

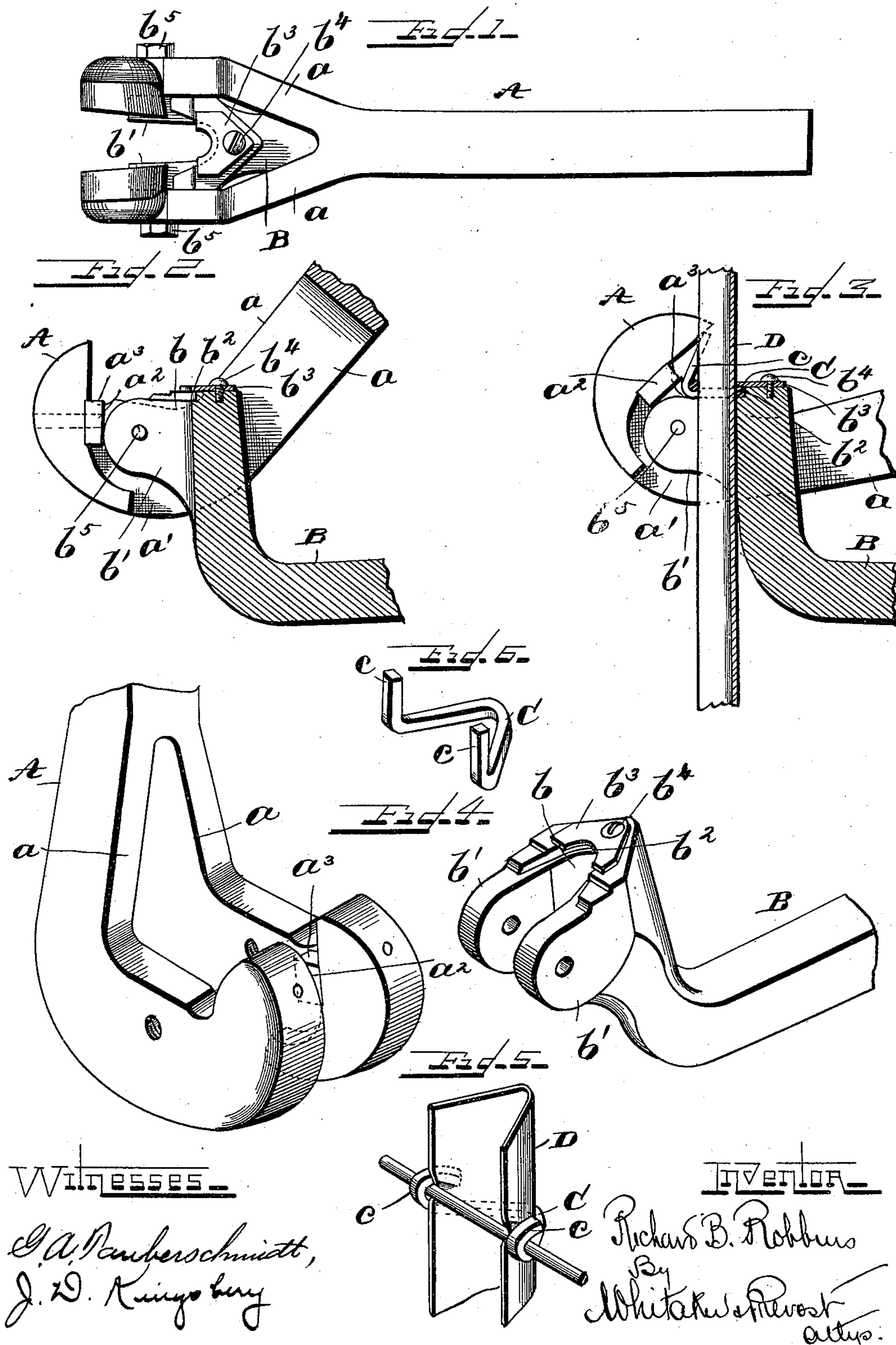
(No Model.)

R. B. ROBBINS.

TOOL FOR ATTACHING STAYS TO WIRE FENCES.

No. 599,196.

Patented Feb. 15, 1898.



UNITED STATES PATENT OFFICE.

RICHARD B. ROBBINS, OF ADRIAN, MICHIGAN.

TOOL FOR ATTACHING STAYS TO WIRE FENCES.

SPECIFICATION forming part of Letters Patent No. 599,196, dated February 15, 1898.

Application filed November 24, 1897. Serial No. 659,711. (No model.)

To all whom it may concern:

Be it known that I, RICHARD B. ROBBINS, a citizen of the United States, residing at Adrian, in the county of Lenawee and State of Michigan, have invented certain new and useful Improvements in Tools for Attaching Stays to Wire Fences; 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.

My invention is an improvement in tools for attaching vertical stays to wire fences; and it consists in the novel features herein-after described, reference being had to the accompanying drawings, which illustrate one form in which I have contemplated embodying my invention, and said invention is fully disclosed in the following description and claims.

Referring to the said drawings, Figure 1 represents a top plan view of the tool. Fig. 2 represents a partial longitudinal sectional view on an enlarged scale. Fig. 3 is a similar view showing the tool in the act of securing a stay to a fence-wire by means of a staple. Fig. 4 is a view of the two parts of the tool separated. Fig. 5 represents one of the stays attached to a fence-wire by the use of the tool. Fig. 6 is a detail perspective view of one of the staples which I preferably use with the tool.

In the building of wire fences either in the factory or upon the ground the need for vertical stays between the fence-posts has been felt, and I have found by experience that a stay composed of sheet metal bent into the form of a V in cross-section gives the best results. Such stays have been used heretofore; but it has been customary to cut or notch the stay to facilitate its connection to the line-wire to prevent slipping, and this has been found extremely disadvantageous, as it weakens the stay and impairs its strength, and consequently its life and usefulness.

The improved tool which is the subject of this invention is designed to attach a V-shaped stay to the line-wires by means of staples, as shown, the tool being so constructed that as the staple is clenched or bent around the line-wire the line-wire is simultaneously pressed against the edges of the stay, so as to indent

them and form recesses which prevent the stay and wire from moving with respect to each other.

In the drawings, A represents one of the jaws of the tool, and B represents the other. The jaw A is bifurcated to form a pair of curved or hook-shaped arms *a a*, separated to permit the jaw B to be pivoted between them. The curved arms *a a* have recessed portions *a'* on their inner sides to receive the jaw B, and each arm is provided with a clenching-face *a²*, preferably straight, terminating in a shoulder *a³*, which forces the line-wire to indent the edges of the stay.

The jaw B is provided with a V-shaped recess *b* to receive the stay, the jaw being provided with a perforated ear *b'* on each side of said recess, which engage the recessed parts *a' a'* of the other jaw. On the upper face of the jaw B is a recess *b²* around the upper end of the V-shaped recess *b*, which is of just the correct size and shape to receive the V-shaped end of the staple C, and the upper face of this jaw is provided with a plate *b³*, preferably separate from the jaw and secured thereto by a screw *b⁴*, which has a curved or V-shaped notch or recess on its inner edge, the edges of said notch overhanging the recessed portion *b²* of the jaw and confining the staple therein, as is clearly shown in Figs. 1 to 4, inclusive. The ears *b' b'* of the jaw B are pivoted in the jaw A, preferably by means of screws *b⁵ b⁵*, which pass through the arms *a a* of the jaw A and engage apertures in the ears *b' b'*.

Each of the jaws A B is provided with an operating-arm so arranged that by bringing said arms together the clenching-face *a²* of the jaw A will be moved toward the upper face of the jaw B.

C represents the staple which I prefer to employ and which consists of a piece of metal wire or rod bent into V shape to conform to the shape of the stay D and having its ends *c c* bent upward substantially at right angles to the central portion, as shown in Fig. 6.

To use this tool, the operator will place a staple in the top of the jaw B, with its central part lying in the recess *b²* of the jaw and resting on the bottom of said recess, with its V-shaped part lying beneath the plate *b³* and the ends of the staple extending upward.

The stay D is then placed with its edges against one of the line-wires, the tool is placed on the stay from the rear until the V-shaped back edge of the stay rests in the V-shaped recess of the jaw B and the line-wire resting on the staple within its upturned ends. The operating-arms are then brought together, which will cause the clenching-faces $a^2 a^2$ of the jaw A to engage the ends of the staple and bend them over the line-wire. (See Fig. 3.) As the bending progresses the shoulders $a^3 a^3$ of the jaw A will engage the portions of the staple which are bent around the line-wire and act in conjunction with the clenching-faces $a^2 a^2$ to clench the staple ends, the said shoulders forcing the line-wire against the edges of the stay, (see Fig. 2,) so as to cause it to indent the same and form a locking-seat for the wire without weakening the stay. Fig. 5 shows the appearance of the line-wire, staple, and stay after the staple is clenched.

What I claim, and desire to secure by Letters Patent, is—

1. A tool for attaching stays to wire fences, consisting of two jaws, one of said jaws being provided with means for holding a staple, the other jaw being provided with clenching-faces for engaging the ends of the staple and bending them around the line-wire, said faces being provided with shoulders, forming an angle therewith, for engaging the portions of the staple which are bent around the line-wire, and forcing the line-wire against the stay, substantially as described.

2. In a tool for attaching stays to wire

fences, the combination with a jaw provided with a recess adapted to receive and hold the stay, the upper face of said jaw being provided with a staple-retaining recess surrounding the upper end of said stay-receiving recess, of another jaw pivoted to the first jaw and provided with clenching-faces for engaging the ends of the staple and shoulders for engaging the portions of the staple which are bent around the line-wire, and forcing the line-wire to indent the stay, substantially as described.

3. In a tool for attaching stays to wire fences, the combination with a jaw provided with a V-shaped recess to receive and hold the stay and having a staple-holding recess on its upper face surrounding said stay-receiving recess and a staple-retaining plate detachably secured to the upper face of the jaw, and having its inner edges overhanging said staple-holding recess, of another jaw pivoted to the first jaw provided with two arms having a space between them to permit the tool to be placed in engagement with the stay, each arm having a clenching-face, and a shoulder adjacent thereto for engaging the portion of the staple which is bent around the line-wire, to force the line-wire to indent the edges of the stay, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

RICHARD B. ROBBINS.

Witnesses:

DORA D. RENIFF,
E. L. MILLS.