

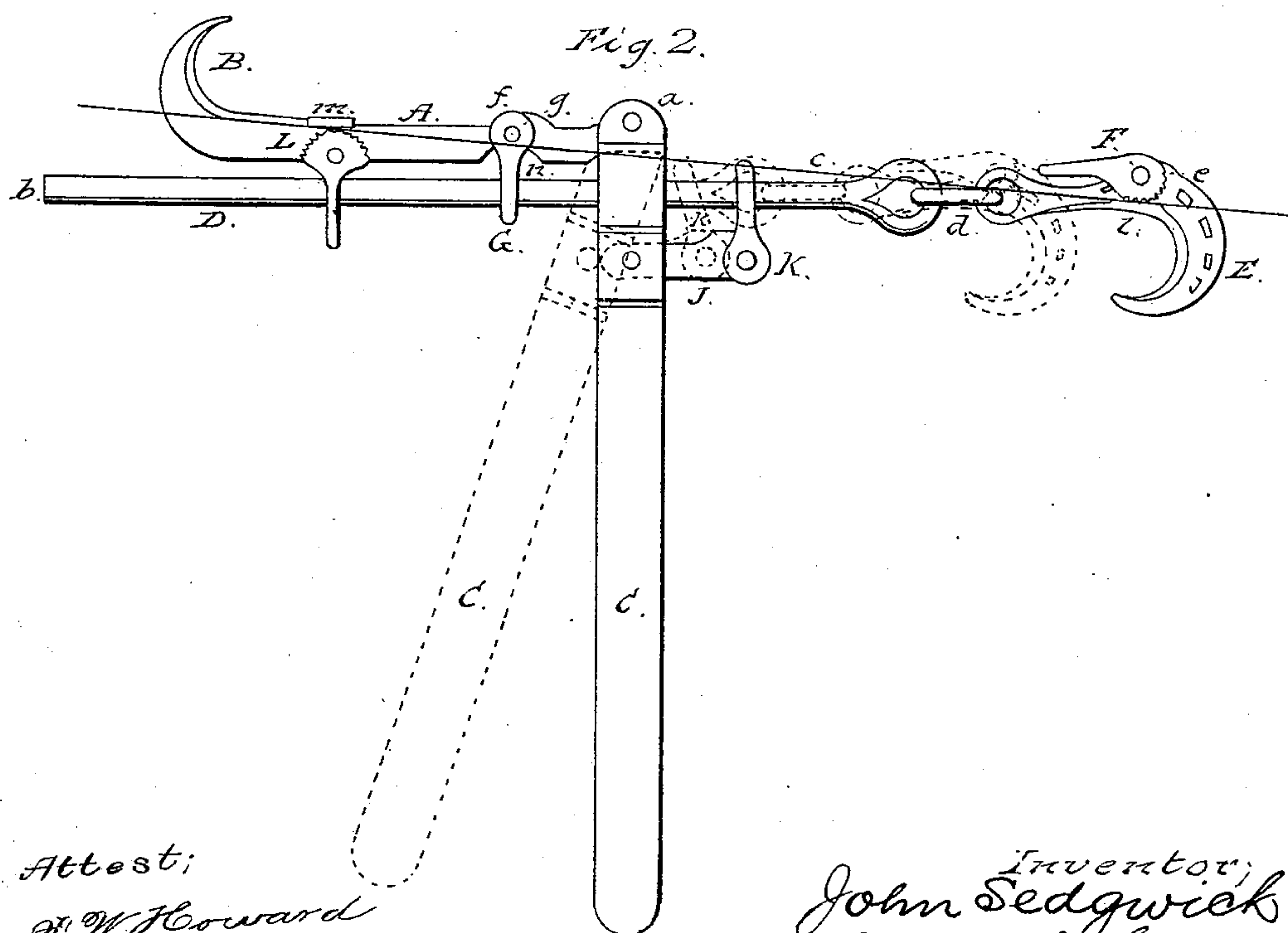
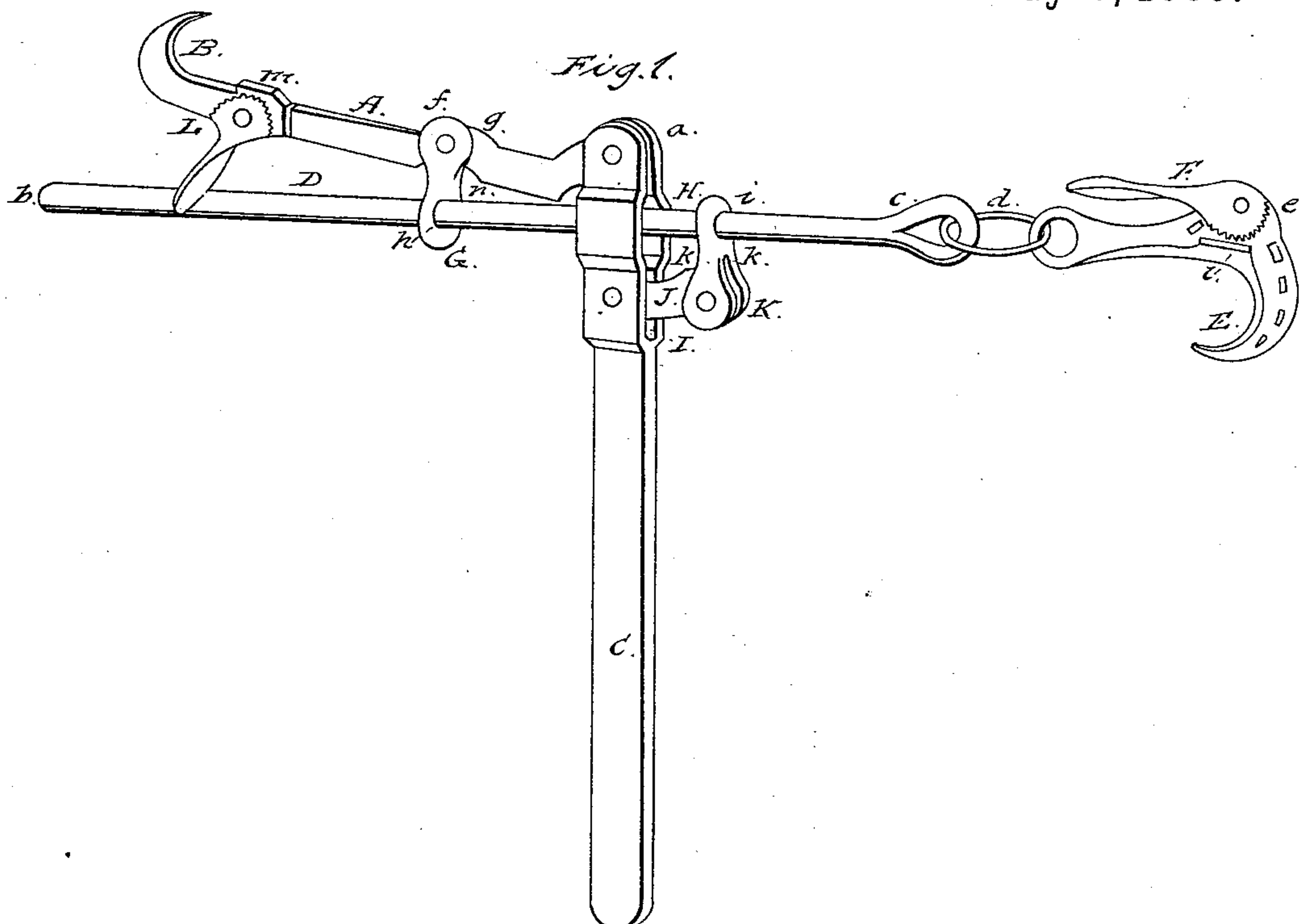
(No Model.)

J. SEDGWICK.

WIRE AND CORD STRETCHER.

No. 277,068.

Patented May 8, 1883.



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UNITED STATES PATENT OFFICE.

JOHN SEDGWICK, OF RICHMOND, INDIANA.

WIRE AND CORD STRETCHER.

SPECIFICATION forming part of Letters Patent No. 277,068, dated May 8, 1883.

Application filed December 15, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOHN SEDGWICK, a citizen of the United States of America, residing at Richmond, in the county of Wayne and State of Indiana, have invented certain new and useful Improvements in Wire and Cord Stretchers, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to devices adapted for tightening wire fences and stretching wires or cords and drawing them taut; and it consists in certain improvements in the construction and arrangement of parts, as will be hereinafter described and claimed.

In the drawings, Figure 1 represents a perspective view of my improved machine or apparatus. Fig. 2 is a side elevation thereof, showing the apparatus in operation, the full lines showing the parts in the position they assume before and the dotted lines after the wire-stretching movement.

A represents an anchoring bar or arm, having at its outer end a hook, B, by means of which the device is anchored to a post, rail, or other suitable purchase.

C represents a forked lever, which is pivoted at its upper end, *a*, to the inner end of the bar or arm A.

D represents a metal draft-rod, which is grasped at its free end *b* by one hand of the operator, when said rod is pushed forward, as hereinafter described, its opposite end, *c*, having suitable connection, *d*, with a wire or cord grasping device, which, as shown in the drawings, may be both a hook, E, and an eccentric-dog, F, having teeth *e*, or either.

The bar or arm A is connected to the draft-rod D by means of a link, G, having forked upper end, *f*, which embraces the side faces of said bar, and to which it is pivotally connected by a pin, *g*, or other suitable means, the lower end of said link having an eye, *h*, through which the draft-rod slides during the operation of the device, as hereinafter explained. The lever is provided with a mortise-recess, H, within which the rod rests when not in operation and slides when in operation. Within the lower slotted portion, I, is pivoted the rear end of a link, J, to whose opposite end is pivoted the lower end of a link, K, having at its upper

end an eye, *i*, through which the draft-rod slides. An upwardly-extending lug or projection, *k*, is formed on the upper face of the link J, whose office it is to push forward the link K upon the rod and toward the end when the lever is moved forward for the purpose of securing a fresh hold upon the draft-rod D. The hooked end E is provided with a shoulder, *l*, immediately beneath the pivotal connection of the toothed eccentric-dog F. The length of the wire to be stretched is allowed to rest upon this shoulder and the dog depressed until its teeth grip said wire securely against said shoulder. Another shoulder or ledge, *m*, is formed upon the upper edge of the bar or arm A, against which the double eccentric toothed dog L will grip the wire or cord when it is desired to hold the wire or cord, while the draft-rod D is loosened and pushed forward to secure a new hold upon the wire or cord.

n represents a notch or projection against which the loop or link G rests when not drawn tight by the draft-rod. By providing the arm or bar A with a double eccentric-dog, L, when the hook B is anchored to a post or other anchorage, and the wire or cord has been drawn up, said eccentric will hold the wire or cord securely and in the same direction while the rod is projected forward to secure a new hold on the wire. This double eccentric-dog L also serves to hold the wire or cord in the opposite direction when it is desired to attach the stretcher to two separate wires for the purpose of drawing the ends together to be spliced. The arm or bar A having been adjusted to the desired position upon the draft-rod D, the hook B is secured to a post or suitable anchorage. The wire fence or cord to be stretched is then engaged by either the hook E or dog F, or both. Then the operator grasps the outer end of the lever C. Then by drawing or forcing the lower end of the lever toward the arm or bar A the link K will draw the draft-rod D and its thereto-attached hook E and dog F rearwardly, thereby also drawing in the same direction the wire or cord grasped by either or both the hook or dog E F. As the wire or cord passes rearwardly, it can be passed between the shoulder *m* and the eccentric-dog L and across the toothed face of the latter until

the movement thereacross ceases, when the teeth of said eccentric-dog will grip the wire or cord and hold it firmly in its retracted position while the slack is being taken up or the rod D pushed forward to secure a new hold on the wire or cord to be stretched or tightened. To force the draft-rod D and the there-to-attached wire or cord grasping member forward to secure a new hold upon the wire to be stretched or tightened, the operator slackens the grip of the links G and K, and slips the draft-rod D out or forward, ready to take a new hold. Thus it will be seen that the device is very easily operated, a simple movement of the lever in one direction being sufficient to retract the rod D, which, as it passes rearwardly, is automatically caught and held by the link G. The wire can be passed over and clamped by the eccentric-dog L.

In using this device the anchoring-bar A is hooked to a suitable anchorage. The draft-rod D is then extended by hand as far as it will go without coming out of the eye of the link G. Then the wire or cord is grasped by the dog F against the shoulder L or by the hook E, as suits best. The operator then grasps the lever and works it back and forth, whereupon the link J will draw the rod rearwardly, and the link G will grip and hold it in position. To secure a new hold upon the wire after the rod D is drawn back its length, the wire is gripped against the shoulder *m* by the double eccentric-dog L, so as to hold the wire. The links are then loosened by straightening the lever C, and then the draft-rod D is pushed forward, as before described, to its foremost position. To splice two wires where they must be drawn tight, catch one wire with each dog and work the lever, as before described, and the machine will draw them together and hold them while the work is done.

The whole of the parts are constructed of metal, so that there are no portions to become stretched or warped in use. There are no complicated portions to get out of order or require frequent renewing.

The device can be easily and cheaply constructed and easily operated. It is very effective in its operation, as considerable strain can be brought to bear upon the wire, and it is automatically sustained by the arrangement of links operating on the draft-rod by simply drawing the lever in the proper direction.

Having thus described my invention, what I claim therein is—

1. In wire-stretchers, the combination of an inflexible draft-rod having at one end a wire-grasping attachment, substantially as described, a rigid anchoring arm or bar having a wire grasp or clamp and eyed link, G, and a lever pivoted at one end to said anchoring arm or bar, and having link-connection J K with the draft-rod, whereby motion is imparted to said rod and wire-grasping attachment, substantially as and for the purpose set forth.

2. In devices for stretching wire or cords, the forked or slotted lever or handle C, having links J and K, anchoring bar or arm A, having eyed link G and pivotally connected at one end to said lever, and having a wire-grasping device, and an inflexible draft-rod, D, having at one end a wire grasping and clamping device, substantially as described, and for the purpose set forth.

3. A wire or cord tightener having anchoring bar or arm A, provided with shoulder *m*, double eccentric-dog L, and eyed link G, slotted or forked lever C, having link J and eyed link K, and the inflexible draft-rod D, provided at one end with a wire or cord grasp or clamp, having shoulder *l* and toothed eccentric-dog F, the whole being constructed and arranged substantially as and for the purpose set forth.

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

JOHN SEDGWICK.

Witnesses:

BENJAMIN STRATTAN,
W. I. DULIN.