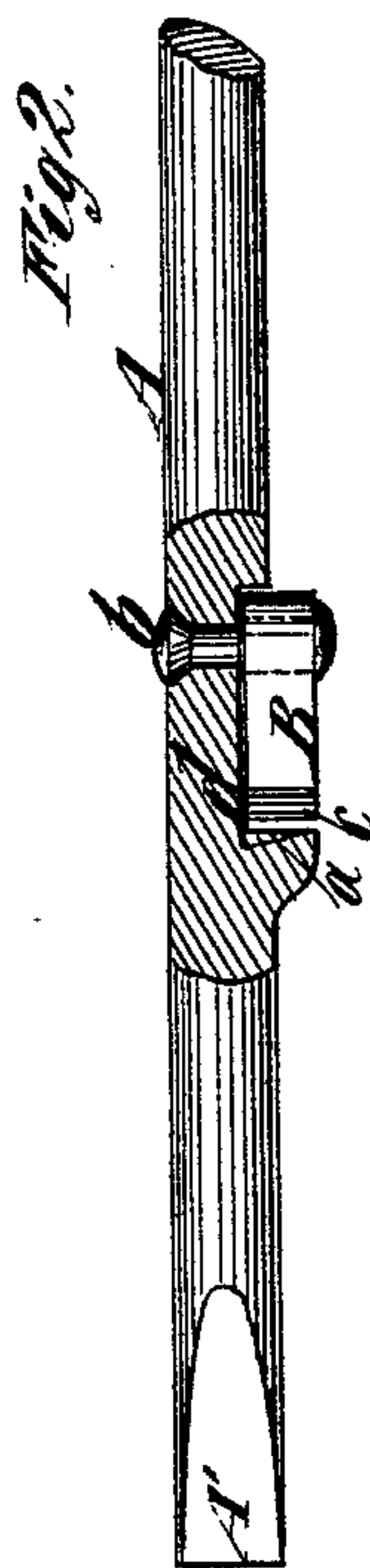
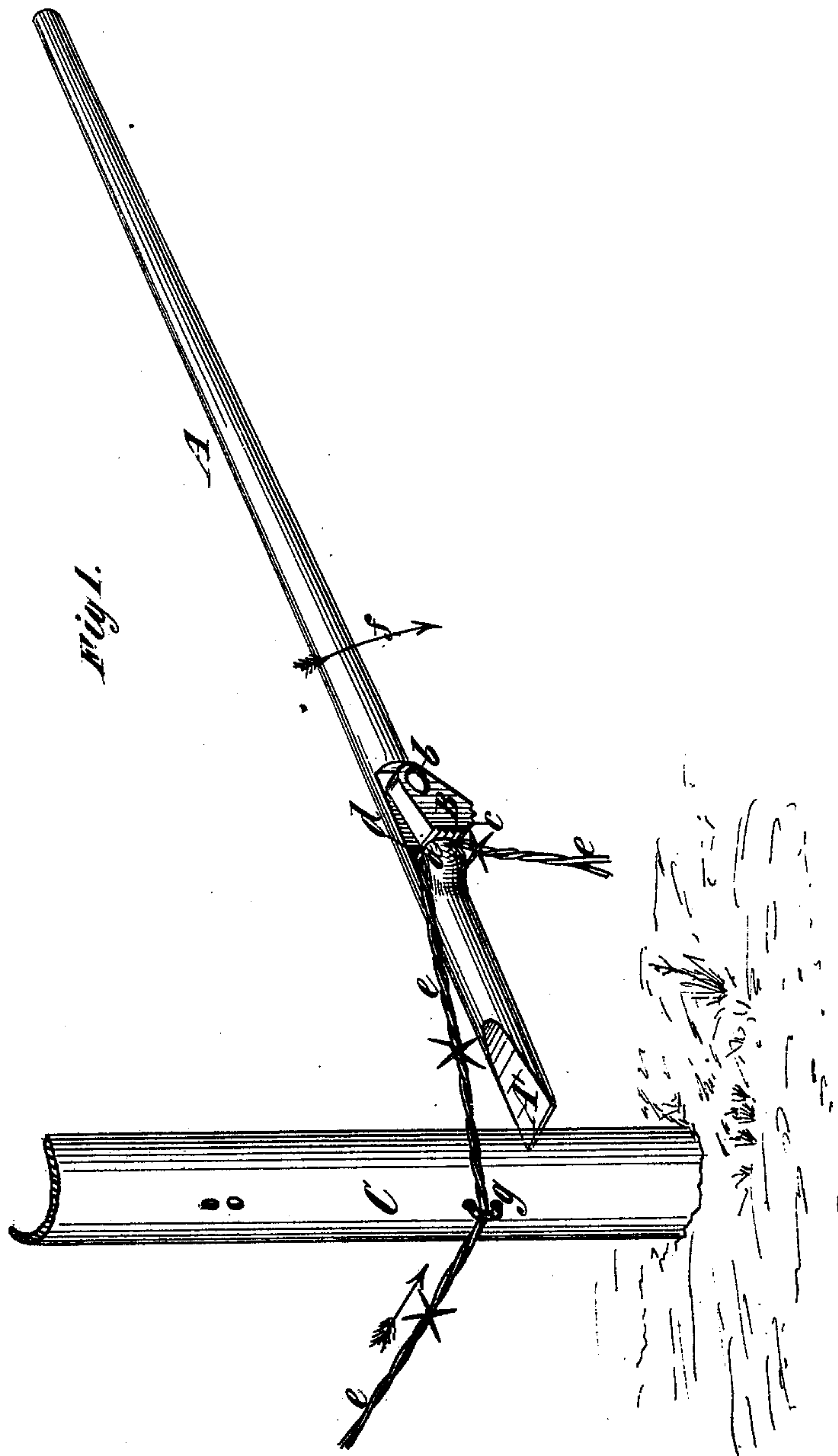


(Model.)

G. NICHOLSON.
Wire Stretcher.

No. 229,449.

Patented June 29, 1880.



Witnesses
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UNITED STATES PATENT OFFICE.

GRANVILLE NICHOLSON, OF NEW YORK, N. Y.

WIRE-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 229,449, dated June 29, 1880.

Application filed March 1, 1880. (Model.)

To all whom it may concern:

Be it known that I, GRANVILLE NICHOLSON, of the city of New York, in the county and State of New York, have invented a certain new and Improved Tool for Fencing and other purposes, of which the following is a specification.

In the construction of wire fences it is necessary to employ a tool for stretching the wire tightly, so as to take up all the sag and create a tension upon the wire before fastening it to a post.

It is also desirable to employ a crowbar for use in setting posts and other purposes incident to putting up a line of wire fence.

My improved tool consists in a bar having a crowbar-point and provided with a shoulder and a pivoted cam-dog for gripping the wire and holding it between said cam-dog and shoulder, and so constructed that it may be swung inward toward the axial line of the bar from either side thereof, whereby greater facility in the use of the tool is secured than if the dog were capable of swinging only upon one side of the bar.

In the accompanying drawings, Figure 1 represents a portion of a fence and a perspective view of my improved tool, showing the manner of using it in straightening the fence-wires; and Fig. 2 represents a partly-sectional side view of said tool.

Similar letters of reference designate corresponding parts in both the figures.

A designates a bar of steel or iron, having at a little distance from one end a shoulder, *a*, and having a cam-dog, B, pivoted to one side by means of a rivet, *b*. The cam-dog B is represented as having a serrated or roughened face, *c*, which may not, however, be essential, and it is pivoted in such relation to the shoulder *a* that when turned so as to stand in line with the bar the space between the shoulder *a* and the face *c* of the dog will be somewhat less than the thickness of the strands of wire composing the fencing, as clearly shown in Fig. 2.

It will be observed that the cam-dog B is so

constructed and arranged that it may swing inward toward the axial line of the bar from either side thereof, and that therefore the bar may be used with much greater convenience than if the dog could be swung upon one side only, for the reason that it makes no difference in using the bar which of the two opposite sides is uppermost, while in the latter case the user must use care to have a particular side of the bar uppermost.

The cam dog is here represented as arranged in a recess, *d*, in the side of the bar A, and the shoulder *a* as formed by a lug or projection formed upon the side of the bar; but if desirable the recess *d* might be dispensed with, the side of the bar being slightly flattened to form a seat for the dog, or the recess might be made deeper, so that one end thereof would form the shoulder, and in such case the lug or projection on the side of the bar would be dispensed with.

The end of the bar A has formed upon it a crowbar-point, A', and hence it answers all the purposes of an ordinary crowbar, and enables a separate crowbar to be dispensed with.

In using my improved tool the fence strand or wire *e* is caught and held between the serrated face *c* of the cam-dog B and the shoulder *a* and the point A' rested against the post C as a fulcrum.

By moving the bar down in the direction of the arrow *f* the strand or wire *e* is stretched sufficiently to keep it from sagging, and is then fastened to the post by staples *g* or otherwise.

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

The bar A, having a crowbar-point, A', and the shoulder *a*, and provided with the cam-dog B, constructed and arranged so that it may be swung from either side of the bar inward toward the axial line of the bar, substantially as and for the purpose herein described.

GRANVILLE NICHOLSON.

Witnesses:

FREDK. HAYNES,
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