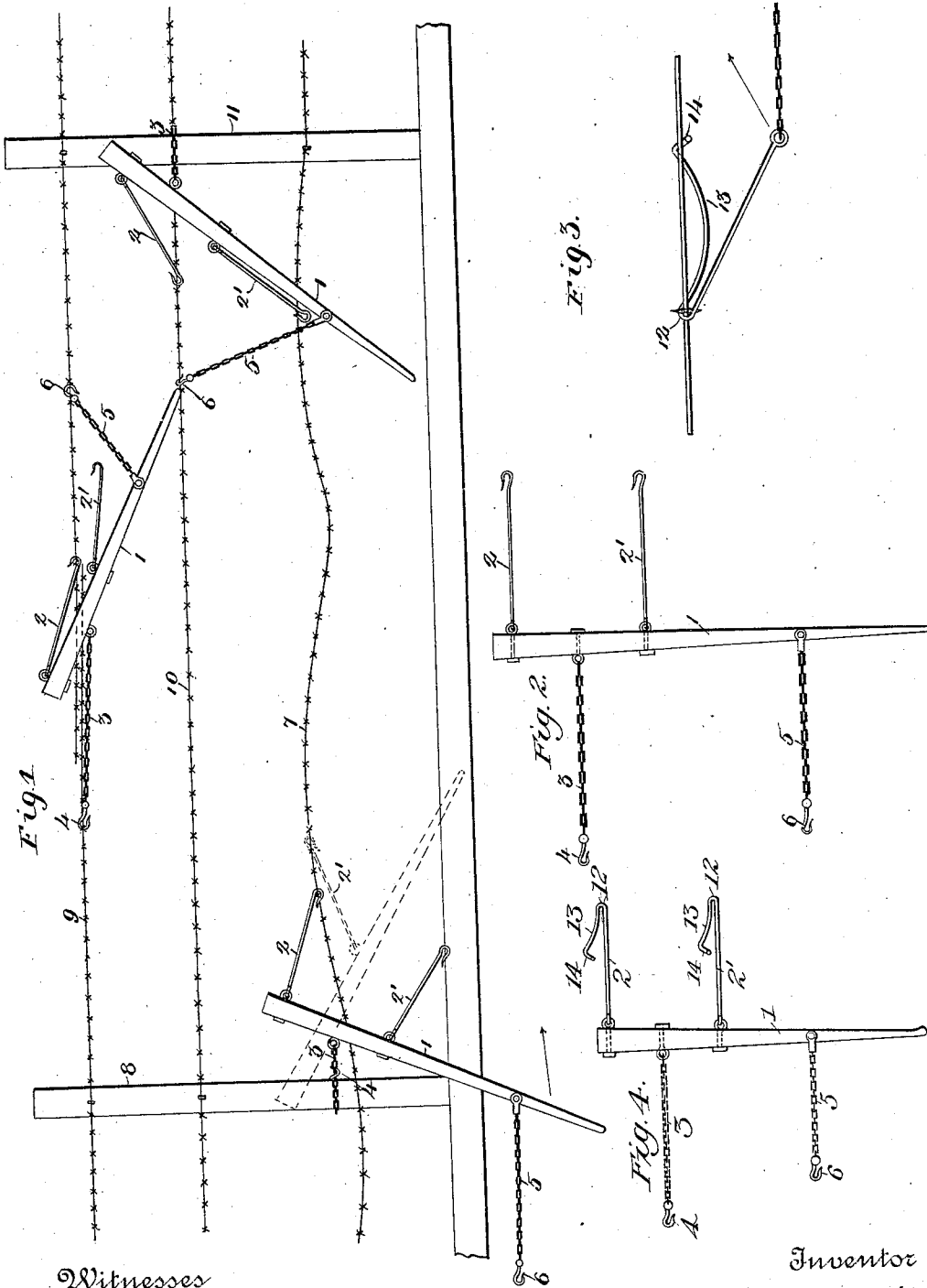


(No Model.)

J. C. CARPENTER.
WIRE STRETCHER.

No. 574,982.

Patented Jan. 12, 1897.



Witnesses

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JAMES C. CARPENTER, OF COUNCIL GROVE, KANSAS.

WIRE-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 574,982, dated January 12, 1897.

Application filed May 27, 1896. Serial No. 593,291. (No model.)

To all whom it may concern:

Be it known that I, JAMES C. CARPENTER, a citizen of the United States, residing at Council Grove, in the county of Morris and State of Kansas, have invented certain new and useful Improvements in Wire-Stretchers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention has relation to improvements in wire-stretchers; and it consists in the novel arrangement and combination of parts more fully set forth in the specification, and pointed out in the claims.

In the drawings, Figure 1 is an elevation of a section of a wire fence, showing my invention applied to different wires and along different portions of the same. Fig. 2 is a plan view of the tool itself. Fig. 3 is a detail elevation of the preferred form of hook; and Fig. 4 is a view similar to Fig. 2, showing, however, the preferred form of the device.

The object of my invention is to construct a wire-stretcher which will be simple in its make-up, thoroughly effective, reliable, one which serves the purpose of seizing the wire, either at the posts between which it is stretched or at any intermediate point between the posts where necessity arises to splice the meeting ends of the severed wire, and one presenting further and other advantages to be presently set forth in detail, and pointed out in the claims.

In detail the device may be described as follows.

Referring to the drawings, 1 represents the operating-lever, forming the body portion of the stretcher.

2 and 2' are steel-wire hooks of substantially the same length, secured near the base of the lever and at a suitable distance apart and extending in the same direction. Between the points of connection of the hooks 2 and 2' and the lever 1 is secured to the lever one end of a cable-chain 3, having a terminal grab-hook 4, the chain extending in a direction opposite to that of the hooks 2 and 2'. Secured to the top surface of the lever 1, at a point exterior to the inner hook 2' and at a convenient distance from the end of the handle portion of the lever, is a chain 5, having a terminal hook 6, designed to temporarily retain

the lever in position at the conclusion of the stretching operation until the operator can conveniently either staple the end of the wire to the fence-post or splice the meeting ends of opposite sections of wire brought together.

On the left of Fig. 1 the lever 1 is shown in a position ready to be operated to tighten or stretch a length of wire 7, the chain 3 being first secured to the fence-post 8 and the hook 2 being secured to the wire to be stretched. By throwing the lever in the direction as indicated by the arrow in Fig. 1 the wire 7 becomes stretched, the point of connection between the chain 3 and the lever 1 acting as a fulcrum. Should the wire, however, be so slack that a single throw of the lever in the direction indicated does not suffice to stretch the same to the degree desired, the hook 2 may be detached from the wire 7 after the lever has been swung to the position shown in dotted lines on the left of Fig. 1, and the hook 2' may be attached to the wire, when by throwing the lever in the reverse direction from that of the previous operation, the wire will be completely stretched and can then be stapled to the post 8. The middle portion of Fig. 1 represents the lever in a position of stretching the opposite sections of a broken wire 9, the chain 3 being connected to one of the sections and the hook 2 to the opposite section. To temporarily retain the lever in position until the meeting ends of the two sections can be properly spliced, the chain 5 (which may be swung to any position) is secured to that section of the wire toward which the free end of the lever has been swung, thereby preventing the lever from swinging loose under the tension of the sections of wire, and thus holding the meeting ends temporarily until the operator can conveniently splice the same. At the right-hand end of Fig. 1 the lever is shown stretching a wire 10 to be stapled to a post 11, the chain 5 being in this case secured to the wire 10 to prevent the lever from flying or swinging back under the tension of the wire and loosening the latter, and thus temporarily holding the parts until the operator can conveniently staple the end of the wire to the post 11.

In many instances the barb of the wire may slip when the wire is under tension, thus

causing the hooks to slip on the wire and lose their hold thereon. To obviate this slipping, I provide the various chains of the device with terminal hooks, preferably such as shown in detail in Fig. 3. The hook has a hooked or bent portion proper, 12, and an inwardly-concave extension 13, terminating in an inwardly-deflected arm or straight portion 14. The hook is applied so as to cause the hooked portion proper to embrace the wire, allowing the deflected terminal arm 14 to bear against the under surface of the wire. As tension is applied in the direction indicated by the arrow in Fig. 3 the pressure of the arm 14 exerted on the fence-wire will prevent the hook from slipping, so that even smooth wire can be operated on.

Having described my invention, what I claim is—

1. In a wire-stretcher, a suitable operating-lever or body portion, suitable hooks, each having a hooked portion for embracing the wire on one side and a terminal deflected portion for bearing against the opposite side of the wire carried at one end thereof and extending in one direction, and a grab-hook also carried by the lever but extending in the opposite direction, and serving as a fulcrum for the lever in the operation of stretching the wire, substantially as set forth.

2. In a wire-stretcher, a suitable operating-lever or body portion, a pair of hooks, each having a hooked portion for embracing the wire on one side and a terminal deflected portion for bearing against the opposite side of the wire carried at one end of the same and extending in one direction, a chain secured at one end to the lever at a point between the connections of the hooks with the lever and extending in the opposite direction from that of the hooks, a grab-hook carried at the free

end of said chain, and suitable means carried by the lever for temporarily holding the lever while in the act of stretching the wire, substantially as set forth.

3. A wire-stretcher, comprising a suitable lever or body portion, a pair of hooks, each having a hooked portion for embracing the wire on one side and a terminal deflected portion for bearing against the opposite side of the wire carried at one end of the lever and separated a suitable distance, a chain having one end secured to the lever intermediate between the hooks, and having a grab-hook at the free end thereof, said chain being disposed in a direction opposite to that of the pair of hooks carried by the lever, a second chain carried by the lever at a point exterior to the inner hook and at a suitable distance from the free end or handle portion of the lever, and a hook carried at the free end of the second chain whereby the lever with the first-named chain as a fulcrum can be operated in two directions, and whereby the hook of the second chain may serve to temporarily hold the lever in position against the tension of the wire, until the ends of the wire can be either securely spliced or stapeled to the fence-post, substantially as set forth.

4. In a wire-stretcher, a suitable hook having a hooked or bent portion proper for embracing the wire, an inwardly-concave continuation, and a terminal deflected portion or arm adapted to bear against the opposite surface of the wire from that embraced by the hooked portion, substantially as set forth.

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

JAMES C. CARPENTER.

Witnesses:

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