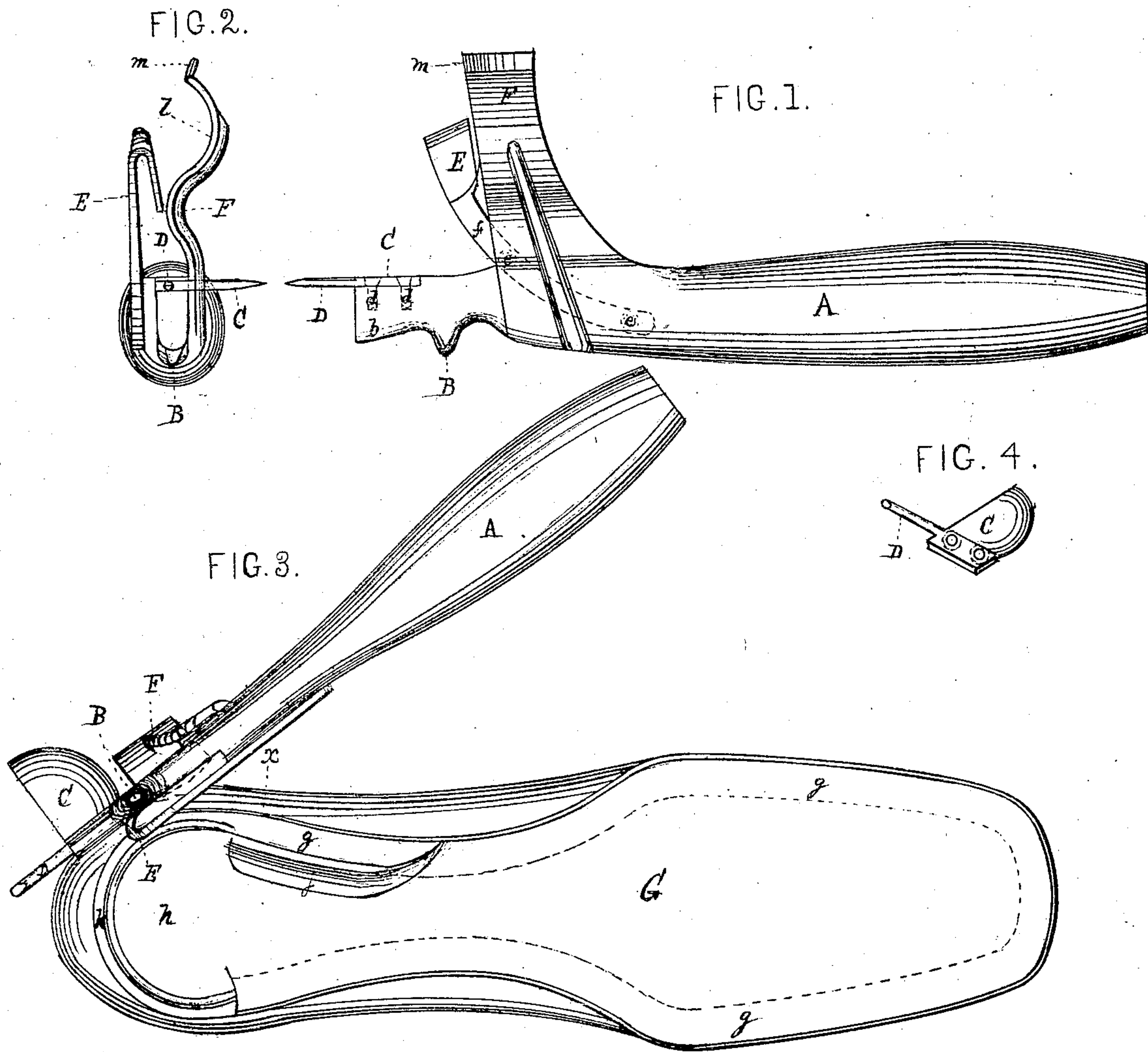


ALFRED CLARKE AND ARTHUR CLARKE.

COMBINED SHOEMAKERS TOOL.

PATENTED MAY 31 1870

103566



WITNESSES.

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ALFRED CLARKE AND ARTHUR CLARKE, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 103,566, dated May 31, 1870.

IMPROVED SHOEMAKERS' TOOL.

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

We, ALFRED CLARKE and ARTHUR CLARKE, of the city of Philadelphia and State of Pennsylvania, have invented certain Improvements in Shoemakers' Channel Opener, Gouge and Guide for the same, Knife and Awl, of which the following is a specification.

The object of our invention is the saving of much time ordinarily consumed by shoemakers in laying down and picking up tools constantly used in the process of preparing the soles for stitching.

We accomplish this object by combining these tools with a common handle, and simplify and cheapen their construction by casting such of them together as do not require to be made of steel, and confining the others to the handle by means of screws or rivets.

The several parts are constructed and arranged as follows:

In the accompanying drawing which makes a part of this specification—

Figure 1 is a side view of the combined tool;

Figure 2 is an end view of the same;

Figure 3 is a face view of a sole *G*, and the combined tool, showing the process of forming the groove, *k*; and

Figure 4 is an isometrical view of the knife *C* and awl *D*, in a single piece.

Like letters in all the figures indicate the same parts.

A is the handle of the tool;

B the channel opener;

C the knife;

D the awl;

E the gouge; and

F the guide for the latter.

The channel opener *B*, guide *F*, and handle *A* are cast in a single piece.

The knife *C* and awl *D* are constructed of a single piece of steel; as represented in fig. 4, and confined to the projection *b* of the handle *A* by means of screws *d d*.

The gouge *E* is confined to the handle *A* by means of screws, *e e*, which pass through the shank *f*.

The operation of the several tools is as follows:

The channel *g*, around the front part of the sole *G*, seen in fig. 3, having been cut by a machine before the sole is put on the last, the knife *C* is used to cut through the channel, at its termination at the heel *h*; then the channel opener is placed in one end of the channel and drawn around to the other, and turning the edge *j* up in preparation for sewing, in the manner represented at one end of the channel, at *x*. The

awl is used merely for stabbing holes to receive nails for confining the sole to the last.

The gouge *E* is used, as represented at fig. 3, for forming the groove *k* around the seat, the guide *F* coming against the back part of the upper, as represented, whereby the groove is made of accurate distance from the edge of the heel all around, and just where it is wanted to sew through, thereby making it perfectly practicable to stitch through the thick part of the stiffening, and thus insuring a firm heel.

In the ordinary mode of using the gouge, without the guide, a different result takes place, especially when there is much irregularity in the heel part of the sole, often causing the groove to be made too far out, and thereby resulting in the stitches being cut when the heel is trimmed off, or else in carrying the stitches through the thin part of the stiffness, and which is, thereby, rendered useless, and results in the heel running down and in the ripping of the front part of the sole, as that part then takes the strain.

The guide *F* has a curve, *l*, so as to clear any irregular projection in the heel of the shoe, as the face *m* slides against the back part of the upper during the formation of the groove *k*.

The channel *g*, as has been stated, is made before the sole is put on the last, but the groove *k*, around the heel, cannot be made until it is placed on the last, as is well known to all shoemakers, and hence requires a distinct tool for its construction.

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

1. The combination and arrangement of the gouge *E* and guide *F* in relation to each other and to the handle *A*, when the said guide is constructed and arranged to operate in relation to the back part of the upper, substantially in the manner and for the purpose above described.

2. The construction of the channel opener *B* and handle *A* in a single piece, substantially as described.

3. The formation of the guide *F* and handle *A* in a single piece, as above set forth.

4. The construction of the knife *C* and awl *D* in a single piece, as above described.

In testimony that the above is our invention, we have hereunto set our hands and affixed our seals this 11th day of April, 1870.

ALFRED CLARKE. [L. S.]

ARTHUR CLARKE. [L. S.]

Witnesses:

STEPHEN USTICK,

THOMAS J. BEWLEY.