(No Model.)

J. J. BROOKS.

WIRE STRETCHER.

No. 588,741. Patented Aug. 24, 1897.

Fig. 1.

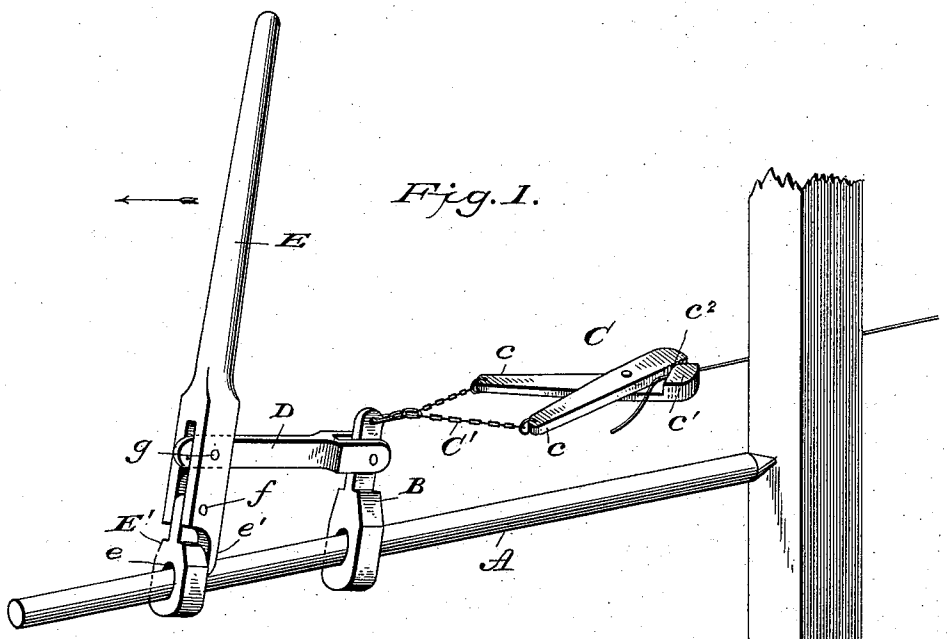


Fig. 3.

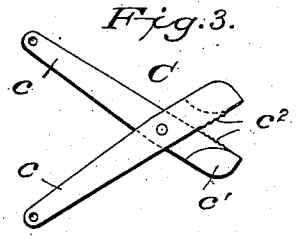


Fig. 2.

WITNESSES:

L. S. Elliott.

Chas. F. Lowell

INVENTOR

John J. Brooks

by- Eugene W. Johnson

his attorney

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOHN J. BROOKS, OF ATHENS, OHIO.

WIRE-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 588,741, dated August 24, 1897.

Application filed July 1, 1897. Serial No. 643,166. (No model.)

To all whom it may concern:

Be it known that I, JOHN J. BROOKS, a citizen of the United States of America, residing at Athens, in the county of Athens and State of Ohio, 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, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in wire-stretchers, the object being to provide a device for stretching fence-wires in building the fence and to tighten wires between posts as well as for use in splicing broken wires when the fence requires repairing; and the invention consists in the construction and combination of the parts, as will appear in the following description and be specifically pointed out in the claims.

In the drawings, Figure 1 is a perspective view of a wire-stretcher embodying my invention. Fig. 2 is a side elevation, partly in section, showing the lever, link, and clutches in the different positions upon the bar. Fig. 3 is a plan view of the clamp which engages with the wire.

A is a straight bar, preferably round in cross-section and made of iron or steel, one end thereof being sharpened for engagement with the fence-post, and the other end may be provided with a hook with which a flexible connection can engage to support the end of the bar, to which it is attached in a horizontal position, or said bar may be held in place manually.

B refers to a clutch having an aperture of slightly larger diameter lengthwise than the bar A, on which it is placed, the lateral or transverse diameter being substantially the same as the bar. The clutch B has an upwardly-projecting portion, to which is attached a gripping device C, the same consisting of two members *c c*, which are pivotally connected with each other and are provided with projecting portions *c'*, having a rounded face, and the edge of the member which will be moved opposite thereto has serrations c^2. The long ends of the members are provided with a chain C', which connects with a ring or link which is caused to suitably engage the upper end of the clutch B.

D refers to a connecting-bar which is pivotally attached to the clutch B at a point below the point of connection of the gripping device C thereto, and the opposite end of this connecting-bar D passes between the side members of a bifurcated lever E. The lever E has pivoted thereto a clutch E', said clutch having an opening *e* similar to the opening in the clutch B. The side members of the hand-lever E are cut away, so as to provide depending portions *e'*, which will engage with the face of the clutch E' nearest the clutch B, below the bar and slightly to one side of the center of the same, and the projecting portions are cut away, so as to lie partially over the bar A when the lever E and clutch E' are on a line with each other.

The construction shown in the accompanying drawings is a preferred form and is effective in operation and may be cheaply manufactured, but the construction of the parts may be varied as long as the pivotal points of connection are preserved and a lever with a bifurcated end which lies partially over the bar and engages with the clutch pivotally attached thereto, so as to move said clutch upon the bar.

In use, when it is desired to stretch a fence-wire the clutches are moved toward the pointed end of the bar and said bar is placed in engagement with the post. The wire is then placed between the jaws of the gripping device, and by moving the lever in the direction of the arrow the clutch B will be moved upon the bar A, the pivot-point *f* then being the fulcrum of the lever. After the clutch B has been moved or slid upon the bar by such movement of the lever the pivot *g* becomes the fulcrum, and the lower end of the lever, engaging the face of the clutch E', moves the same upon the bar A, when the operation hereinbefore described may be repeated until the wire is stretched.

In practice the device can be operated by holding one end of the bar A in the hand, the other hand being free to operate the lever. As long as there is any tension upon the end

of the clutch B to which the gripping device is attached in the direction of said gripping device the clutch will hold the bar, but will be freed and moved upon said bar when the tension of the wire is overcome by the lever operating through the connecting-bar, so that in practice when the wire is stretched it will be held taut by the clutch B without any manipulation of the lever.

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

1. In a wire-stretcher the combination with the bar A, of clutches mounted on said bar, a gripping device connected to one of the clutches, a lever pivotally secured to the other clutch, a connecting-bar pivoted to the clutch having the gripping device below the point of connection of the same thereto, the connecting-bar being pivoted to the lever at a point above the point of connection of the lever with the other clutch, said lever having projecting end portions for engagement with the face of the clutch adjacent to the clutch carrying the gripping device substantially as shown and for the purpose set forth.

2. In a wire-stretcher, the combination with the bar A, of the clutches mounted thereon, a lever having a bifurcated end between which is pivoted a projecting portion of one of the clutches and one end of a bar connecting the clutches, the lever having extensions for engagement with the face of the clutch to which it is pivoted, a gripping device attached to the other clutch beyond the point of connection of the connecting-bar therewith substantially as shown and for the purpose set forth.

3. In combination with a wire-stretcher a gripping device consisting of two side pieces or members pivotally connected to each other and provided on opposite sides with projections which with the straight edge of the other member forms gripping-jaws on opposite sides, substantially as shown, whereby a wire can be gripped on either side of the gripping device.

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

JOHN J. BROOKS.

Witnesses:
CHAS. D. HOPKINS,
B. A. HEADLEY.