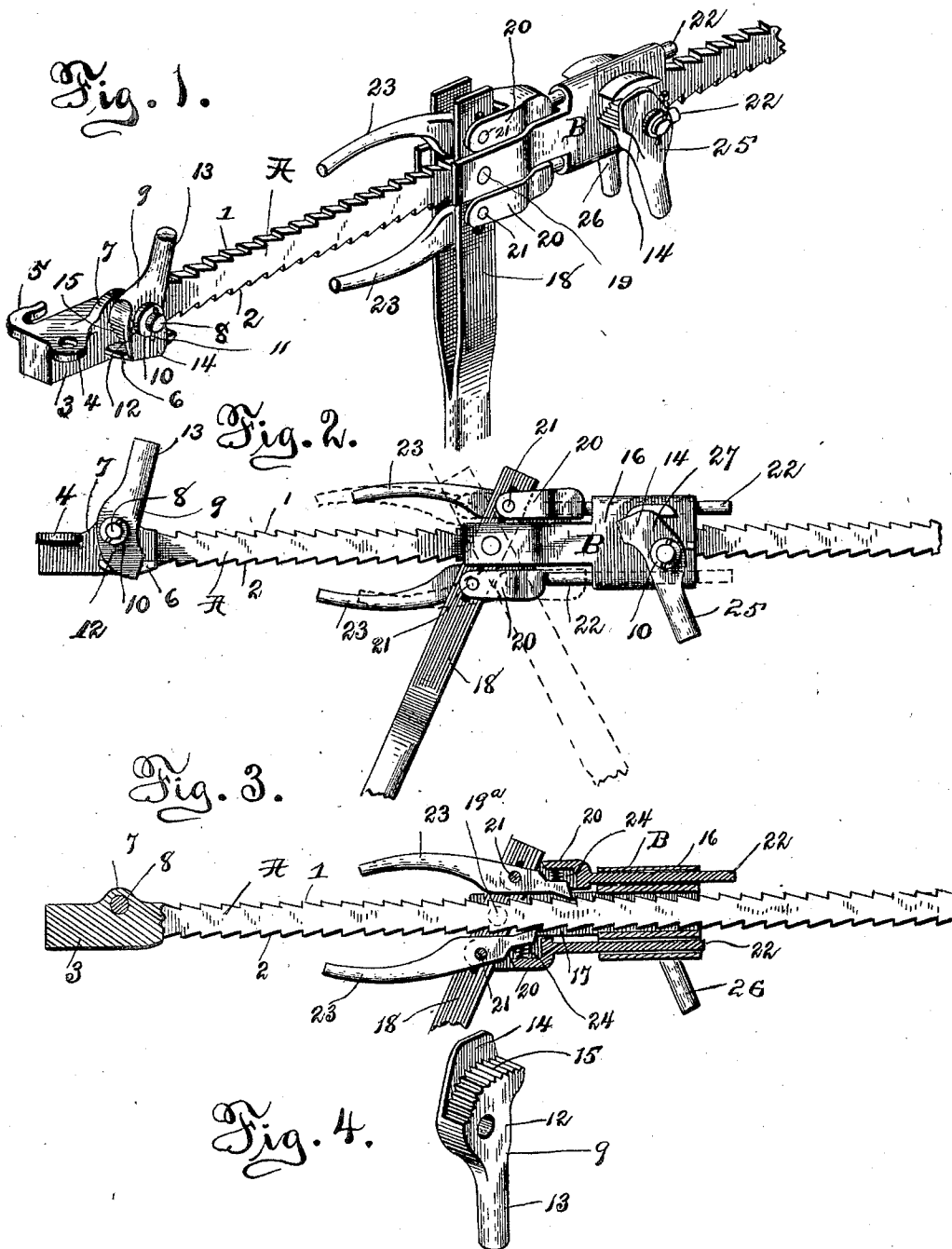


(No Model.)

L. S. HANSON.
WIRE STRETCHER.

No. 581,859.

Patented May 4, 1897.



Witnesses
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UNITED STATES PATENT OFFICE.

LEWIS SAMUEL HANSON, OF HURON, WISCONSIN.

WIRE-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 581,859, dated May 4, 1897.

Application filed June 13, 1896. Serial No. 595,479. (No model.)

To all whom it may concern:

Be it known that I, LEWIS SAMUEL HANSON, a citizen of the United States, residing at Huron, in the county of Chippewa and State of Wisconsin, have invented certain new and useful Improvements in Wire-Stretchers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to wire-stretchers used in putting up wire fences.

My object is to provide an improved wire-stretcher provided with improved means both for stretching wires and for holding the ends of broken wires together, so that they may be easily spliced.

The invention consists of certain novel features and combinations, as will appear more fully hereinafter.

In the accompanying drawings, Figure 1 is a perspective of my complete invention; Fig. 2, a side elevation; Fig. 3, a central longitudinal sectional view, and Fig. 4 a detail view of one of the gripping-pawls.

A represents a double rack-bar provided with rows of teeth 1 and 2. One end of this rack-bar is provided with a reinforcing-piece 3, which has an eye 4 on one of its sides and a hook 5 on the other side. It is also provided with a clamping-plate 6 and an ear 7. A pin 8 projects outwardly from the ear and affords a pivot for a gripping-pawl 9, which is held in position by a washer 10 and pin 11. This gripping-pawl consists of a head 12, a handle 13, and a flange 14. The edge of the head is curved and provided with a series of teeth 15. The wire is held in between the teeth and the clamping-plate. Two other gripping-pawls which I employ in the present invention are of the same construction as this pawl.

A traveler B, adapted to slide on the rack-bar, carries the remaining parts of the invention and consists of a head 16 and neck 17.

A hand-lever 18 is pivoted in the neck 17 by pins 19 and 19^a.

Two duplicate guides are provided with heads 20, having jaws which are pivoted to the hand-lever by pins 21, that pass through elongated pin-openings in said hand-lever. These guides are also provided with piston-

rods 22, which are adapted for free movement in openings in the head of the traveler when the hand-lever is rocked.

The numeral 23 designates duplicate ratchets, which are pivoted in a slot in the hand-lever by the pins 21. Springs 24 tend to keep these ratchets in engagement with the opposite rows of teeth on the rack-bar. By pressing the handles of these ratchets together the traveler may be slid along the rack-bar at pleasure.

Two gripping-pawls 25 and 26 are located on opposite sides of the traveler, being duplicates of the gripping-pawl heretofore described in detail and pivoted in the same manner and adapted to coöperate with clamping-plates like that heretofore described.

My improved wire-stretcher may be used in the following manner: If it is desired to stretch a wire, a chain which is connected to eye 4 is passed around the post to which the wire is to be fastened and is caught on hook 5. The wire being stretched is then caught between one of the gripping-pawls on the traveler and its clamping-plate. Upon rocking the hand-lever the engagement of the ratchets with the rack-bar causes the traveler to move forward and stretch the wire, which may then be stapled or fastened in position. When it is desired to splice a wire that has become broken, one of its broken ends is caught in the other gripping-pawl on the traveler and its remaining broken end in the gripping-pawl on the end of the rack-bar, whereupon the traveler may be actuated and the ends of the wires brought together and spliced.

Having thus described the invention, what is claimed as new is—

1. In a wire-stretcher, the combination with a double rack-bar, of a traveler slidable thereon, a hand-lever pivoted to the traveler, pistons connected to the hand-lever and adapted for movement in the traveler, ratchets pivoted to the hand-lever, springs adapted for actuating the ratchets, and wire-gripping devices on the traveler and rack-bar, substantially as described.

2. In a wire-stretcher, the combination with a double rack-bar provided with a fastening device, and having a wire-gripping pivoted pawl, of a traveler slidable on the rack-bar,

a hand-lever pivoted to the traveler, ratchets actuated by the hand-lever, and two pivoted wire-gripping pawls, one located in substantial alinement with the wire-gripping pawl
5 on the rack-bar, and the other situated on the opposite side of the traveler, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

LEWIS SAMUEL HANSON.

Witnesses:

THOS. O'NEILL,
W. J. ICKSTEADT.