

No. 145,156.

Patented Dec. 2, 1873.







Fig. 2

Mitnesses. Reducer & Gibbous. Robert Skimm

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AM. PHOTO-LITHOGRAPHIC Co. N.Y. IOSBORNE'S PROCESS)

## UNITED STATES PATENT OFFICE.

## LEWIS CUTTING, OF SAN FRANCISCO, CALIFORNIA.

## IMPROVEMENT IN SOLDERING-TOOLS.

Specification forming part of Letters Patent No. 145,156, dated December 2, 1873; application filed August 18, 1873.

## To all whom it may concern:

Be it known that I, LEWIS CUTTING, of the city and county of San Francisco, State of California, have invented an Improvement in Soldering-Tools; 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 and to the letters marked thereon.

My invention relates to that class of tools or soldering-irons which are employed in securing the tops of cans after being filled with fruit or other substances; and it consists in the employment of a soldering-iron proper, which is formed in sections about the heating-block and is retained in its position by means of a ring which is driven down over the sections. This enables me to make use of scraps of copper in forming the sectional ring, and it enables me also to easily replace the whole or any part of the ring when it is burned out.

Referring to the drawings for a more complete explanation of my invention, Figure 1 is a side elevation with a section of holding-ring. Fig. 2 is a perspective view. Fig. 3 is a view of the guide for setting the plates. Figs. 4 and 5 are bottom views of the device.

A is the handle of the iron, and B is the stem or rod which extends from it to the iron or block C. The inner stem, D, is operated by the handle E, and works, through the stem B, to hold the cover in place while it is being soldered in the ordinary manner. Outside of the iron C is the soldering-ring proper F. This ring is kept hot by the block C, and is ordinarily made in one piece secured to it. In my device I construct the ring in sections, as shown. These sections are bent so as to surround the blocks C, and are secured by means of an outer band or ring, G, the block C being made slightly tapering, so that the ring will bind the sections strongly to their place. The ring also serves to retain the heat and prevent the solderingring from being oxidized or decomposed by excessive heat when placed in the furnace or on the heating-plate.

In order to adjust the lower ends of the sections so that all will be of the same length, and also at the same distance below the block C, I employ a ring, H, flanged at I, so that the part H supports the block C, while the edges of the sections F extend down to the flange I. The ring G is then driven down and the whole is secured in place.

By this means I am enabled to make my soldering-ring cheap and easily replaced whenever it is necessary; and the block C can also be heated without danger of burning the other parts, as in the ordinary solderer.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The soldering ring composed of the sections F, in combination with the block C and the holding ring G, when constructed to operate substantially as herein described.

In witness whereof I have hereunto set, my hand and seal.

LEWIS CUTTING. [L. s.]

Witnesses: C. W. M. SMITH,

M. G. UPTON.