

(Model.)

C. P. CARTER.

ADJUSTABLE SOLDERING FORCEPS.

No. 307,178.

Patented Oct. 28, 1884.

Fig. 1.

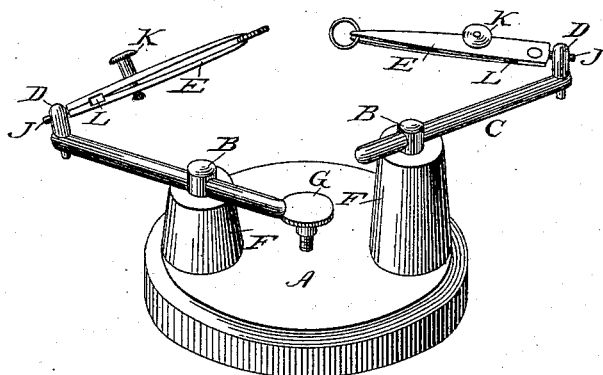
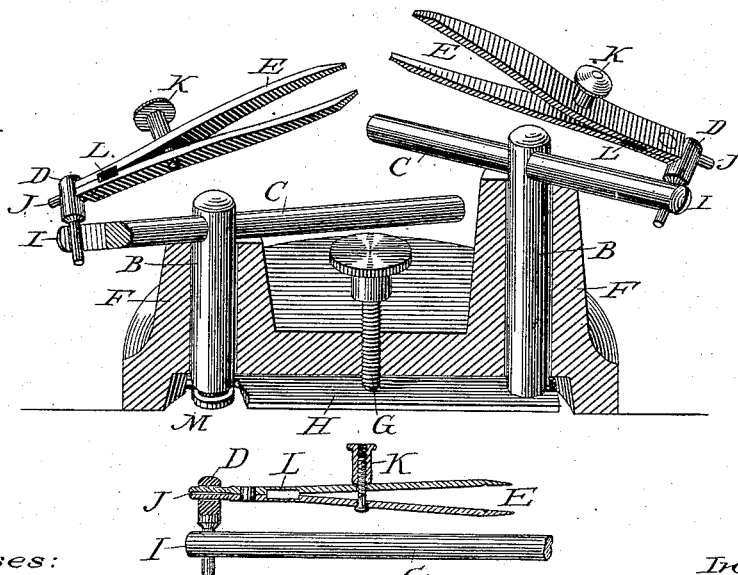


Fig. 2.



Witnesses:

Alfred S. Hudson  
Wm. Wood

Fig. 3.

Inventor:

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# UNITED STATES PATENT OFFICE.

CHARLES P. CARTER, OF KINGSTON, NEW YORK.

## ADJUSTABLE SOLDERING-FORCEPS.

SPECIFICATION forming part of Letters Patent No. 307,178, dated October 28, 1884.

Application filed May 5, 1884. (Model.)

*To all whom it may concern:*

Be it known that I, CHARLES P. CARTER, a citizen of the United States, residing at the city of Kingston, in the county of Ulster and State of New York, have invented a new and useful improvement for the purpose of holding work which is to be joined together by soldering or brazing; 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.

Heretofore jewelers' work on jewelry to be joined by soldering has been held in position by binding with wire or fastening with pins to charcoal or other substance that would bear heating.

My invention relates to an improvement in attaching forceps to arms so constructed that work can be placed in them and be brought together in any desired angle or position and held securely in place. This gives the person using the tool the free use of both hands while doing his work. I attain these objects by the device illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of my soldering-forceps; and Fig. 2 is a perspective view showing the parts in detail, the bed-piece and posts being shown in section. Fig. 3 is a detail view of one of the parts, the forceps being shown in section.

Similar letters refer to like parts throughout.

I construct my device with a base, A, on which are placed two upright posts, F F. One of these posts I make longer than the other, which makes it more convenient to manipulate the forceps. The posts have a hole made through their centers vertically and through the bed. In these holes are placed two studs, B B, which pass through them beneath the bed, to allow the spring H to engage in a groove, M, cut at the lower end of studs B B. The upper ends of studs B B extend above the posts F F far enough to allow a hole to be made through them at right angles to their length, and through these holes are placed the arms C C. These arms lie upon the tops of the posts F F. At one end of the arms C C

a hole is made through them, in which hole is placed the short studs D D. The arms are slitted at the ends, the slits being deep enough so that when the studs D D are forced in the holes the arms at I I will spring open and clasp the studs tightly. The forceps E E, I make of two pieces of steel, one end being made pointed to hold the work. Near the center of the jaws at K is placed a screw and nut to close them together, the jaws being normally sprung open. Near the end, at L, the steel is cut away and made thin, so as to make it spring at this part to open and close easily. Between the cut L and the stud D the two pieces forming the forceps are firmly riveted together, and the ends of the forceps are then reduced and made round to fit snugly in the holes in studs D D. After being made round, the two pieces forming the round end are slit and spread apart at J. This makes them spring tightly in the holes in studs D D. The spring H is made with a notch at each end. This notch is placed in grooves in studs B B. The screw G forces down the spring H, which draws down the studs B B, and with them the arms C C are forced down upon the tops of the posts F F, the friction upon which causes the arms to move more or less rigidly, as desired, while at the same time the arms can be revolved upon their own axis, and the studs D D can revolve in the arms C C and the forceps revolve in the studs D D, which hold them, all moving at the same time, giving motions in any and all directions, so that the forceps can be brought to any point or position desired, and remain securely held there.

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

1. The bed-piece A, with upright posts F F, screw G, spring H, and studs B B, when arranged and combined to operate as shown and set forth.

2. The forceps jointed to the arms C C, with the studs D D, and held securely in place by the means, as shown and described, and for the purpose as set forth.

CHARLES P. CARTER.

Witnesses:

JOHN S. DE WITT,  
OLIVER H. HULBERT.