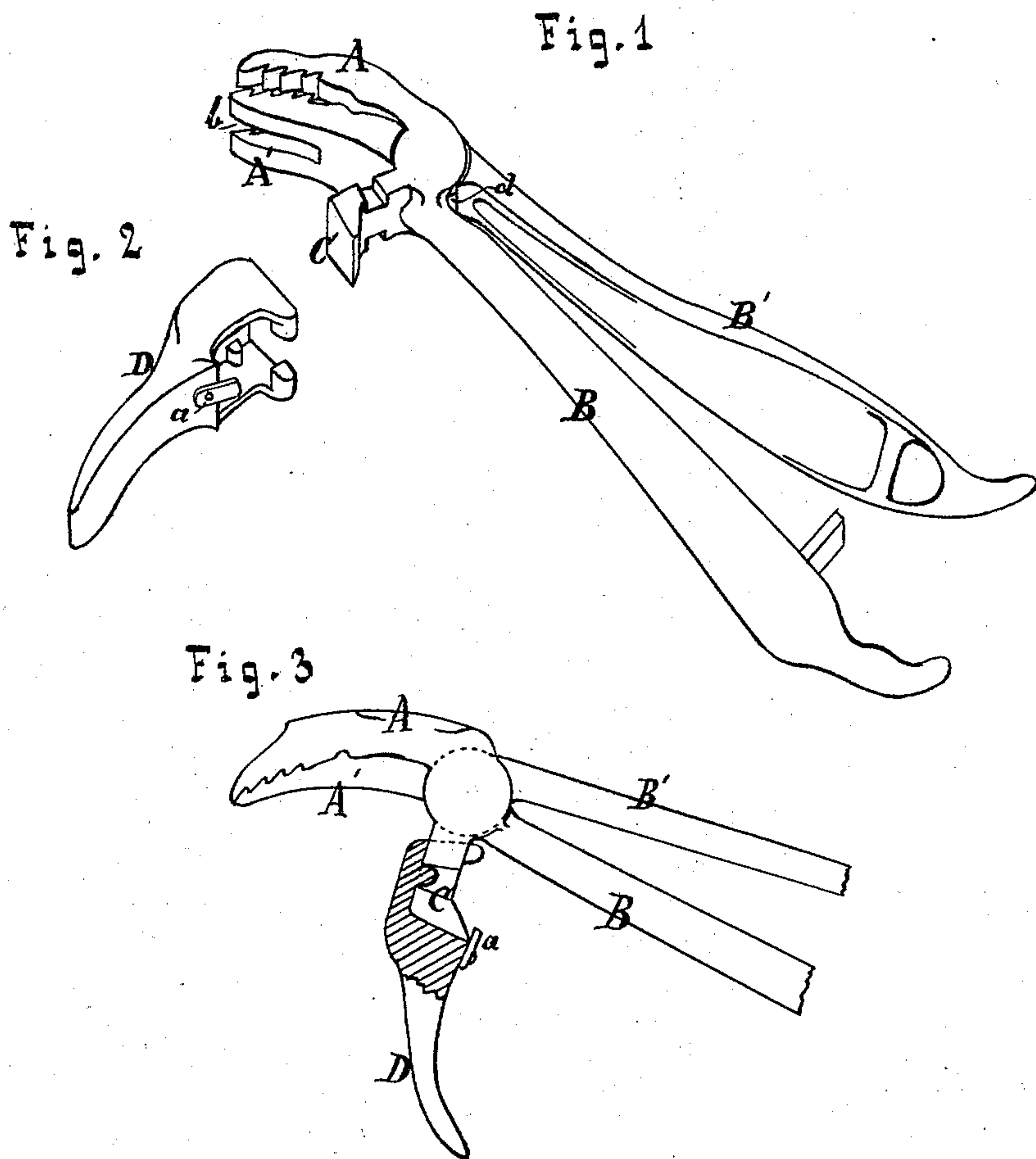


T. B. SHELLY.
SHOEMAKERS' PINCERS.

No. 184,180.

Patented Nov. 7, 1876.



WITNESSES =

Julius Wilkes
John H. Whiffles

INVENTOR =

Thomas B. Shelly

UNITED STATES PATENT OFFICE.

THOMAS B. SHELLY, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN SHOEMAKERS' PINCHERS.

Specification forming part of Letters Patent No. **184,180**, dated November 7, 1876; application filed July 24, 1875.

To all whom it may concern:

Be it known that I, THOMAS B. SHELLY, of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Pinchers; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing, forming a part of this specification, in which—

Figure 1 is a perspective view of the pinchers proper, with the part forming the movable fulcrum removed. Fig. 2 is a perspective view of the movable fulcrum; and Fig. 3 is a side elevation of a portion of the pinchers proper, with the movable fulcrum attached, a portion of which is broken away, showing the manner of securing the same to the fixed fulcrum.

Similar letters of reference indicate like parts in the several figures of the drawing.

My invention relates more particularly to that class of pinchers employed in the manufacture of boots and shoes; and its object is to improve the pinchers for which Letters Patent No. 143,594 were granted to me October 14, 1873. To that end it consists in the arrangement of parts, more fully understood by the following description and claims.

In the drawing, A represents the upper jaw, and A' the lower jaw, which are formed as a part of their respective handles B B'. C is the fixed fulcrum, which is made as a part of the upper jaw A, as shown in Figs. 1 and 3. C represents the fixed fulcrum, which is made as a part of the upper jaw, and provided at its lower end with a groove on each side, right and left, running across it at right angles, or nearly so. D represents a removable fulcrum, to be taken off and put on at will, of such construction as to be put onto the fixed fulcrum through the grooves at its lower end, and fastened by means of the button *a*, pivoted to the removable fulcrum D, and so arranged as to bear against the rear surface of the fixed fulcrum C, as shown in Fig. 3.

In constructing my improved pinchers I first cast the upper handle and lower jaw with a solid circular disk, *d*, located at its junction with the lower handle, which unites

said upper handle and lower jaw, making them one solid piece, and forms the fulcrum on which the upper handle turns. This part is then placed into the molds of the lower handle, in such position as to bring the disk in place where the handles cross, and leave an opening for that part of the lower handle which crosses the other to form or cast over and around the disk to form the joint. When the parts are thus cast together they form a perfect and compact joint, which turns on the disk without the aid of a rivet to hold them together, and the lower handle and upper jaw, together with the fixed fulcrum, are formed in one solid piece of metal instead of two, as in my former patent.

The fulcrum, being a part of the upper jaw, gives leverage to the gripe of the jaws, and enables the operator to hold the leather with a firmer grasp, and draw it down to the last by one and the same operation—namely, bearing down on the upper handle. The lower handle is used mainly for the purpose of opening the jaws, it not being necessary, as with ordinary pinchers, to gripe the leather mainly by the gripe of the hand in drawing the upper and lower handles together.

The pinchers, as constructed without the movable fulcrum D, are used for lasting boots or shoes at all required points except the shank, which usually requires a different tool for lasting.

For the purpose of lasting the shank with my pinchers, I have devised the movable fulcrum D, (shown in Fig. 2 of the drawing,) which may be put on or taken off at will. It is attached to the fixed fulcrum, and held in place by means of the key or button *a*, but may be attached in any other convenient mode. When it is attached the pinchers have the same leverage of gripe as without it, and are adapted to slide over the hollow of the last, and draw the leather down to the last at this point, as is required in lasting the shank.

I make the jaws of the pinchers either with or without the slot *b*, Fig. 1. The object of this slot is to afford a better hold on the leather.

What I claim is—

1. Pinchers having a disk or pulley joint, substantially of the construction described.

2. Shoemakers' pinchers having the fixed fulcrum made as a part of the upper jaw, and provided with grooves at its lower end, to admit of the attachment of the removable fulcrum D for shank-lasting, substantially as described.

3. The removable fulcrum D, in combination

with shoemakers' pinchers, for shank-lasting, substantially as described.

THOMAS B. SHELLY.

Witnesses:

JOHN H. WHIPPLE,
CHARLES K. OFFIELD.