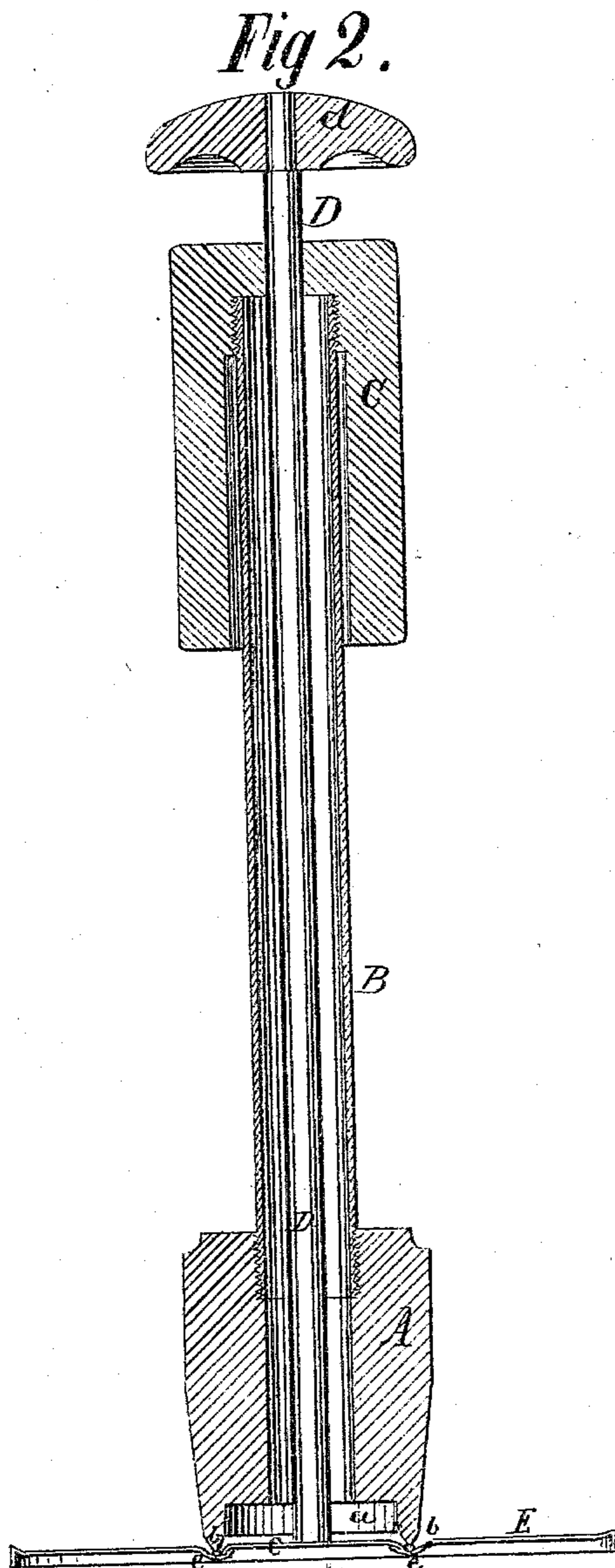
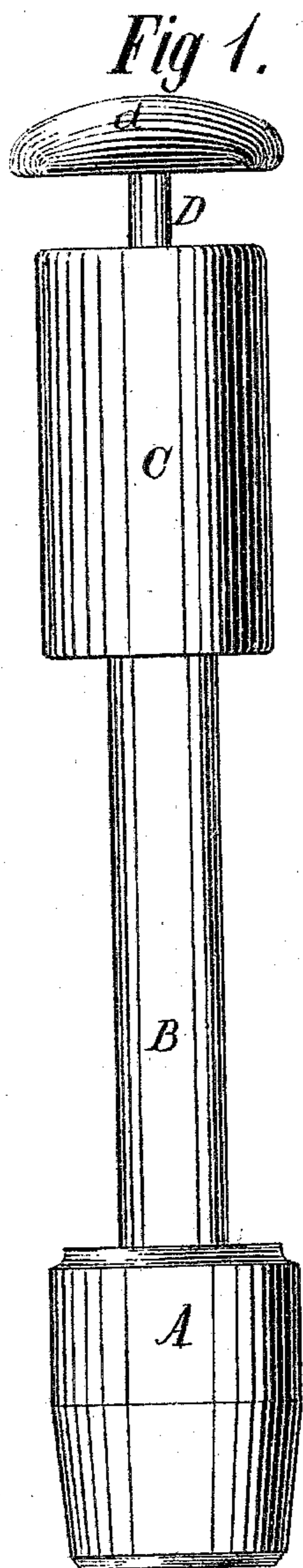


L. McMURRAY & R. J. HOLLINGSWORTH.

Improvement in Soldering Tools.

No. 115,760.

Patented June 6, 1871.



*Witnesses:*

*James Flynn  
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*Inventors:*

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# UNITED STATES PATENT OFFICE.

LOUIS McMURRAY AND ROBERT J. HOLLINGSWORTH, OF BALTIMORE, MD.

## IMPROVEMENT IN SOLDERING-TOOLS.

Specification forming part of Letters Patent No. 115,760, dated June 6, 1871.

We, LOUIS McMURRAY and ROBERT J. HOLLINGSWORTH, of the city and county of Baltimore and State of Maryland, have invented certain Improvements in a Soldering-Tool, of which the following is a specification:

Our invention consists in an improvement in the construction of the soldering-tool for which Letters Patent were granted to J. A. Bostwick on June 21, 1870, by providing the soldering-iron with a vertical hollow stem through which the presser-rod plays, guided in the handle of the stem, as will be generally explained in the following description, and specifically pointed out in the claim.

In the annexed drawing, Figure 1 is an elevation of our improved soldering-tool. Fig. 2 is a vertical section of the same, showing the mode of operation.

The iron A is a short block, having a recess, *a*, formed in one end corresponding in outline with the caps which the tool is designed to solder to tin fruit-cans and the like. The rim *b*, bounding the recess, is beveled to an edge, or nearly so. An aperture is formed through the block A longitudinally, which is tapped at the end opposite to the recess *a* to receive the hollow stem B which is screwed into it. The block and stem may be formed in one piece, if preferred, but both must always be made hollow. The outer end of the hollow stem is screwed into a wooden handle, C, in which a presser-rod, D, is snugly fitted. This presser-rod passes through the hollow stem into the iron to press upon the cap and hold it firmly to the top of the can while being soldered to the latter. It is made of sufficient length to ex-

tend a short distance above the handle C when it rests on the cap, and terminates in a wooden knob, *d*, on which to press with the palm of the hand or with one finger, while the iron may be turned at the same time with the other fingers of the same hand, taking hold of the handle C. When the iron A is to be heated the presser-rod D is drawn out of it a sufficient distance into the hollow stem so that it will not be affected by the fire to any extent.

In applying the tool, as shown in Fig. 2, the presser-rod is projected through the iron A to first press the cap *c* down on the can-top E. The handle C is then pushed down on the rod to bring the edge of the iron in contact with the solder *e*, in the crease of the can-top, and fuse it. The iron is lifted off the can-top a moment before the presser-rod is, so as to allow the solder to set while the cap is still being pressed to the can.

The greater utility of this tool over that patented by Bostwick consists in its compactness, and that it can be operated with one hand.

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

The combination of the tubular soldering-iron A, hollow stem B, handle C, and presser-rod D, which is guided in the handle to play through the stem and soldering-iron, substantially in the manner set forth.

LOUIS McMURRAY.

ROBERT J. HOLLINGSWORTH.

Witnesses:

JAMES FLYNN,

GOTTLEIB JEHNERT.