

(No Model.)

J. W. CALEF.  
Punches.

No. 240,883.

Patented May 3, 1881.

Fig. 1.

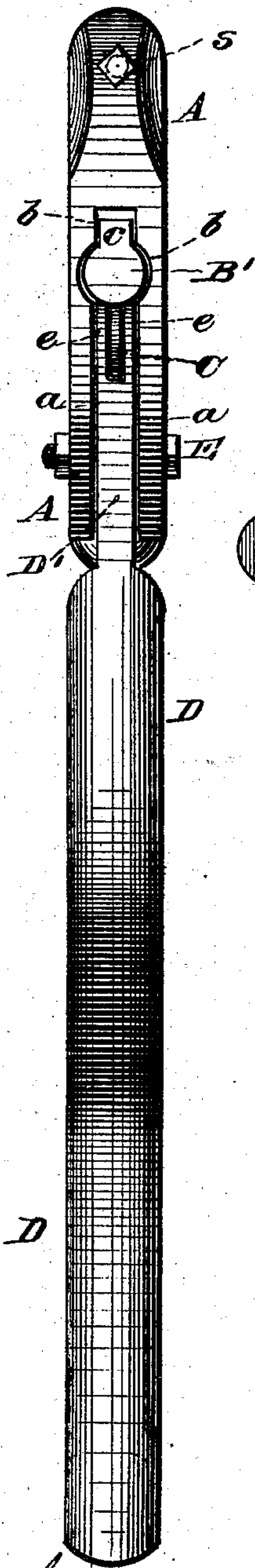


Fig. 2.

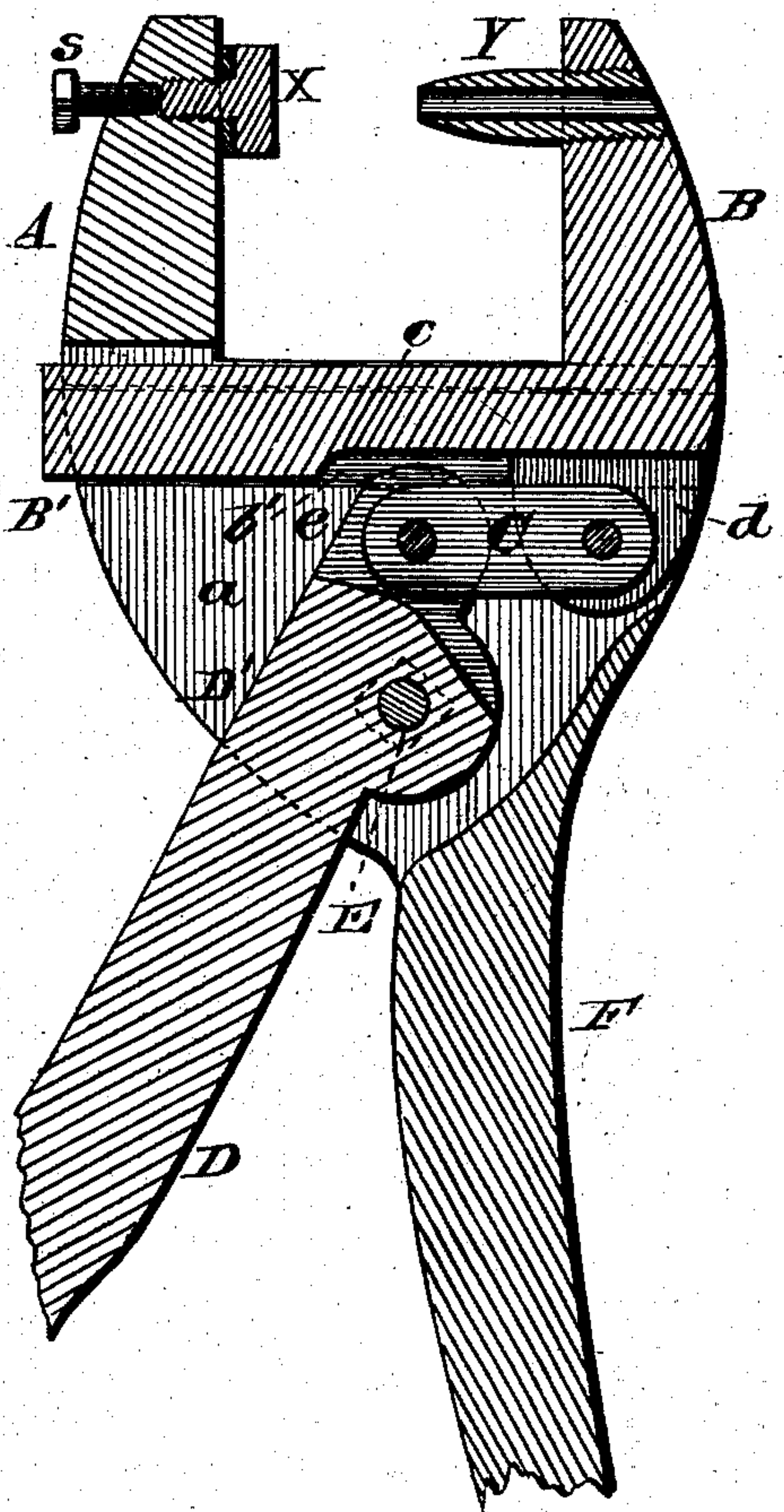
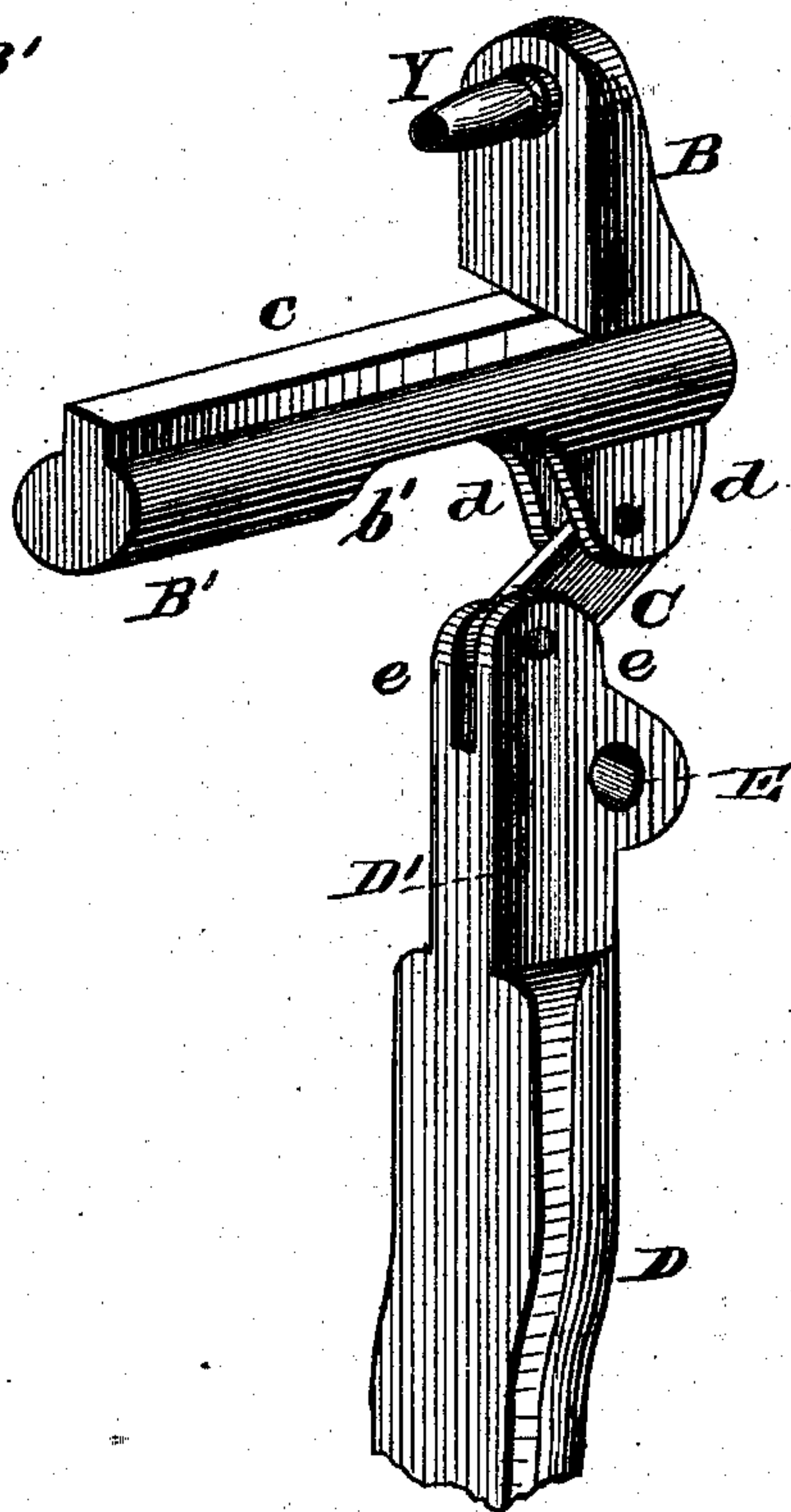


Fig. 3.



WITNESSES

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# UNITED STATES PATENT OFFICE.

JOSEPH W. CALEF, OF NORTH EASTON, ASSIGNOR OF ONE-HALF TO GEORGE B. PARKINSON, OF BOSTON, MASSACHUSETTS.

## PUNCH.

SPECIFICATION forming part of Letters Patent No. 240,883, dated May 3, 1881.

Application filed March 5, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH W. CALEF, of North Easton, in the county of Bristol and State of Massachusetts, have invented certain  
5 new and useful Improvements in Punches; and I 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  
10 reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is an end or edge view of my improved punch. Fig. 2 is a sectional view of  
15 the same; and Fig. 3 is a perspective view of the sliding jaw with its punch-die and link, showing also the upper part of the lever or handle with which it is connected.

Similar letters of reference indicate corresponding parts in all the figures.

My invention has relation to that class of hand-punches which have two handles for operating them, and are adapted more especially for cutting out eyelet-holes or punching holes  
25 of any kind and shape in leather, pasteboard, and other material; and it consists in the improved construction and combination of parts, as hereinafter more fully described, whereby the punch is adapted to cut with ease through  
30 several thicknesses of leather or other tough material with comparatively a small expenditure of power.

In the annexed drawings, A and B represent the jaws of my improved punch, one of which  
35 is provided with the cutting base or anvil X, and the other with the cutter steel or die Y. I prefer to make both the anvil and die detachable from their respective jaws, so that dies of different size or shape may be substituted, and the base or anvil X is fitted with a  
40 set-screw, s, for regulating its distance from the die.

The base of the jaw A has a chamber, a, open at both ends and at the top and bottom, and  
45 recessed or grooved longitudinally on opposite sides, as shown at b. The other jaw, B, has a shank or base, B', of such shape that it will fit into the grooved recess or chamber a b in jaw

A, its upper part forming a rib or shoulder, c, which is flush with the upper part of the walls 50 or sides of the chamber in which it slides.

The chambered jaw A is made in one piece with a handle, F, and the shank or base B' of the other jaw, B, has at one end underneath its solid part two parallel downward-projecting ears, d, between which is pivoted a link, 55 C, the other or lower end of which is pivoted between a pair of ears, e, which constitute the upper end of the other lever or handle, D. The upper flattened part, D', of this is inserted into 60 the chamber a of jaw A, having its fulcrum upon a pin or bolt, E.

By the described construction and combination of the chambered jaw A and sliding jaw B B', with its rib c, all danger of "binding" of 65 the jaws is obviated, as particles of leather or paper which, in operating the punch, may find their way into chamber a, can readily be removed through its open top and sides without separating the parts. By recessing the sliding 70 base B' of the jaw B on its under side, as shown at b', room is provided for the play of the upper end of the handle D D' within chamber a, so that it will not bind against the sliding base B' on its forward throw or stroke. 75

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

In a hand-punch, the combination of the jaw A, having the chamber a, open at its top and 80 sides, and provided with the anvil X and rigid handle F, handle D D', having its fulcrum at E in the chamber a, link C, working within said chamber a, and sliding jaw B, provided with the die Y, and base B', having rib or flange 85 c and recessed at b', the whole constructed and arranged to operate substantially as and for the purpose herein shown and specified.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature 90 in presence of two witnesses.

JOSEPH W. CALEF.

Witnesses:

AUGUST PETERSON,  
JAMES H. MANDEVILLE.