

G. F. BLAISSE & J. BRANNEN.

Soldering-Irons.

No. 139,537.

Patented June 3, 1873.

Fig.1

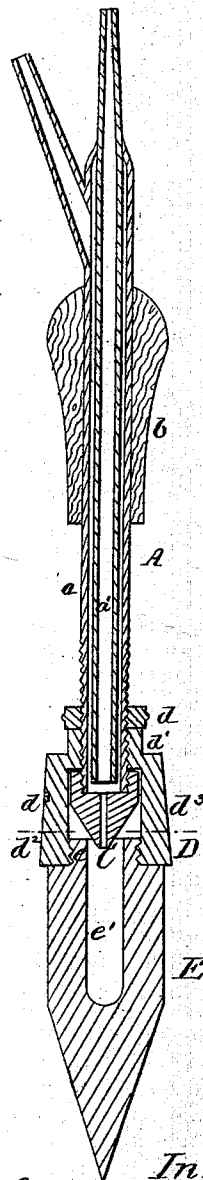
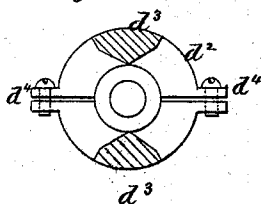


Fig. 2



Witnesses
N Connolly
A. Connolly


 Inventors
 George Frederick Blaise
 James Brammen
 Connolly Bros
 Attys

UNITED STATES PATENT OFFICE.

GEORGE F. BLAISSE AND JAMES BRANNEN, OF PHILADELPHIA, PA.

IMPROVEMENT IN SOLDERING-IRONS.

Specification forming part of Letters Patent No. 139,537, dated June 3, 1873; application filed March 20, 1873.

To all whom it may concern:

Be it known that we, GEORGE FREDERIC BLAISSE and JAMES BRANNEN, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Soldering-Irons; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings which form part of this specification:

Referring to the drawings, Figure 1 is a vertical central section of our invention. Fig. 2 is a cross-section.

Our invention has reference to that class of soldering implements in which the iron is heated by means of gas, the rapid combustion of which is aided by a strong current of air brought in direct contact with the flame. Our improvements relate to the construction of the different parts and their combination, having particular reference to the device for holding the iron, consisting of a clamp so constructed that it may be tightened as the thread upon the iron's neck becomes worn.

Referring to the accompanying drawing which illustrates a soldering-iron with our improvements, A represents the handle of the iron, composed of the air-pipe *a*, which surrounds the gas-pipe *a'*, and is provided with a block or hand piece, *b*. The lower end of the air-pipe is threaded, as shown, and provided with a conical burner, C, and clamp D, the latter being made secure by a jam-nut, *d*. The clamp D is composed of the collars *d*¹ *d*², the latter being made in sections united by means of the arms *d*³. The two sections com-

posing the collar *d*² are provided with flanges and adjusting-screws, as shown at *d*⁴, so that as the thread upon the neck *e* of the iron E becomes worn the clamp may be tightened. The iron E is formed with a recess, *e'*, for receiving the flame from the burner C, said recess being of depth and breadth sufficient to leave a considerable portion of metal in the walls and point, so as to retain sufficient heat for some time, and also to permit the said point to be "forged" out when it becomes dulled by use.

We have shown the iron's neck threaded as also the collar *d*²; but it is obvious that both may be made smooth, if desired, the adjusting-screws at *d*⁴ being sufficient to bind the iron in place. We prefer, however, to construct both the neck and clamp threaded, as shown. If made smooth a tightening-screw might be employed, which would pass through the collar *d*² and impinge upon the neck *e*, and a similar device might be employed for retaining the clamp upon the air-pipe; but the means shown are preferable.

What we claim as our invention, and desire to secure by Letters Patent, is—

In combination with the recessed iron E, the clamp D, having the arms *d*³ connecting the collars *d*¹ and *d*², the latter being made in sections, and provided with screws *d*⁴, substantially as specified.

In testimony that we claim the foregoing we have hereunto set our hands this 14th day of March, 1873.

GEORGE F. BLAISSE.
JAMES BRANNEN.

Witnesses:

GEO. C. SHELMEKDINE,
M. DANL. CONNOLLY.