

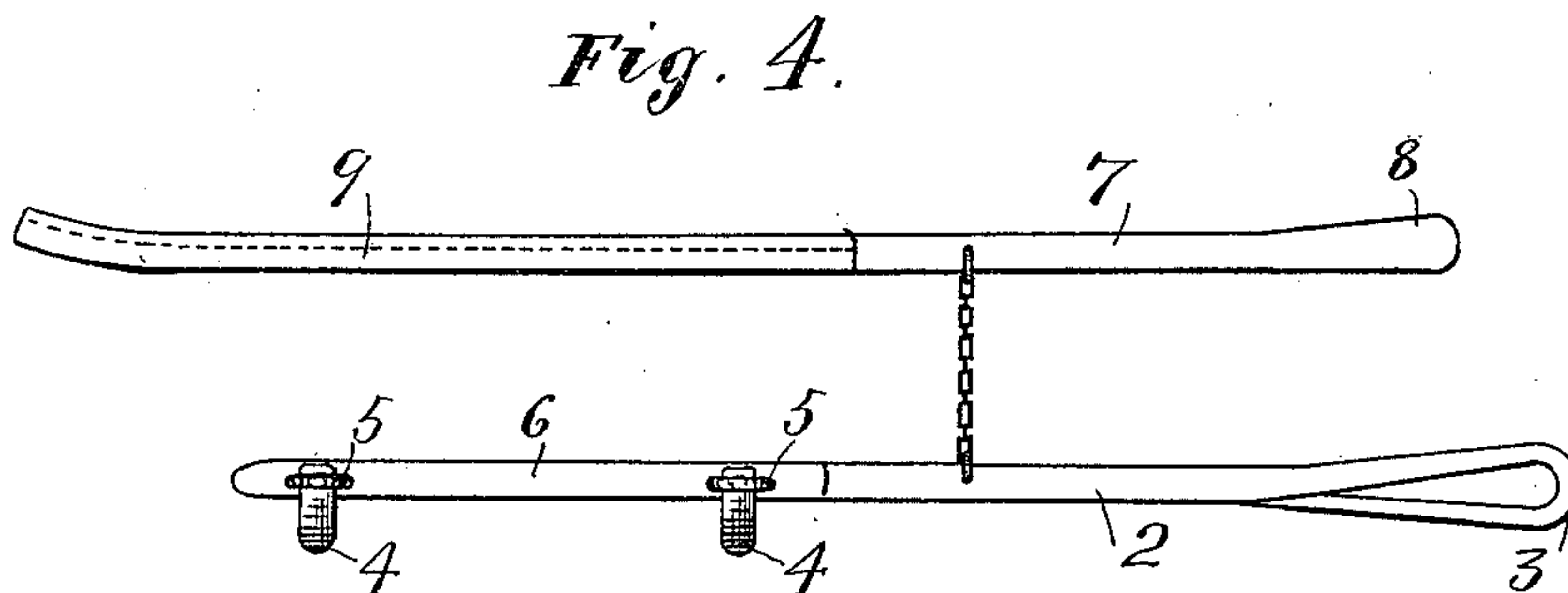
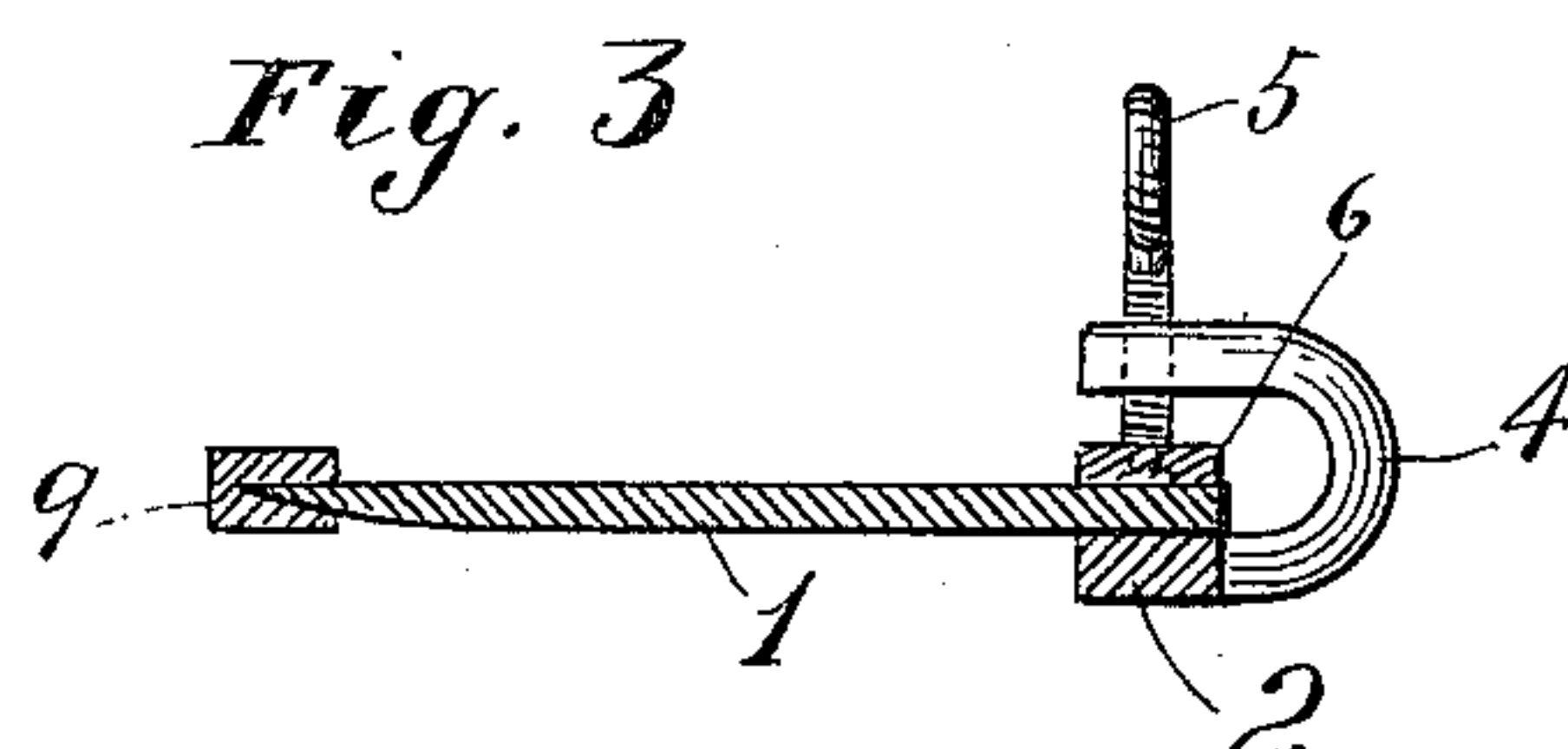
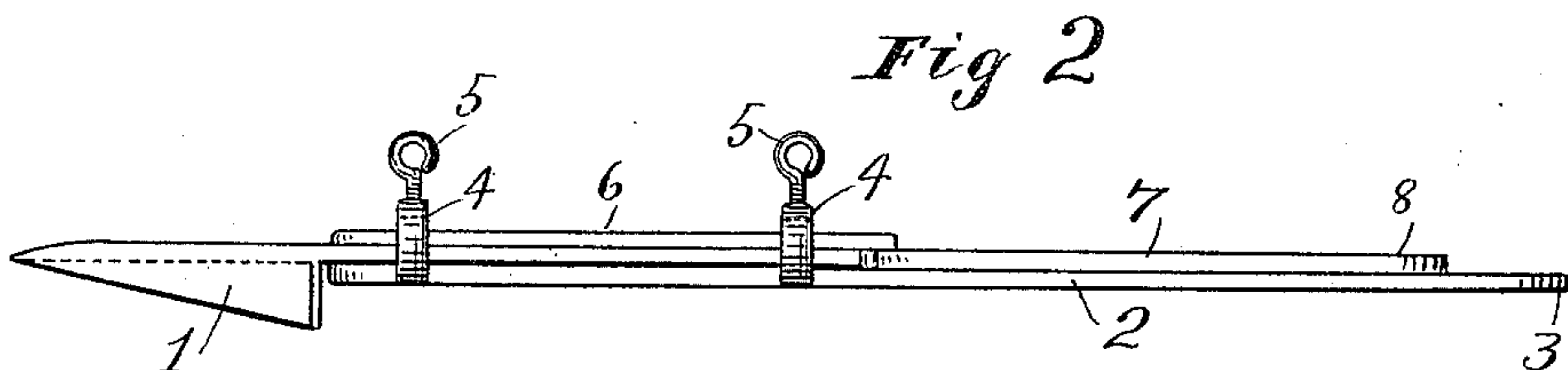
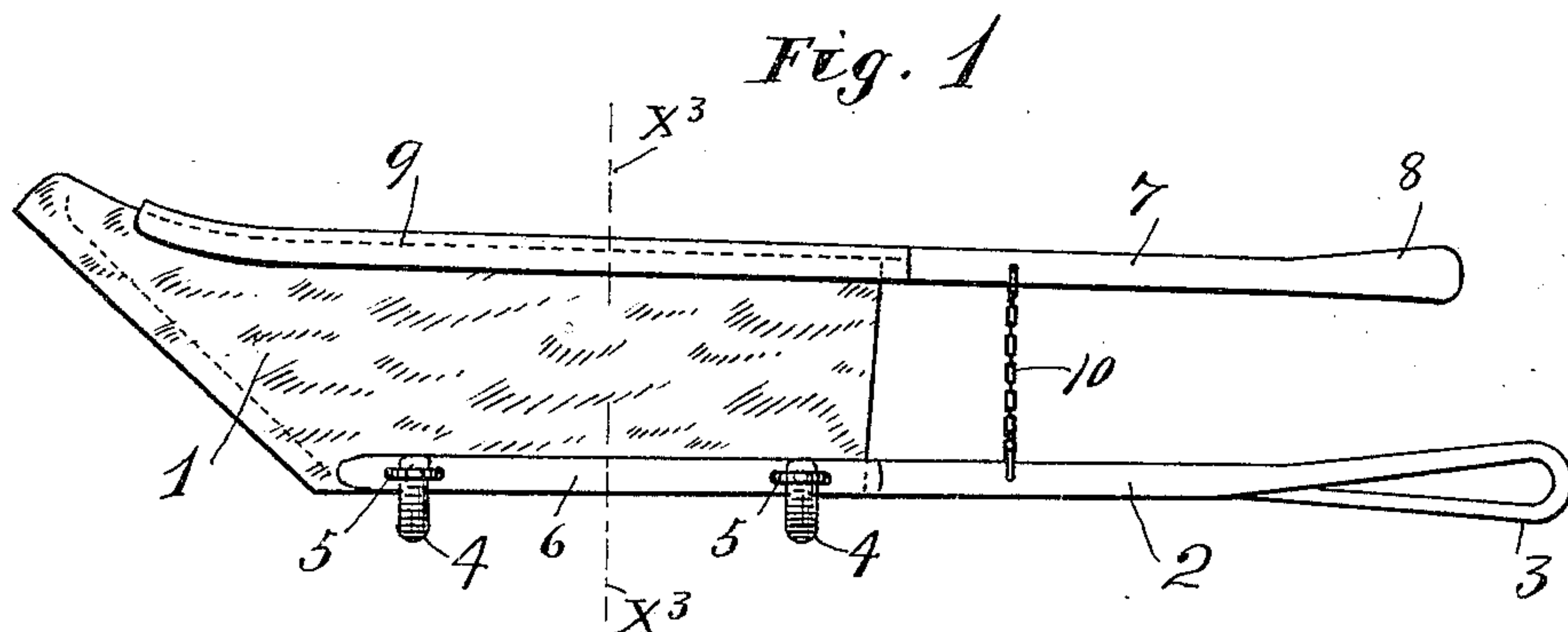
No. 683,923.

Patented Oct. 8, 1901.

B. E. FOSTER.  
PLOWSHARE CLAMP

(Application filed June 20, 1901.)

(No Model.)



Witnesses.  
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# UNITED STATES PATENT OFFICE.

BURTON EUGENE FOSTER, OF RUSHMORE, MINNESOTA.

## PLOWSHARE-CLAMP.

SPECIFICATION forming part of Letters Patent No. 683,923, dated October 8, 1901.

Application filed June 20, 1901. Serial No. 65,242. (No model.)

*To all whom it may concern:*

Be it known that I, BURTON EUGENE FOSTER, a citizen of the United States, residing at Rushmore, in the county of Nobles and State of Minnesota, have invented certain new and useful Improvements in Plowshare-Clamps; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has for its object to provide a simple and efficient device for holding plowshares while they are being hardened; and to this end it consists of the novel devices and combinations of devices hereinafter described, and defined in the claims.

The invention is illustrated in the accompanying drawings, wherein like characters indicate like parts throughout the several views.

Figure 1 is a side elevation showing my improved clamp applied in working position on a plowshare. Fig. 2 is an edge or plan view of the same. Fig. 3 is a transverse section on the line  $x^3 x^3$  of Fig. 1, but on an enlarged scale; and Fig. 4 is a view corresponding to Fig. 1, but showing the clamp removed from the plowshare.

The numeral 1 indicates a plowshare of ordinary construction. The numeral 2 indicates a straight-edge bar or back rib, which is provided with a handpiece 3 and with a pair of upturned U-shaped brackets 4. A thumb-screw 5 works through each bracket 4, and to the inner ends of said thumb-screw is swiveled a clamping-bar 6, which is much shorter than the bar 2.

The numeral 7 indicates a bar having at one end a handpiece 8 and provided at its other end with a sheath 9, the groove of which is approximately V-shaped in cross-section and extends approximately one-half of the length of the said bar 7. The bars 2 and 7 are connected by a chain or flexible connection 10, which serves a purpose presently to be noted.

The clamping device above described is adapted to be used substantially as follows:

The back edge of the plowshare may be clamped and securely held between the bar 2 and the clamping-bar 6 by means of a thumb-screw 5. After the plowshare has been heated to the proper temperature the bars 2 and 6 may be applied thereto in the manner indicated. The sheath 9 of the bar 7 may then be applied to the sharp edge thereof, as indicated in Figs. 1 to 3. When the plowshare is thus held, it may be easily handled while it is being hardened, and it will be positively held from warping or bending under the cooling action of the tempering liquid. The chain or connection 10 serves as a fulcrum-link between the levers 2 and 7, so that by pressing outward on the handpieces 3 and 8 the shield 9 may be tightly held in working position on the edge of the said plowshare. It is therefore evident that the connection or link 10 while not indispensable is a very important feature.

It is a well-known fact to all persons experienced in tempering plowshares or similar devices that they are very liable to warp or twist out of shape while being hardened, so that it is often necessary to harden them over several times before the work can be satisfactorily done. By actual experience with the device above described I have found that the plowshares may be quickly and properly hardened and at the same time held in shape.

What I claim, and desire to secure by Letters Patent of the United States, is as follows:

1. In a clamp of the character described, the combination with a handpiece having a straight-edge bar and means for clamping the same onto the back of a blade or plowshare, of a second handpiece having a groove or channel which is adapted to receive the sharp edge of the blade or plowshare, substantially as described.

2. The combination with the bar 2 having yokes 4 and screws 5, of the clamping-bar 6 swiveled to the ends of said screws, the bar 7 with slotted sheath 9, and the connections 10 between said bars 2 and 7, serving as a fulcrum, substantially as and for the purposes set forth.



3. The combination with a bar provided  
with means for clamping it to the back of a  
plowshare, of another bar provided with a  
sheath for engagement with the sharpened  
5 edge of the plowshare, and a link or connec-  
tion between said bars serving as a fulcrum,  
substantially as and for the purposes set forth.

In testimony whereof I affix my signature  
in presence of two witnesses.

BURTON EUGENE FOSTER.

Witnesses:

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