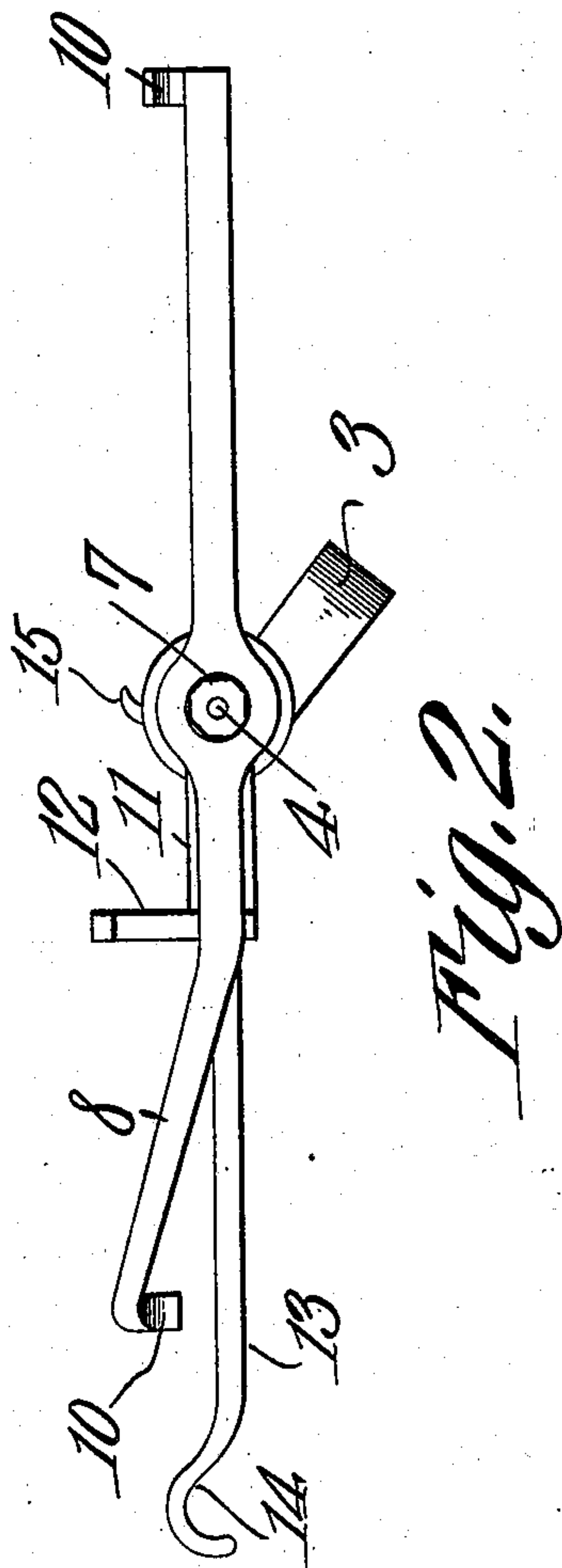
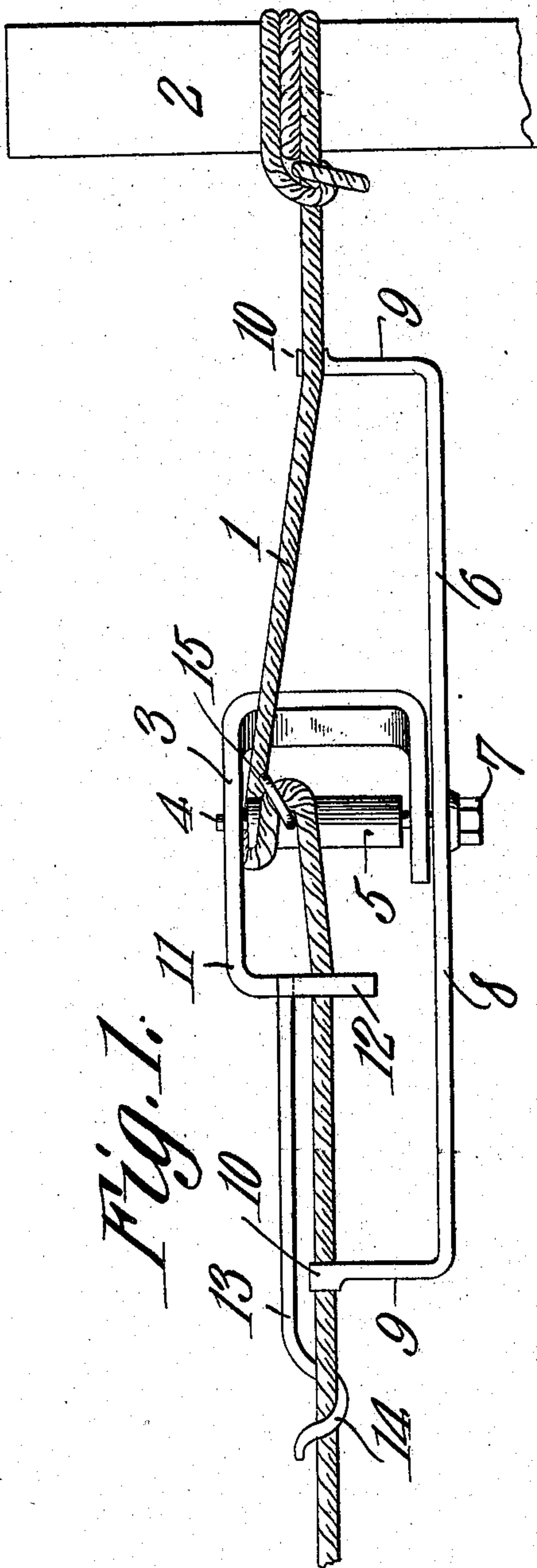


No. 885,693.

PATENTED APR. 21, 1908.

J. T. GARDNER.
WIRE STRETCHER.

APPLICATION FILED APR. 25, 1907.



Witnesses

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JOHN T. GARDNER, OF BUFFALO, MISSOURI, ASSIGNOR TO LEVI ENGLE, OF BUFFALO, MISSOURI.

WIRE-STRETCHER.

No. 885,693.

Specification of Letters Patent.

Patented April 21, 1908.

Application filed April 25, 1907. Serial No. 370,253

To all whom it may concern:

Be it known that I, JOHN T. GARDNER, a citizen of the United States, residing at Buffalo, in the county of Dallas and State of Missouri, have invented a new and useful Wire-Stretcher, of which the following is a specification.

This invention relates to wire stretching apparatus and it is especially designed for tightening the strand wires of fences.

The principal object of the invention is to provide a device of this character designed to be used in connection with a flexible connecting device on which the frame of the stretcher is designed to be readily placed, said frame being so constructed as to enable it to be supported solely by the connecting device prior or subsequent to the stretching operation.

Another object is to provide a stretcher utilizing a removable key for the purpose of operating means whereby a flexible connecting device may be wound for the purpose of pulling longitudinally on the wire to be stretched, said key being so shaped as to engage the flexible connection at two points simultaneously so as to prevent the winding means from rotating to loosen the connecting device.

With these and other objects in view the invention consists of certain novel features of construction and combinations of parts which will be hereinafter more fully described and pointed out in the claims.

In the accompanying drawings is shown the preferred form of the invention.

In said drawings: Figure 1 is a plan view of the wire stretching device. Fig. 2 is a side elevation thereof.

Referring to the figures by characters of reference, 1 designates a flexible connecting device designed to be used in connection with the stretcher, the same being preferably in the form of a strong rope or cable designed to be fastened at one end to a post 2 or other fixed structure while the other end thereof may be fastened in any preferred manner to the wire to be stretched. Means are employed for winding the connecting device so as to pull the wire longitudinally and this means consists of a yoke 3 in the side portions of which is journaled a shaft 4 having a spool 5 secured thereto and between the sides of the yoke. One end of this shaft extends beyond one side of the yoke and is designed to

be engaged by a key consisting of an arm 6 the central portion of which is mounted on the shaft and is held in fixed relation thereto in any preferred manner as by means of a lock nut 7. One end portion of the arm is extended at an angle to the remaining portion thereof as indicated at 8 and both end portions are provided with parallel fingers 9 extending at right angles therefrom and each terminating in a hook 10. These hooks are oppositely adjusted and are arranged along a line extending longitudinally through the center of yoke 3.

Extending from one side of the yoke 3 and at an angle thereto is an extension 11 having an intermediate inverted L-shaped arm 12 extending inwardly at right angles therefrom and partly across the open end of the yoke 3. A longitudinal holding arm 13 extends from the arm 12 and terminates in a hook 14 designed to engage the connection 1 in the manner hereinafter set forth.

When it is desired to stretch a wire by means of the apparatus herein described the flexible connection 1 is fastened at one end to a fixed structure and at its other end to the wire, after which yoke 3 is placed under and moved upward toward the connection 1 so as to bring the arm 12 over said connection and the hook 14 into position to partly wrap the same. A hook 15 extends from the spool 5 and this is designed to engage the connection 1 and in order to facilitate its engagement the hook is disposed in a plane extending diagonally upon the spool as indicated in Fig. 1. After the frame has been placed upon the connection 1 in the manner above described it will be apparent that the same will remain supported by said connection because the arm 12 will bear downward upon the connection and hold it in contact with the hook 14 and spool 5. Key 6 can then be placed in engagement with one end of shaft 4 and by rotating it the flexible connection 1 will be wound upon the spool 5 and inasmuch as a portion of the connection 1 is brought into position below the spool and extends outward therefrom toward the fixed support 2 it has been advantageous to extend the yoke 3 downward at an angle as indicated clearly in Fig. 2 so that the same will not interfere with the proper winding of the connection and cause a bend therein. Each time the key 6 is revolved the hooks slip past the connection 1 and should it be

desired to hold the spool so as to prevent the connection 1 from unwinding the hooks carried by the key can be permitted to engage the upper and lower portions respectively of the connection 1 as indicated in Fig. 1 so as to hold the key against rotation in a reverse direction. After these hooks have been placed in engagement with the connection 1 the apparatus can be left suspended upon the connection 1 without danger of the parts becoming slack and the operator can then devote his entire attention to securing the stretched wire in place.

What is claimed is:

15 1. A wire stretcher comprising a yoke, a spool journaled within the yoke, an extension projecting from the yoke and at an angle thereto, an angular upstanding arm integral with the extension and extending partly
20 across the open end of the yoke, an arm projecting beyond the extension and having a hooked terminal, a key detachably connected between its ends to the spool, and
25 portions of the arm and disposed in a plane

extending longitudinally of the center of the yoke.

2. The combination with a flexible connecting device; of a stretcher comprising a yoke, a spool journaled therein, means carried by the spool for engaging said device, an intermediate holding arm connected to the yoke and disposed to overhang said device, a hooked holding arm extending beyond the yoke for engaging the flexible device, said device being disposed to extend over the yoke and hook and beneath the intermediate holding arm, and a key detachably connected to and disposed to actuate the spool, said key having oppositely disposed
40 hooks carried by the terminals thereof for simultaneously engaging the flexible device when rotating in one direction.

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

JOHN T. GARDNER.

Witnesses:

GREEN L. DAVIS,

GEORGE W. MORROW.