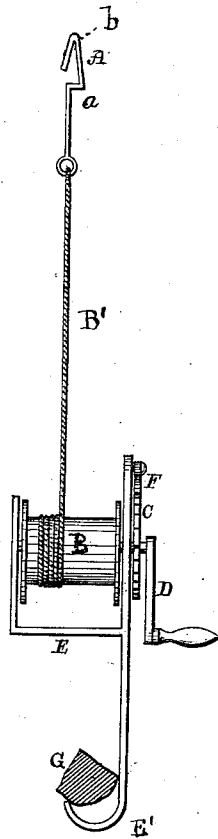


W. Z. DAFOE.
WIRE-STRETCHER.

No. 192,572.

Patented July 3, 1877.



Witnesses:

Shubert T. Armstrong
E. E. Armstrong.

Inventor:

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UNITED STATES PATENT OFFICE.

WILLIAM Z. DAFOE, OF SYCAMORE, ILL., ASSIGNOR OF ONE-HALF HIS RIGHT
TO CHARLES W. MARSH AND WILLIAM W. MARSH, OF SAME PLACE.

IMPROVEMENT IN WIRE-STRETCHERS.

Specification forming part of Letters Patent No. **192,572**, dated July 3, 1877; application filed
June 22, 1876.

To all whom it may concern:

Be it known that I, WM. Z. DAFOE, of Sycamore, county of De Kalb and State of Illinois, have invented certain new and useful Improvements in Wire-Tightener; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The object of this invention is to provide a device which can be applied to fence-wires, for the purpose of tightening or straining them, either in repairing old fences or constructing new; and its nature consists in providing a hook which will grasp and hold the wire without coiling or bending it around such hook; in connecting the hook to a windlass by a rope, so that the unstrained portion of the wire will be left free; and in the arrangement of the windlass in a frame provided with a hook, so that such frame can be hooked to a fence-post of any form, and in any position on the post.

The figure is a plan view, and A represents the hook, which is provided with a shoulder or projection, *a*, and its interior is so formed that it approaches a sharp angle, *b*. B' represents the rope; B, the windlass; C, the ratchet-wheel; D, crank; E, frame; E', frame-hook; and F, pawl.

The hook A is made of steel, and has its upper and lower faces flat, so as to present sharp edges at the angles *b*. The frame E is made of wrought-iron, and the hook E' is most conveniently made by curving a portion of the frame, as shown; but it may, however, be made of a separate piece, and pivoted to the frame E. The windlass B is most conveniently made of cast-iron, but it may, if desired, be made partly of wood; and it is provided, at the outside of the frame, with a winding-crank and an ordinary ratchet-wheel and pawl, as shown.

In use, the wire is brought through the angular portion of the hook, and over or under the shoulder or projection *a*. The angle of the hook firmly clasps the wire without coiling or bending it, so that the unstrained portion is left free for fastening to a post, or for attaching additional lengths of wire, instead of being wound onto the windlass, as has heretofore been practiced.

The frame E is attached to a post represented at G, when the windlass is ready to be wound, and when wound the ratchet holds the wire taut until the staples are driven into the posts, or the wire otherwise fastened, and in this position, if desired, the free end may also be attached to the post supporting the tighteners.

This operation is greatly facilitated by using a rope for winding upon the windlass, instead of using the wire. Whenever greater power is desired the rope B' may be doubled, and have one of its ends tied to the frame, and the other in position to be wound upon the windlass. In this case the hook will be attached to the rope by a sheave or small pulley-block.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The hook A, having the angle or projection *a*, and the opening having a sharp angle, *b*, for holding the wire without winding or bending, substantially as specified.
2. The combination of the hook A and rope B' with the windlass B, as and for the purpose described.
3. The combination of the frame E, having a hook, F', with the windlass B, provided with a crank and ratchet-wheel and pawl, rope B', and hook A, all constructed and operating substantially as and for the purpose set forth.

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Witnesses:

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