(No Model.)

Z. F. HOWARD.

WIRE STRETCHER.

No. 588,921. Patented Aug. 24, 1897.

Fig. 1

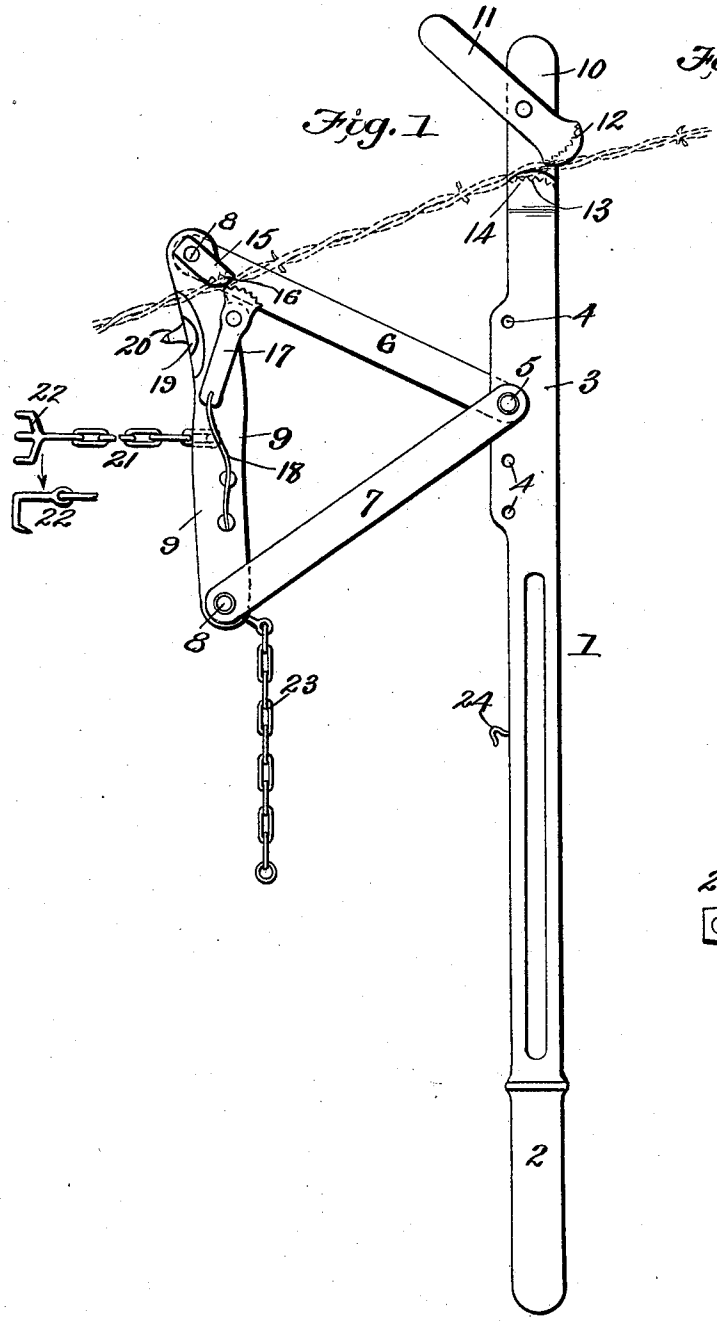


Fig. 2.

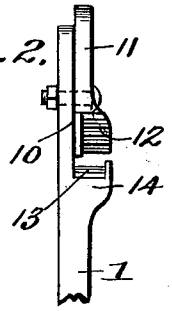
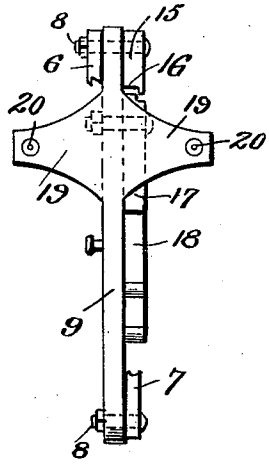


Fig. 3.



WITNESSES:

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ZENAS F. HOWARD, OF SEALY, TEXAS, ASSIGNOR OF ONE-HALF TO BENJAMIN G. HARRIS, OF SAME PLACE.

WIRE-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 588,921, dated August 24, 1897.

Application filed June 24, 1897 Serial No. 642,063. (No model.)

To all whom it may concern:

Be it known that I, ZENAS F. HOWARD, of Sealy, in the county of Austin and State of Texas, have invented certain new and useful Improvements in Wire-Stretchers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to novel and useful improvements in wire-stretchers; and it consists, essentially, of a lever, means for clamping or gripping the wire while it is being stretched, means for preventing the wire from slipping after it has been stretched to the desired extent, and means for securing the stretcher in operative position upon the fence-post.

The object of my invention is to produce a device of the character mentioned which will be especially simple in construction, cheap, durable, and efficient in operation, and I find in practice that I am enabled to stretch old wire which has been in use for a great length of time, something which heretofore has not been accomplished with any degree of success on account of the poor leverage of stretchers heretofore manufactured and used.

Other objects and advantages of my invention will become apparent in the course of the following description, and the points of novelty will be particularly pointed out in the claims.

I am enabled to accomplish the object of my invention by the means illustrated in the accompanying drawings, in which—

Figure 1 represents a perspective view of my improved wire-stretcher with a section of wire in position therein to be operated upon. Fig. 2 is a detail edge elevation of the upper portion of the lever and arm for preventing the wire from slipping after it has been stretched, and Fig. 3 is a similar view of the clamps or jaws for gripping and holding the wire while the lever is being moved to stretch the same.

Referring to the drawings, figure 1 indicates a lever which is constructed of any suitable material and provided at its lower end with a handle 2. The upper portion of said lever is flattened, as indicated by the numeral 3, and provided with a series of perforations 4 for the reception of a pivot 5, which passes through the ends of two arms 6 and 7, which have their forward ends pivoted at 8 to the vertical arm 9. The upper end of lever 1 is cut away, as indicated by the numeral 10, and has pivotally mounted upon said cut-away portion a short arm or lever 11, which is provided at its lower end with notches or a roughened surface 12, which is adapted to swing in close proximity to the teeth 13, formed on the shoulder 14 at the upper end of the operating-lever.

Stationarily secured to the upper end of the vertical arm 9 is a short arm or jaw 15, which is cut away on its under side, as indicated by the numeral 16, and preferably provided with short teeth.

The numeral 17 indicates a short pivoted arm or jaw, which is also provided at its upper end with a roughened surface or short teeth which are adapted to engage with the under side of the arm 15, and the upper end of said lever 17 is adapted to be kept normally in engagement with the lower end of the stationary jaw 15 by a leaf-spring 18, which is preferably secured in the recess in the lower end of said arm at one end and at the other to the vertical arm 9.

The arm 9 is provided with short lateral extensions 19, which are provided near their ends with short spurs 20, which are adapted to be forced into the post and prevent the stretcher from slipping. As an additional means of securing the stretcher to the post I provide a chain 21, which is secured at one end at or about the center of the vertical bar 9, and at the other end said chain is provided with a claw 22, which is adapted to enter the post and prevent the chain from unwinding.

After the wire has been sufficiently stretched it is desirable to lock the lever in order that the operator may secure the wire to the post. I therefore provide a chain 23, which is attached to the lower end of arm 9, and during the operation of stretching the wire said chain performs no function, but

after the lever has been moved to stretch the wire said chain is secured to a hook 24 on the lever 1.

It will be observed that the leverage of the stretcher can be increased or diminished by shifting the arms 6 and 7 from one to another of the perforations 4. When it is desired to carry this stretcher from place to place, the pivot 5 can be taken out and the stretcher folded into compact and convenient form to be carried.

I do not desire to be understood as limiting myself to the precise construction shown in the drawings, and many modifications in my device may be made without departing from the spirit of the invention.

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

1. A wire-stretcher comprising a lever, means carried by said lever for holding the wire after the same has been stretched, two arms pivoted to the lever and having their other ends pivoted to the upper and lower ends of a vertical arm, means carried by said vertical arm to grip and hold the wire while the same is being stretched, means for securing the stretcher to the post, and means for locking the lever after it has operated on the wire, substantially as and for the purpose set forth.

2. A wire-stretcher comprising a lever provided near its upper end with a shoulder, an arm pivoted to said lever and adapted to engage said shoulder and hold the wire, two arms pivoted to the lever and having their other ends pivoted to the vertical arm, a stationary jaw secured to the vertical arm, a pivoted jaw on said arm adapted to engage the stationary jaw and hold the wire while it is being stretched, means for keeping the pivoted jaw in normal engagement with the stationary jaw, means substantially as described for securing the stretcher to the post, a chain secured to the lower end of the vertical arm, a hook on the lever adapted to receive said chain to lock the lever, substantially as described.

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

ZENAS F. HOWARD.

Witnesses:
E. G. MAGRUDER,
H. B. MENKE.