

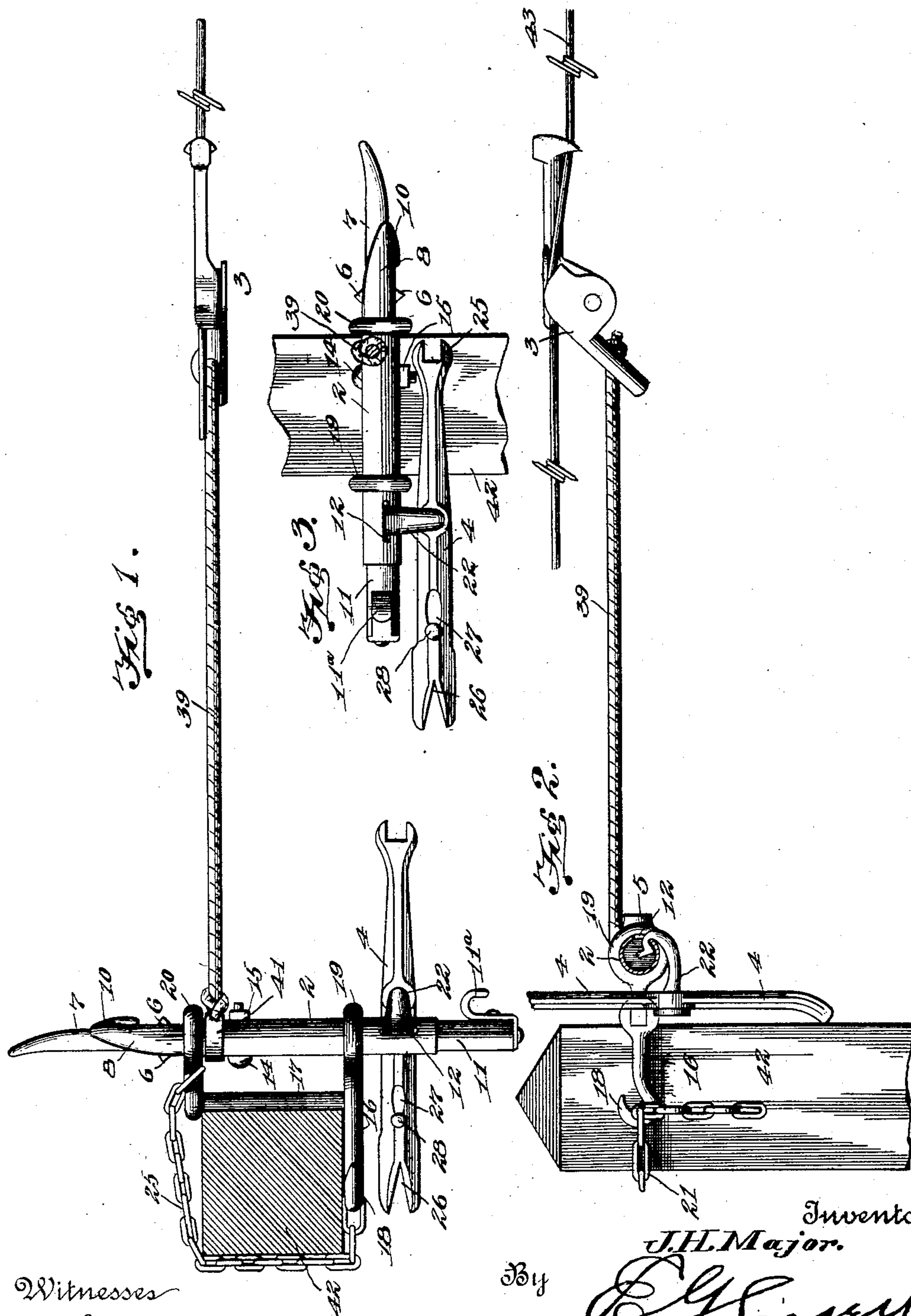
No. 738,050.

PATENTED SEPT. 1, 1903.

J. H. MAJOR.
WIRE WORKING TOOL.
APPLICATION FILED APR. 5, 1902.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses
John Maupin.
Ed. Shepard.

By

Inventor
J.H. Major.
E. G. Singer
Attorney

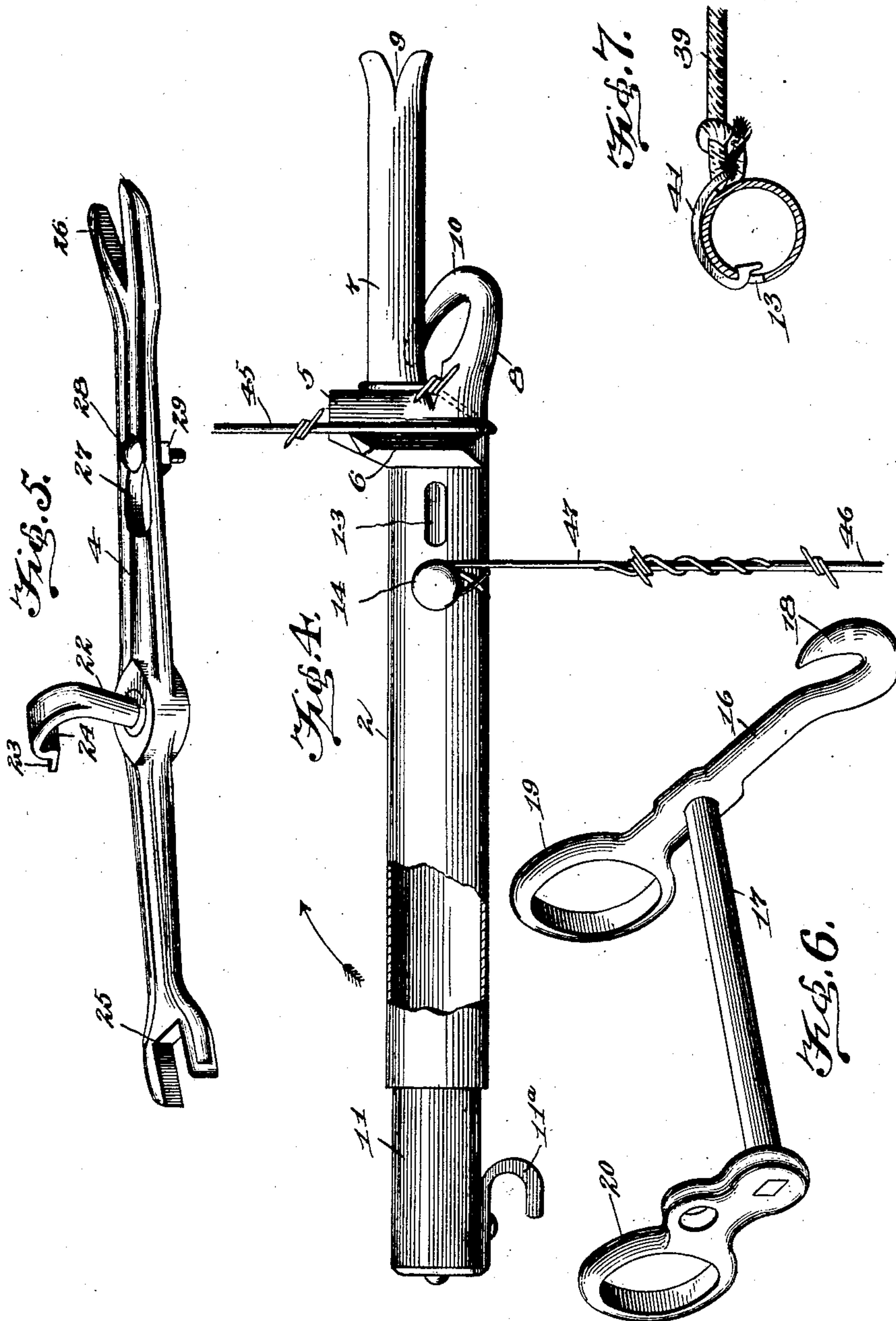
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J.H. Major
E.G. Siggers
Attorney

UNITED STATES PATENT OFFICE.

JOHN H. MAJOR, OF ELRENO, OKLAHOMA TERRITORY.

WIRE-WORKING TOOL.

SPECIFICATION forming part of Letters Patent No. 738,050, dated September 1, 1903.

Application filed April 5, 1902. Serial No. 101,546. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. MAJOR, a citizen of the United States, residing at Elreno, in the county of Canadian and Territory of Oklahoma, have invented a new and useful Wire-Working Tool, of which the following is a specification.

This invention relates to wire-working tools, and has for its object to provide an improved apparatus made up of a plurality of parts which may be conveniently assembled, so as to be anchored upon a post and connected with a wire for stretching the latter and some of the parts being capable of independent use for stretching and mending the strands of wire fences.

It is furthermore designed to arrange the device so as to form a windlass and to provide means for connecting the free end of the wire with the windlass for convenience in stretching the former by manipulation of the latter.

Another object is to provide an improved operating device for the windlass, which operating device is capable of being adjusted into engagement with the post which supports the windlass, so as to lock the latter against unwinding, and thereby to hold the wire after it has been stretched, so as to permit of the wire being fastened to a post. This handle is also detachable and is constructed to be employed as a wire-stretcher independently of the windlass arrangement of the device.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a top plan view of the present device with parts assembled and applied to a post in position to stretch a wire. Fig. 2 is a side elevation thereof, partly in section, to show the detachable connection

between the handle and windlass or rotatable member of the device. Fig. 3 is a front elevation thereof with the handle thrown into engagement with the post to hold the rotatable member against rotation. Fig. 4 is a plan view, partly in section, of the rotatable member of the device detached and connected to the opposite ends of a broken wire in the initial position for drawing the wires together. Fig. 5 is a detail perspective view of the handle-bar of the device. Fig. 6 is a detail perspective view of the supporting-bracket. Fig. 7 is a detail cross-sectional view taken through the rotatable member to show the detachable connection between the same and the wire-clamp.

Like characters of reference designate corresponding parts in all the figures of the drawings.

The present device is made up of a plurality of parts—viz., a post-engaging bracket 1, a rotatable member 2, which is employed in the capacity of a drum or windlass, a wire-clamp 3 to connect a wire with the windlass, and an operating handle-bar 4 for use in rotating the member 2. These parts are all detachably connected in order that they may be conveniently separated for employment in their individual capacities and also packed in convenient shape for transportation.

The rotatable or windlass member 2 is in the form of a hollow cylinder which is open at one end and closed at the other, the closed end being provided with an integral laterally-projected hammer-head 5 and also having transversely-disposed wedge-shaped ribs 6, lying at opposite sides of the member and designed to form wire-cutters, the wire being placed transversely across either of the ribs and then struck with a hammer or other implement, so as to force the sharp edge of the rib through the wire. This end of the member is bifurcated to form the fork members 7 and 8, of which the member 7 is longer than the other member and has its outer end split and spread to form a claw 9 for convenience in removing staples and the like. The other fork member 8 has its outer end hooked, as at 10, with its outer extremity overlapping an intermediate portion of the member 7, so

as to partially close the loop between the two members for convenience in picking up barbed wire. The interior of the hollow or tubular member 2 is designed to form a receptacle for staples and the like, and its open end is normally closed by means of a removable plug 11. A laterally-projected head or shoulder 11^a is provided at one side of the plug 11 for convenience in driving the plug out of the tubular member 2 to give access to the interior thereof. Adjacent to the upper end of the member there is provided a longitudinal slot 12, and a similar slot or socket 13 is formed at the opposite end of the member and disposed substantially at the opposite side of the member. Adjacent to the inner end of the socket 13 is a removable-headed bolt or pin 14, which is provided with a nut 15, whereby the bolt is held against accidental displacement.

For the rotatable support of the member 2 the bracket 1 is employed. This bracket embodies bar members 16 and 17, which are disposed at substantially right angles to each other, so as to snugly embrace adjacent faces of the post, as clearly indicated in Fig. 1 of the drawings. The bar member 16 is provided at its rear end with a hook 18, and the bar member 17 is provided with the spaced eyes 19 and 20, projected in front thereof and adapted to rotatably receive the member 2, so as to form bearings therefor, in which said member is adapted to rotate. A chain 21 has one end secured to that end of the bar member 17 which carries the bearing-eye 20 and is adapted to embrace the post and have one of its links engaged with the hook 18, so as to rigidly connect the bracket to the post. It will of course be understood that the bolt or pin 14 is removable in order that the member 2 may be fitted endwise into the bearings 19 and 20.

To facilitate rotation of the drum or windlass member 2, the handle-bar 4 is detachably connected to the open end thereof by means of a swiveled hook 22, carried immediately by the handle-bar. The outer end of the bill of this hook is provided with a head 23, which projects in front and rear thereof, the rear side of the head being undercut, as at 24, to receive and embrace one edge of the slot 12 when the bill of the hook has been inserted into said slot. The length of the head 23 from front to rear slightly exceeds the width of the slot 12, so as to prevent accidental displacement of the hook; but by turning the latter so as to incline the head across the slot it may be readily inserted therein and withdrawn therefrom. One end of the handle-bar is provided with a wrench-socket 25, and the opposite end is split or bifurcated to provide a claw 26. At a point substantially midway between the hook 22 and the claw 26 there is provided a tapered slot or opening 27, and at the tapered end thereof there is a bolt 28; piercing the han-

dle-bar and provided at its opposite end with a nut 29.

For connecting the free end of a wire to the rotatable member or windlass 2 the wire-clamp 3 is provided with a rope 39, which is adapted to be wound upon the windlass. At the opposite end of the rope is a metallic hook 41, (best illustrated in Fig. 7 of the drawings,) the bill of this hook being formed substantially as described for the swiveled hook 23 and designed to be engaged with the slot or socket 13 in the windlass member 2.

In the employment of the device to stretch a wire, as indicated in the application, (shown in Figs. 1 to 3, inclusive,) the bracket 1 is applied to the post 42 and secured thereon by means of the chain 21, as best indicated in Fig. 1. The rotatable member 2 is mounted in the bearings 19 and 20 either before or after the bracket has been applied to the post, and then the handle-bar is applied to the open projected end of the rotatable member. The free end portion of the wire 43 is then engaged with the clamp 3, the hook 40 engaged with the rotatable member 2, and the handle-bar 4 is manipulated to turn the member 2, and thereby coil or wrap the rope 39 upon the windlass member, whereby the wire may be stretched to any desired tension. When the required amount of slack has been taken up and the handle-bar is in an upright position, as indicated in Fig. 2, its inner end is swung inwardly and upwardly across the adjacent face of the post, so as to lie transversely across the same, as indicated in Fig. 3, whereby the member 2 will be held against unwinding by the tension of the wire, and the latter will be held taut, so that it may be fastened to one of the other posts of the fence. In engaging the handle-bar with the rotatable member 2 it is preferable to have the handle-bar disposed beneath the member 2 with the hook 22 lying across the front of the member, as indicated in Fig. 1, so that when the handle-bar assumes a vertical position in rear of the member 2, as indicated in Fig. 2, the hook 22 may lie beneath the member, and when the handle-bar is turned transversely across the post, as shown in Fig. 3, the pressure against the handle-bar will be in a substantially horizontal direction at right angles to the plane of pivotal movement of the bar upon the swiveled hook, whereby the bar cannot then turn upon the hook under the force of the tension of the wire, and the rotatable member is effectually held against backward rotation.

It will here be noted that the adjustable movement of the handle-bar to engage the same with the post, which forms a locking element, is independent of and lateral or at an angle with respect to the direction or plane of movement of the handle to rotate the member 2.

Besides forming a windlass or drum the member 2 may be employed as a lever when

detached from the bracket by engaging a wire 45, as shown in Fig. 4, between the fork members 7 and 8 with one of the barbs of the wire lying across the crotch of the fork, so as to prevent slipping of the wire upon the member, after which the member 2 is placed against a post as a fulcrum and manipulated to stretch the wire, as by a lever. The member 2 may also be employed in another manner by connecting a wire 45 thereto, as hereinbefore described, and then connecting another wire 46, preferably by wrapping a short section of smooth wire 47 about the free end of the barb-wire 46 and then engaging the free end of the smooth wire with the pin or bolt 14 as a cleat. When the two wires are thus connected to the member 2, the latter is turned in the direction indicated by the arrow in Fig. 4 and passed beneath the wire 45 until the member has been completely reversed, thereby drawing the wires together and looping the same across each other, after which the free end of the smooth wire 47 is disengaged from the pin 14 and finally wrapped upon the wire 45, thereby completing the connection or splice between the two wires.

The handle-bar 4 may be employed to stretch wires as described for the members 2 by engaging one end with the fork 26 and the opposite end either with the slot or opening 27 or the bolt 28.

What I claim is—

1. The combination with a support, of a windlass mounted thereon and projected therefrom, a crank-handle arranged near one end of the windlass and located beyond the support, and connecting means between the handle and the windlass whereby the former may be turned into substantial parallelism with the latter, the support lying in the path of the handle when the latter is turned into substantial parallelism with the windlass.

2. The combination with an upright support, of a substantially horizontal windlass mounted across one face thereof and projecting from the support, a crank-handle at the projecting portion of the windlass, and connecting means between the handle and the windlass whereby the former may be turned into substantial parallelism with the latter and across that face of the support upon which the windlass is mounted, the support lying in the path of the handle when the latter is turned into substantial parallelism with the windlass.

3. The combination with a bracket adapted for application to a support, of a windlass mounted upon the bracket and projecting therefrom, a handle arranged at the projecting portion of the windlass and located beyond the bracket, and connecting means between the handle and the windlass whereby the former may be turned into substantial parallelism with the latter and across the bracket.

4. In a wire-stretcher, the combination of a rotatable drum, and a handle provided with a fastening swiveled upon and projected laterally therefrom and having a detachable connection with the drum.

5. In a wire-stretcher, the combination of a rotatable drum having a socket, and a handle provided with a laterally-projected swiveled hook, the bill of which is detachably engaged with the socket of the drum.

6. In a wire-stretcher, the combination of a rotatable drum having a socket formed in one side thereof, and a handle having a hook for detachable engagement with the socket, the bill of the hook being provided with a head projected in front and rear thereof, the rear side of the head being undercut to embrace one edge of the socket.

7. In a wire-stretcher, the combination of a rotatable drum having a socket formed in one side thereof, and a handle having a laterally-projected hook swiveled thereto at an intermediate point for detachable engagement with the socket, the bill of the hook being provided with a head projected in front and rear thereof, the rear side of the head being undercut to embrace one edge of the socket.

8. In a wire-stretcher, the combination with a post, of a rotatable drum mounted transversely thereon and projected therefrom, and an operating handle-bar lying wholly at one side of the drum pivoted intermediate of its ends to one side of the projected end portion of the drum and lying transversely across the same when in its operative position.

9. In a wire-stretcher, the combination of a supporting-bracket embodying angularly-related members, one of which is provided at its outer end with a hook, bearings projected laterally outward from the other member, a chain connected to the outer end of said other member and adapted for detachable engagement with the hook to embrace a support, an endwise-removable rotatable drum mounted in the bearings and provided with means for engagement with a wire to be stretched, and projected beyond the bracket, and an operating handle-bar swiveled intermediate of its ends to one side of the projected end portion of the drum.

10. In a wire-stretcher, the combination of a post-engaging bracket conforming to the configuration of two of the faces of the post, a flexible connection securing the bracket to the post, a drum mounted in suitable bearings of the bracket, and an operating handle-bar swiveled between its ends to the drum at one side of the bracket and adapted to be partially rotated for engaging the post to lock the drum, substantially as described.

11. In a wire-stretcher, the combination with a rotatable drum having a socket, of a wire-clamp having a flexible connection, and a hook carried by the free end of the connection and adapted for detachable connection

with the socket of the drum, the hook being formed to embrace the periphery of the drum when engaged with the socket of the latter.

12. In a wire-stretcher, the combination
5 with a rotatable drum having a socket in one side thereof, of a wire-clamp having a flexible connection, and a hook carried by the free end of the connection, the bill of the hook having a head projected in front and
10 rear thereof with its rear side undercut, the

headed bill of the hook being adapted for detachable engagement with the socket of the drum.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in 15 the presence of two witnesses.

JOHN H. MAJOR.

Witnesses:

R. MITCHELL,

F. M. GOFF.