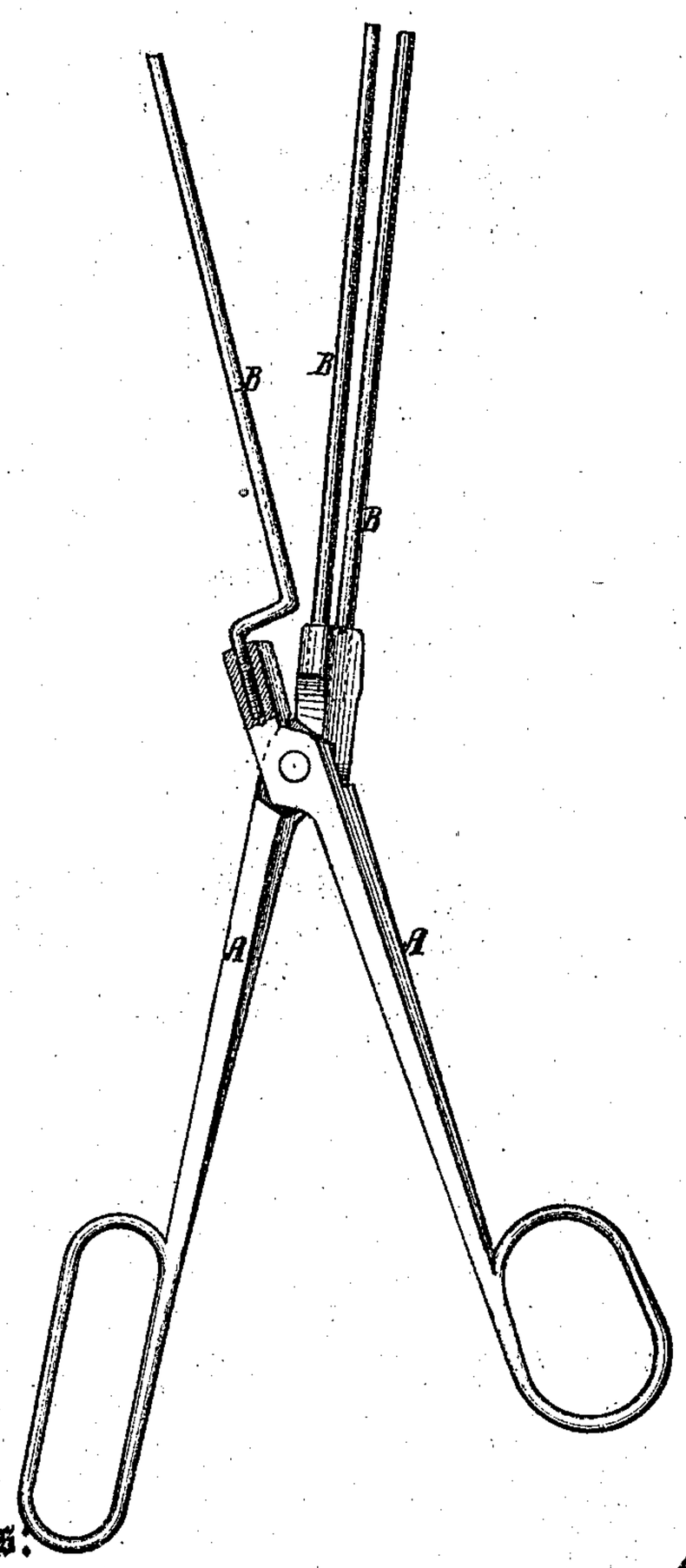
H. Gerecke,

Fluting Tongs.

No. 103,039. Patented May 17. 1870.



Witnesses:

A. Bennenendorf

L. L. Mabee

Inventor:

H. Gerecke

Per Munn & Co

Attorneys.

United States Patent Office.

HENRY GERECKE, OF CARLSTADT, NEW JERSEY, ASSIGNOR TO HIMSELF, AUGUSTUS GERECKE, OF SAME PLACE, AND JACOB STAHL, OF NEW YORK CITY.

Letters Patent No. 103,039, *dated May* 17, 1870.

IMPROVEMENT IN FLUTING-TONGS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, HENRY GERECKE, of Carlstadt, in the county of Bergen and State of New Jersey, have invented a new and useful Improvement in Fluting-Tongs; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

This invention relates to improvements in the construction of fluting-tongs; and consists in making the handles of cast metal and the fingers of wrought or rolled wire, and attaching them to the ends of the handles below the pivot-joint by screwing or otherwise fastening them into holes in the ends of the handles, as hereinafter more fully specified.

Fluting-tongs made entirely of wrought iron, as well as entirely of cast or malleable iron, are old articles of manufacture; but while both have their advantages, they have also their serious disadvantages, which I claim I entirely overcome in my invention, while retaining all the advantages of both.

The advantage of an entirely wrought fluting-tongs is, that it will stand almost any amount of reasonable strain, while in use, to which it may be subjected. Its disadvantage is the large amount of manual labor required in its production, as all the various parts must be forged by hand, which forging, giving the iron a very rough surface, requires a considerable amount of grinding and polishing in order to give it the requisite smoothness to answer for the purpose intended.

The advantage of malleable iron fluting-tongs, on the other hand, is that it dispenses entirely with forging, all the various parts being cast in the proper shape. Yet its disadvantages are obvious, namely, that the prongs being thin, the heat of the furnace twists them into every possible shape, which requires skilled labor to straighten. While, being cast, they have a rough surface, and require fully as much grinding and polishing as the wrought-iron ones. The main disadvantage, however, of the malleable one is, that the metal, being very coarse grained, and its particles not being very firmly united, as soon as the thin prongs are subjected to any considerable strain they are apt to break off, and consequently render the tongs worthless.

In my fluting-tongs the handles are made of malleable iron and pretty thick, so that the heat of the furnace does not materially affect them. Into the heads of these handles I drill holes large enough to admit the prongs, (merely pieces of ordinary bright iron wire,) which can be either riveted, screwed, or cemented in place. I am thus able to dispense with all forging, all grinding, and all polishing, (which is always one of the most serious items in cost of manufacture of this class of goods,) because the handle is japanned, and the wire of which the prongs are made is already drawn perfectly smooth. Thus it will be seen that I secure the advantages of both, while I overcome all their disadvantages, and am able to produce them at fully one-third less expense than either of the others.

Another great advantage of my tongs over any other is, that the prongs can be replaced whenever they should happen to get burnt, which frequently happens from being heated.

The ordinary tongs are constructed in an entirely different manner from mine. Their handles and fingers are cast in one piece, the fingers being merely faced with a thin strip of steel in order to give them a cutting-edge.

The drawing represents an elevation of my improved fluting-tongs, a part being sectional, to show the manner of attaching the fingers.

It is important to have the fingers made of iron or steel wire, which does not become roughened by the action of the heat as the cast-metal fingers do. I therefore propose to make the fingers of wrought or rolled wire and the handles of cast metal, and attach them together by inserting the ends of the fingers in holes in the ends of the handles below the pivot joint, and secure them by screwing or otherwise fastening them in the said holes.

I make the handles or parts made by casting to comprise the joint, and to extend sufficiently beyond the joint for the connection of the fingers.

A represents the handles, and B the fingers. Two of the fingers are attached in the end of one part A, and one in the end of the other part.

Having thus described my invention,

I claim as new and desire to secure by Letters Patent—

As an article of manufacture, fluting-tongs, having cast handles and rolled-wire fingers screwed therein below the pivot-joint, as shown and described.

HENRY GERECKE.

Witnesses:

PETER DIPPEL, JR.,

GEO. L. PLATT.