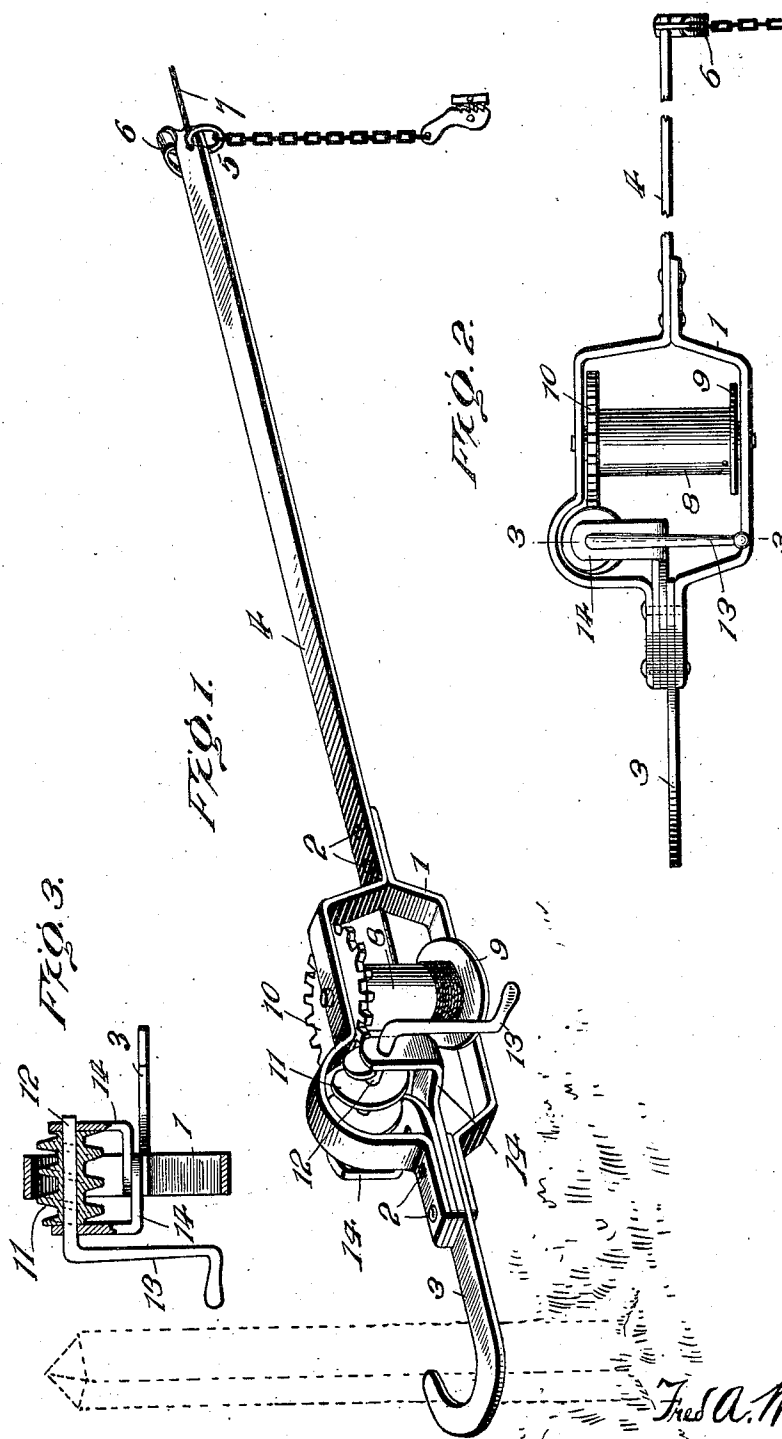


No. 828,362.

PATENTED AUG. 14, 1906.

F. A. WOODHAMS.
WIRE STRETCHER.
APPLICATION FILED MAR. 8, 1906.



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FRED A. WOODHAMS, OF HOLYOKE, COLORADO.

WIRE-STRETCHER.

No. 828,362.

Specification of Letters Patent.

Patented Aug. 14, 1906.

Application filed March 8, 1906. Serial No. 304,940.

To all whom it may concern:

Be it known that I, FRED A. WOODHAMS, a citizen of the United States, residing at Holyoke, in the county of Philipps and State of Colorado, have invented certain new and useful Improvements in Wire-Stretchers, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to wire stretchers or tighteners adapted for use in tightening sagging wires on fences, the object being to provide a device of the character described that shall be simple and inexpensive in construction, durable, and effective in operation, and by means of which great force can be easily brought to bear upon a wire to stretch it to any desired tension, said device being particularly adapted for use in stretching wires on fences subsequent to erection.

With these and other objects in view the invention resides in the construction and arrangement of parts hereinafter more fully described, illustrated, and finally claimed.

In the drawings accompanying this invention and made a part hereof, Figure 1 is a perspective view of my complete device, showing the manner in which it is connected with a fence-post. Fig. 2 is a side elevation; and Fig. 3 is a sectional view on lines 3 3 of Fig. 2.

1 designates the frame which is preferably composed of iron or sheet metal and is made in two parts secured together by rivets or bolts 2, the object of having said frame thus constructed being to save expense in providing new parts in case of wear or breakage. The rear part of the frame is provided with a hook 3 to pass around a post in order to hold the tightener in place when in operation. The other portion of the frame is provided with an arm 4, having at its outer end an opening 5, and secured to or formed integral with the outer end of the arm is a hook 6, through which passes a rope 7, having one end secured to the wire to be stretched by any suitable gripping means and having the other end attached to a drum 8, suitably journaled in bearings in the frame. One end of the drum 8 is provided with a circular plate or flange 9 to serve in holding the rope 7 on the drum when winding thereon. The other end of said drum is provided with a gear-wheel 10, meshing with a worm-gear 11, mounted

on a shaft 12, provided with a crank-handle 13. The shaft 12 is journaled in bearings in brackets 14, secured between the two parts of which the frame 1 is formed. These brackets when worn or broken can readily be replaced by removing the parts of the frame and releasing them.

In operation the wire is secured to the outer end of the rope 7 and the worm-gear 11 set in motion by turning the crank-handle 13. This causes the drum 8 to rotate and the rope to be wound thereon. The object of the opening 5 is to afford means whereby one end of a chain may be secured to the arm 4. Secured to the other end of the chain is a grip attachment of any desired construction which will effectually grip the wire and hold it in position in the event the operator desires to secure another grip on the wire by means of the gripping attachment carried by the rope 7—as, for instance, when the rope 7 should become all wound up on the drum 8 and the wire not sufficiently tightened the operator attaches to the wire the grip carried by the chain secured to the arm 4, and the wire is thus held in stretched position while he unwinds the drum 8 to let out the rope 7 and take a new grip on the wire to stretch it tighter.

Having thus described my said invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. A wire-stretcher comprising a frame constructed in two parts removably connected with each other, a hook carried by one part and adapted to engage a fence-post, an arm carried by the other part, a hook on the arm, a drum journaled in the frame, a gear-wheel carried by the drum, brackets mounted in the frame, a shaft journaled in the brackets, a crank-handle carried by the shaft, and a worm-gear carried by the shaft and meshing with the gear-wheel whereby the drum is rotated.

2. A wire-stretcher comprising a frame constructed in two parts removably connected with each other, a hook carried by one part and adapted to engage a fence-post, an arm carried by the other part, a hook on the arm, a drum journaled in the frame, a gear-wheel carried by the drum, brackets mounted in the frame, a shaft journaled in the brackets, a crank-handle carried by the

shaft, a worm-gear carried by the shaft and meshing with the gear-wheel whereby the drum is rotated, gripping means carried by the arm and adapted to hold the wire in
5 place, and other gripping means adapted to grip the wire, said last-mentioned gripping means being connected with the drum.

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

FRED A. WOODHAMS.

Witnesses:

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J. V. CANADAY.