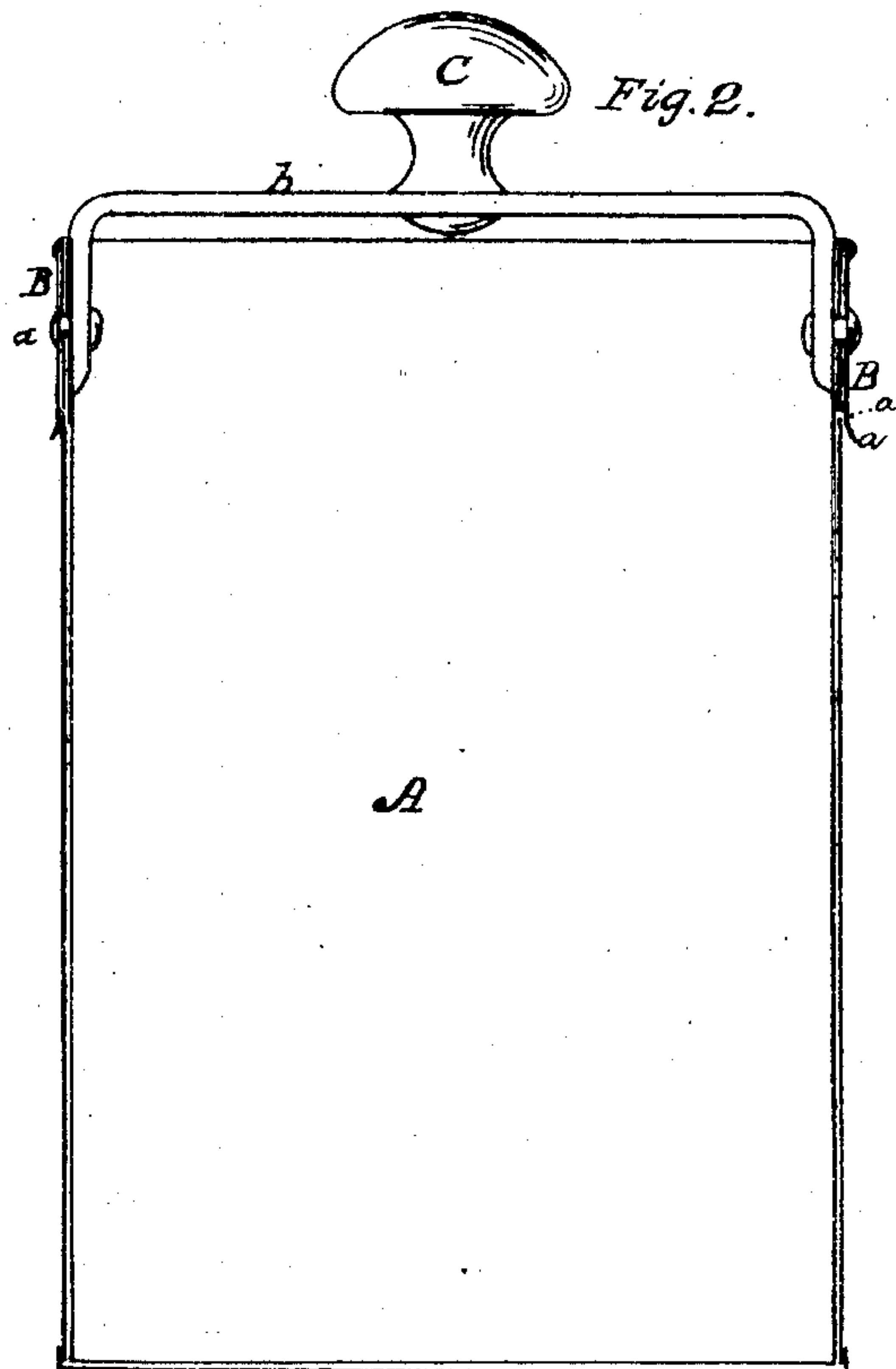
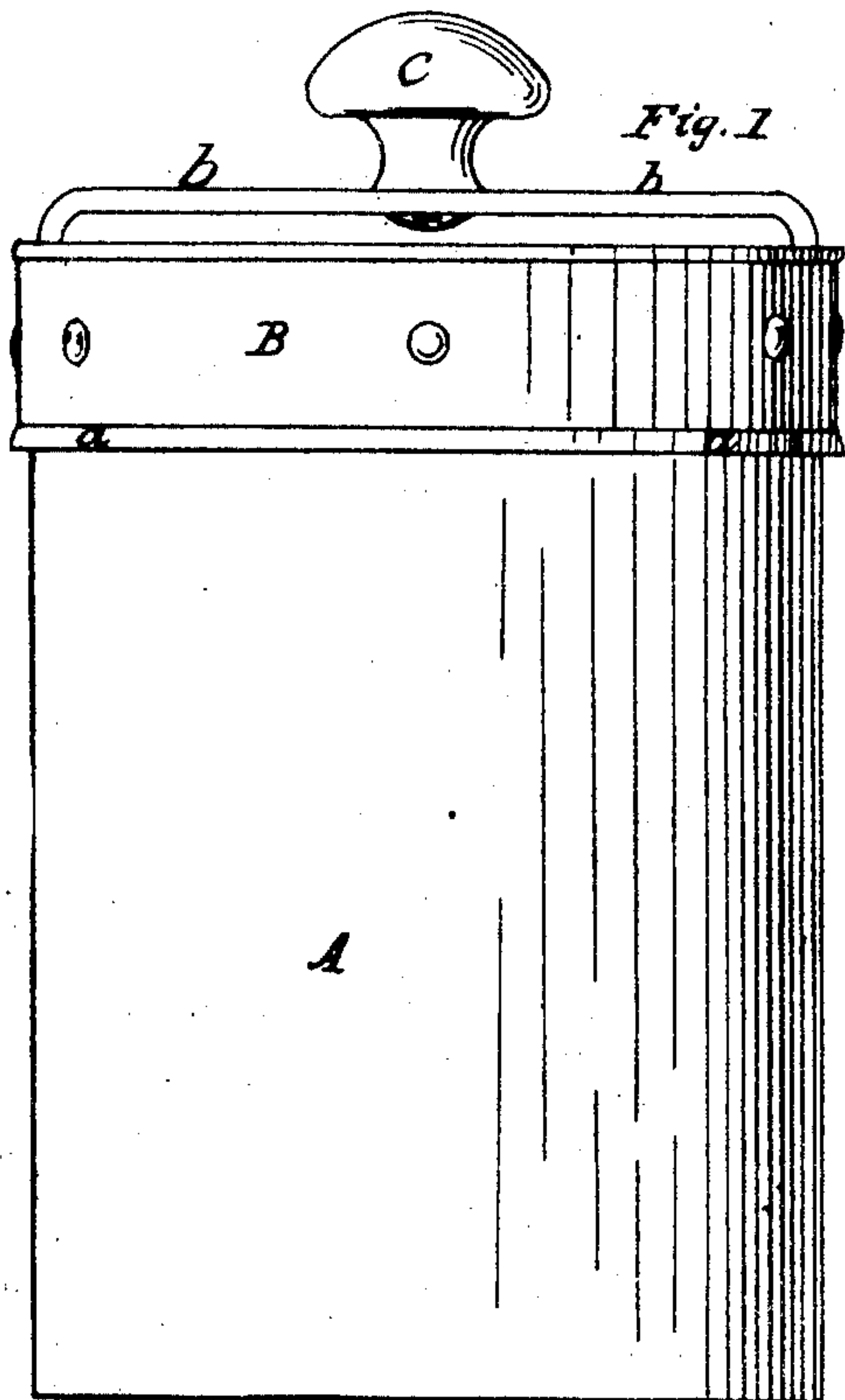


*W<sup>m</sup> Serviss,  
Soldering Tin Cans.*

*N<sup>o</sup> 75,985.*

*Patented Mar 24. 1868.*



*Witnesses:*

*Inventor:*

*J. M. Coombs  
W. W. Reed*

*William Serviss  
per Brown Combs &  
Atty.*

# United States Patent Office.

WILLIAM SERVISS, OF SIDNEY, OHIO.

*Letters Patent No. 75,985, dated March 24, 1868.*

## IMPROVEMENT IN DEVICE FOR SOLDERING TIN CANS.

*The Schedule referred to in these Letters Patent and making part of the same.*

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, WILLIAM SERVISS, of Sidney, in the county of Shelby, and State of Ohio, have invented certain new and useful Improvements in Apparatus for Soldering Tin Cans; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a portion of this specification, in which—

Figure 1 is a side view of an apparatus constructed according to my invention.

Figure 2 is a vertical transverse section of the same.

Figure 3 is a side view of the same on a reduced scale, showing the manner of removing the can after the soldering-operation is performed.

Figure 4 is a detached section of a portion of the same on an enlarged scale.

Similar letters of reference indicate corresponding parts in all the figures.

This invention is designed more particularly for use in making tin fruit-cans, but it may also be employed to advantage in the manufacture of other cylindrical vessels of such material, and its object is to enable the operation of soldering the joints of such tinware to be performed with much greater convenience and economy of time than is practicable by the ordinary method of soldering.

The invention consists in a tubular holder, furnished, near one end, with an annular clasping-lip, in such manner that the can may be readily secured upon the said holder, and held in such position that its joints may be soldered with very great facility.

The invention further consists in the combination, with the aforesaid holder, of a knob or equivalent device, whereby the easy removal of the finished or soldered can or article from the holder is secured.

To enable others to understand the nature and construction of my invention, I will proceed to describe it with reference to the drawings.

A represents a cylindrical shell, which may be made of stiff sheet metal, and which is made somewhat—for instance, about an inch—longer than the can or vessel to be soldered; and secured around one end of this shell is an annular sheet-metal strap, B, placed preferably upon an intermediate band, *a'*, which keeps it at a short distance from the shell A, the innermost edge, *a*, of which is made flaring outward, the said edge constituting a lip, flaring from the surface of the shell A, as shown more clearly in fig. 2. Secured in that end of the shell A at which the strap B is situated is a strong transverse bar, *b*, to the outer side of which is attached a knob, C, the purpose of which will be herein presently set forth.

In using the apparatus, the sheet-metal blank from which the cylindrical body of the can or vessel is to be formed, having been first bent into proper cylindrical shape, is placed around the shell A, with what is designed for the upper edge of the can pushed underneath the lip, *a*, of the said shell, and with its longitudinal edges lapping past each other to any desired degree. The bottom of the can is then fitted upon the outer or lower end of the body of the can, the position of the said body and bottom of the can upon the apparatus being shown more clearly in the red outline of fig. 2. By this means the upper edge of the body is held snugly in position by the lip *a* surrounding the same, while the lower edge is correspondingly retained in place by the flanch of the bottom placed thereon, as just mentioned. The parts of the can being thus secured in position, the joints are soldered by the usual or any suitable means or appliances, which being done, the knob C is placed between the prongs of a forked or bifurcated tool, *b*, fixed to a suitable support, as shown in red outline in fig. 3, and the can, being grasped by the hands, as represented in the said figure, is then withdrawn from the apparatus. The apparatus, by thus serving to hold the body and bottom of the can in position while the joints thereof are being soldered, does away with the necessity of the means ordinarily employed as prerequisites of such soldering-operation.

The shell may be made slightly tapering toward that end thereof opposite the lip *a*, if desired, to facilitate the detachment of the soldered or finished can or article therefrom.

I am aware that cylinders provided with a lip of about half an inch wide to bite on the lap of the seam to be soldered have heretofore been used; but these have proved of little value where perfect uniformity of size is desired, as the cylinder to be soldered is apt to bulge away from the former on the opposite side from said lip



or clip; and, in case the material is less than the average thickness, it will not be held by it at all. This, therefore, I do not claim; but

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

1. The holder, composed of the shell A, furnished with the annular lip *a*, substantially as and for the purpose herein set forth.
2. The combination, with the holder, constructed as described, of the knob C, substantially as and for the purpose specified.

WILLIAM SERVISS.

Witnesses:

T. F. WILKINSON,  
E. H. ARBUCKLE.