(No Model.)

W. N. HULING.

WIRE STRETCHER.

No. 350,057. Patented Sept. 28, 1886.

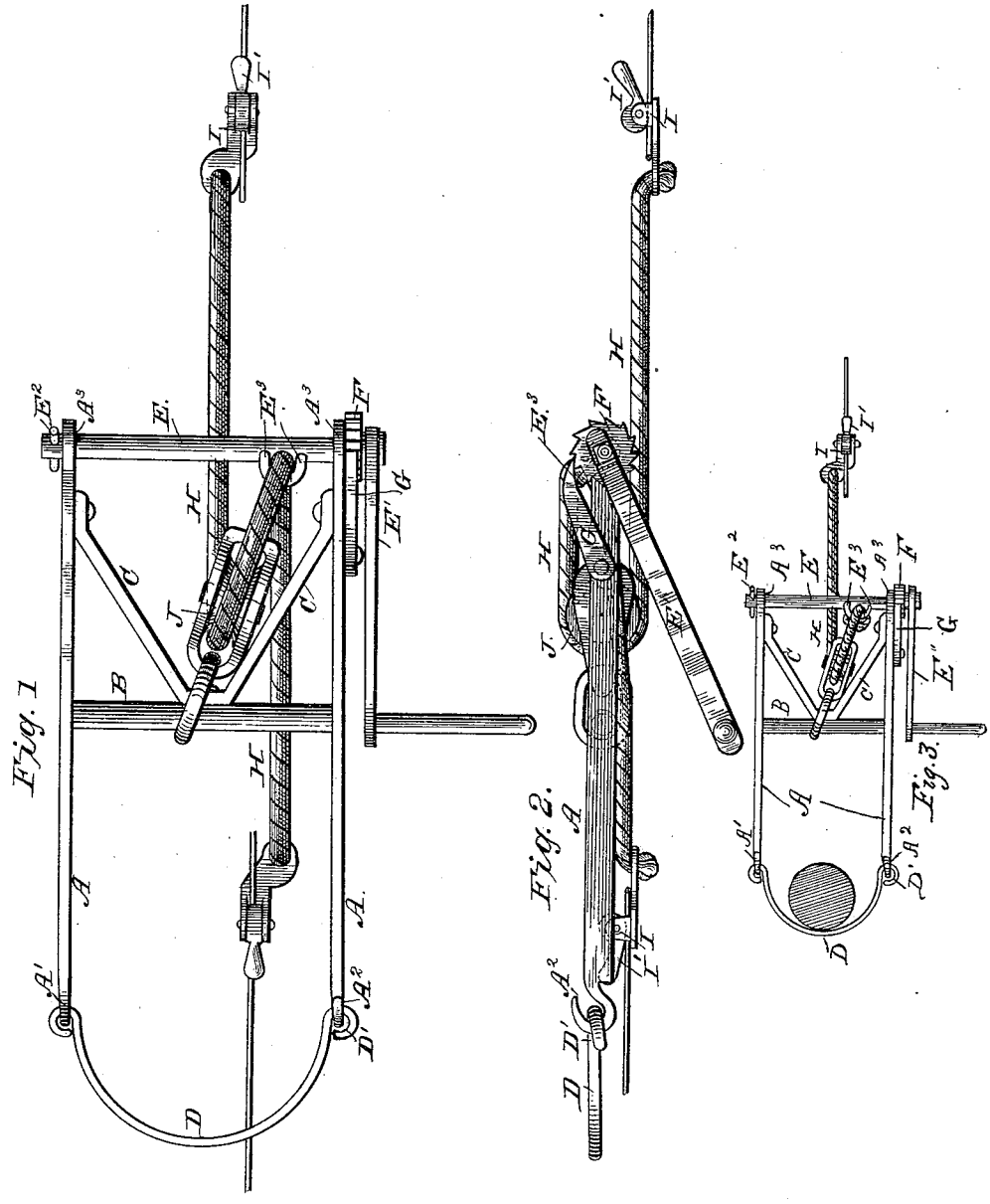

Fig. 1

Fig. 2.

Fig. 3.

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WIRE-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 350,057, dated September 28, 1886.

Application filed June 19, 1886. Serial No. 205,710. (No model.)

To all whom it may concern:

Be it known that I, WILLIAMS NEYLAND HULING, of Lampasas, in the county of Lampasas and State of Texas, have invented a new and useful Improvement in Wire-Stretchers, of which the following is a specification.

My invention consists in an improved wire-stretcher, which will be hereinafter fully described and claimed.

Referring to the accompanying drawings, Figure 1 is a plan view of my improved wire stretcher, showing it applied for joining the ends of two wires. Fig. 2 is a side view of the same, and Fig. 3 is a plan view showing the device applied for drawing or stretching a wire between posts.

The same letters of reference indicate corresponding parts in all the figures.

Referring to the several parts by letter, A A indicate the parallel side pieces of my stretcher, which are connected by the cross-piece B and strengthened by the V-shaped braces C between their forward ends. The rear end of one of the side pieces, A, is formed or provided with a ring, A′, while the corresponding end of the other side piece is formed or provided with a hook, A^2, and in the ring A′ is looped or hinged one end of a strap or loop, D, of suitable material, which has at its free end a ring, D′, which engages with the hook A^2 at the rear end of that side piece, A. The forward ends of the side pieces, A, form bearings A^3 A^3, for the transverse shaft E, which is provided at one end with the crank or handle E′ and at the other end with a nut or pin, E^2, which operates to hold the shaft in position. In the central portion of this shaft is inserted a staple, E^3, for the purpose hereinafter set forth, while upon that portion of the shaft between its handle and the side of the frame A is rigidly secured a ratchet-wheel, F, with the inclined teeth of which a pawl, G, pivoted to that side of the frame A, engages, thus holding the shaft firmly to the point to which it has been turned until the pawl is raised by the operator to unwind the rope H. This rope H is of suitable length, and has at each end a suitable wire-catch, consisting, preferably, of the small casing, I, to the side of which is pivoted the serrated cam-lever I′, between the serrated edge of which and the adjacent side of the casing the wire is firmly held while being stretched.

J indicates a sheave, which is secured to the cross-piece B between the converging ends of the V-brace.

In operation, when a wire is to be stretched from post to post, the frame is secured to one post, as shown in Fig. 3, by passing the free end of the loop D around the post and hooking the ring at that end over the hook A^2 of that side piece of the frame. One end of the rope H is then passed through the staple E^3 on the shaft E, and is tightly secured to said staple, so that it cannot be drawn through it, while the other portion of the rope passes around the grooved pulley J, and the wire to be stretched is secured in the casing I at its end by means of the serrated cam-lever I′. The shaft E is then turned by its handle or crank, so as to stretch the wire by winding the rope H around the shaft, and when the wire has been stretched to the requisite point the pawl G, engaging with the teeth of the ratchet-wheel F, will hold the shaft firmly while the wire is being secured to the post to which the frame A is secured. When, however, it is desired to bring together the ends of a broken wire or the ends of two separate wires, the rear end of the rope H is unfastened from around the shaft, and, after passing through the staple E^3, is passed back in line with its forward end, as shown in full lines in Fig. 1 of the drawings, when an end of the wire is secured in the catch at the rear end of the rope, and the other end of the wire is secured in a similar manner in the catch at the forward end of the rope which passes through the sheave, and it will be seen that by then turning the handle of the shaft the middle portion of the rope will be wound upon the shaft, so as to draw both ends of the rope toward each other, and by this movement the ends of the wire are drawn together so that they can be fastened together, the pawl and ratchet-wheel holding the shaft firmly in position while the ends are being thus secured.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of my improved wire-stretcher will be readily understood.

It will be seen that my improved wire-stretcher is strong and simple in construction

and can be manufactured at a small cost, and is not liable to break or get out of order, while it is exceedingly effective in its operation. It may be used, as described, either to stretch a wire from post to post or in mending a broken wire.

I am aware that a wire-stretcher has been provided with a chain for attaching it to a post, and with a crank and rotary shaft for winding a rope connected with a wire by means of a clamp.

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

The combination of the following parts: the stretcher-frame composed of side bars and a cross-bar which connects them, the hinged loop attached at one end of said side pieces and the rotary shaft arranged in bearings at the other end, the ratchet and pawl, the rope having catches, and the sheave attached to the cross-bar of the frame, all as shown and described, to operate as specified.

WILLIAMS NEYLAND HULING.

Witnesses:
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