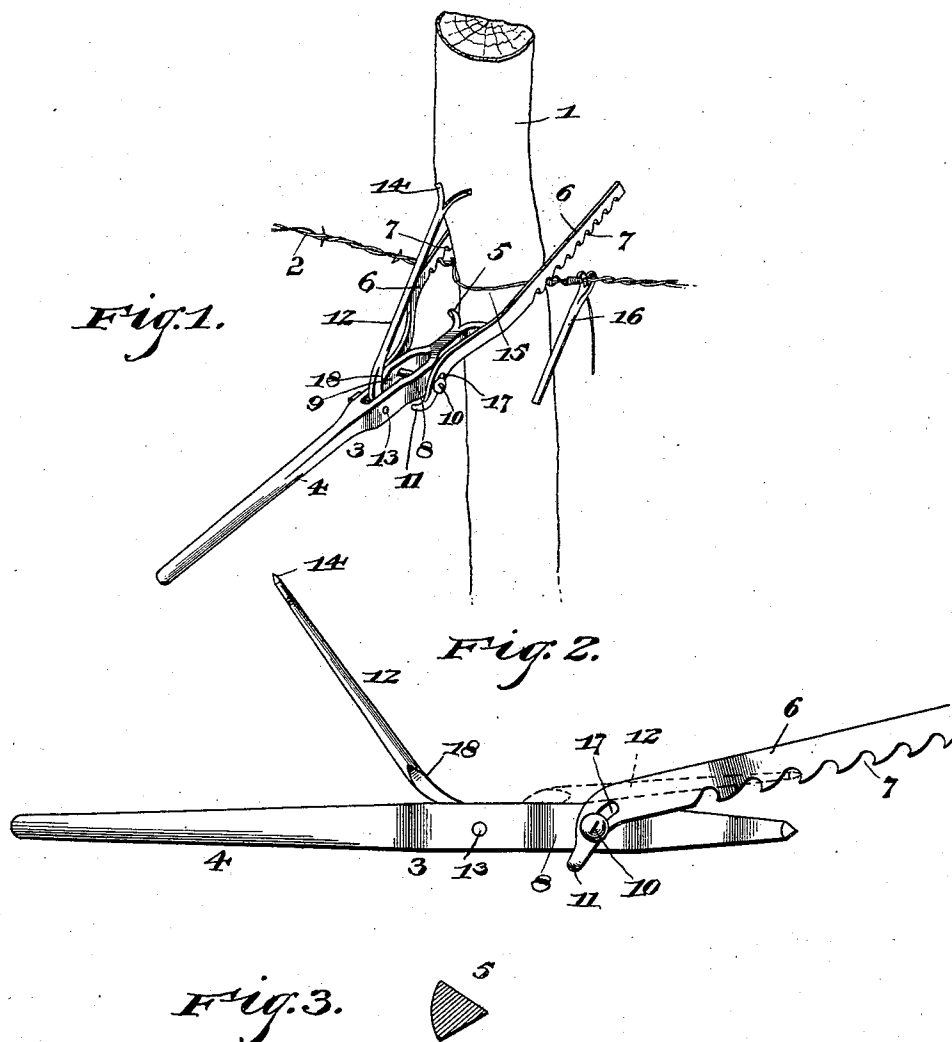


(No Model.)

W. H. BEAL.
WIRE STRETCHER.

No. 532,717.

Patented Jan. 15, 1895.



Inventor
William H. Beal,

Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM H. BEAL, OF ANSON, ASSIGNOR OF ONE-HALF TO R. McKIBBEN, OF CONWAY SPRINGS, KANSAS.

WIRE-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 532,717, dated January 15, 1895.

Application filed June 14, 1894. Serial No. 514,568. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. BEAL, a citizen of the United States, residing at Anson, in the county of Sumner and State of Kansas, have invented a new and useful Wire-Stretcher, of which the following is a specification.

My invention relates to a wire stretching device or an apparatus for taking up slack in fence wires, and it has for its object to provide a stretcher adapted to be applied to a post and provided with arms for engagement with a fence-wire or runner upon both sides of such post, and to provide for a bearing against the post to enable the portions of the wire or runner adjacent to the sides of the post to be drawn forward to permit of their connection by a stay bearing against the front of the post.

A further object of the invention is to provide means for holding the apparatus against movement during the arrangement of the tie-wire or stay.

Further objects and advantages of the invention will appear in the following description, and the novel features thereof will be particularly pointed out in the claims.

In the drawings:—Figure 1 is a perspective view of a wire-stretching apparatus embodying my invention applied in the operative position to a fence and showing a wire twister connected with one end of a stay-wire, as seen when coiling the same around the fence-wire or runner. Fig. 2 is a side-view of the stretcher showing the brace in full lines, as seen when thrown back to facilitate the engagement of the straining arms with the fence-wire or runner, and showing said brace in dotted lines in its folded position. Fig. 3 is a detail transverse section of one of the prongs forming the foot of the lever.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates a post, to which is attached a fence-wire or runner, 2, and 3 represents the stretcher embodying my invention applied in the operative position thereto. This stretcher comprises a lever 4, having a bifurcated or pronged foot 5 to bear against the adjacent side of the post, and the straining-arms 6 which are pivotally connected to opposite sides of the lever, and are provided with un-

derecut or hook-shaped notches 7 for engagement with the fence-wire or runner upon opposite sides of the post. A series of these notches is formed in each straining-arm to facilitate engagement with the fence-wire or runner irrespective of the thickness of the post. The straining-arms are connected to the lever at an intermediate point of the latter sufficiently removed from the pronged foot to provide the necessary leverage to enable the operator to draw the adjacent portions of the fence-wire or runner forward to take up slack, and the portion of the lever to which these arms are attached is preferably enlarged laterally, as shown at 8, with the intermediate portion of the lever cut away, as shown at 9. The pivot-bolt 10 by which the straining-arms are connected to the lever extends through this cut-away portion or slot of the lever. Furthermore, the straining-arms are provided with stop-fingers 11 to engage the under side of the lever and hold the arms, when disengaged from a fence-wire, substantially parallel with the lever.

In addition to the above construction, I employ a brace 12, which is pivotally connected to the lever at a point beyond the connection thereto of the straining-arms by means of a pivot-bolt 13, said brace-bar being located within the cut-away portion or slot above described. The brace-bar is provided at its free end with a pronged foot 14 for engagement with the surface of the post.

In operation, the notches of the straining-arms are engaged with the fence-wire or runner upon opposite sides of the post, and the pronged foot of the lever is arranged in contact with the surface of the post, after which the free end of the brace-bar is thrown forward into contact with the post. The free end of the lever is now depressed to the desired extent to draw the portions of the fence-wire or runner toward the operator, and when pressure is removed from the lever, the parts of the apparatus are held in position by the engagement of the pronged foot of the brace-bar with the post. When the wire has been stretched to the desired extent the stay-wire is extended around the opposite side of the post from that in contact with which the fence-wire or runner is arranged, and is coiled at its extremities around the adjacent por-

tions of said fence-wire or runner, such coiling being accomplished by any suitable device, as the twister shown at 16 in Fig. 1.

5 The feet of the lever and of the brace-bar are sharpened or reduced to edges upon their concave or inner sides to prevent slipping upon the surface of the post.

10 From the above description it will be seen that the device is simple, operates directly upon the wire to be stretched, may be manipulated with facility in connection with a post of any size, and may be cheaply manufactured. The openings 17 in the straining-arms through which the pivot-bolt passes are
15 enlarged or elongated to allow lateral movement of the free ends of the arms, whereby they may be spread to accommodate the post and arranged close to the surface thereof. The brace-bar is preferably bent or deflected as
20 shown at 18, whereby said bars may lie close to the plane of the lever when folded, as shown in dotted lines in Fig. 2.

25 Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the spirit of the invention or sacrificing any of the advantages thereof.

Having described my invention, what I claim is—

1. In a wire-stretcher, the combination with 30 a lever provided with a foot for engagement with a post, pivotal straining-arms connected to an intermediate point of the lever and provided with notches for engagement with a fence-wire or runner upon opposite sides of 35 the post, and stop-fingers carried by the straining-arms and arranged to engage the lever to limit the movements of said arms, substantially as specified.

2. In a wire-stretcher, the combination of a 40 lever having a pronged foot which is sharpened or reduced to an edge at its inner or concave side and having an intermediate cut-away portion or slot, straining-arms pivotally connected to an intermediate point of the 45 lever and provided with notches for engagement with a fence-wire or runner, and a brace-bar pivotally connected to the lever and provided with a pronged foot having sharpened or reduced inner edges, substan- 50 tially as specified.

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

WILLIAM H. BEAL.

Witnesses:

JOSEPH MCMERIN,
D. P. BOWEN.