CHARLES BROMBACHER

Improvement in Soldering-Irons.

No. 128,106.

Patented June 18, 1872.

Fig. 1.

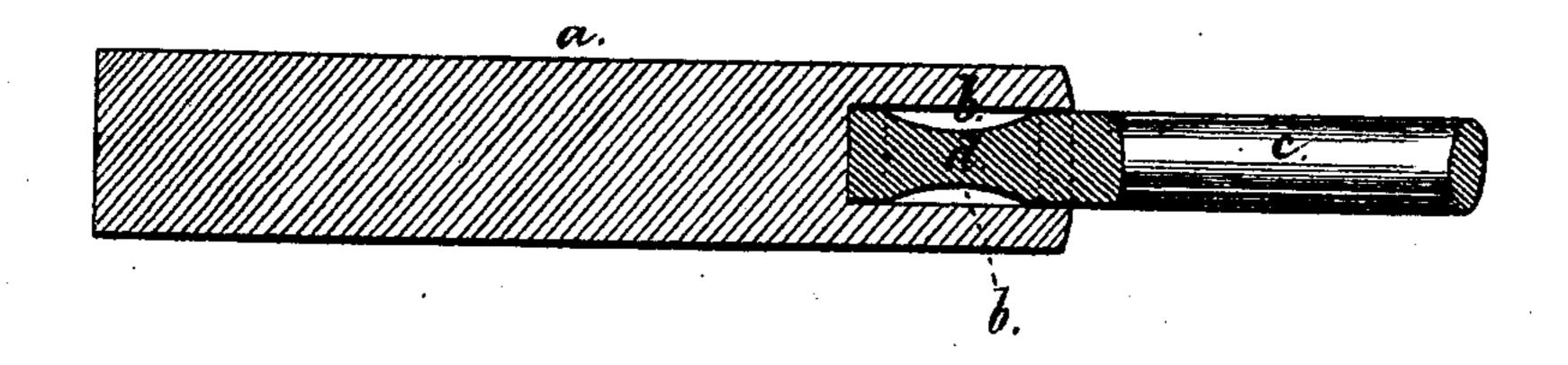
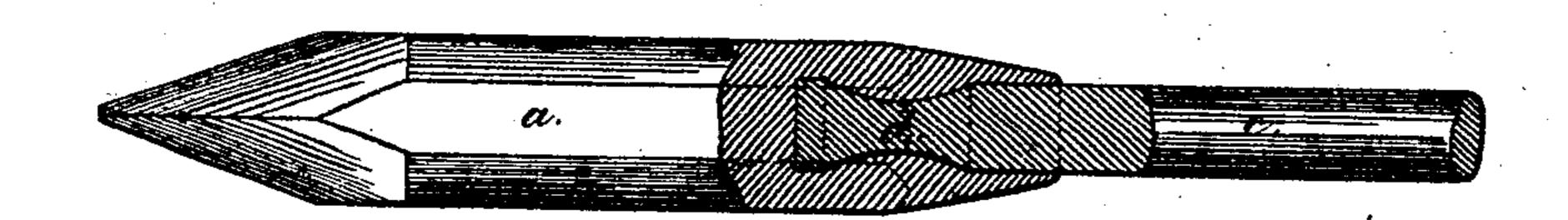


Fig. 2.



Witnesses

Chart Smith Sel. T. Timekney Inventor.

Charles Brombacher, mel W. Terrell

AM. PHOTO-LITHOGRAPHIC CO. N.Y. (OSBORNE'S PROCESS.)

UNITED STATES PATENT OFFICE.

CHARLES BROMBACHER, OF TARRYTOWN, NEW YORK.

IMPROVEMENT IN SOLDERING-!RONS.

Specification forming part of Letters Patent No. 128,106, dated June 18, 1872.

To all whom it may concern:

Be it known that I, Charles Brombacher, of Tarrytown, in the county of Westchester and State of New York, have invented and made an Improvement in Soldering-Irons; and the following is hereby declared to be a full and

correct description of the same.

Previous to my invention the copper bolts of soldering-irons have been secured to their handles by the end of a bolt entering a socket or fork in the rod or handle, and the two connected together by riveting. A rod has also been passed through a hole in the bolt, bent double, and then welded together to form the handle. In another instance the rod has been screwed into the end of the copper bolt; but in either case the bolt is liable to become loose or disconnected from the rod, and said modes of attachment are expensive.

The object of my invention is to provide a mode of attachment which will dispense with riveting or screw-threads, so as to cheapen the cost of manufacturing soldering-irons, and at the same time furnish a means of attachment which will connect the copper bolt to its rod or handle in a more secure and reliable manner than by any of the methods heretofore

devised.

I make use of a copper bolt with a cavity or hole in its end to receive the end of the rod or handle, and said rod is made with a projection near its end, or a neck or depression in the surface of the rod, or with both, and the metal of the end of the bolt is compressed by dies around the rod, so as to fill the depression or surround the rib and thus prevent the bolt being drawn off the rod.

In the drawing, Figure 1 is a section of the copper bolt and a portion of the rod or handle previous to the metal of the bolt being swaged around the rod; and Fig. 2 is a similar view, with the bolt partially in elevation and the bolt connected to the rod.

The copper bolt a may be of any desired size or shape, and at its rear end is a longitudinal hole or socket, b, to receive the end of the rod c. This rod c is preferably made of wroughtiron, and the part which enters the hole b is provided with one or more projections upon its surface, or with a neck or depression. I have shown a depression, d, which may have an irregular surface, so as to prevent the bolt turning upon the rod after the copper has been compressed around the rod.

The hole b is first punched in the blank bolt, and then the end of the rod passed into said hole; the blank is now placed in suitable dies, and the metal of the bolt swaged or compressed around the end of the rod, which forces the metal into the depression and securely connects the bolt and rod together. The blank may now be pointed and finished in any de-

sired manner.

I claim as my invention—

The soldering-iron made with a metal handle having a projection or neck, around which the copper is compressed, as and for the purposes set forth.

Signed by me this 7th day of March, A. D.

1872.

CHAS. BROMBACHER.

Witnesses:
GEO. T. PINCKNEY,
CHAS. H. SMITH.