(No Model.)

# W. Z. BRANNON.

## WIRE STRETCHER.

No. 590,087. Patented Sept. 14, 1897.

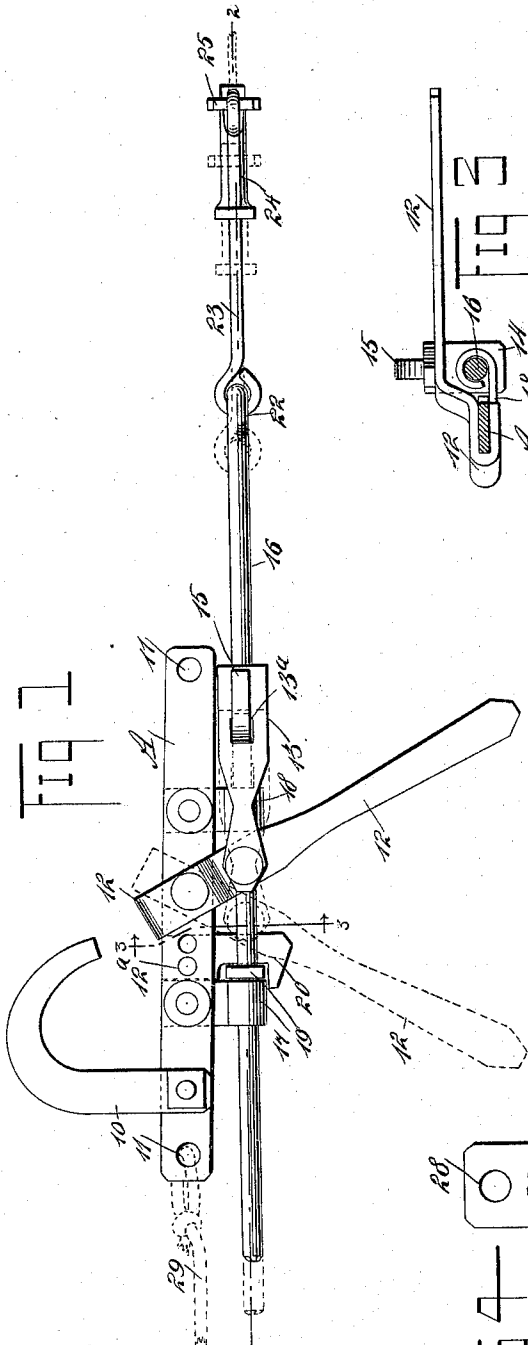


Fig. 1



Fig. 2

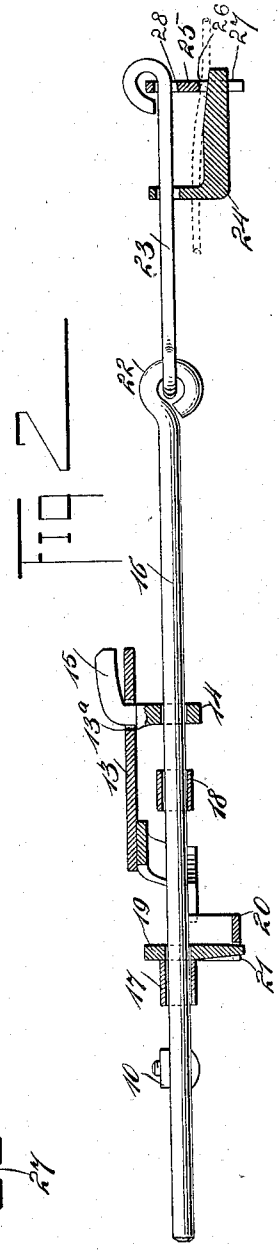


Fig. 3

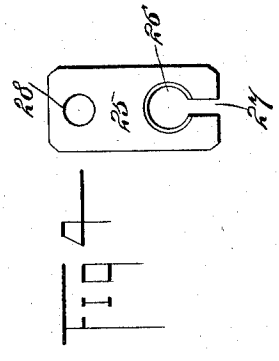


Fig. 4

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# UNITED STATES PATENT OFFICE.

WALTER ZEBULIN BRANNON, OF BRAZOS, TEXAS.

## WIRE-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 590,087, dated September 14, 1897.

Application filed March 16, 1897. Serial No. 627,787. (No model.)

*To all whom it may concern:*

Be it known that I, WALTER ZEBULIN BRANNON, of Brazos, in the county of Palo Pinto and State of Texas, have invented a new and useful Improvement in Wire-Stretchers, of which the following is a full, clear, and exact description.

The object of the invention is to provide a wire-stretcher of simple, durable, and economic construction, capable of being applied to a wire and supported upon a post or maintained in working position between posts or uprights.

Another object of the invention is to so construct the wire-stretcher that the wire to which it is applied may be brought under any desired tension in a convenient and expeditious manner.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of the device. Fig. 2 is a longitudinal section taken substantially on the line 2 2 of Fig. 1. Fig. 3 is a transverse section taken substantially on the line 3 3 of Fig. 1, and Fig. 4 is a face view of the gripping-arm of the device.

A body-bar A is provided with a clamping-hook 10, pivoted thereon, adapted for engagement with a post or an equivalent support, and the said body-bar is further provided ordinarily with an aperture 11 at each end, whereby when the hook 10 is not used for holding the wire-stretcher in operative position a wire, cord, rope, or its equivalent may be attached to either or to both ends of the body-bar, as occasion may demand. A lever 12 is fulcrumed upon the body-bar between its ends, and the said body-bar is provided with a series of apertures $12^a$, whereby the lever 12 may be shifted on the body-bar, if desired. A link 13 is pivotally attached to the lever. The link 13 extends from the lever parallel with the body-bar A and is provided with an opening $13^a$. An angular head 15 of a gripping-nut 14 is passed through the opening $13^a$ of the said link 13, the upper face of the nut engaging with the under face of the link, and the shank or head of the gripping-nut 14 is of such dimensions that it will have movement in the aperture of the link 13, as is clearly shown in Fig. 2. A draft-rod 16 is passed through the gripping-nut 14 and extends parallel with the body-bar A, the draft-rod being preferably of greater length than the length of the body-bar, as illustrated.

The draft-rod is supported in bearings 17 and 18, which are attached to the body-bar. A second gripping-nut 19 is loosely mounted on the draft-rod, serving as a check against the forward movement of said draft-rod, the second gripping-nut serving to hold the draft-rod in the position to which it may be carried by the movement of the lever 12. The gripping-nut 14, operated directly from the lever, serves to carry the draft-rod in a rearward direction, placing the wire connected with the draft-bar under considerable tension.

The check gripping-nut 19 is prevented from having lateral movement by reason of the said nut being brought to an engagement with a keeper-arm 20, of angular formation, attached to the body-bar and having a recess in which the lower end of the check-nut is received. The forward end of the draft-rod 16 terminates in an eye 22, in order that a link on a second section 23 may be pivotally attached to the main portion of the said draft-rod. The link 23 carries an angular clamping-arm 24, the vertical member whereof is free to slide upon the link, while the horizontal member, which is below the link, is tapered at its outer end. An eye is formed at the outer end portion of the link 23, being adapted to receive a keeper block or plate 25. This keeper block or plate is pendent from the link 23 and is provided near its lower end with an opening 26, adapted to receive the beveled end of the clamping-arm 24. A slot 27 is made in the lower end of the keeper block or plate and is carried to the opening 26, while at the upper end of the keeper block or plate an aperture 28 is made, through which the link 23 is passed.

In operation the wire to be placed under tension is drawn through the opening 26 in the keeper-block 25, and the clamping-arm 24 is then passed through the said opening 26

to an engagement with the wire, as shown in Fig. 2, holding the wire firmly to the device. The device is connected with the post through the medium of the hook 10 or is suspended or supported between posts by means of a wire, cord, or rope 29, as stated, and as shown in dotted lines in Fig. 1. The draft rod or bar 16 is drawn forward as far as may be necessary, and by moving the lever 12 in a forward direction and then carrying the lever back the draft-rod is drawn rearward, since at each forward movement of the lever the gripping-nut 14 will be advanced on the draft-rod, and at each rearward movement of the lever the nut will grip the draft-rod and carry it in the same direction that the lever is moved, while the check 19 will prevent the forward movement of the draft-rod when the lever is carried in that direction.

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

1. A device for stretching wire, consisting of a support, a draft-rod, a lever having shifting connection with the draft-rod, a check arranged to prevent the movement of the draft-rod in one direction, and means for connecting the wire to be stretched to the draft-rod, the said means comprising an angular clamping-arm and a keeper, both connected with the draft-rod, the said keeper being provided with an opening to receive the end of one of the members of the clamping-arm, substantially as shown and described.

2. A device for stretching wire, consisting of a body-bar adapted for attachment to a support, a draft-rod mounted to slide upon the said body-bar, a lever fulcrumed upon the body-bar, the said body-bar being provided with a series of apertures, whereby the lever may be shifted thereon, a link pivotally attached to the lever, a gripping-nut loosely carried by the said link and through which the draft-rod passes, a keeper carried by the draft-rod and a clamping-arm arranged to coact with the said keeper, as and for the purpose specified.

3. A device for stretching wire or for similar purposes, consisting of a body-bar adapted for attachment to a support, bearings connected with the said body-bar, a draft-rod held to slide in the said bearings, a lever fulcrumed on the said body-bar, a gripping-nut operated by the lever and receiving the draft-rod, a keeper and a clamping-arm arranged to coact with the keeper and both connected with the draft-rod, a check-nut adapted for engagement with the draft-rod and arranged to prevent its movement in one direction, and a keeper for the nut connected with the said body-bar, as and for the purpose specified.

4. The combination with a support, a lever fulcrumed on the support, a draft-rod mounted to slide on the support, and a keeper and clamping-arm coacting therewith carried by the draft-rod, of a link connected with the said lever, a gripping-nut loosely mounted on the draft-rod and having a loose connection with the link connected with the lever, a check-nut for the said draft-rod, and a keeper for the said check-nut connected with the said support, as and for the purpose specified.

5. The combination, with a support, a lever fulcrumed upon the support, a draft-rod mounted on the support, being capable of end movement, and a keeper and clamping-arm coacting therewith, carried by the draft-rod, of a link connected with the said lever, a gripping-nut loosely mounted on the draft-rod and having a loose connection with the link connected with the lever, a check-nut through which the draft-rod is passed, and a keeper for the said check-nut connected with the said support, the said check-nut and its keeper being located at the side of the lever opposite that from which the link is extended, as and for the purpose specified.

6. A device for stretching wire, comprising a support, a draft-rod capable of end movement and carried by said support, a link connected with one end of the draft-rod, an angular clamping-arm having a vertical member fitted to slide upon the link, and a horizontal member beveled at its outer end, a keeper-block carried by the link and provided with an opening adapted to receive the beveled end of the clamping-arm, a lever fulcrumed upon the support, and a gripping-nut loosely mounted upon the draft-rod and having a loose connection with the said lever, as and for the purpose set forth.

7. The combination with a support, a draft-rod mounted on the support and capable of end movement, a lever fulcrumed upon the support, a link connected with the lever and provided with an opening, a gripping-nut through which the draft-rod passes, the said gripping-nut being provided with an angular head adapted to extend through the opening in the link, a check arranged to prevent the movement of the draft-rod in one direction, and means for connecting the wire to be stretched with the draft-rod, substantially as shown and described.

8. A device for stretching wire, consisting of a support, a draft-rod mounted to slide upon the support, a lever having shifting connection with the draft-rod, means for connecting the wire to be stretched with the draft-rod, a check arranged to prevent the movement of the draft-rod in one direction, the said check, comprising a nut loosely mounted on the draft-rod and a keeper-arm of angular formation attached to the support and having a recess in which the lower end of the nut is received, substantially as shown and described.

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Witnesses:
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