P. P. HAINES.
Soldering Tool.

No. 201,522. Patented March 19, 1878.

FIG. 1.

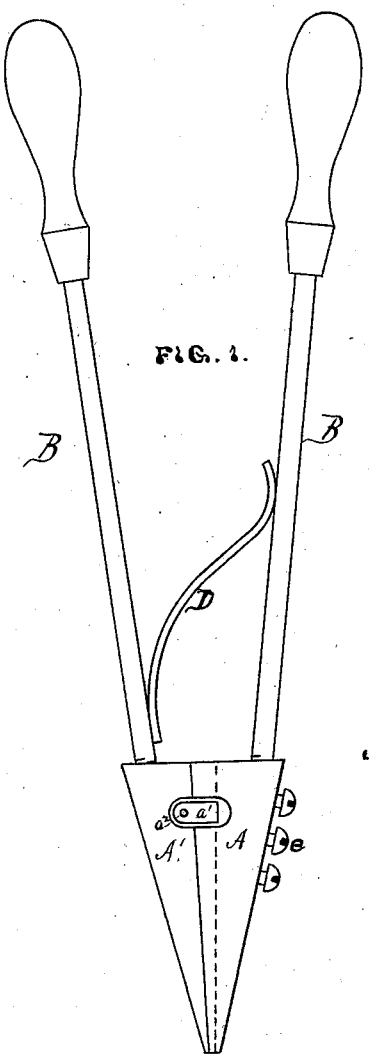


FIG. 2.

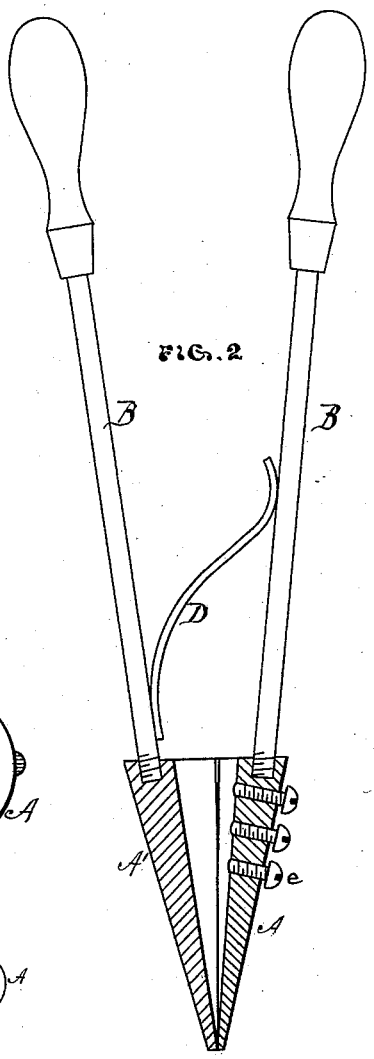


FIG. 3.

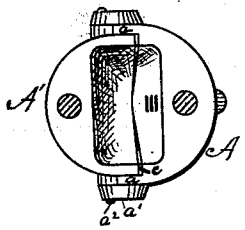
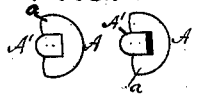


FIG. 4.



WITNESSES:

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UNITED STATES PATENT OFFICE.

PETER P. HAINES, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE WILSON PACKING COMPANY, OF SAME PLACE.

IMPROVEMENT IN SOLDERING-TOOLS.

Specification forming part of Letters Patent No. **201,522,** dated March 19, 1878; application filed March 5, 1878.

To all whom it may concern:

Be it known that I, PETER P. HAINES, of Chicago, in the county of Cook and State of Illinois, have invented certain Improvements in Soldering-Tools, of which the following is a specification:

This invention relates to the class of soldering-tools which are provided with cups to carry an allotted quantity of molten solder.

It consists in forming the cup of two halves of a hollow cone, one of which sets slightly within the other, in order to form a tight joint between them, and uniting them by a hinge-joint near their upper edge, so that by attaching a handle to each half and pressing those handles together, a small opening is formed at the point or apex of the cone, through which the solder may issue to the joint to be soldered.

The invention further consists in providing openings upon the side of the cup, which may be closed or opened at will, to regulate the amount of solder dipped up by the cup, or, in other words, to enable the operator to adjust the capacity of the cup to the wants of the work upon which he may be engaged.

In the accompanying drawings, Figure 1 is a side view, and Fig. 2 a central section, of my improved soldering-tool. Fig. 3 shows the top, and Fig. 4 the bottom, of the cup, the latter view being much enlarged.

Like letters indicate like parts in all the figures in which they are used.

In said drawing, A A′ represent the two halves of the cup, forming together an inverted hollow cone, as shown. The part A is provided with lips *a* on each side, which set over and inclose to some extent the part A′. In this manner a secure joint is formed, which prevents leakage.

Upon each side of the tool is a hinge-joint, formed by an ear, a^1, on the part A, and a pivot, a^2, inserted through the ear and into the part A′. By this connection the two halves are securely held together. The opposing edges of the two parts are, however, rounded slightly off above the hinges, so that when the handles B B, one of which is inserted in each half, are pressed together, the points of the cone will be slightly opened to allow the solder to flow out. This opening is shown in black in Fig. 4, the other part of said figure showing the parts closed.

The chamfering mentioned should be very slight, as at *c*, because the extent of the opening at the point needs to be limited.

A spring, D, is attached to one of the handles, and exerts its pressure upon the other to keep the point of the cup closed at all times, except when its pressure is overcome by the operator.

The adjustable capacity for the cup is obtained by a number of threaded openings, *e*, in one of the halves of the cup, filled by screws, as shown.

If it is desired to diminish the capacity, it is done by removing that one of the screws which will bring it down to the desired point.

Of course, it is obvious that when the tool is dipped into the molten solder, all in the cup above the removed screw will flow out and back into the receptacle from which it is taken. The tool thus becomes adapted to use with several different sizes of cans or other work.

What I claim as new is—

1. The soldering-tool the cup whereof is formed of the two halves of an inverted hollow cone, hinged together and provided each with a handle, substantially as specified.

2. The soldering-tool the cup whereof is formed of two halves of an inverted hollow cone, hinged together and provided each with a handle, and the point whereof is opened to allow the solder to flow by pressing the handles together, substantially as specified.

3. The soldering-tool provided with a cup the capacity whereof can be regulated to suit the work in hand, substantially as specified, and as a new manufacture.

PETER P. HAINES.

Witnesses:

JOHN G. LISTON,

FORDE R. SMITH.