

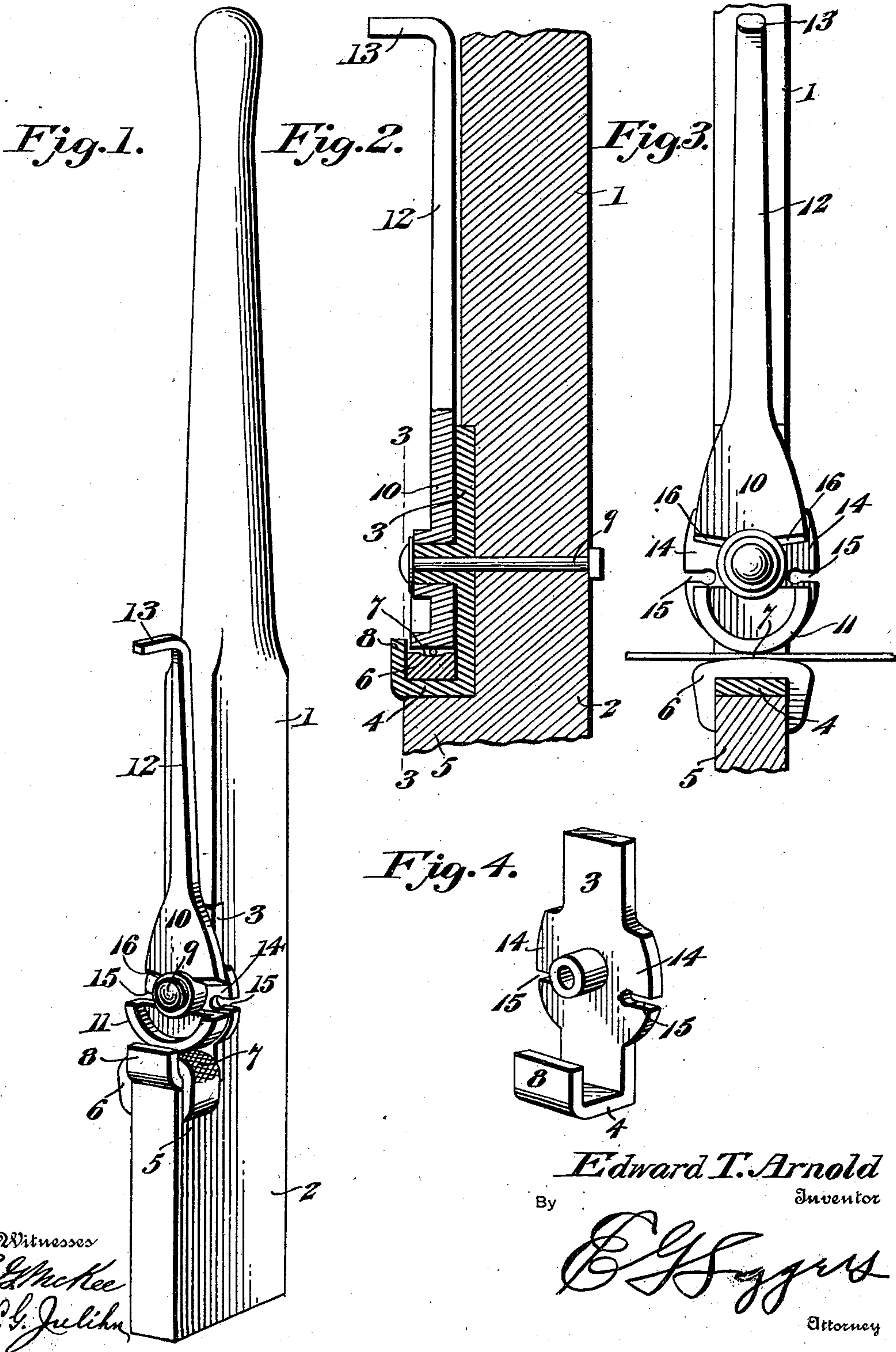
**No. 661,027.**

**Patented Nov. 6, 1900.**

**E. T. ARNOLD.**  
**WIRE STRETCHER.**

(Application filed July 12, 1900.)

(No Model.)



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# UNITED STATES PATENT OFFICE.

EDWARD T. ARNOLD, OF EUTAW, PENNSYLVANIA.

## WIRE-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 661,027, dated November 6, 1900.

Application filed July 12, 1900. Serial No. 23,385. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD T. ARNOLD, a citizen of the United States, residing at Eutaw, in the county of Washington and State of Pennsylvania, have invented a new and useful Wire-Stretcher, of which the following is a specification.

My present invention has relation to improvements in wire-stretchers, one object in view being to produce a device of simple and inexpensive construction for the stretching of fence-stringers or other wires.

A further object is to combine in a wire-stretcher a wire-cutting device embodied in the stretcher construction by shaping the base-plate and the pivoted clamping member to form cutters by means of which the wire or other strand may be quickly severed after having been stretched and secured to a suitable support.

A further object of the invention is to simplify the construction of the stretcher by utilizing the stationary jaw as a retaining device for one end of the base-plate in order that the several coöperative clamping members and their mounting may be secured upon a wooden or other suitable stretching arm or lever by a single bolt which also acts as the fulcrum of the pivoted jaw.

To the accomplishment of these several objects and others which will hereinafter more fully appear the invention consists in the construction and arrangement of parts to be hereinafter described, illustrated in the accompanying drawings, and succinctly defined in the appended claims.

In said drawings, Figure 1 is a perspective view of my stretcher complete. Fig. 2 is a central longitudinal section with parts of the bar broken away. Fig. 3 is a section on the line 3 3 of Fig. 2, and Fig. 4 is a detail view of the base-plate.

Referring to the numerals of reference employed to designate corresponding parts in the several views, 1 indicates an elongated bar or lever having one end tapered to form a handle and provided at a point nearer its opposite end with a clamping device for the secure retention of a wire designed to be stretched by the manipulation of the lever, with its comparatively broad end or foot 2 placed against the fence-post or other sup-

port to form a fulcrum from which the lever may be swung.

For the support of the clamping device I provide a base-plate 3, set into one edge of the bar 1 to be flush therewith and having a right-angular end 4 imposed against the contiguous end face of the foot extension 5 and securely clamped thereagainst by the substantially U-shaped stationary jaw 6. The stationary jaw 6 is mounted to straddle the right-angular end 4 of the plate 3 and has its ends clamped against the opposite sides of the foot extension 5, thus serving to securely retain the base-plate, which in turn effects the retention of the jaw 6 by reason of the fact that the extremity of the plate end 4 is bent back over the jaw and extends beyond the clamping-face 7 of said jaw to constitute a guard 8, designed to prevent the wire from being displaced from its proper position between the jaws. It will appear that the stationary U-shaped jaw is retained by its ends clamped upon the opposite sides of the foot extension 5 and that it is interlocked with the lower end of the plate 3. The only additional securing means for the base-plate is a bolt 9, passed edgewise through the bar 1 and extending beyond the plate 3 to constitute a pintle or fulcrum for the pivoted jaw 10, having a substantially semicircular engaging face 11 in effective proximity to the face 7 of the stationary jaw 6 and provided at the opposite side of its pivot with an extended handle 12, normally disposed along the edge of the bar 1 and having its extremity bent to form a handhold or grip 13, designed to facilitate the pivotal movement of the jaw 10 for the purpose of securely clamping a wire between the engaging faces of the jaws.

The curvature of the face 11 of the pivoted jaw may be varied somewhat in accordance with the conditions of use; but in order that the engaging faces of the jaws will approach to produce the necessary clamping action upon the swinging of the jaw-handle 12 the face 11 is struck from a center eccentric to the pivot of the jaw and is curved in somewhat-greater degree than the opposed face 7 of the jaw 6. The incorporation of the wire-cutter in the structure described comprehends the formation of lateral extensions 14 at opposite sides of the plate 3, which extensions



are recessed, as indicated at 15, for the reception of the wire designed to be severed by cutters 16, disposed substantially radial to the axis of the bolt 9 and formed by recessing the opposite edges of the pivoted jaw, as illustrated, the operation of cutting being facilitated by the inclination of the recesses 15 and the cutting edges 16 to dispose the wire at an angle to the plane of movement of the cutter.

10 In operation the jaw-handle 12 is swung away from the bar 1 to permit the insertion of a wire between the jaws by passing it laterally under the guard 8. The handle is then swung back to its normal position, causing the central portion of the engaging face 11 of the pivoted jaw to advance under the guard 8 and securely clamp the wire against the engaging face 7 of the stationary jaw 6. The foot of the bar or lever 1 is then properly fulcrumed against a suitable support, and the wire is stretched by urging the handle of said bar in the proper direction. After the wire is properly stretched and secured to the fence-post or other support it may be severed by passing it laterally into the recess 13, where it is cut by the advance of the cutter 16 across the plane of the recess through the pivotal movement of the pivoted jaw.

From the foregoing it will be observed that I have produced a simple, durable, and inexpensive wire-stretcher embodying the several advantageous features hereinbefore enumerated; but while the construction illustrated and described comprehends the preferred form of my device I desire to reserve to myself the right to effect such changes and modifications as may be properly embraced within the spirit of the invention.

What I claim is—

- 40 1. A wire-stretcher comprising a bar, a plate mounted upon the bar, a stationary jaw serving as a retaining device for the plate, and a movable jaw carried by the plate in coöperative relation with the stationary jaw.
- 45 2. A wire-stretcher comprising a bar, a plate carried by the bar and having an end bent out of the plane of the bar, a stationary jaw engaging the bent end of the plate and serving to secure said end to the bar, and a movable jaw mounted upon the plate in coöperative relation with the stationary jaw.
- 50 3. In a wire-stretcher, the combination with a bar, of a plate having one end bent at an angle to the bar and provided with a guard formed by locating the extremity of said end in a plane substantially parallel with the plate, and a substantially U-shaped station-

ary jaw engaging the bent end of the plate and embracing a portion of the bar, whereby said stationary jaw has interlocking engagement with the plate and is clamped upon the bar to retain the plate in place, and a movable jaw mounted upon the plate and having its engaging face extended under the guard in one position.

4. In a wire-stretcher, the combination with a bar provided with a lateral foot extension, of a plate disposed upon one face of the bar and having a bent end located upon the extension of the bar, a substantially U-shaped stationary jaw engaging the bent end of the plate and embracing the contiguous end of the bar extension, a single securing-bolt passed through the bar and plate, and a pivoted jaw fulcrumed upon the plate and in operative relation with the stationary jaw.

5. In a wire stretcher and cutter, the combination with a bar having a plate seated upon one edge thereof, stationary and movable jaws mounted upon the plate, a pair of cutters being formed in the movable jaw and disposed substantially radial to the axis of movement of the jaw, and a pair of recessed extensions formed upon the plate and located beyond the opposite sides of the bar and in operative relation with the cutters.

6. In a wire stretcher and cutter, the combination with a bar having a lateral foot extension, of a plate provided with recessed extensions extending beyond the opposite side faces of the bar and with an angular end bent back into parallel relation with the plate to form a guard, a substantially U-shaped stationary jaw having interlocking engagement with the bent end of the plate and embracing the contiguous end of the foot extension, a single retaining-bolt passed edgewise through the bar and piercing the plate between the recessed extensions thereof, a pivoted jaw fulcrumed upon the plate and formed with a semicircular engaging face and a handle at opposite sides of its pivot and with a pair of radial cutters movable over the recessed extensions of the plate for the purpose of severing a wire or wires located within the recesses of said extension.

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

EDWARD T. ARNOLD.

Witnesses:

L. FRANK BAKER,  
LENA MINEHART.