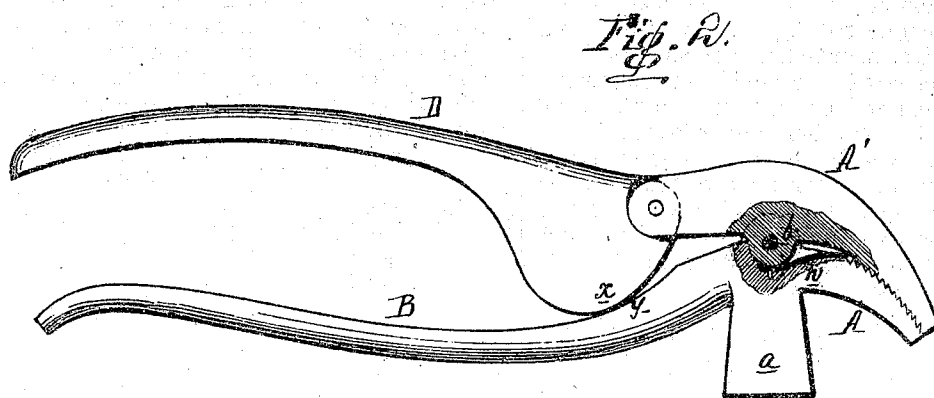
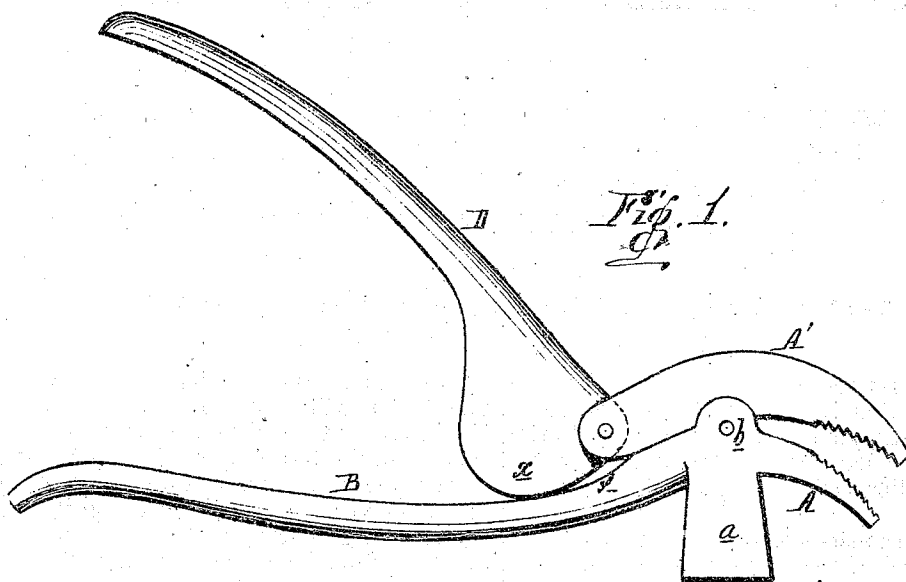


Daniel Zeiler ass't etc. Improved Pincers or Pliers.

No. 120,144.

Patented Oct. 17, 1871.



Witnesses { *Geo. B. Harding*
Thomas M. Thayer

Daniel Zeiler
by his attys
Steele & Anderson

UNITED STATES PATENT OFFICE.

DANIEL ZEILER, OF MARLBOROUGH TOWNSHIP, PENNSYLVANIA, ASSIGNOR TO HIMSELF AND DANIEL MILLER, OF SAME PLACE.

IMPROVEMENT IN PINCHERS.

Specification forming part of Letters Patent No. 120,144, dated October 17, 1871.

To all whom it may concern:

Be it known that I, DANIEL ZEILER, of Marlborough Township, county of Montgomery, State of Pennsylvania, have invented certain improved Pinchers or Pliers, of which the following is a specification:

My invention consists of a pair of pinchers or pliers, composed of two jaws pivoted together and operated by a cam-lever, hung to one of the said jaws, and acting as an arm secured to or forming part of the other jaw, all as fully described hereafter.

Figure 1 is a side view of my improved pinchers or pliers, showing the jaws opened; and Fig. 2 the same, partly in section, with the jaws closed.

The drawing represents my invention as applied to a pair of shoemaker's pinchers, of which A and A' are the jaws, of the usual curved shape, and *a* a projection on the under jaw, intended to serve as a hammer for pounding leather, &c. The jaws are connected together by a pin, *b*, but are not crossed, as in ordinary shoemaker's pinchers. The lower jaw A is formed in one piece with, or has permanently secured to it, an arm, B, and to the rear end of the short upper jaw A' is pivoted a lever, D, which has on its under edge a cam-like projection, *x*, arranged to bear against and turn upon the curved surface *y* of the arm B of the lower jaw. This projection *x* is of such a shape, that, when the lever D and arm B, which

form the handles of the instrument, are pressed together, it will raise the rear end and depress the front end of the short upper jaw, and thus close the latter upon the short lower jaw A, the pressure which is thus exerted through the cam-lever forcing the jaws tightly together and enabling objects to be much more firmly gripped and held between the said jaws than in ordinary pinchers. A spring, *h*, is arranged in any convenient position between the jaws, so as to separate the latter when the pressure upon the cam-lever and arm B is relieved.

My invention, although especially applicable to shoemaker's pinchers, can, it will be evident, be adapted to pinchers, pliers, or forceps, to be used for a variety of purposes.

I claim—

A pair of pincers or pliers, consisting of jaws A and A', connected together by a pin, *b*, and operated by a cam-lever, D, pivoted to one of the said jaws, and acting on an arm, B, secured to the other jaw, all substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

DANIEL ZEILER.

Witnesses:

JOHN EIDEMILLER,
HENRY E. MOYR.

(16)