

No. 681,747.

Patented Sept. 3, 1901.

J. R. SEVIER.
WIRE STRETCHER.

(Application filed Aug. 2, 1900.)

(No Model.)

Fig. 1.

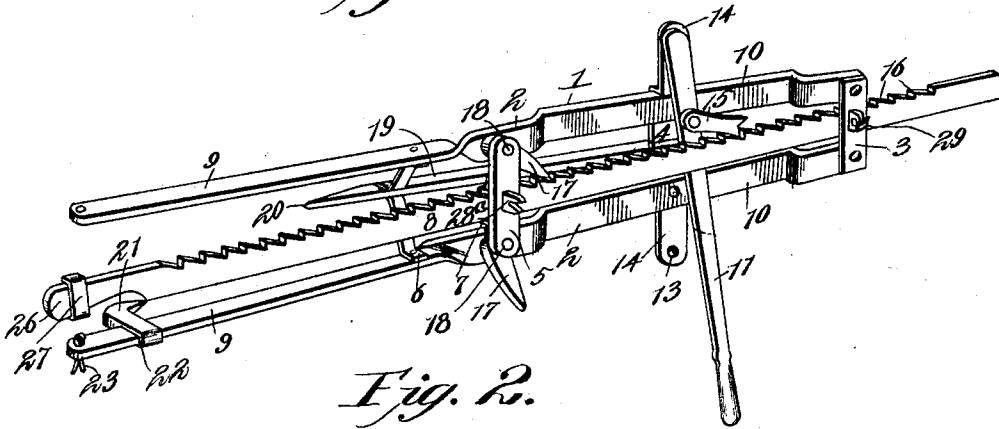


Fig. 2.

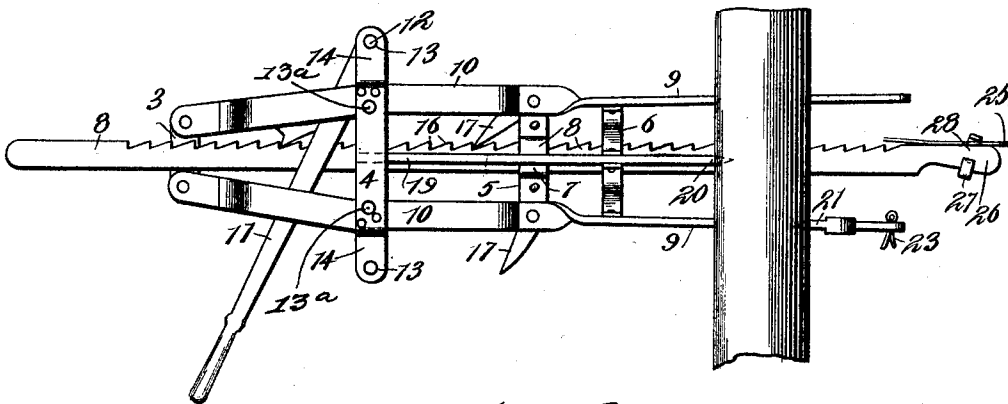
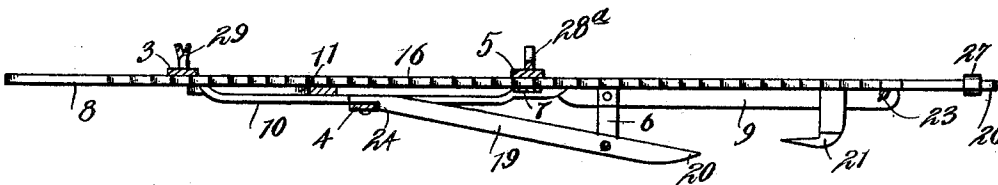


Fig. 3.



Witnesses

C. H. Walker
J. H. Riley

John R. Sevier Inventor
C. A. Snow & Co. Attorneys

UNITED STATES PATENT OFFICE.

JOHN RUSH SEVIER, OF BROWNING, MISSOURI, ASSIGNOR OF ONE-HALF TO
CHARLES EDGAR MURPHY, OF SAME PLACE.

WIRE-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 681,747, dated September 3, 1901.

Application filed August 2, 1900. Serial No. 25,894. (No model.)

To all whom it may concern:

Be it known that I, JOHN RUSH SEVIER, a citizen of the United States, residing at Browning, in the county of Linn and State of Missouri, have invented a new and useful Wire-Stretcher, of which the following is a specification.

The invention relates to improvements in wire-stretchers.

One object of the present invention is to improve the construction of wire-stretchers and to provide a simple, inexpensive, and efficient one of great strength and durability adapted to be readily applied to a fence-post for stretching wires to the same and capable of readily adjusting itself to the direction of the wire and of enabling the same to be readily stretched to the desired tension.

Another object of the invention is to enable the operating mechanism to be readily reversed to enable the device to be conveniently operated from above or below, accordingly as it is located at the top or bottom of a fence.

The invention consists in the construction and novel combination and arrangement of parts, hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a wire-stretcher constructed in accordance with this invention. Fig. 2 is a side elevation of the same, illustrating the manner of mounting the wire-stretcher on a fence-post. Fig. 3 is a horizontal sectional view.

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

1 designates a frame composed of upper and lower side bars 2, connected by suitable cross bars or pieces 3, 4, 5, and 6, arranged at different points, as clearly illustrated in Fig. 1 of the accompanying drawings. The cross-bar 3 is arranged at the outer end of the frame, and the cross-bar 5 is located near the center of the same and is provided at its center with a loop or guide 7, receiving a longitudinally-movable ratchet-bar 8, which is located between the side bars 2. The side bars 2 are provided with inner straight portions 9 to form guides, and their outer por-

tions 10 are offset between the cross-bars 3 and 5 to arrange such portions beyond the plane of the ratchet-bar to provide a space for an operating-lever 11. The offset portions 10 have their side faces arranged in planes parallel with the side faces of the ratchet-bar, and the said side bars 2 are provided with central quarter-bends to arrange the guide portions 9 in planes at right angles to the planes of the offset portions 10. The operating-lever, which is interposed between the offset portions 10 of the side bars 2 and the ratchet-bar, is provided at one end with a handle portion or grip, and it has a pivot or pin 12 at its other end adapted to fit in perforations 13 of lateral extensions or arms 14 of the cross-bar 4. The cross-bar 4 is angularly bent between its ends to provide shoulders for supporting the side bars 2, and the operating-lever is provided between its ends with a pivoted pawl or dog 15 for engaging the teeth 16 of the ratchet-bar. The teeth 16 are arranged at one of the longitudinal edges of the ratchet-bar, and the latter, which is removable, is adapted to be taken out and reversed to arrange the teeth at the upper or lower edge, and the lever, which is also reversible, is adapted to have its ends fulcrumed on either of the arms or extensions 14 of the cross-bar 4. By oscillating the operating-lever the ratchet-bar is gradually advanced and the pivoted pawl or dog is held in engagement with the same by gravity. The ratchet-bar is held against backward movement when the operating-lever is swung backward by one of a pair of check-pawls 17, pivotally mounted at the centers of the side bars on the fastening devices 18, which connect the cross-bar 5 with the side bars, and the said check-pawls are interposed between the side bars and the cross-bar 5. By removing the ratchet-bar and changing the lever the wire-stretcher can be operated with either side up, and the lever can be worked from above and below by arranging its pivot or pin in either of the perforations 13 or in perforations 13^a. The perforations 13^a are located at opposite sides of the ratchet-bar and are adapted to permit the lever to be operated above the wire-stretcher when either side of the latter is uppermost. When the

lever is in an upright position and the pin or pivot 12 is arranged in the lower perforation 13^a, the pawl 15 will be located at the top of the ratchet-bar and will operate by gravity.

5 The engaging end of the pawl is provided with a pair of teeth in order to operate in either of the said positions. The frame is provided at its rear side with an angularly-disposed bar 19, secured at one end to the center of the cross-bar 4 and supported near its

10 engaging end by the cross bar or piece 6, which is composed of two sections or members and which forms a substantially V-shaped brace. The engaging end 20 of the bar 19 is pointed and adapted to engage a fence-post, as clearly illustrated in Fig. 2 of the accompanying drawings, and when a wire is placed under tension the strain will hold the bar 19 firmly in engagement with the post.

15 The engaging end of the bar is located midway between the side bars and is adapted to form a fulcrum or pivotal point to permit the frame to adjust itself readily to the direction of a fence-wire, so that the wire may be stretched whether it be arranged at right angles to the post or at any other angle.

When the wire-stretcher is applied to a fence-post, the latter is also engaged by a clamp 21, consisting of a sliding hook mounted on one of the guides 9 of the side bars 2

30 and provided with a pointed engaging bill or end adapted to be readily driven into a fence-post. The sliding hook or clamp is provided at the end of its shank with an opening 22 to receive either of the guides 9, and the latter are perforated at their outer ends for the reception of a key 23 for retaining the clamp or hook on the guides. The inner end 24 of the bar 19 is provided with a recess forming a

40 shoulder for abutting against the cross-bar 4, as illustrated in Fig. 3 of the accompanying drawings, and it will be apparent that the engaging bar 19 is firmly supported and braced and is rigidly connected with the frame of the wire-stretcher. The ratchet-bar is provided with a clamp for engaging a fence-wire 25, and this clamp consists of a wedge-shaped portion 26 of the bar and a sliding loop 27, mounted on the wedge-shaped portion or end 26 of the ratchet-bar and provided

50 at one side with an opening 28 to facilitate the engagement of the fence-wire and the clamp. The loop is preferably constructed of a single piece of metal, and the fence-wire is adapted to be readily placed between the end of the ratchet-bar and the jaw of the loop or movable member.

When it is desired to draw the ends of a broken wire together, one end of the wire is placed in the clamp of the ratchet-bar and the other end is engaged with a catch 28^a, centrally mounted on the bar 5 and provided with a recess to receive the wire. The catch 28^a is adapted to engage one of the barbs of

65 the wire, which is also connected with the wire-stretcher by a support 29, consisting of a pair of hooks mounted on the cross-bar 3

and having their bills arranged diagonally of the frame to provide an entrance-opening. The entrance-opening is arranged at an angle to the ratchet-bar and the wire, so that the latter cannot become accidentally disengaged from the support 25 when the wire-stretcher is in operation. The wire-stretcher is adapted to draw the ends of the wire together and it will hold them in convenient position while the wire is being spliced. The wire-stretcher is adapted to be operated in this manner either adjacent to a fence-post or at a point between two fence-posts.

It will be seen that the wire-stretcher is exceedingly simple and inexpensive in construction, that it is adapted to be readily operated, and that the angularly-disposed bar 19, which is rigid with the frame, is adapted to fulcrum the latter on a fence-post, so that the wire-stretcher may readily adjust itself and assume a position corresponding to the position of the fence-wire. It will also be apparent that the sliding clamp or hook, which is especially adapted for supporting the wire-stretcher preparatory to connecting a fence-wire with the same, may be arranged on either of the guides formed by the straight portions of the side bars of the same and that the said clamp may be readily driven into a fence-post. Furthermore, it will be clear that the operating-lever is adapted to be reversed with the ratchet-bar to enable it to be operated from the top or bottom to facilitate working close to the top and bottom of a fence. It will also be clear that the device is adapted for stretching fence-wires contiguous to fence-posts, as illustrated in Fig. 2 of the accompanying drawings, and that it may also be employed for splicing wires adjacent to a fence-post or at any point between two fence-posts.

What I claim is—

1. A wire-stretcher comprising a frame provided with side bars having extensions forming guides, a sliding clamp adapted to be arranged on either of the guides for engaging one side of a fence-post, means carried by the frame for engaging the opposite side of the fence-post, a ratchet-bar provided with means for connecting it to a fence-wire, an operating-lever provided with means for engaging the ratchet-bar, and a check-pawl, substantially as described.

2. A wire-stretcher comprising a frame provided with longitudinal guides and having offset portions, a ratchet-bar, a lever fulcrumed on the frame and arranged between the offset portions of the side bar and the ratchet-bar, and provided with means for engaging the latter, a sliding clamp mounted on one of the guides and arranged to engage one side of a fence-post, a device carried by the frame for engaging the other side of the post, and means for connecting the ratchet-bar with a fence-wire, substantially as described.

3. A wire-stretcher comprising a frame provided with side bars and having a cross-bar 4, a ratchet-bar, a lever fulcrumed on the frame,

a pawl carried by the lever and engaging the ratchet-bar, a check-pawl, the longitudinal post-engaging bar located between the ends of the frame and rigidly secured at one end 5 to the cross-bar, and the cross-pieces 6, secured to the sides of the frame and rigidly supporting the post-engaging bar near the engaging end thereof, substantially as described.

4. A wire-stretcher comprising a frame composed of side bars having offset outer portions 10 and straight inner portions forming guides, cross bars or pieces connecting the side bars, and a post-engaging bar supported by the cross pieces or bars, a clamp mounted on one 15 of the guides, a ratchet-bar, a reversible lever arranged between the ratchet-bar and the offset portions of the side bars and provided with means for engaging the ratchet-bar, and the opposite check-pawls, substantially as described. 20

5. In a wire-stretcher, the combination of a frame comprising the side bars having offset outer portions and provided with straight inner portions forming guides, the cross-bars 3

and 4 connecting the side bars at the ends of 25 the offset portions, the cross-bar 4 arranged between the ends of the offset portions and provided with laterally-disposed arms, and the substantially V-shaped brace, the post-engaging bar disposed at an angle to the side 30 bars and supported by the brace and the cross-bar 4, a catch mounted on the cross-bar 5 at the inner face thereof, a ratchet-bar, check-pawls located at the opposite edges of the 35 ratchet-bar, and the reversible operating-lever adapted to be fulcrumed on either of the laterally-disposed arms of the cross-bar 4 and interposed between the ratchet-bar and the offset portions of the side bars and provided 40 with means for engaging the ratchet-bar, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JOHN RUSH SEVIER.

Witnesses:

G. G. HERSMAN,
J. H. LANE.