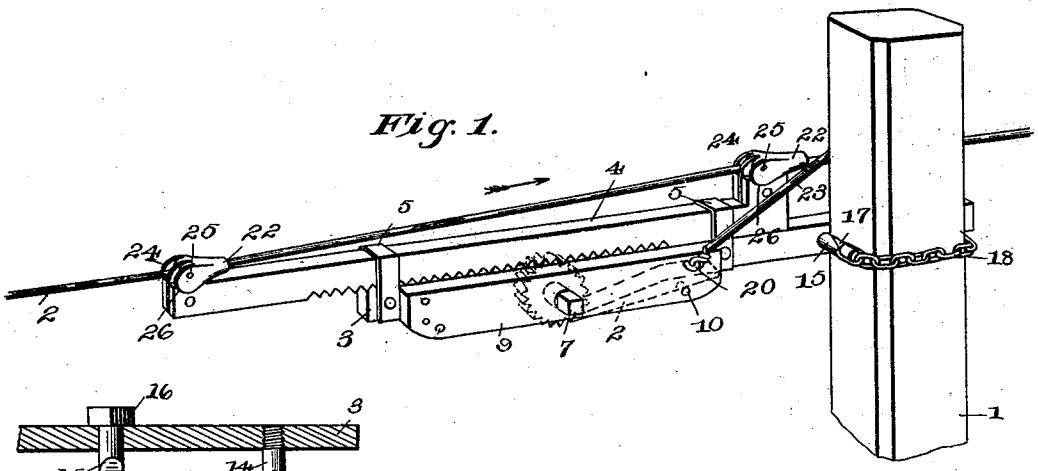
(No Model.)

P. LOUDENBURG.

WIRE STRETCHER.

No. 508,891. Patented Nov. 14, 1893.

Fig. 1.



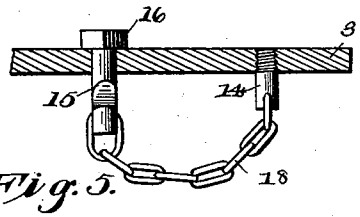


Fig. 5.

Fig. 2.

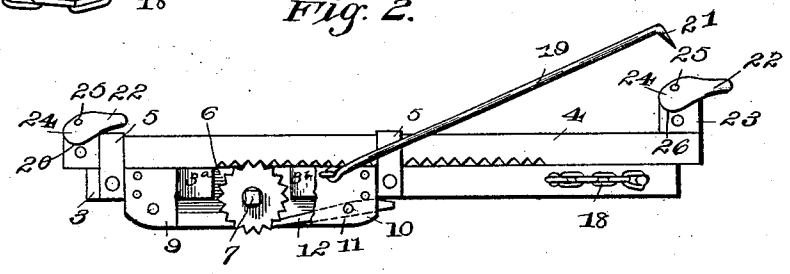
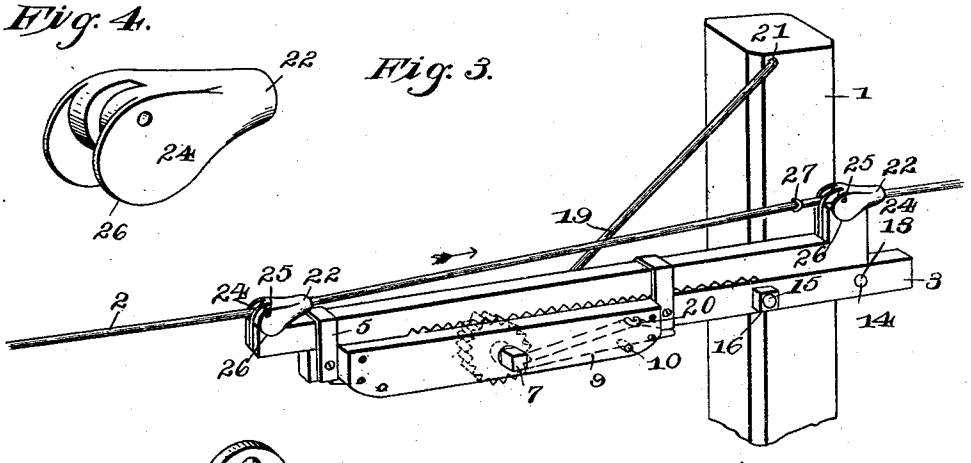


Fig. 4.

Fig. 3.



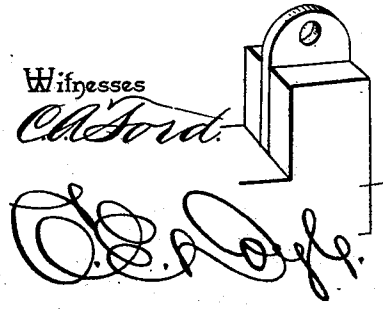


Fig. 6.

Witnesses
C. A. Ford.
O. E. Doyle.

Inventor
Peter Loudenburg.

By his Attorneys,
C. A. Snow & Co.

THE NATIONAL LITHOGRAPHING COMPANY,
WASHINGTON, D. C.

UNITED STATES PATENT OFFICE

PETER LOUDENBURG, OF MODENA, ILLINOIS.

WIRE-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 508,891, dated November 14, 1893.

Application filed May 31, 1893. Serial No. 476,132. (No model.)

To all whom it may concern:

Be it known that I, PETER LOUDENBURG, a citizen of the United States, residing at Modena, in the county of Stark and State of Illinois, have invented a new and useful Wire-Stretcher, of which the following is a specification.

My invention relates to a wire-stretcher designed especially for stretching fence wires, and the objects in view are to provide improved means for attaching the stretching frame to the post, and to provide simple and effective clamping devices to secure the wire which is being stretched.

Further objects and advantages of my 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 device embodying my invention applied in the operative position to a fence. Fig. 2 is a side view partly broken away of the same. Fig. 3 is a perspective view showing the parts adjusted to dispose the wire upon the opposite side of the posts. Fig. 4 is a detail view in perspective of the wire-holding device. Fig. 5 is a detail view in plan of the clamp. Fig. 6 is a detail view of the connection between the bar and the locking device.

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

1 designates a post to which my improved stretcher is applied and 2 the fence wire which is to be stretched thereby.

The stretcher comprises essentially the bars 3 and 4, respectively, the bar 3 being provided with keepers 5 in which slides the bar 4. The bar or member 3 is recessed as shown at 6 and in the side walls of this recess are formed bearings in which is mounted the transverse spindle 7. This spindle carries a spur-wheel 8 which engages the toothed lower edge of the bar or member 4 whereby the latter may be fed in either direction by the rotation of said spindle.

The recess 6 which is above described as being formed in the bar or member 3 is preferably provided by dividing said bar or member and separating the adjacent ends to form a casing in which the spur-wheel is arranged. The parts 3^a and 3^b thus formed are connected by the parallel cheeks 9 which depend at their lower edges below the lower edge of the bar or member 3. These depending edges of the cheeks 9 are provided with transversely registering perforations 10. In these perforations is arranged a transverse pivot pin 11 upon which is mounted the pawl 12.

The bar or member 3 is provided at the end opposite to that in which is arranged the spur-wheel with transverse perforations 13 in one of which is arranged a pin 14 and in the other of which is arranged a bolt 15 provided with an adjusting nut 16. This bolt is provided at the opposite end from the adjusting nut with a notch 17, and 18 represents a chain which is fixed at one end to the stud 14 and is looped at the other end in the notch 17. This construction forms a clamp to embrace the post and it will be understood that by manipulating the adjusting nut, any desired tension of the chain may be attained. It will be obvious furthermore that the stud and the bolt may be reversed in position with relation to the bar or member 3 in order to arrange the clamp upon the opposite side thereof, as shown in Fig. 3.

19 represents a stay-rod which is looped at one end and engaged in an eye 20 upon one side of the bar or member 3, the upper end of said stay-rod being provided with a lateral engaging point or spur 21 which is adapted to be driven into the side of the post. Duplicate eyes 20 are arranged upon opposite sides of the bar or member 3 to permit of the reversal of the stay-rod as shown in Fig. 3. The bar or member 4 is provided at opposite ends with wire locking devices which are similar in construction and therefore it will be necessary to describe only one in this connection. Said locking device comprises essentially a cam lever 22 which is fulcrumed to a vertically disposed web 23, the cam head 24 being bifurcated or split to fit over said web and the transverse pivot 25 being passed through registering perforations in the cam head and web. Integral with the cam head and spaced apart at sufficient distance to receive the bar or member 4 between their inner or opposing faces are the depending ears 26. When the cams are turned down in the position shown in Fig. 1 the wire is clamped

against the upper surface of the bar or member 4 and when the cam is loosened or raised to permit of adjustment of the parts the wire is held from being displaced laterally by the depending ears 26.

In Fig. 1 the parts are shown in the position which they assume before the stretching operation is begun, and the dart indicates the direction of movement of the upper or movable member of the device. When said upper member has been moved in the direction indicated by the dart sufficiently to bring the elevated locking device beyond the post, the wire will be arranged close to the surface of the post in position to be secured by means of a staple. It will be understood that the elevation of one of the locking devices enables the wire to be secured to the post by the engagement therewith, between the locking devices, of a suitable staple 27, and enables such staple to be driven conveniently without injury to the stretcher.

In Fig. 3 the parts are shown in the position which they assume after the stretching operation has been completed, the dart indicating the direction of movement of the upper member; and the stay-rod being arranged upon the opposite side of the device from that shown in Fig. 1.

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

Having thus described my invention, what I claim is—

1. In a wire stretcher, the combination with relatively adjustable bars or members one of which is provided with wire engaging devices, and operating connections between said bars or members, of a clamping device having a flexible chain secured at one end to a bar or member, a bolt connected to the other end of said chain and fitted in an opening in the bar, and an adjusting nut threaded upon such bolt, substantially as specified.

2. In a wire stretcher, the combination with relatively adjustable bars or members and operating connections between said bars or members, of wire holding devices comprising stationary vertical webs and bifurcated cam levers fulcrumed to such webs and provided with depending ears to prevent lateral deflection or displacement of the wire, substantially as specified.

3. In a wire stretcher, the combination of bars or members 3 and 4, the latter being provided with wire holding devices, and reversible operating connections between such bars or members whereby they may be operated in either direction, of a clamping device secured to the bar or member 3 and comprising a stud, an adjusting bolt and a chain connecting said stud and bolt, such stud and bolt being reversible to arrange the clamp upon either side of the bar or member, a stay-rod provided with a spur to engage a fence post and means whereby the other end of said stay-rod may be attached to either side of the bar or member 3, substantially as specified.

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

PETER LOUDENBURG.

Witnesses:
ANTHONY LOUDENBURG,
ARTHUR LOUDENBURG.