No. 705,498. Patented July 22, 1902.

I. M. WARNER.

WIRE FENCE STRETCHER.

(Application filed Sept. 6, 1901.)

(No Model.)

Fig. 1.

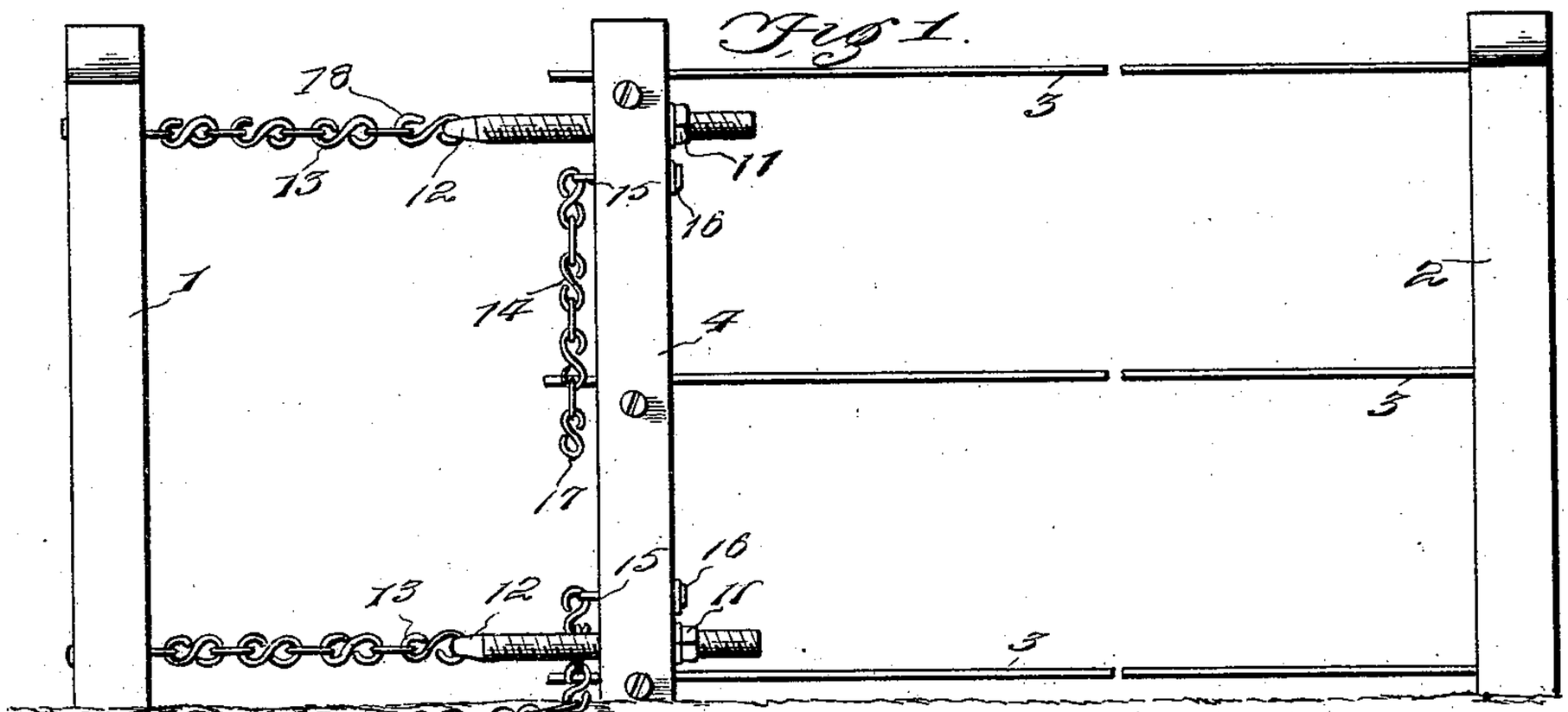


Fig. 2.

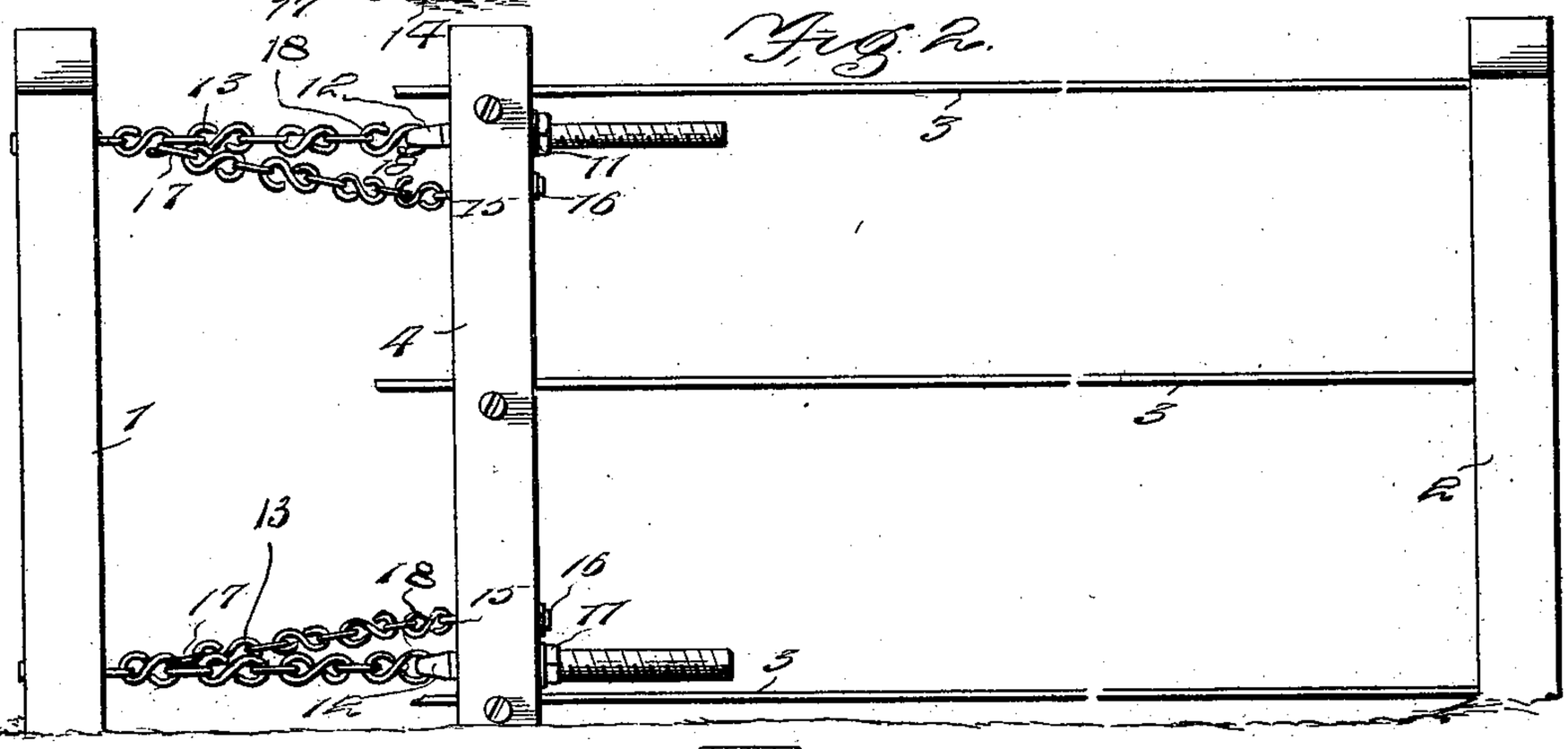
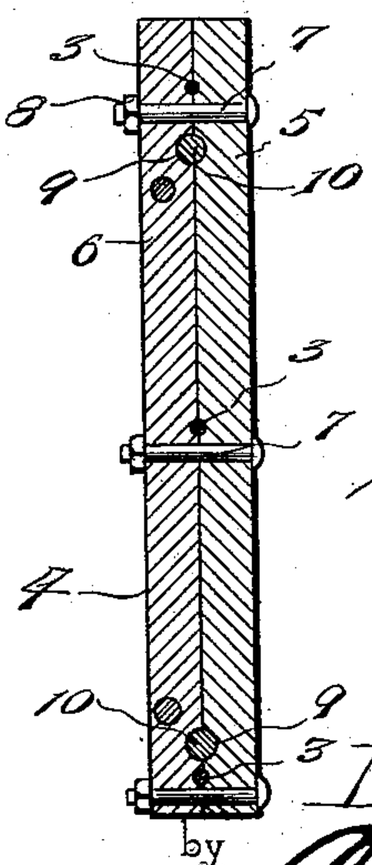


Fig. 3.



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UNITED STATES PATENT OFFICE.

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WIRE-FENCE STRETCHER.

SPECIFICATION forming part of Letters Patent No. 705,498, dated July 22, 1902.

Application filed September 6, 1901. Serial No. 74,552. (No model.)

To all whom it may concern:

Be it known that I, ISAAC M. WARNER, a citizen of the United States, residing at Union City, in the county of Branch and State of Michigan, have invented a new and useful Wire-Fence Stretcher, of which the following is a specification.

This invention relates to wire-fence stretchers.

The object of the invention is to provide a simply-constructed and thoroughly efficient device of the character specified by the use of which the slack of the runner-wires may be readily and easily taken up; furthermore, to provide means by which the runner-wires will be held from relaxing when the tightening means require readjustment for a second operation.

With these and other objects in view, as will appear as the nature of the invention is better understood, the same consists in the novel construction and combination of parts of a wire-fence stretcher, as will be hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which like numerals of reference indicate corresponding parts, there is illustrated one form of embodiment of the invention capable of carrying the same into practical operation, it being understood that the elements therein exhibited may be varied or changed as to shape, proportion, and exact manner of assemblage without departing from the scope of the invention, and in these drawings—

Figure 1 is a view in side elevation, showing the device in connection with a section of fence the runner-wires of which are to be tightened, the clamp-holding chains being disengaged from the tightening-chains. Fig. 2 is a similar view showing the clamp-holding chains in engagement with the tightening-chains to permit the latter chains to be relaxed to effect readjustment for a second tightening operation. Fig. 3 is a view in transverse section through the stretcher-bar or clamp.

Referring to the drawings, 1 and 2 designate the end posts of a section of fence, and 3 the runner-wires, the latter to be of the plain or barbed type, as may be preferred. As these parts may be of the usual or any preferred construction, detailed description thereof is deemed necessary.

The present invention resides in the clamp or stretcher-bar 4 and its associated mechanism, by which the runner-wires may be placed under the requisite tension. The clamp or stretcher-bar comprises two sections or jaws 5 and 6, which are held assembled for operative work by bolts 7, carrying nuts 8, the opposed faces of the jaws being provided with recesses 9, in which fit the tightening-screws 10, of which there are shown in this instance but two, it being understood that this number may be increased, if desired, and still be in the scope of the invention. The tightening-screws are coarse-threaded, and each carries an adjusting-nut 11 to bear against the inner side of the clamp, the outer end of each of the screws being provided with an orificed head 12 to be engaged by the end link of the tightening-chain 13, the other end of which is associated with the post 1 in any preferred manner, as by having a bight turned thereabout or by the employment of an eyebolt and nut, as shown. One of the clamp-jaws also carries two clamp-holding chains 14, one end of each of which is secured in an eyebolt or staple 15, held assembled with the clamp-jaw by a nut 16. The free end link 17 of each of the clamp-holding chains is open, whereby to permit it to be hooked into engagement with any one of the links of the chain 13, thus to hold the clamp-bar against relaxing when the tightening-screws are removed or loosened for the purpose of permitting the tightening-chains to be shortened in the operation of a second or third tightening of the runner-wires. To effect this, the end link 18 of each of the tightening-chains 13 is open, thus to permit this link to be brought into engagement with any one of the succeeding links of the chains for the purpose stated.

In operation the clamp is secured in position against the runner-wires through the medium of the bolts 7 and nuts 8, as will be readily understood and as is common in devices of this character. The ends of the tightening-chains are then suitably secured to the post 1 and a wrench is applied to the nuts 11, thereby forcing the clamp toward

the post 1 and putting the runner-wires under tension. If by the time the nuts 11 have traversed the operative length of the tightening-screws the runner-wires are not under the requisite tension, the links 17 of the clamp-holding chains 14 are hooked into engagement with one link of each of the tightening-chains, as shown in Fig. 2, thereby holding the clamp against retraction, and the nuts 11 are then screwed out upon the tightening-screws, after which the link 18 of each of the tightening-chains is brought into engagement with the appropriate link of each of the said chains, and the operation is again repeated. When the runner-wires have been placed under the requisite tension, their ends are passed through suitable openings in the post 1 and are secured thereto in the usual manner, or they may be secured to the side of the post by the employment of ordinary staples. The chains 13 are then disconnected from the post 1 and the clamp removed from the runner-wires.

It will be seen from the foregoing description that while the device of this invention is exceedingly simple of construction it will be thoroughly effective in operation to produce the results designed and, further, that it may be operated by a person of ordinary mechanical ability.

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

1. In a wire-fence stretcher, the combination of a tightening connecting element attached to a fixed point, a stretcher-bar having means to secure runner-wires thereto, a tightening-screw attached to and movable axially with reference to the stretcher-bar, means to adjustably connect the tightening-screw to the tightening connecting element, a holding connecting element carried by the stretcher-bar and means to adjustably connect the holding connecting element to the tightening connecting element, prior to disconnecting the latter from the axially-movable tightening-screw, substantially as described.

2. In a wire-fence stretcher, the combination of a tightening connecting element attached to a fixed point, a stretcher-bar having means to secure runner-wires thereto, a tightening-screw, attached to and movable axially with reference to the stretcher-bar, an adjusting-nut bearing against the bar and engaging the screw, to adjust the latter axially, means to adjustably connect the tightening-screw to the tightening connecting element, a holding connecting element carried by the stretcher-bar, and means to adjustably connect the same to the tightening connecting element prior to disconnecting the latter from the axially-movable tightening-screw, substantially as described.

3. A wire-fence stretcher comprising a two-part stretcher-bar, nut-bearing screws carried thereby, tightening-chains associated with the screws, and stretcher-bar-holding chains carried by the said bar.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ISAAC M. WARNER.

Witnesses:
H. T. CARPENTER,
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