

APPLICATION FILED AUG. 18, 1908.

2 SHEETS--SHEET 1.

Attorneys.

E. A. & C. W. WHEELER.
WIRE STRETCHER.
APPLICATION FILED AUG. 18, 1908.

936,749.

Patented Oct. 12, 1909.

2 SHEETS—SHEET 2.

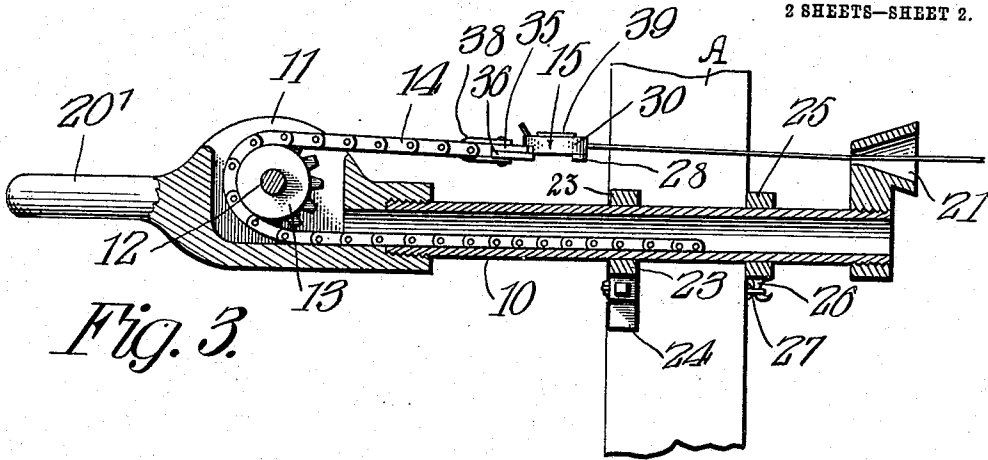


Fig. 3.

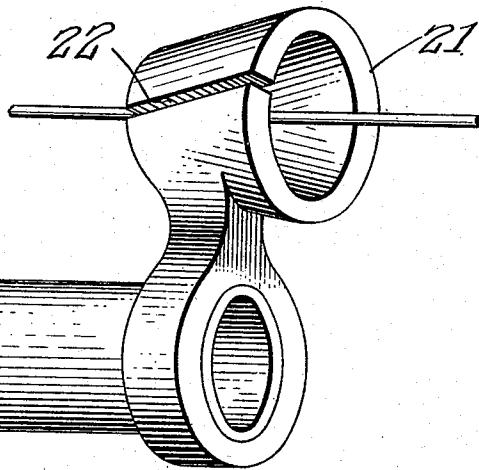


Fig. 6.

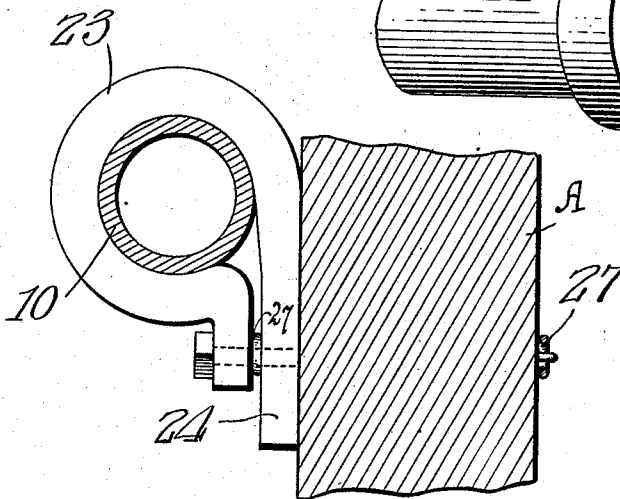


Fig. 7.

Witnesses
Charles Richardson
C. N. Woodward

Inventors
Edward A. Wheeler and
Charley W. Wheeler;

By *Charles W. Woodward*
Attorneys.

UNITED STATES PATENT OFFICE.

EDWARD A. WHEELER AND CHARLEY W. WHEELER, OF McLEAN, NEBRASKA.

WIRE-STRETCHER.

936,749.

Specification of Letters Patent.

Patented Oct. 12, 1909.

Application filed August 18, 1908. Serial No. 449,042.

To all whom it may concern:

Be it known that we, EDWARD A. WHEELER and CHARLEY W. WHEELER, citizens of the United States, residing at McLean, in the county of Pierce, State of Nebraska, have invented certain new and useful Improvements in Wire-Stretchers; and we 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.

This invention relates to wire stretchers and has as its primary object to provide a device of this class which may be applied to any ordinary fence post and which is so constructed that the wire being stretched will be drawn directly across the post in position to be secured thereto.

In carrying out our invention we provide a hollow tubular member which is provided with means for attachment to an ordinary fence post and mount at one end of this member a casing in which is journaled a shaft the said shaft carrying a sprocket gear within the casing. A sprocket chain is trained over this gear and is received within the tubular member at one end and has attached to its other end a wire grip with which the wire to be stretched is engaged, means being provided of course for rotating the said shaft.

One of the novel features of the invention lies in the specific construction of the wire stretching means and another novel feature resides in the means provided for attaching the device to a fence post and for adapting it to be attached to fence posts of various diameters.

Another feature resides in a novel form of guide which is supported at one end of the tubular member.

In the accompanying drawings, Figure 1 is a side elevation of the device in use, Fig. 2 is a top plan view thereof, Fig. 3 is a vertical longitudinal sectional view thereof, Fig. 4 is an end view thereof, Fig. 5 is a similar view but looking at the other end, Fig. 6 is a detail perspective view of one end of the device showing the wire guide in detail, and, Fig. 7 is a horizontal sectional view on line 7—7 of Fig. 1 showing the means for attaching the device to a fence post.

As shown in the drawings, the wire stretcher embodying our invention comprises a tubular body member 10 upon one

end of which is fitted a casing which has its upper side open and which includes sides 11. Journaled for rotation in the said sides 11 of the casing is a shaft 12 and fixed upon this shaft at a point between the said sides is a sprocket gear 13 over which is trained a stretcher chain 14 the said chain being provided at one end with a special wire grip 15 and having its under stretch, or in other words that portion which is passed beneath the stretcher gear extending in the bore of the tubular member 10, it being understood that as the shaft is rotated, the chain will be taken up and its free or under portion will be stored in the said tubular member. A ratchet 16 is fixed upon the shaft 12 directly outwardly of one of the sides 11 of the casing and pivoted upon the said side of the casing and held normally in engagement with the ratchet by means of a leaf spring 17 is a pawl 18 the said pawl serving to prevent rotation of the shaft in a direction to unwind the chain. Loosely fixed upon the shaft 12 is a hand lever 19 which carries a pawl 20 which also rests normally in engagement with the ratchet, it being understood that this hand lever is to be oscillated to impart a step by step rotary movement to the shaft 12 so as to take up the chain and draw the wire grip engaged with which is the wire to be stretched in the direction of that end of the device at which the casing is fitted. The said casing is formed with a rearwardly extending hand grip 20' which may be grasped to hold the device in position for use.

It is of course desirable that some means be provided for guiding the wire to be stretched and for holding it in position to be secured to the post and this means we have embodied in a hollow conical guide 21 which has its major end presented forwardly and its minor end rearwardly, the said guide being formed with a slot 22 which is extended in a diagonal direction and through which the wire to be stretched is to be inserted, it being understood that the device is to be tilted to the proper angle in order to permit of such engagement of the guide with the wire, and that after such engagement has been had, the device is to be swung downwardly thereby preventing the accidental withdrawal of the wire. After the wire has been engaged through the guide it is to be engaged with the wire grip as will be readily understood and the shaft then rotated to

take up the chain 14 and stretch the said wire.

In order that the device may be applied to a fence post, there is fixed upon the tubular body member 10 a collar 23 which is formed with a plate extension 24 bent to fit against a post of the ordinary size, and loosely engaged upon the said body member 10 is a collar 25 which is formed with a hook 26, there being a chain 27 connected to the said plate extension 24 at one edge thereof and passed around the post which is indicated in general by the reference character A, one of the links of the chain being engaged with the hook 26 so as to hold the device against the post.

An approved wire gripping mechanism is shown in Figs. 1, 2 and 3, and comprises a base 15 having two gripping arms 29 and 30 pivoted at 31—32 thereto and with links 35—36 coupled to the free ends of the grip arms and connected by a link 38 to the chain 14.

What is claimed is:

1. A wire stretcher comprising a tubular member, a casing upon one end of the tubular member and communicating at one end with the same, a shaft journaled through the casing above the axial line of the tubular member, a sprocket wheel upon the shaft within the casing with its inner edge in substantial alinement with the axial line of the tubular member, a chain engaging over the sprocket wheel with the surplus of the chain stored in said tubular member, a wire gripping device carried at one end of the chain, and means for rotating the shaft.

2. A wire stretcher, comprising a tubular member, a casing upon one end of said tubular member opening upwardly and communicating at one end with the same, a shaft journaled through the casing, a winding element upon the shaft, a flexible element engaging over said winding element with the surplus thereof stored in the said tubular

member, a wire grip device carried at one end of the flexible member, and means for rotating the shaft.

3. A wire stretcher comprising a tubular member, a casing upon one end of the tubular member opening upwardly and communicating at one end therewith, a shaft journaled through the casing, a sprocket gear upon the shaft within the casing with its inner edge in substantial alinement with the axial line of the tubular member, a chain engaging over the sprocket gear and with the surplus of the chain passed into said tubular member, a wire grip device carried at one end of the chain, and means for rotating the shaft.

4. A wire stretcher comprising a tubular member, a casing formed with spaced elevated sides and with a cylindrical extension at one end, said cylindrical extension engaging over said tubular member at one end, whereby communication is provided between the tubular member and the interior of the casing, a shaft extending through the spaced elevated sides of said casing, a chain wheel carried by said shaft within the casing with its lower edge in alinement with the axial line of the tubular member, a chain engaging around the wheel with the surplus of the chain extending into the tubular member and with a wire engaging device at the outer end of the chain, a collar inclosing said tubular member and provided with a lateral extension, a collar slidable upon said tubular member and provided with a hook, and a chain secured at one end to the first mentioned collar and engaging with the hook upon the last mentioned collar.

In testimony whereof, we affix our signatures, in presence of two witnesses.

EDWARD A. WHEELER.
CHARLEY W. WHEELER.

Witnesses:

H. J. KRUEZFELDT,
C. O. SHANNON.