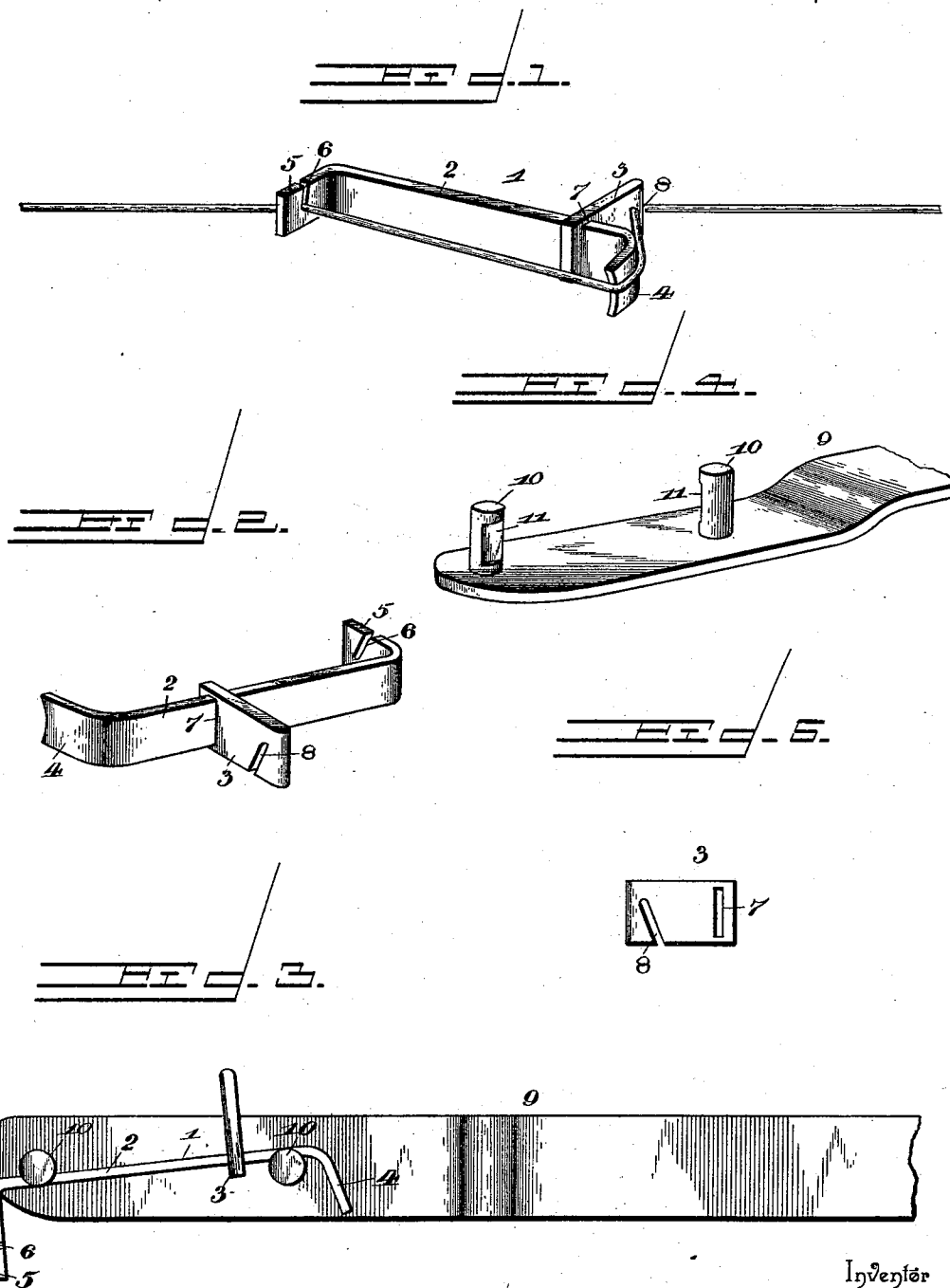


(No Model.)

J. S. HEMENWAY.
WIRE STRETCHER.

No. 550,970.

Patented Dec. 10, 1895.



Inventor

Justin S. Hemenway.

Witnesses

Wm. F. Doyle
J. H. Riley

By his Attorneys,

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UNITED STATES PATENT OFFICE.

JUSTIN SAMUEL HEMENWAY, OF RIVER FALLS, WISCONSIN, ASSIGNOR OF
ONE-HALF TO T. H. DANIELS, OF SAME PLACE.

WIRE-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 550,970, dated December 10, 1895.

Application filed April 10, 1895. Serial No. 545,206. (No model.)

To all whom it may concern:

Be it known that I, JUSTIN SAMUEL HEMENWAY, a citizen of the United States, residing at River Falls, in the county of Pierce and State of Wisconsin, have invented a new and useful Wire-Stretcher, of which the following is a specification.

The invention relates to improvements in wire-stretchers.

10 The object of the present invention is to improve the construction of that class of wire-stretchers known as "mid-wire take-ups" and to provide a simple and inexpensive device capable of adjustment to enable the
15 amount of wire taken up or the amount of strain exerted to a given amount of twisting of the device to be regulated.

Another object of the invention is to prevent any liability of the wire to break under
20 severe strain.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed
25 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 and shown applied to a wire. Fig. 2 is a perspective view
30 of the device detached. Fig. 3 is an elevation of the wire-stretcher, illustrating the manner of engaging the same with a twisting-lever. Fig. 4 is a detail perspective view of the engaging end of the twisting-lever. Fig.
35 5 is a detail view of the slide of the wire-stretcher.

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

40 1 designates a wire-stretcher comprising a bar 2 and a slide 3, arranged on the bar. The bar 2 is constructed of resilient metal, and its ends 4 and 5 are bent substantially at right angles and are adapted to engage a horizontal wire of a fence. The end 4 of the bar 2
45 is provided with a curved notch, forming a seat or fulcrum for the reception of the wire to be stretched, and the other end 5 is provided with a recess or slot 6 for the reception
50 of the fence-wire.

The slide 3 is provided with an opening 7,

receiving the bar 2, and is retained on the same by reason of the bent ends 4 and 5, and it is provided beyond the opening 7 with a wire-receiving slot or notch 8. In applying
55 the wire-stretcher to a fence-wire the latter is first placed in the slot or notch 8 of the slide 3, which is adjusted to the desired position on the bar 2, according to the size of the bend required to produce the proper tension in the
60 fence-wire, and the bar is then swung outward away from the wire at its end 5, carrying the notched end 4 against the wire. The swinging of the bar of the wire-stretcher is continued until it has been turned substantially
65 end for end and until the bent end 5 is engaged with the wire. The wire being received in the notch or slot of the end 5, the wire-stretcher is locked against returning.

The greater the distance the slide is from
70 the end 4 the greater will be the bend of the fence-wire, as will readily be seen, and the material of which the bar is constructed is sufficiently resilient to bend under very great
75 strain to avoid breaking a fence-wire and to enable the end 5 of the bar to be engaged with the fence-wire without exerting too much strain.

The twisting of the wire-stretcher is accomplished by means of a lever 9, provided at one
80 end with a pair of studs 10, flattened at opposite sides to provide recesses 11 to receive the bar of the stretcher and to prevent any accidental slipping during the operation of tightening a fence-wire. After a fence-wire has
85 been stretched the lever is disengaged from the bar and only one lever is required for any number of the bars and slides. The studs 10 are arranged at the longitudinal center of the lever and the wire-stretcher, when engaged
90 with the lever, is at an angle to the same, as clearly shown in Fig. 3 of the accompanying drawings. By this arrangement the stretching edge is twisted and the slot 6 can be engaged with the wire in completing the twisting
95 without the handle end of the lever coming in contact with the fence-wire. This will be found exceedingly advantageous in twisting or tightening barb-wire fences, as it will save the hands of the operator from being
100 scratched.

It will be seen that the wire-stretcher is ex-

ceedingly simple and inexpensive in construction, that it is adapted to be readily applied to a fence-wire at an intermediate point between fence-posts, and that it is capable of
5 adjustment to enable the degree of stretching to be regulated.

Changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sac-
10 rificing any of the advantages of this invention.

What I claim is—

1. A wire engaging device, comprising a bar having its ends bent laterally and provided
15 respectively with a wire receiving notch and a wire engaging slot, and a wire engaging device located at a point between the ends of the bar and projecting in the opposite direction from the said ends, substantially as de-
20 scribed.

2. In a device for tightening wires, the combination of a resilient bar having its ends bent substantially at right angles and adapted to receive and engage a wire, and a slide having
25 an opening and arranged on the bar between the ends thereof and provided with a wire engaging slot, substantially as described.

3. In a device for stretching wires, the combination of a bar having wire engaging ends, a slide mounted on the bar and adapted to en-
30 gage the wire, and a lever provided with studs having recesses to receive the bar, substantially as described.

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

JUSTIN SAMUEL HEMENWAY.

Witnesses:

F. M. WHITE,

V. L. HEMENWAY.