

A. GOETZE.
SOLDERING TOOL.

No. 175,691.

Patented April 4, 1876.

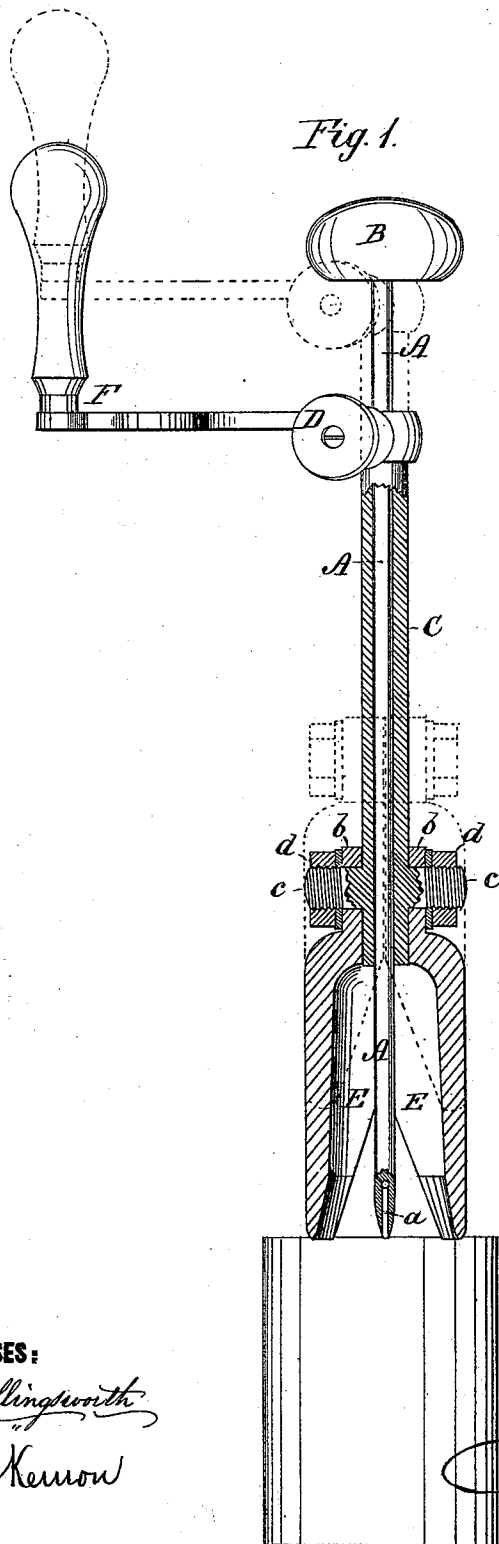
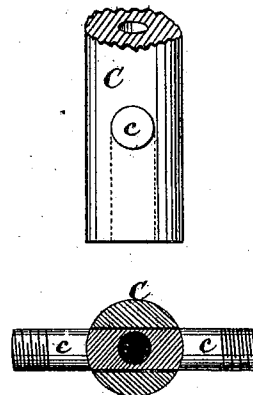


Fig. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

AUGUST GOETZE, OF BALTIMORE, MARYLAND.

IMPROVEMENT IN SOLDERING-TOOLS.

Specification forming part of Letters Patent No. **175,691**, dated April 4, 1876; application filed January 26, 1876.

To all whom it may concern:

Be it known that I, AUGUST GOETZE, of Baltimore city, State of Maryland, have invented a new and Improved Soldering-Tool; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming a part of this specification, in which—

Figure 1 is a sectional side elevation, showing the elevated position of the tube and soldering-block in dotted lines. Fig. 2 are details of the end of the tube, showing attachment of screw-stems to the same.

My invention relates to a novel construction of soldering-iron, especially adapted to capping cans of preserved fruits, vegetables, oysters, and other articles of food.

The invention belongs to that class of soldering-irons in which the copper block is attached to a hollow tube, which is provided with a handle, and adapted to be rotated about a central shaft, and also made vertically adjustable thereon.

My invention consists in the peculiar attachment of the copper blocks to the tube, as hereinafter more fully described.

In the drawing, A represents the central shaft of the soldering-iron, which is employed for centering the devices upon the can, and around which the soldering devices rotate. Said shaft is provided at the top with a knob-handle, B, and at the bottom with a gas and air vent, *a*, which allows the escape of the air and gas from the central hole in the cap of the can while soldering. C is the hollow tube encompassing shaft A, and arranged both to rotate and slide thereon. Said tube carries the copper soldering-block below, and is provided at the top with a radial crank-handle, F, by which it is rotated, and also with a short knob-handle, D, which, when the tube and copper blocks are raised for the sol-

der to cool, is grasped by the same hand of the operator which holds the shaft-handle B, thus leaving the right hand free to cool the solder by sprinkling water thereon or brushing it over with a wet brush, by means of which arrangement a great saving of time is made, and a larger amount of work accomplished in a given time. E E are the copper soldering-blocks, which are made heavy, and have their lower ends wrought into parts of circles, so as to fit the circular seams of the can. Said blocks are two in number, and are placed upon opposite sides of the central shaft, so as to balance each other. They are provided at the top with lugs *b b*, having holes, through which pass screw-stems *c c*, attached to the tube, nuts *d d* with washers being employed for clamping and holding the parts securely together. Said screw-stems *c c* require to be very strongly attached to the tube, and for this reason cannot be brazed directly to the same, as the twisting action of the heavy copper blocks would have a tendency to break them off.

To make a very strong and durable connection, I slot the end of the tube, as shown in dotted lines in Fig. 2, and make the screw-stems in one and the same piece with the cylindrical segment *e*, which is afterward brazed in the slots to form a part of the tube.

Having thus described my invention, what I claim as new is—

The tube C, having screw-stems *c c* rigidly united thereto, in combination with the clamping-nuts, and the copper soldering-blocks E E, having perforated upper ends, as and for the purpose described.

The above specification of my invention signed by me this 24th day of January, 1876.
AUGUST GOETZE.

Witnesses:

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