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PATENTED MAR. 3, 1908.

J. M. EVANS.  
TIGHTENER.

APPLICATION FILED OCT. 29, 1907.

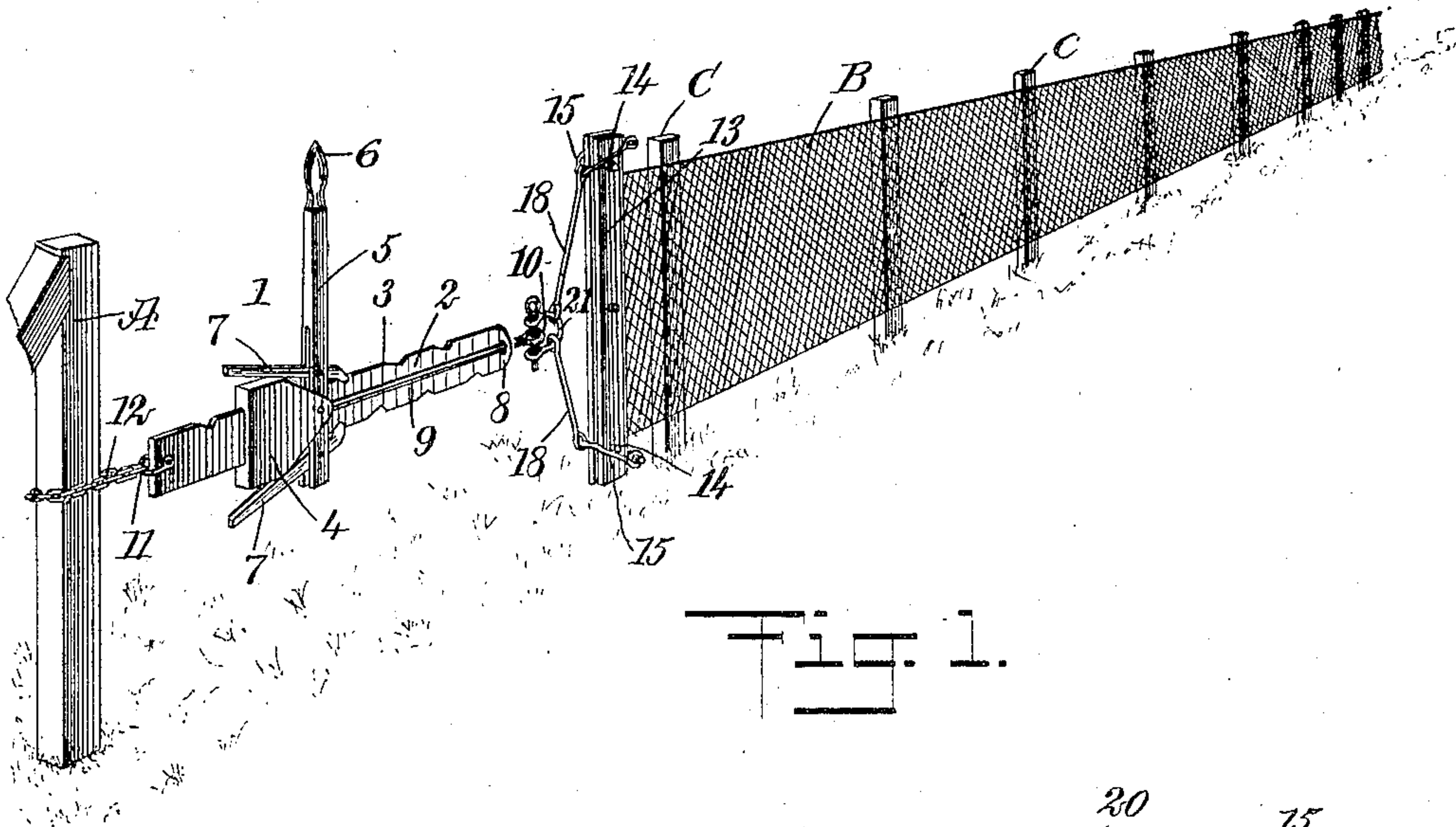
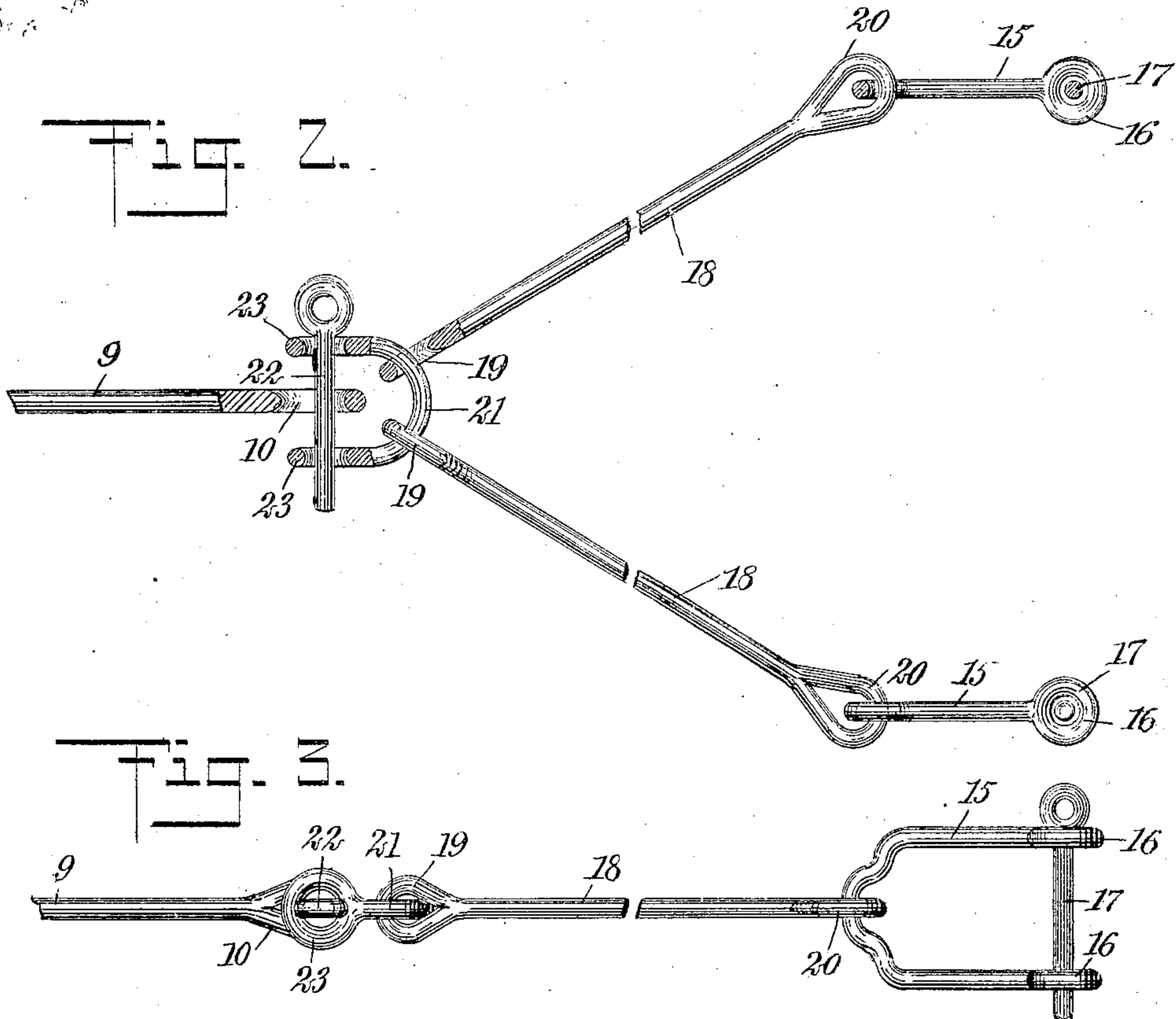


Fig. 1.



WITNESSES

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# UNITED STATES PATENT OFFICE.

JAMES M. EVANS, OF CHANUTE, KANSAS.

## TIGHTENER.

No. 880,980.

Specification of Letters Patent.

Patented March 3, 1908.

Application filed October 29, 1907. Serial No. 399,645.

*To all whom it may concern:*

Be it known that I, JAMES M. EVANS, a citizen of the United States, and a resident of Chanute, in the county of Neosho and State of Kansas, have invented a new and Improved Tightener, of which the following is a full, clear, and exact description.

This invention relates to tighteners, and more particularly devices of this character used in tightening fence wires or woven wire fabrics used in constructing fences and the like.

An object of the invention is to provide a device of the class described, by means of which single wires as well as strips of woven wire fabric of different widths can be drawn taut to permit the same to be properly mounted upon fence posts and the like.

A further object of the invention is to provide a tightener having clamping means for securely holding wide strips of woven wire fence material, and serving to draw the same taut in constructing fences and the like.

The invention consists in the construction and combination of parts to be more fully described hereinafter and particularly set forth in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views, and in which

Figure 1 is a perspective view of a fence under construction showing my invention in use for tightening a strip of woven wire material; Fig. 2 is an enlarged elevation showing certain details of the device with parts in cross-section; and Fig. 3 is an enlarged plan view of a part of the device.

Before proceeding to a more detailed explanation of my invention, it should be understood that it can be used in combination with tightening means of different kinds, though I prefer to employ the simple tightening mechanism illustrated in Fig. 1, and which will be described in detail hereinafter.

In constructing fences with wire or woven wire fabric, it is customary to prepare the fence posts in the usual manner and to secure the wires or fabric to one of the same, and then to stretch the wire along the post by means of a suitable tightener before nailing or otherwise securing the wire or fabric in position. It is necessary to tighten the wires

or the fabric, to prevent the consequent sagging or loosening of the same after the fence is completed.

My device is particularly advantageous for fence building in that by means of it, not only single wires but strips of woven fabric of various widths, can be properly stretched before securing them in position.

Referring more particularly to the drawings, I prefer to employ a tightening mechanism 1, comprising an elongated plate 2 having a plurality of notches 3 at the opposite longitudinal edges. A bracket 4, is slidably arranged upon the plate 2 and has pivoted thereupon a lever 5, one end of which is bifurcated and extends at each side of the plate 2. At the upper end, the lever 5 has a handle 6 by means of which it can be manually operated. Between the sides of the bifurcated portion of the lever are pivoted dogs 7, adapted to engage the notches 3 at the opposite sides respectively, of the plate 2. At one end of the plate 2 is a laterally disposed toe 8, having an opening therethrough in which is slidably arranged a pull rod 9, pivoted at one end to the bracket 4 and having at the other end an eye 10. The end of the plate 2 remote from the toe 8 has a clevis 11, carrying a chain 12 by means of which the mechanism can be secured to a post A. A pull can be exerted upon the rod 9 by means of the lever 5 and the dogs 7, the lever being alternately fulcrumed at one or the other of the dogs, thereby advancing the bracket longitudinally of the plate.

I provide a clamp comprising similar elongated clamp members 13, adapted to be rigidly secured together by means of screws or bolts 14, and serving to hold fence wires or woven wire material B therebetween. Shackles 15, comprising U-shaped members having eyes 16 at the ends, are removably mounted at the extremities of the clamp members and are held in position by pins 17, removably inserted in the eyes 16. Links 18, having eyes 19 and 20 at the opposite ends, are arranged in planes at substantially right angles and are secured to the shackles by means of the eyes 20. The opposite ends of the links are joined by a common clevis 21, secured to the pull rod 9 by means of a pin 22, passing through eyes 23 of the clevis and the eye 10 of the pull rod. It will be understood that the shackles, the links and the clevis,



are removably secured together and the last-mentioned is removably attached to the pull rod.

In using my invention, the strip of fence material B is fastened at one end in the usual manner to one of the fence posts C; the opposite end of the strip is clamped between the clamp members 13 and extends along the fence adjacent to the posts. By means of the tightening mechanism, the material B is attached suitably and is then secured to the posts in any preferred or common manner.

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

1. In a device of the class described, in combination, clamp members adapted to hold fence wire, means for securing said clamp members together, shackles removably mounted upon said clamp members near the ends thereof, said means for securing said clamp members together serving to limit the movement of said shackles, links secured together at one end and each attached to one of said shackles, and means for exerting a pull at the adjacent ends of said link.

2. In a device of the class described, in combination, clamp members adapted to hold fence wire therebetween, means for securing said clamp members together, shackles

loosely arranged at the ends of said clamp members and engaging said securing means, whereby said shackles are held in position upon said clamp members, links carried by said shackles, means for securing together the ends of said links remote from said shackles, and means for exerting a pull at the adjacent ends of said links.

3. In a device of the class described, in combination, elongated clamp members adapted to hold fence wire therebetween, bolts arranged transversely of said clamp members and serving to secure them together shackles loosely mounted upon said clamp members near the ends and engaging said bolts, whereby said shackles are prevented from moving along said clamp members toward the middle thereof, links loosely secured to said shackles, a clevis connecting the ends of said links remote from said shackles, means for exerting a pull, and means for movably securing said pulling means and said clevis together.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JAMES M. EVANS.

Witnesses:

J. C. MERRITT,

G. C. DAVIS.