

(No Model.)

J. KNELL.

SHOE MAKER'S PINCHERS.

No. 379,476.

Patented Mar. 13, 1888.

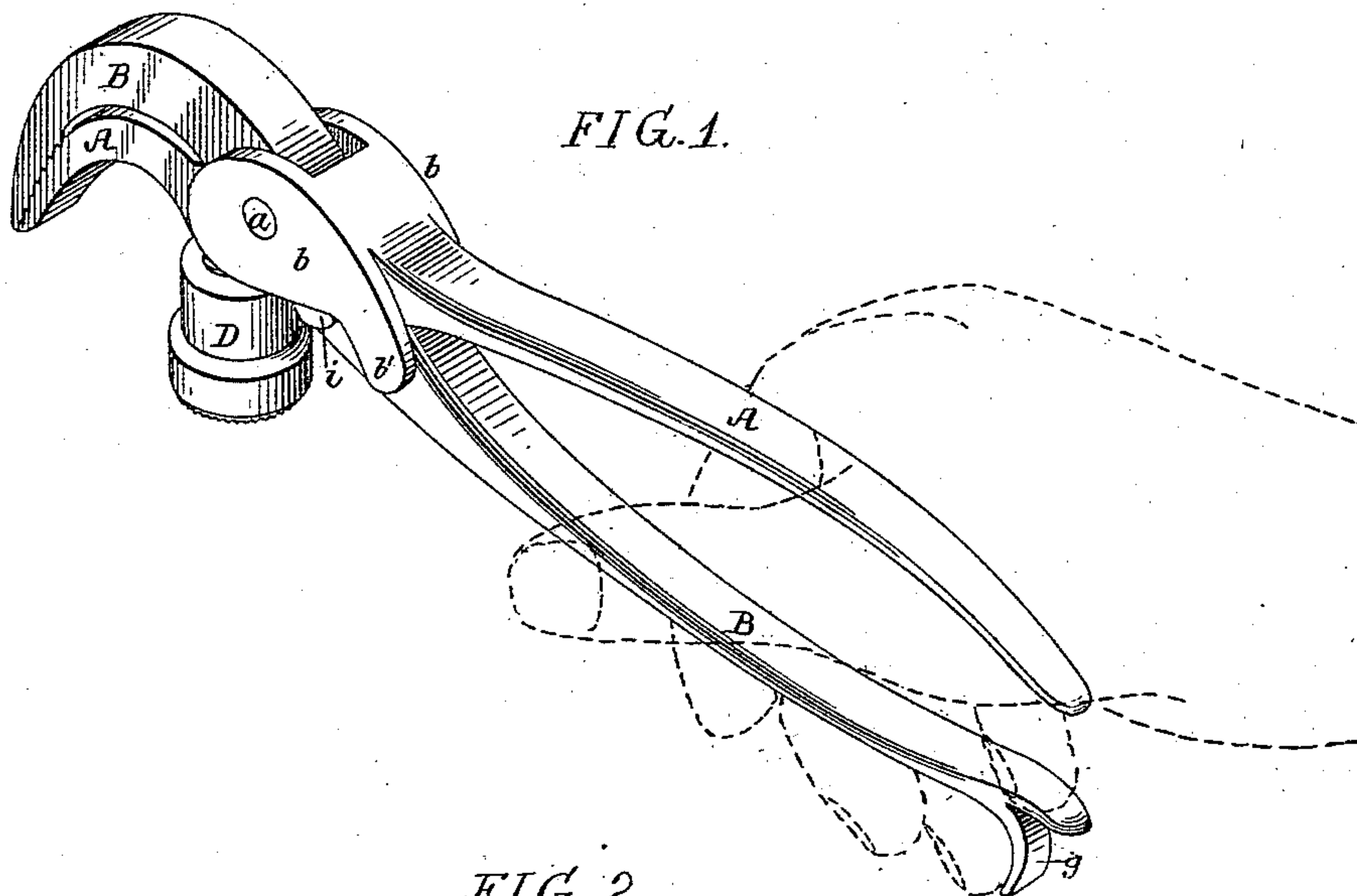


FIG. 2

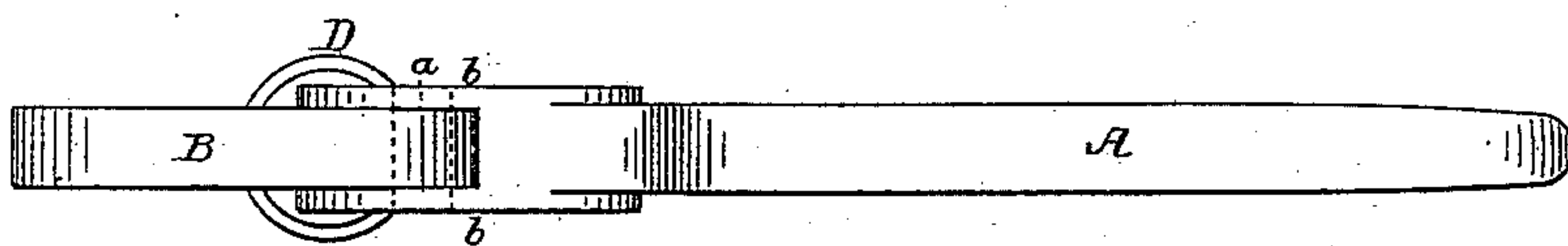


FIG. 3

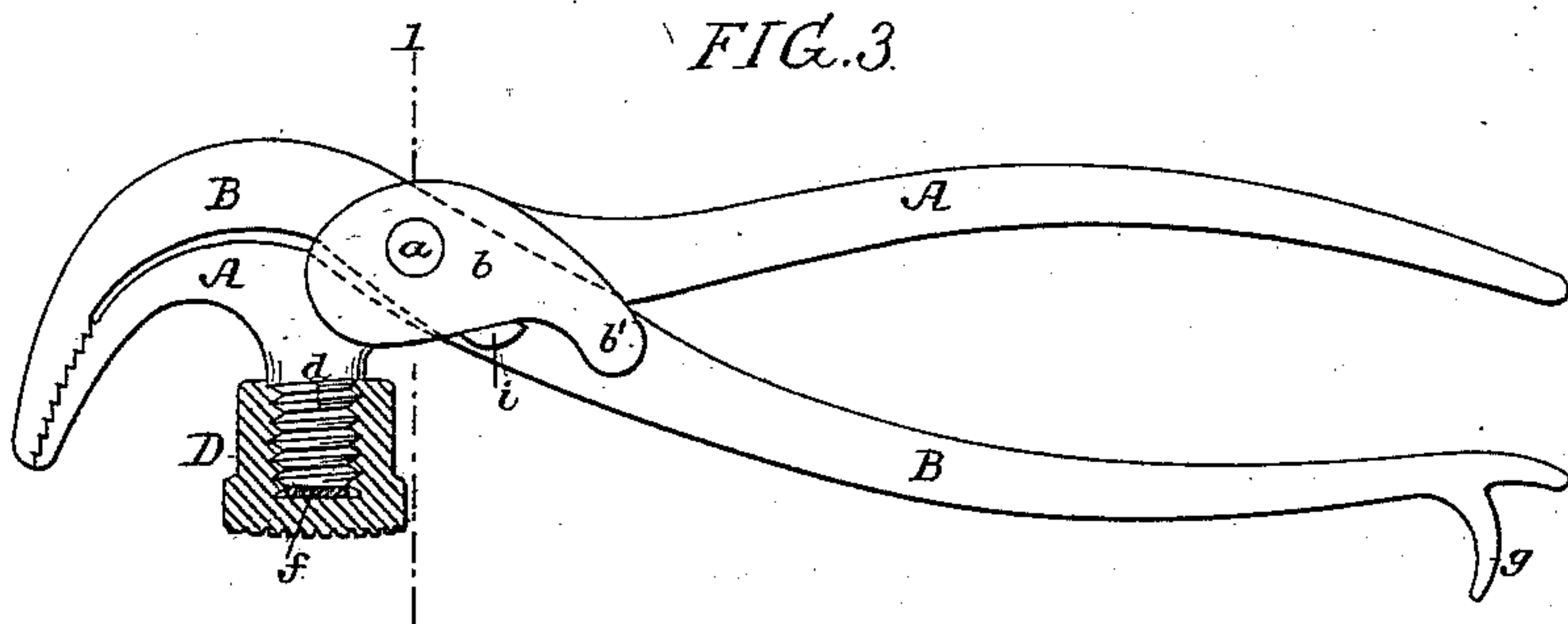
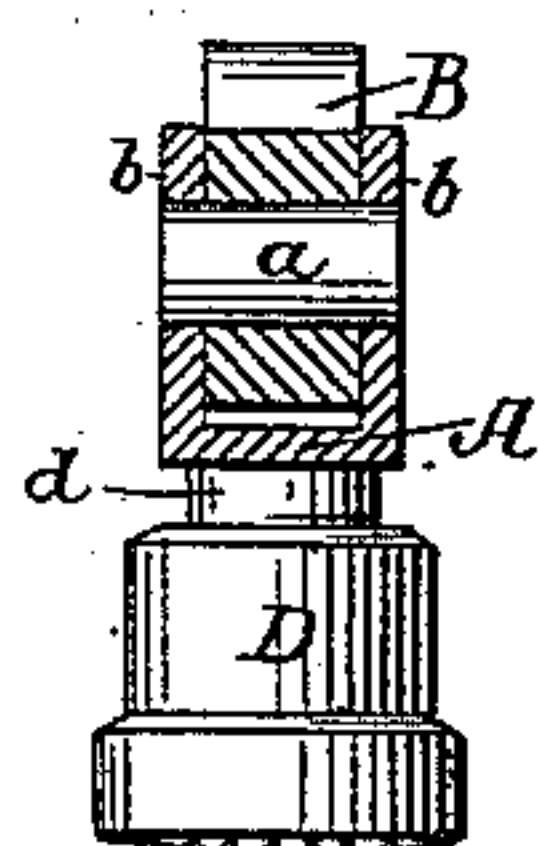


FIG. 4



Witnesses:
Alex. Parkoff.
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UNITED STATES PATENT OFFICE.

JOHN KNELL, OF PHILADELPHIA, PENNSYLVANIA.

SHOE-MAKER'S PINCHERS.

SPECIFICATION forming part of Letters Patent No. 379,476, dated March 13, 1888.

Application filed December 27, 1887. Serial No. 259,054. (No model.)

To all whom it may concern:

Be it known that I, JOHN KNELL, a citizen of the United States, and a resident of Philadelphia, Pennsylvania, have invented certain
5 Improvements in Shoe-Maker's Pinchers, of which the following is a specification.

The object of my invention is to so construct a pair of shoe-maker's pinchers as to strengthen and prevent twisting or straining of the joint
10 between the two levers, to provide for the ready opening and closing of the pinchers, and to strengthen the construction of the adjustable hammer-head with which these pinchers are usually provided.

15 In the accompanying drawings, Figure 1 is a perspective view of a pair of shoe-maker's pinchers constructed in accordance with my invention. Fig. 2 is a plan view of the same. Fig. 3 is a side view with the detachable hammer-head in section, and Fig. 4 is a transverse
20 section on the line 1 2, Fig. 3.

A and B represent the two levers of the pinchers, which are pivoted together by means of a pin, *a*, the short arms of the levers being
25 curved and provided with engaging teeth, as usual. The lever B of the tool is of substantially the same width throughout, and the lever A is expanded at the joint, by reason of the formation on said lever of side wings, *b*, which
30 carry the pivot-pin *a*, this construction permitting the ready insertion and removal of the lever B by simply driving out the pivot-pin *a*, which is made considerably larger than usual in order to give strength to the joint. The
35 wings *b* on the lever A have rearwardly-projecting fingers *b'*, which fit snugly against the sides of the lever B and serve to keep the same properly in line with the lever A, and thus prevent any twisting or wobbling of the jaws
40 of the tool.

From the under side of the short arm of the lever A projects a threaded stud, *d*, which is adapted to a threaded socket in the hammer-head D, with which this class of tools is usually
45 provided, this hammer-head being adjustable, so as to vary its position in respect to the jaws—an operation which is required when the tool is used for lasting. In order to insure a solid bearing of the hammer-head on the threaded
50 stem, however, when said head is projected, one or more washers, *f*, are interposed between

the end of said stem and the bottom of the socket in the hammer-head, as shown in Fig. 3.

The formation of the threaded stem on the lever A for the reception of the hammer-head
55 provides a much stronger construction than when the threaded stem is formed on the hammer and screwed into an opening in the lever, this being the plan now in general use.

On the under side of the lever B, a short
60 distance from the outer end of the same, is a finger, *g*, which serves to prevent the hand from slipping off the tool, and also to insure the holding of the tool in the hand in such position that the little finger may act upon the
65 upper side of the long arm of the lever B, so as to depress the same in order to open the jaws. (See dotted lines in Fig. 1.)

Lugs *i* project from the opposite sides of the lever B in the rear of the pivot-pin *a*, these
70 lugs serving, by contact with the under side of the wings *b* of the lever A, to limit the movement of the levers toward each other and prevent excessive strain upon the toothed portions of the jaws of the levers.

I claim as my invention—

1. The combination, in a pair of pinchers, of the two levers and the pivot-pin therefor, one of said levers having side wings carrying the pivot-pin, whereby an opening of the full
80 width of the other lever is formed for the reception of the latter, all substantially as specified.

2. The combination, in a pair of pinchers, of the two levers and a pivot-pin therefor, with
85 side wings carried by one of the levers and having rearwardly-extending fingers bearing upon the sides of the other lever in the rear of the pivot, to prevent twisting of the levers, all substantially as specified.

3. The combination, in a pair of pinchers, of a lever having projecting side wings, a pivot-pin carried thereby, and a second lever fitting between said side wings and having laterally-projecting lugs bearing upon the under
95 sides of the same, to serve as stops, all substantially as specified.

4. The combination, in a pair of pinchers, of the pivoted levers, one of which has a projecting threaded stem with a hammer-head,
100 having a threaded socket for the reception of said stem, all substantially as specified.

5. The combination, in a pair of pinchers, of the pivoted levers, one of which has a projecting threaded stem, the hammer-head having a threaded socket for receiving said stem, 5 and a washer interposed between the end of the stem and the base of the socket, all substantially as specified.

6. The combination, in a pair of pinchers, of two levers pivoted together, the long arm 10 of one of said levers having on the outer side and some distance from its end a forwardly

bent or curved projecting finger, *g*, serving as a stop for the hand, all substantially as specified.

In testimony whereof I have signed my name 15 to this specification in the presence of two subscribing witnesses.

JOHN KNELL.

Witnesses:

WILLIAM D. CONNER,
HARRY SMITH.