No. 814,139. PATENTED MAR. 6, 1906.

M. E. JOHNSON.

WIRE FENCE STRETCHER.

APPLICATION FILED DEC. 11, 1905.

2 SHEETS—SHEET 1.

Fig. 1.

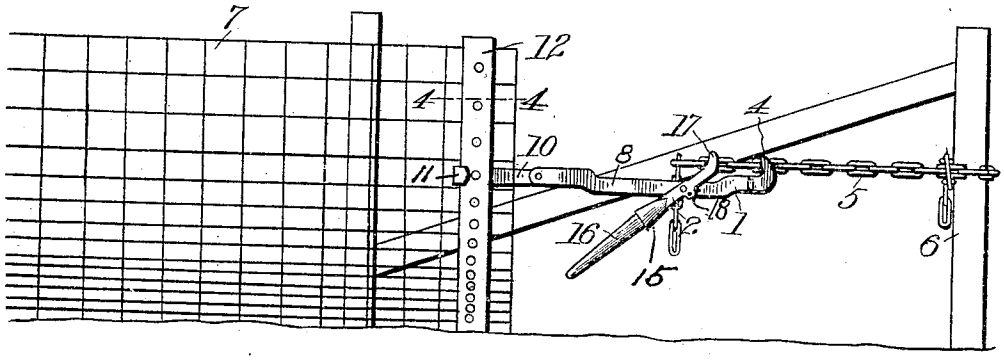


Fig. 2.

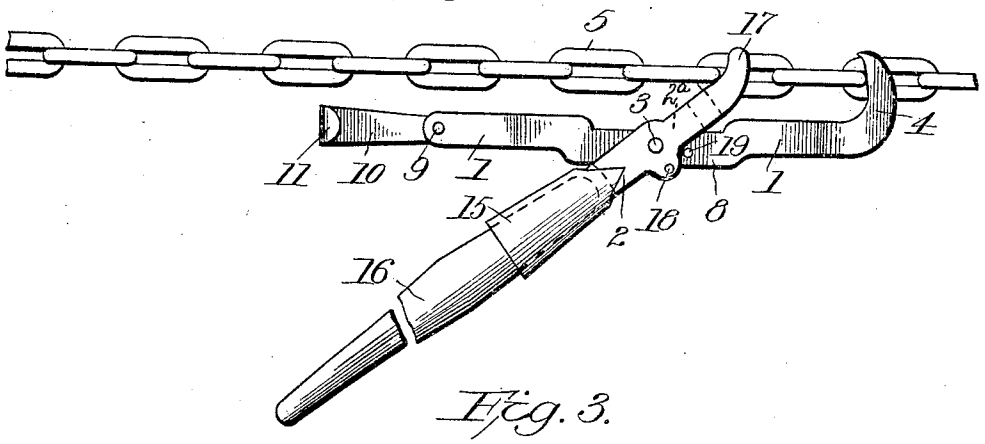


Fig. 3.

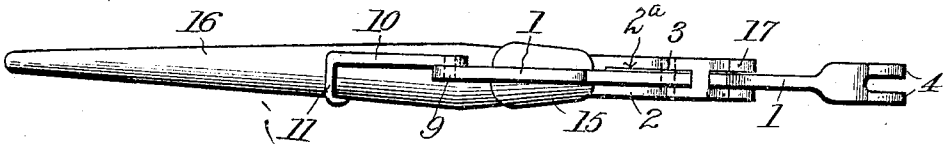
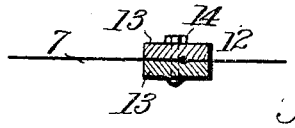


Fig. 4.



Inventor

Moses E. Johnson.

Witnesses

C. H. Walker,

William A. Deane.

By Rexford M. Smith.

Attorney

No. 814,139. PATENTED MAR. 6, 1906.

M. E. JOHNSON.

WIRE FENCE STRETCHER.

APPLICATION FILED DEC. 11, 1905.

2 SHEETS—SHEET 2.

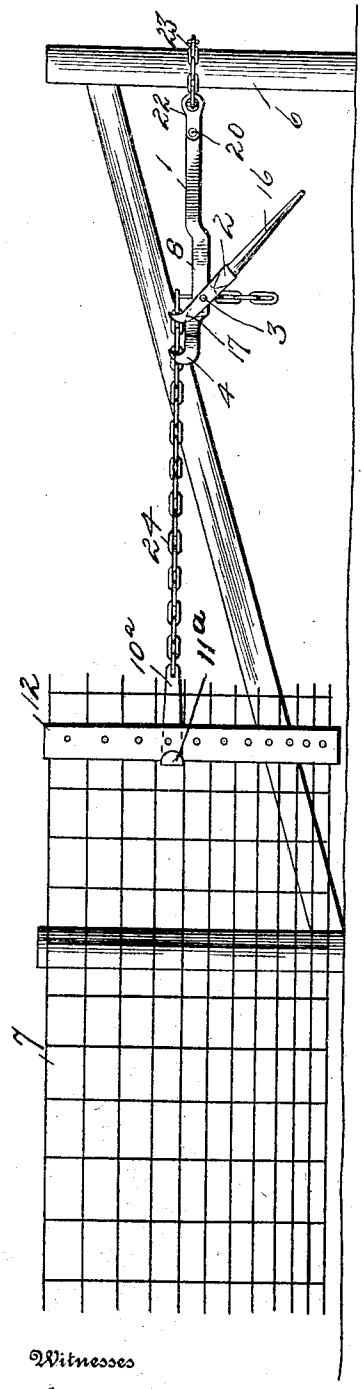


Fig. 5.

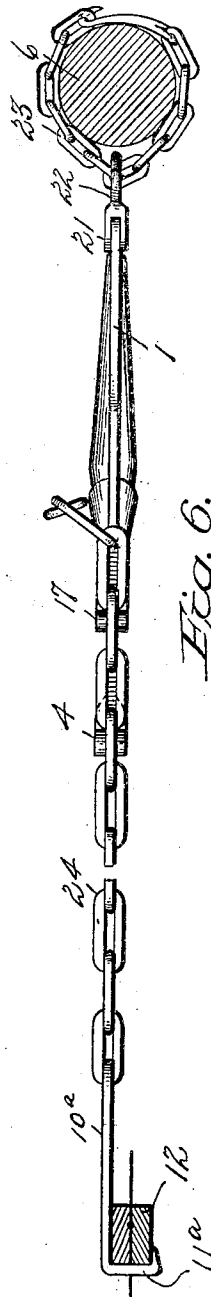


Fig. 6.

Witnesses

C. H. Walker.

William O. Deane

Inventor

Moses E. Johnson.

By Lexington M. Smith

Attorney

UNITED STATES PATENT OFFICE.

MOSES E. JOHNSON, OF PITTSBURG, PENNSYLVANIA.

WIRE-FENCE STRETCHER.

No. 814,139. Specification of Letters Patent. Patented March 6, 1906.

Application filed December 11, 1905. Serial No. 291,310.

To all whom it may concern:

Be it known that I, MOSES E. JOHNSON, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a certain new and useful Wire-Fence Stretcher, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to that type of stretching-tools designed particularly for stretching woven-wire fencing.

To this end the invention contemplates a simple and practical construction of wire-fence stretcher embodying means for evenly distributing the pull or stretch over the entire area of fencing through the manipulation of a single lever.

A further object of the invention is to provide practical means for coupling the stretching-tool to the fencing and also means for holding the "stretch" as the lever is alternately engaged and disengaged from the anchoring element connected with the fixed post.

A general object of the invention is to provide a fence-stretching tool of a simple construction embodying a minimum number of parts and easily applied and manipulated.

With these and other objects in view, which will more readily appear as the nature of the invention is better understood, the same consists in the novel construction, combination, and arrangement of parts hereinafter more fully described, illustrated, and claimed.

In the accompanying drawings, Figure 1 is a general elevation showing a wire-fence stretcher constructed in accordance with this invention in its applied position for stretching a piece of woven-wire fencing. Fig. 2 is an enlarged elevation of the tool. Fig. 3 is a plan view thereof. Fig. 4 is a detail sectional view of a fence-clamp on the line 4 4 of Fig. 1. Fig. 5 is a view similar to Fig. 1, showing another practical and preferable application of the stretching-tool wherein the same is anchored or coupled to the fixed post instead of the fencing. Fig. 6 is a plan view of the reverse arrangement of parts shown in Fig. 5.

Like reference-numerals designate corresponding parts in the several figures of the drawings.

The stretching-tool contemplated by the present invention embodies in its general organization a main holding-bar 1 and a stretching-lever 2, arranged in crossing relation and pivotally connected at their point of intersection through the medium of a pivot pin or bolt 3. The main holding-bar 1 essentially consists of an approximately straight bar of steel or other stout metal sufficiently strong to withstand the strain imposed upon the bar in holding the stretch of the wire fencing. This holding-bar 1 is provided at one extremity with a laterally-offset bifurcated catch-claw 4, adapted to successively engage the links of the anchoring-chain 5, which is secured to or about a fixed end post 6, toward which the stretching of the wire fencing 7 is directed.

At an intermediate point between its ends the holding-bar 1 is provided with an offset portion 8, upon which the lever 2 is mounted, and at its extremity opposite the catch-claw 4 the said bar has pivoted thereto, as at 9, one end of a coupling-plate 10, the other end of which is provided with an engaging hook 11, adapted to be detachably hooked about a fence-clamp 12. The fence-clamp 12 essentially consists of a pair of parallel clamping-bars 13, arranged upon opposite sides of the fencing 7 and tightly clamped thereto through the medium of the binding-bolts 14.

The stretching-lever 2 may be provided at one side of its pivot with any convenient form of handle, but is preferably formed with a socket member 15, receiving an operating-handle 16. At the side of the pivot opposite the handle the lever is formed with a bifurcated fulcrum-claw 17, disposed at the same side of the holding-bar as the claw 4 of the latter and adapted to successively engage the links of the chain 5. Contiguous to its pivot 3 the lever 2 is provided with a retaining-lug 18, adapted to register with a pin-opening 19 in the bar 1, so as to receive a temporary securing-pin which provides means for holding the fencing at a half-stretch when it is impossible to give a full throw to the stretching-lever.

In operation the clamp 12 is first attached to the fencing, and then after positioning the anchoring-chain 5 the holding-bar 1 is attached to the fence-clamp by the plate 10 and engaged with the chain by the catch-claw 4. Then by manipulating the lever with its claw 17 engaged with the chain successive pulls can be taken in the fencing, which are caught and retained by the catch-claw 4 as the stretching action progresses.

While the foregoing description has been directed to an arrangement of the stretching-

tool wherein the holding-bar 1 is connected with the fence-clamp 12 through the medium of a coupling plate or hook 10 and the claws 4 and 17 engage a chain attached to the fixed post 6, it should be understood that the essential features of the invention may be preserved with any other practical arrangement of the tool which provides for stretching wires or wire fabric toward a fixed point. Hence for illustrative purposes there is shown in Figs. 5 and 6 of the drawings another adaptation of the invention involving a very practical and effective arrangement of the stretching-tool. In this arrangement the tool is reversed from the position shown in Fig. 1, and instead of being connected directly with the clamp 12 on the fencing the holding-bar 1 of the tool has pivotally bolted to one end thereof, as at 20, the bifurcated clip 21 of a clevis-ring 22, which receives therethrough an anchoring-chain 23 arranged circumferentially about the fixed end post 6. With the stretcher arranged in this position there is employed a pulling-chain 24, to one end of which is secured a coupling-plate 10^a, having an engaging hook 11^a adapted to be detachably hooked about the fence-clamp 12, heretofore referred to. The stretching action of the tool in this arrangement is the same as before described; but the arrangement shown in Figs. 5 and 6 is probably the more practical and effective.

In any arrangement of the stretching-tool the construction remains substantially the same, and at this point it will be observed that at the point of intersection between the holding-bar 1 and the lever 2 the latter is of a slotted formation, as at 2^a, to embrace the holding-bar. This makes a very strong and balanced pivotal support for the lever, and, furthermore, by reason of the offset 8 in the holding-bar the lever is positioned at exactly the right point to take the proper length of stretch in the fencing. Also the offset arrangement provides for the claw end of the lever moving to a position where it readily disengages itself.

While in Figs. 1 and 2 of the drawings the retaining device 18 and 19 is illustrated, it should be understood that this part of the stretcher may be used or omitted without departing from the invention.

In further explanation of the operation of the tool it will now be understood that the same is entirely automatic in the sense of the holding-bar automatically engaging and disengaging itself from the chain as the lever is manipulated, thus allowing the operator to employ both hands, which is practically impossible with many other types of stretchers now on the market.

What I claim is—

1. A fence-stretching tool ocmprising a main holding-bar provided at one end with a laterally-offset bifurcated catch-claw, and a stretching-lever arranged in crossing relation to the holding-bar and pivoted thereto at an intermediate point, said lever being provided at one end with a bifurcated fulcrum-claw projecting beyond the same side of the holding-bar as the claw of the latter.

2. A fence-stretching tool comprising a main holding-bar having an intermediate offset portion, and at one end provided with a laterally-offset catch-claw, and a stretching-lever having a slotted portion embracing the intermediate offset portion of the holding-bar and pivoted thereto, said lever being provided at one end with a fulcrum-claw projecting beyond the same side of the holding-bar as the claw of the latter.

3. A wire-fence stretcher comprising a chain, a main holding-bar carrying at one end a member for engaging with a support and at its other end with a laterally-offset catch-claw for engagement with the chain, a stretching-lever arranged in crossing relation to the holding-bar and provided at one end with a fulcrum-claw for engagement with the chain, and means for holding the lever in a partly-swung position.

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

MOSES E. JOHNSON.

Witnesses:
W. J. WHITE,
THOS. W. HAMILTON.