

(Model.)

M. A. HOWELL, Jr.  
Wire Stretcher.

No. 241,663.

Patented May 17, 1881.

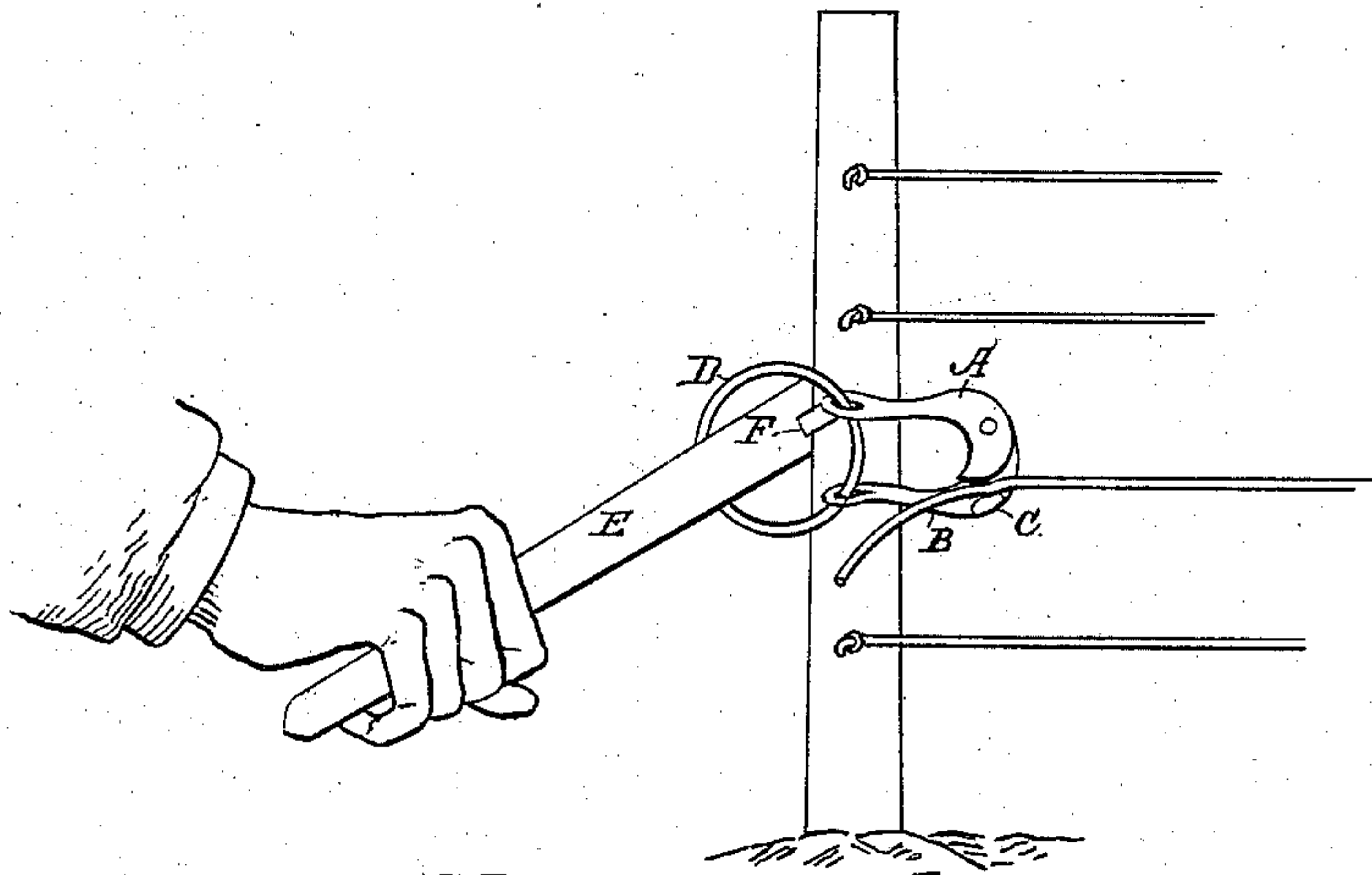


Fig. 2.

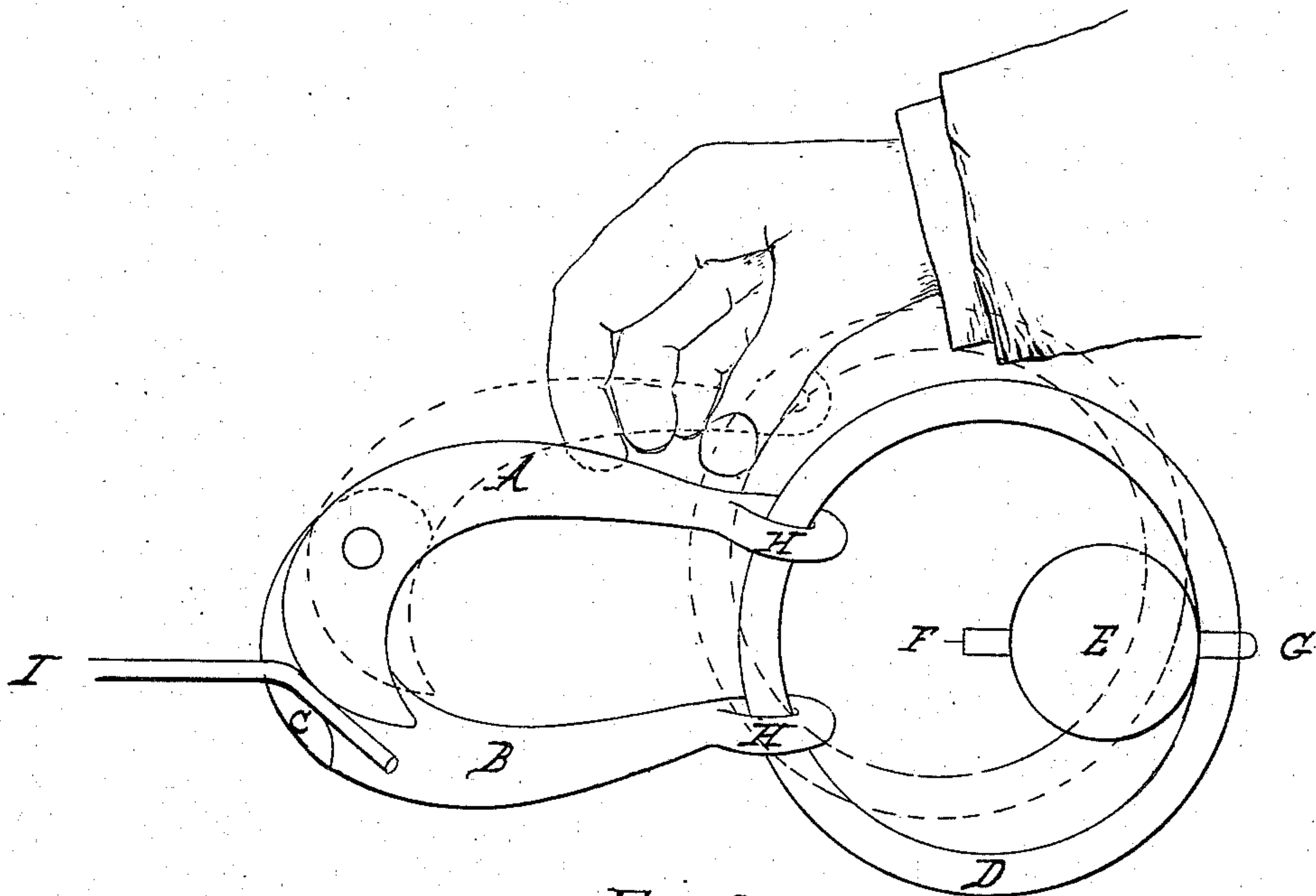


Fig. 1.

Witnesses.  
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Inventor:  
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# UNITED STATES PATENT OFFICE.

MARTIN A. HOWELL, JR., OF CHICAGO, ILLINOIS.

## WIRE-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 241,663, dated May 17, 1881.

Application filed October 16, 1880. (Model.)

*To all whom it may concern:*

Be it known that I, MARTIN A. HOWELL, Jr., a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Wire-Stretchers, (which I verily believe has never before been known or used in the United States or any foreign country,) of which the following is a specification.

My invention relates to improvements in wire-stretchers for either plain or barbed wire, whereby one person with an ordinary lever or wooden handspike is enabled to draw to its proper position any barbed or plain wire, which requires from six to ten men stapling the same, if necessary, to keep pace with him, while all injury and danger of breakage from kinks, short bends, curls, or abrasions of the wire is avoided, and while its durability, utility, and cheapness renders it objectionless.

It is a well-known fact that in the use of common wire or steel barb fence-wire it is extremely liable to break at subsequent stretchings, or by the ordinary process of contracting in cold weather if the surface is injured, twisted, or kinked, as is commonly the case with the many devices now in use, and that to avoid this is a very desirable feature, and that the danger resulting from the slipping or loosening of the wire by spreading of the jaws of ordinary pinchers, or failure to hold in consequence of the freshly-painted surface of the wire as wound from the spool, is very great, and to avoid handling the same as much as possible, and to hold it firmly and securely while being drawn, whether the paint be dry or green, is extremely essential. I attain these objects by the devices illustrated in the accompanying drawings, in which—

Figure 1 is an end view as it would appear with the wire grasped and in position; Fig. 2 being a perspective view, showing the ordinary manipulation of the stretcher by the person employed to use the same.

In Fig. 2, A B C H represent the working parts of the clamps with eyes in the handles at H, into which the ring D plays freely, the ring D being stapled on the back of the lever E at the point marked G, while at F is a stop fastened to the lever at some ten or twelve

inches from the end, as the case may require, to prevent slipping of the lever away from the post or fulcrum while drawn forward and around the post or center.

At C is shown a shoulder, against which the lip of the part A is pressed in proportion to the draft at E, the lip and the corresponding shoulder of the jaw having a cut or abraded surface to prevent slipping of the wire I.

In order more easily to understand the operation of this device, I will proceed to describe it.

After the end of the wire upon the spool is attached to the corner or end post, which is braced in the usual way, the spool is run along the line of posts until as much is unreeled as required. Then a second and third spool is treated in like manner, according to the number of wires necessary in the fence. I proceed forward, according to the level or uneven surface of the land, at a distance (on level ground) from ten to twenty rods, according to the number of assistants or the rapidity required. I hold the lever in my right hand and place the wire (as it lies upon the ground along the posts) in the jaw of the clamp, raising the jaw A by the right hand, as shown in dotted lines in Fig. 1. I next raise the lever, which is then about two feet from a line with the post, place the end of the lever behind the post, as in Fig. 2, and draw, walking backward and in a direction around the post, until the tension is sufficient, when one of the assistants drives a staple into the post next to the one used as a fulcrum, fixing the wire firmly. I then let go and take up the next wire in the same manner, and the third in succession, each of which is fastened as the first, when each is stapled permanently to its respective post. At the next point of draft, the wire, being uninjured, draws in a straight line, and no danger from breakage is met, unless from a flaw or imperfection in manufacture, the power applied by this means being sufficient to break any wire in use. It is easily seen that as the lever is drawn backward the handles of the clamp, which work freely in the eyes, are drawn together, causing the jaws to close firmly upon the wire by pressure applied by the lever.

In defining my invention more clearly, I would state that I am aware that the jaws of a wire-



stretcher have been made in a somewhat analogous way to mine, as shown in patent to Manning, No. 223,367, and that the ends of a pair of pipe-tongs have been retained by a ring, as  
5 in the patent to Fieldhouse, No. 188,881. My invention is distinctive with respect to these in that a single rigid ring, D, is permanently held in both the eyes H H of the jaws, so that the ring and jaws shall rest in the same general plane, which secures the result of clamping  
10 the jaws together when strain is applied, and also allows the ring to turn laterally with a loose hinge-joint in the eyes H when the lever E is deflected.

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

1. A wire-stretcher consisting of the jaws A and B, having eyes H H at their rear ends and pivoted together at their front ends, the  
20 jaw A having its biting end bent to one side of its fulcrum, and the jaw B having a lug, c,

for engagement of the wire between, and the single rigid ring D, passing through the eyes H of the jaws and resting in the same plane therewith, all combined as and for the purpose  
25 described.

2. A wire-stretcher consisting of the combination of jaws A and B, having eyes H H at their rear ends and pivoted together at their front ends, with the jaw A bent to one side of  
30 its fulcrum, and the jaw B provided with the lug c, for the engagement of the wire between, the single rigid ring D, passing through the eyes H and resting in the same plane therewith, and the lever E, arranged in the ring and  
35 connected to it by staple G, substantially as described.

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Witnesses:

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