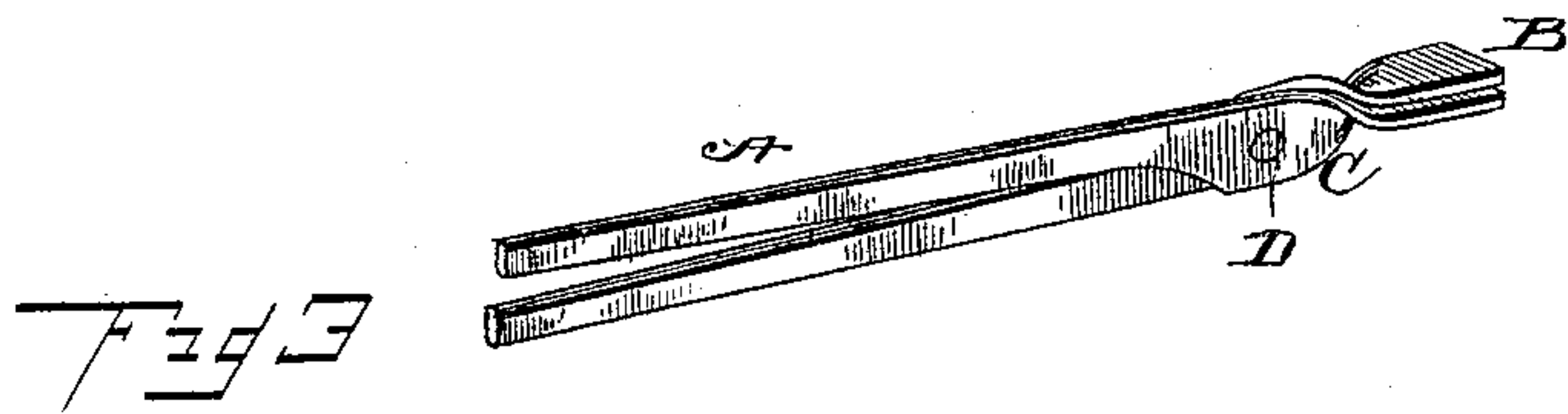
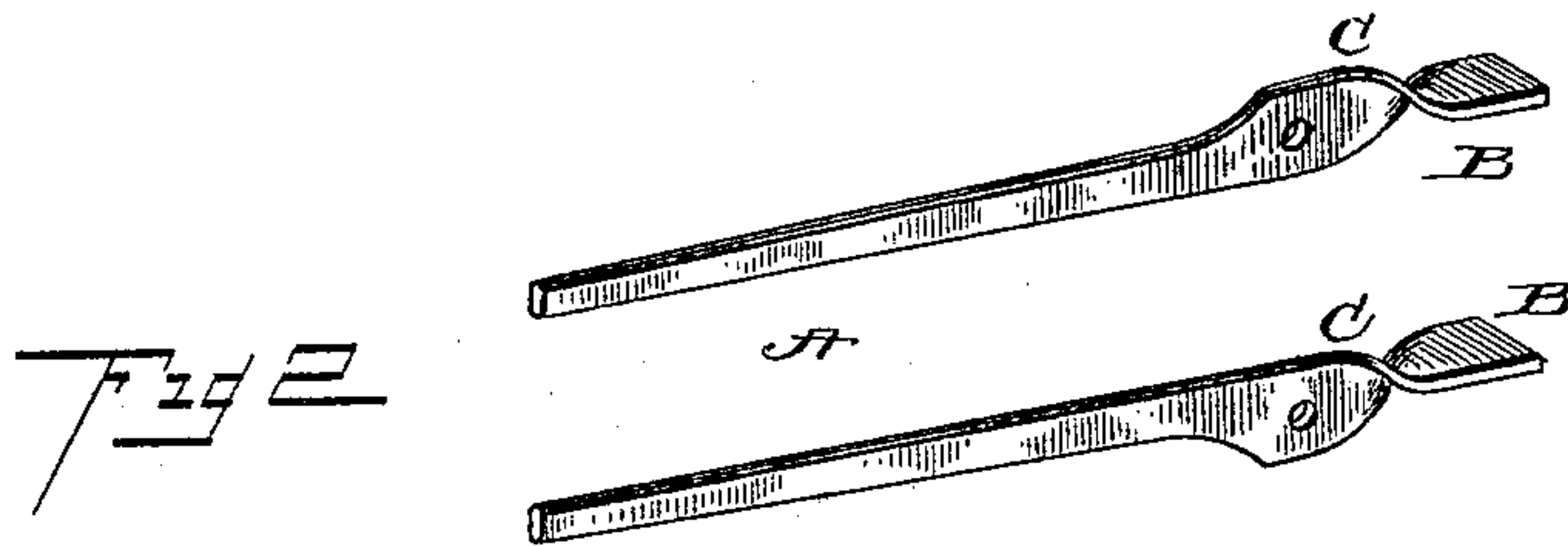
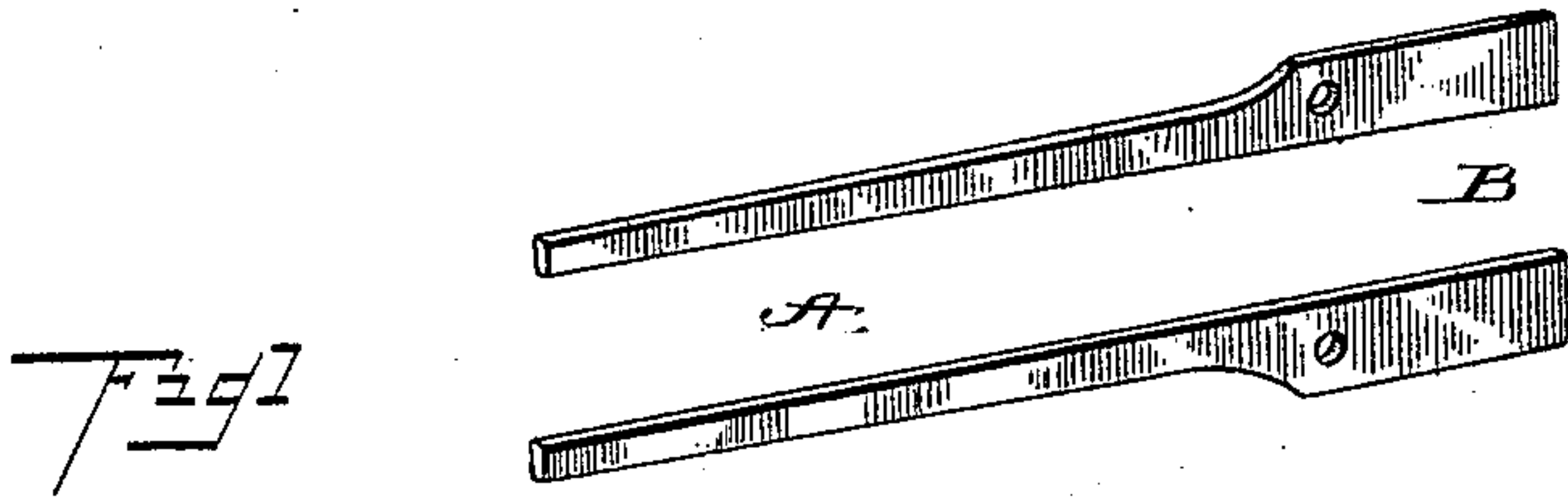


(No Model.)

E. W. PEARSON & T. E. BARLETT.  
TONGS OR PLIERS.

No. 459,818.

Patented Sept. 22, 1891.



Witnesses

John D. Irvine  
Wm. J. Little,

Eli W. Pearson <sup>Inventors</sup>  
and  
Thomas E. Barlett,  
By their Attorney,  
J. R. Littell,

# UNITED STATES PATENT OFFICE.

ELI W. PEARSON AND THOMAS E. BARLETT, OF SABINA, OHIO; SAID  
BARLETT ASSIGNOR TO MILNER VAN PELT, OF SAME PLACE.

## TONGS OR PLIERS.

SPECIFICATION forming part of Letters Patent No. 459,818, dated September 22, 1891.

Application filed May 19, 1891. Serial No. 393,357. (No model.)

*To all whom it may concern:*

Be it known that we, ELI W. PEARSON and THOMAS E. BARLETT, citizens of the United States, residing at Sabina, in the county of Clinton and State of Ohio, have invented certain new and useful Improvements in Tongs or Pliers; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

Our invention relates to improvements in blacksmiths' tongs, pinchers, nippers, or other analogous devices, and has for its object to simplify the construction of said devices and at the same time preserve their strength and durability.

Our invention consists in forming the biting-jaws of aforesaid devices integral with and at right angles to the handles thereof and at the same time a snug-fitting bearing for the hinged or pivotal joint thereof, whereby the parts are held closely together and sustained in an accurate adjustment continuously.

In the accompanying drawings, like letters of reference are used to indicate corresponding parts in the several views, and therein—

Figure 1 represents a perspective view of the blanks employed in constructing the device. Fig. 2 represents a similar view of the said blanks after being shaped into form. Fig. 3 represents a similar view of the completed device.

Referring to the drawings, A designates the handles, and B the broadened ends of the blanks. The two parts are placed in a vise after being heated, and given a torsional twist or bend to form the interlocking bearing parts C of the joint or hinge, and through which is passed a rivet D. After twisting or bending the blanks, the handles A remain in their original shape and position, and the broadened ends B become the biting-jaws. It will be observed that said jaws are formed in such manner that a continuation of the longitudinal line of the handles A would bisect said jaws, thereby locating the same to

equally bear the strain brought to bear thereupon. It will be further noticed that the edges of the curved portions of the bearing parts C form a guard to prevent the jaws from receiving further impact than that necessary to cause a biting action thereof and thereby avoid undue strain on said jaws when not in engagement with work, which would tend to throw the same out of shape. The said curvature of the bearing portions of the device prevent lateral movement of the jaws, and they are thereby always brought into registering alignment.

The improved construction is simple and inexpensive, and serves equally well for the purposes for which other analogous devices are used.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. A device of the character set forth shaped from blanks and having the biting-jaws thereof projecting equally on each side of the handles, substantially as described.

2. A device of the character set forth shaped from blanks and having the biting-jaws thereof projecting equally on each side of the handles and formed with a curved interlocking joint, substantially as described.

3. A device of the character set forth shaped from blanks having handles and enlarged ends, said blanks being jointly twisted to turn said enlarged ends at right angles to the handles and projecting equally on opposite sides of said handles, substantially as described.

4. A device of the character set forth having a curved interlocking joint formed by twisting the parts composing the same, substantially as described.

In testimony whereof we affix our signatures in presence of two witnesses.

ELI W. PEARSON.  
THOMAS E. BARLETT.

Witnesses:

T. E. MOON,  
MILNER VAN PELT.