

(No Model.)

D. DINGLEDINE.
BENDING TOOL.

No. 387,498.

Patented Aug. 7, 1888.

Fig. 1.

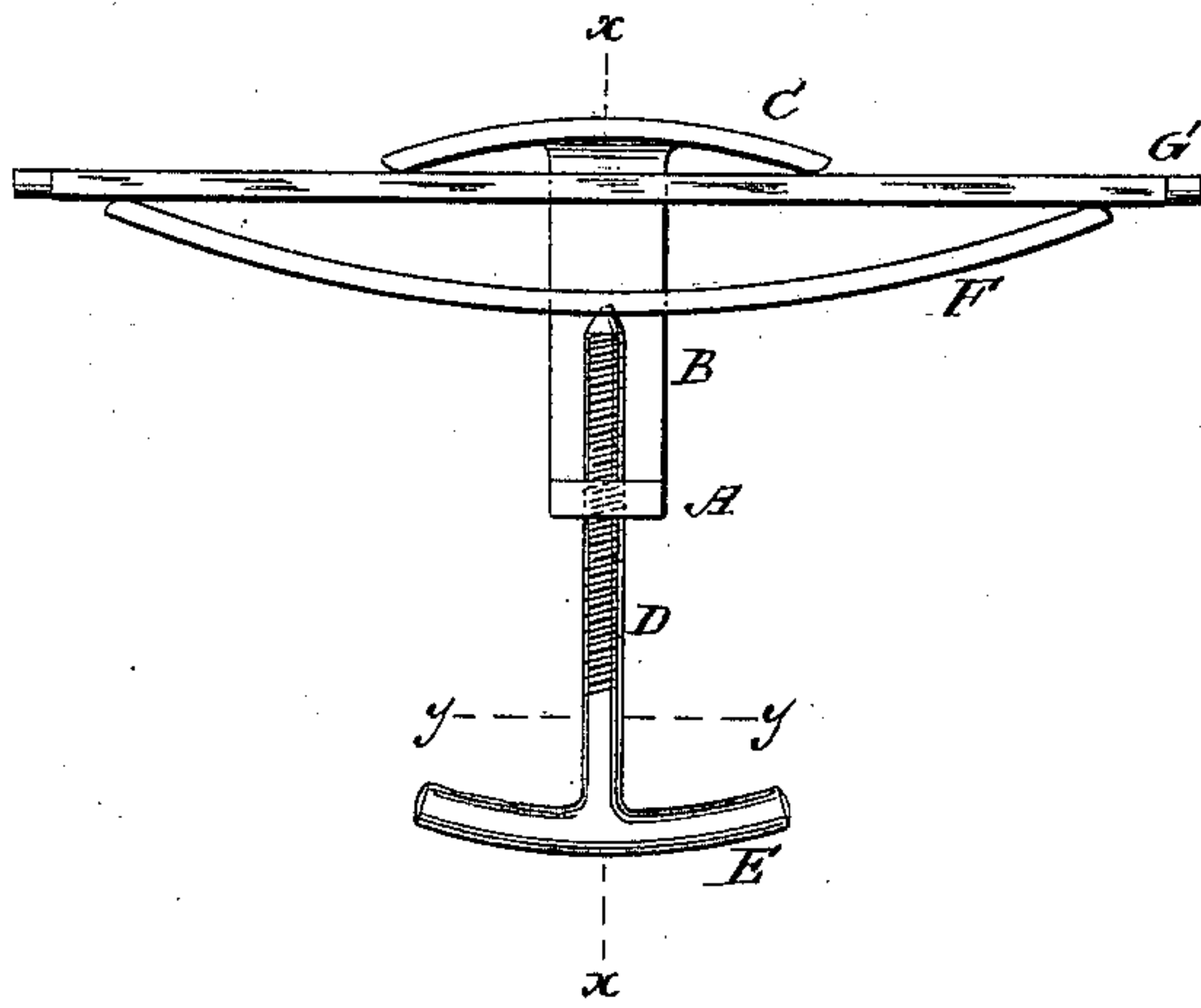


Fig. 2.

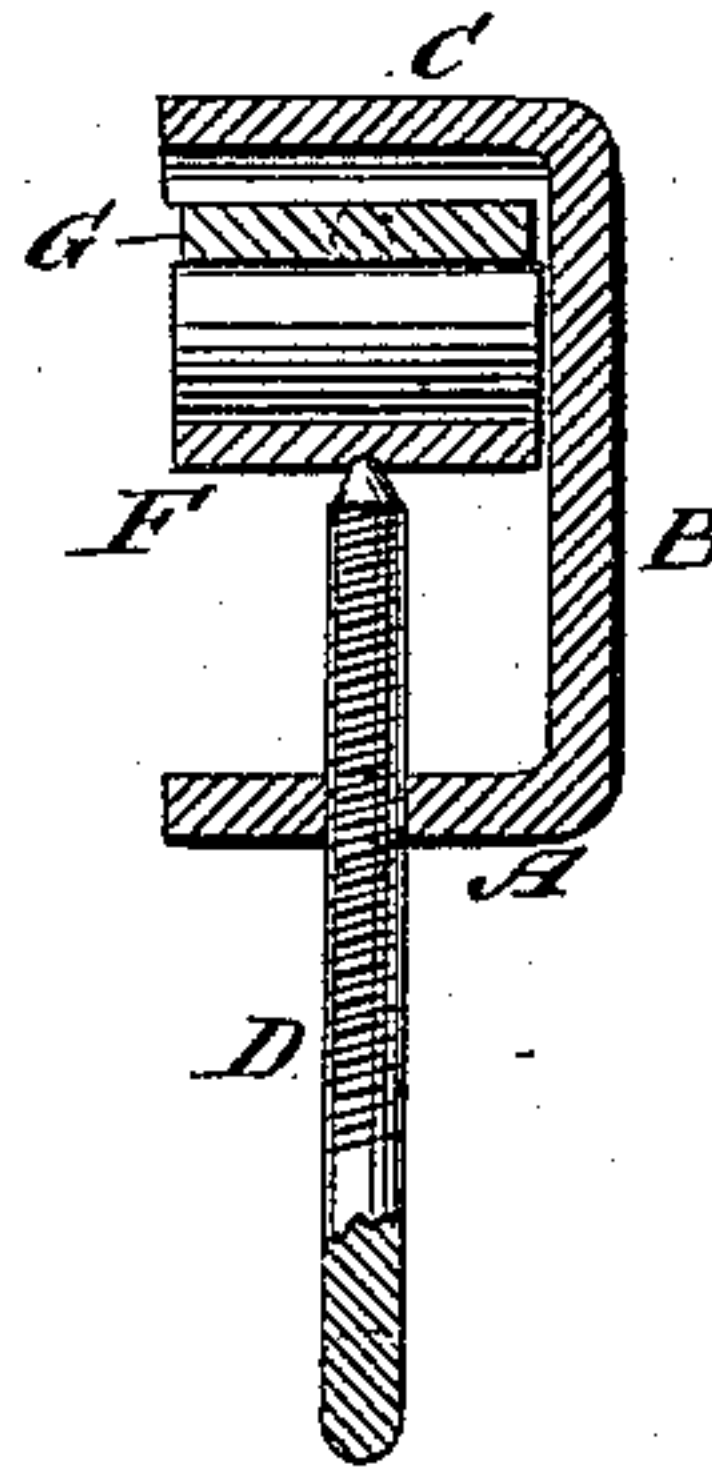


Fig. 3.

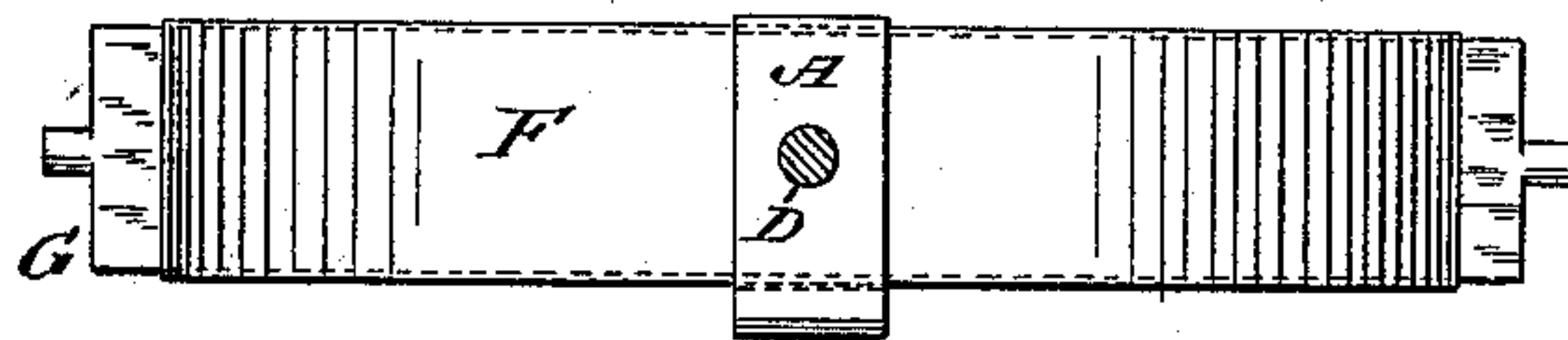


Fig. 4.

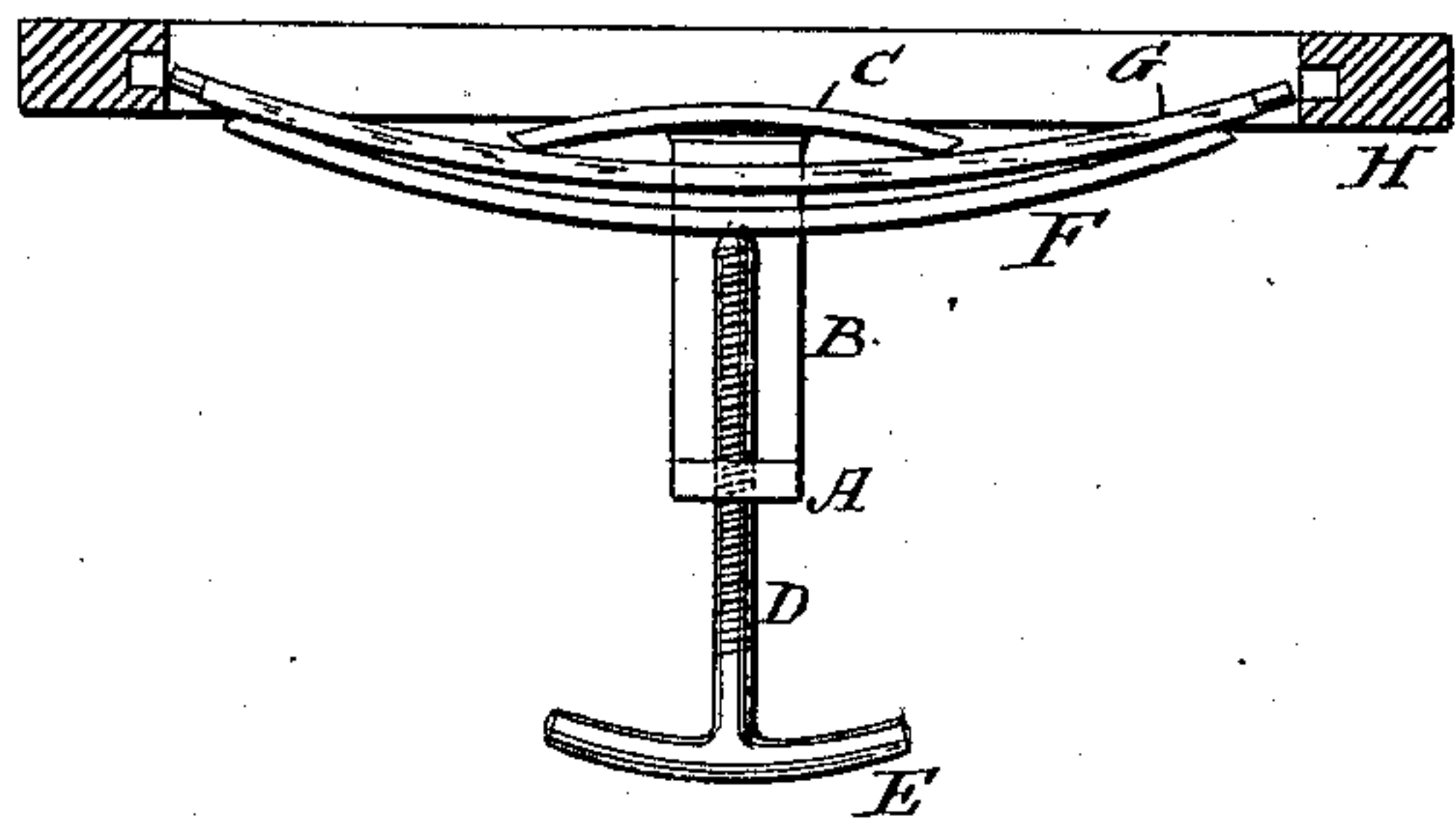
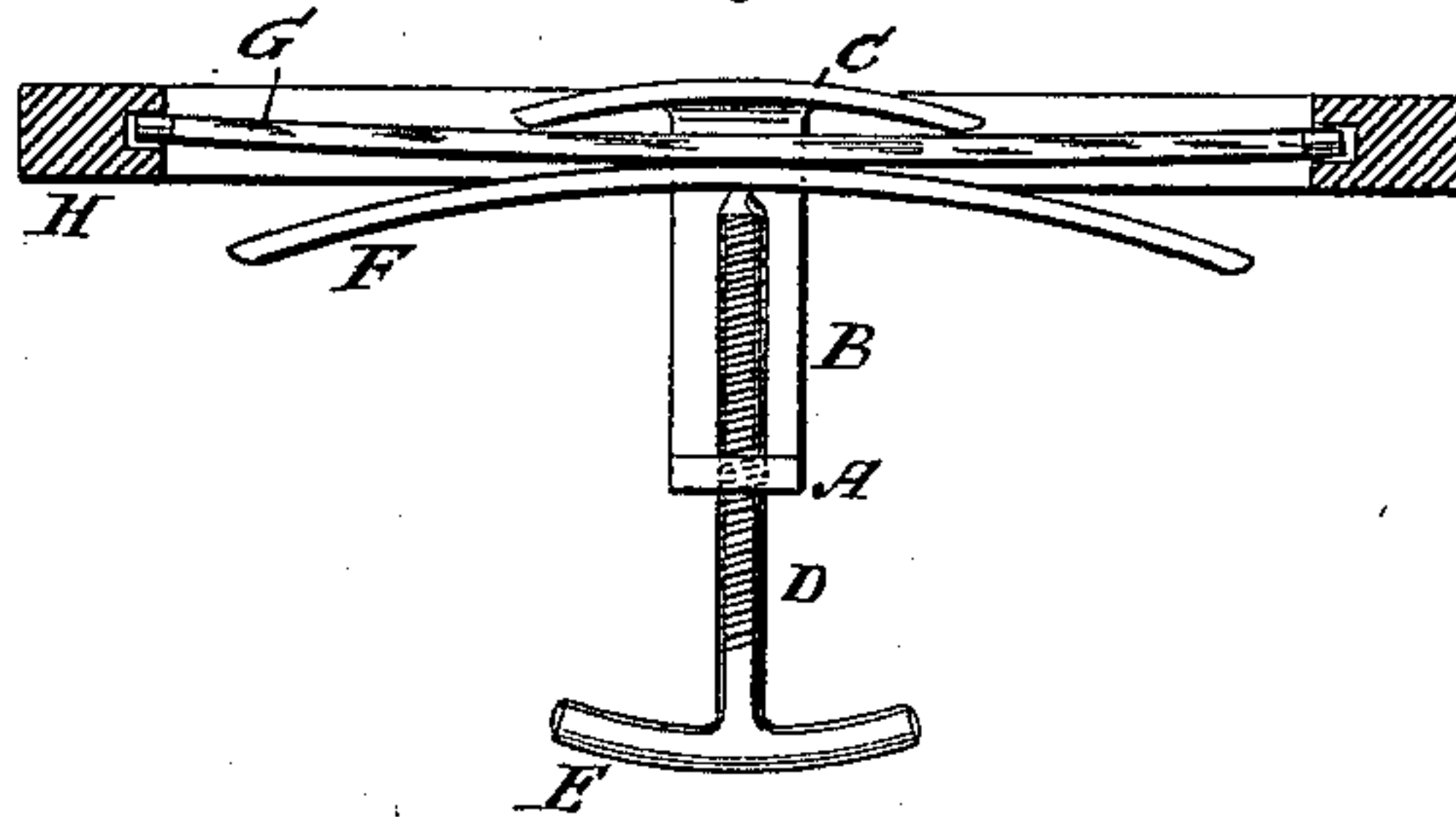


Fig. 5.



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BENDING-TOOL.

SPECIFICATION forming part of Letters Patent No. 387,498, dated August 7, 1888.

Application filed April 19, 1888. Serial No. 271,228. (No model.)

To all whom it may concern:

Be it known that I, DANIEL DINGLEDINE, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented new and useful Improvements in Bending-Tools, of which the following is a specification.

This invention relates to improvements in tools or apparatus for bending articles such as blind-slats and other objects, as set forth in the following specification and claims, and illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of a bending-tool. Fig. 2 is a section along the line *x x*, Fig. 1. Fig. 3 is a section along the line *y y*, Fig. 1. Fig. 4 is a side elevation of a bending-tool in use. Fig. 5 is a view similar to Fig. 4 with parts in different position from that shown in Fig. 4.

Similar letters indicate corresponding parts.

In the drawings it will be seen that the frame of the tool is composed of a bar, B, having end portions located at right angles, or approximately so, thereto, to form a jaw, C, curved longitudinally or lengthwise, and an arm, A, having a screw-threaded orifice with which an actuator, (shown as a screw,) D, engages, said screw having a handle, E, by which to rotate it. The jaw C and arm A are disconnected at their outer extremities, so that the frame is therefore open at one side for the convenient insertion and removal of the article to be bent.

The letter F indicates a removable and replaceable jaw, which is uniformly curved lengthwise and is concavo convex from end to end, so that in one position the ends of the jaw F will rest on a blind-slat, G, bearing against the rigid jaw, C, and the screw D will bear upon the convex surface of said jaw F centrally between its ends, while by reversing the position of the jaw F by turning it over, the convex surface of the middle portion of the said jaw will bear on the slat G, while the screw will bear on the concave surface thereof centrally between its ends, as in Fig. 5.

When the parts are in the position shown in Fig. 1, and the screw D is rotated in the proper direction, the movable jaw F will be moved toward the rigid jaw C, and as the ends of the jaw F extend beyond the ends of the rigid jaw the slat G will be bowed to shorten the dis-

tance between its ends, so that it can be inserted between the side bars of a shutter or blind frame, H, as in Fig. 4. When this is accomplished, the screw D is rotated in the opposite direction to relieve the pressure on the slat, whereupon the latter will straighten out and its tenons engage seats in the shutter or blind frame. If any curvature remain in the slat after it has been introduced into the blind-frame, as described, such curvature can be removed and the slat be made perfectly straight by removing the jaw F and reversing the same by turning it over, so that when again introduced between the slat and the screw the middle portion of the convex surface of the jaw F will bear upon the outer surface of the bulged or curved part of the slat, after which the screw is turned to cause the jaw F to approach the jaw C until the slat G is straight between the ends of the said jaw C. The detachable and reversible jaw F is of a length considerably greater than the length of the rigid jaw C, so that the ends of the reversible jaw extend beyond the ends of the jaw C, for the purpose of attaining the results set forth.

The jaw F is removable, so that said jaw can be readily placed into the device in the position shown in Fig. 4, or in the position shown in Fig. 5. By having the jaws C F curved, as shown in the drawings, the pressure of each of the jaws on the slat can be distributed along more than one point, as seen in Fig. 1. The slat G is thus not so liable to breakage as if one of the jaws should press on the slat G at only one point.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination of the bar B, having the jaw C and arm A, the jaw F, of a length greater than the jaw on the bar, and an actuator, D, for advancing one jaw toward the other, substantially as described.

2. The combination of a frame open at one side and comprising a jaw, C, and actuator D, and a longitudinally-curved jaw, F, of greater length than the jaw on the frame, substantially as described.

3. The combination, with a frame open at one side and comprising a jaw, C, of an actuator, D, and a removable and replaceable concavo-convex jaw F, substantially as described.

4. The combination of a frame open at one

side and comprising a jaw, C, and arm A, having a screw-threaded orifice, the screw D, engaging said orifice, and the jaw F, one of said jaws being of length greater than the other, substantially as described.

5 5. The combination of a frame having a jaw, C, an actuator, D, and a jaw, F, one of said jaws being of a length greater than the other jaw, to extend beyond the ends thereof, substantially as described.

10 6. The combination of a frame having a longitudinally-curved jaw, C, an actuator, D, and a longitudinally-curved jaw, F, one of said jaws being of a length greater than the other, to extend beyond the ends thereof, substantially as described.

7. The combination of the bar B, having a jaw, C, an actuator, D, and a reversible concavo-convex jaw, F, one of said jaws being of a length greater than the length of the other jaw, to extend beyond the ends thereof, substantially as described.

In testimony whereof I have hereunto set my hand and seal in the presence of two subscribing witnesses.

DANIEL DINGLEDINE. [L. S.]

Witnesses:

W. C. HAUFF,

A. FABER DU FAUR, Jr.