

No Model.)

M. GREER, Jr.  
SOLDERING TWEEZERS.

No. 420,874.

Patented Feb. 4, 1890.

FIG. 1.

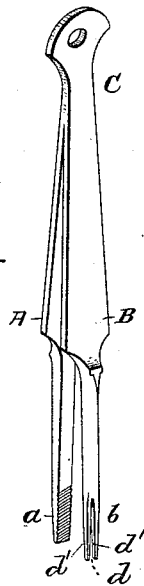


FIG. 2.

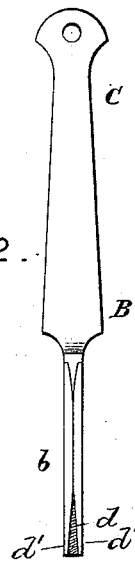


FIG. 3.

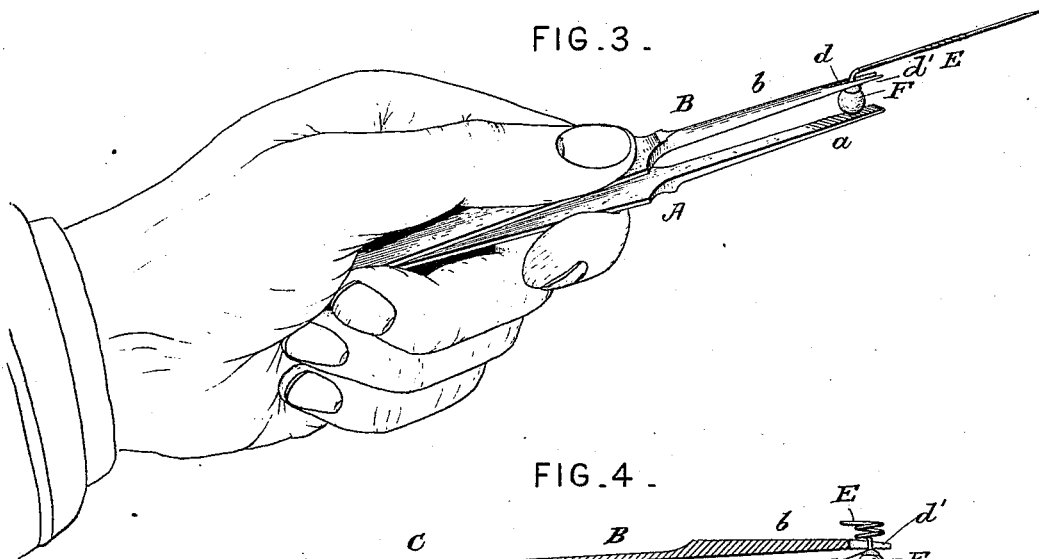
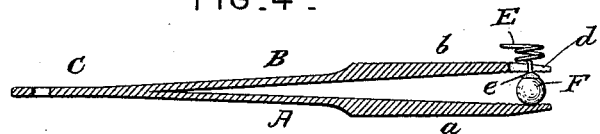


FIG. 4.



Attest:  
Geo. T. Smallwood,  
Walter Allen

Inventor:  
Moses Greer Jr.  
By *Knight & Co.*  
Atty

# UNITED STATES PATENT OFFICE.

MOSES GREER, JR., OF KNOXVILLE, TENNESSEE.

## SOLDERING-TWEEZERS.

SPECIFICATION forming part of Letters Patent No. 420,874, dated February 4, 1890.

Application filed May 7, 1889. Serial No. 309,849. (No model.)

*To all whom it may concern:*

Be it known that I, MOSES GREER, Jr., a citizen of the United States, and a resident of Knoxville, in the county of Knox and State of Tennessee, have invented certain new and useful Improvements in Soldering-Tweezers; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of my improved soldering-tweezers. Fig. 2 is a side view of the same. Fig. 3 is a perspective view showing the manner of holding the parts or articles to be soldered, and Fig. 4 is a longitudinal sectional view also illustrating the manner of using the device.

Like letters of reference denote corresponding parts in all the figures.

This invention relates to tweezers for the use of jewelers, watch-makers, and similar trades in which fine and delicate handling and soldering of small parts or objects is to be done; and it consists in the improved construction of a pair of soldering-tweezers, which will be hereinafter more fully described, and particularly pointed out in the claim.

In the accompanying drawings, the letters A and B designate the two legs of my improved tweezers, connected, as usual, at the inner end C, and having sufficient spring to keep their outer ends or jaws *a* and *b* apart from each other when not in use. Both of these jaws are serrated or roughened on their inner sides, facing each other in the usual manner; but one of them *b* is bifurcated, providing a narrow wedge-shaped slot or opening *d* and prongs *d'*. This slot or opening is adapted to receive and the prongs formed thereby to hold the stem or shank of the fastening for the pin, stud, or other object which

is to be soldered to the fastening, as will be seen by reference to Figs. 3 and 4 of the drawings, in which the letter E denotes a fastening to which the ornamental head F is to be soldered. The latter, which may be of course of any desired shape (a sphere is shown in the drawings) or suitable material, is held between the serrated jaws of the tweezers, in which position it will bear against the plate *e* upon the pin to which it is to be soldered. The wedge shape of the slot provides converging walls to the prongs, which bite firmly that part of the stem or shank of the fastening which is inserted in the opening, so as to hold or wedge it securely and fixedly in place during the process of soldering the head F upon plate *e*. Other articles which permit of it are held and treated in the same way, and in this manner small articles of jewelry or the parts of watch-movements may be soldered or brazed neatly and expeditiously. The opening *d* being of wedge shape, shanks or stems of various diameters can be securely held between the converging walls of the prongs *d'*. At the same time this device may be used in the same manner and for the same purposes as an ordinary pair of tweezers in picking up or handling small objects.

Having thus described my invention, the following is what I claim as new therein and desire to secure by Letters Patent:

Soldering-tweezers constructed with a pair of legs one of which is provided with an elongated tapering slot for receiving and holding stems of different diameters in opposition to the article held between said legs, substantially as described.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

MOSES GREER, JR.

Witnesses:

WM. P. GRIFFIN,

WM. STONE FOWLER.