

No. 830,750.

PATENTED SEPT. 11, 1906.

E. E. TOBIAS.
TIE FOR WIRE FENCING.
APPLICATION FILED DEC. 13, 1905.

Fig. 1.

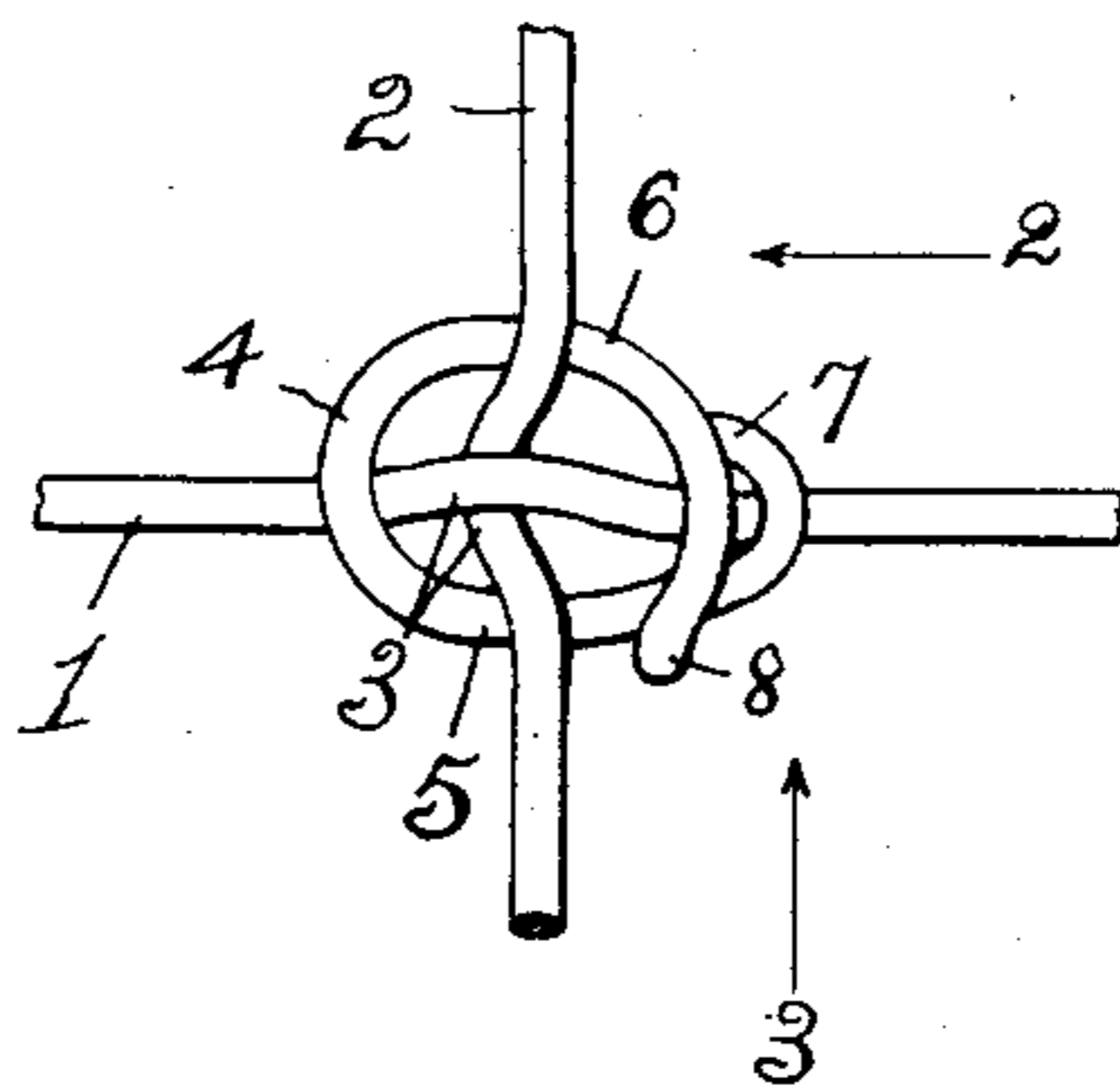


Fig. 2.

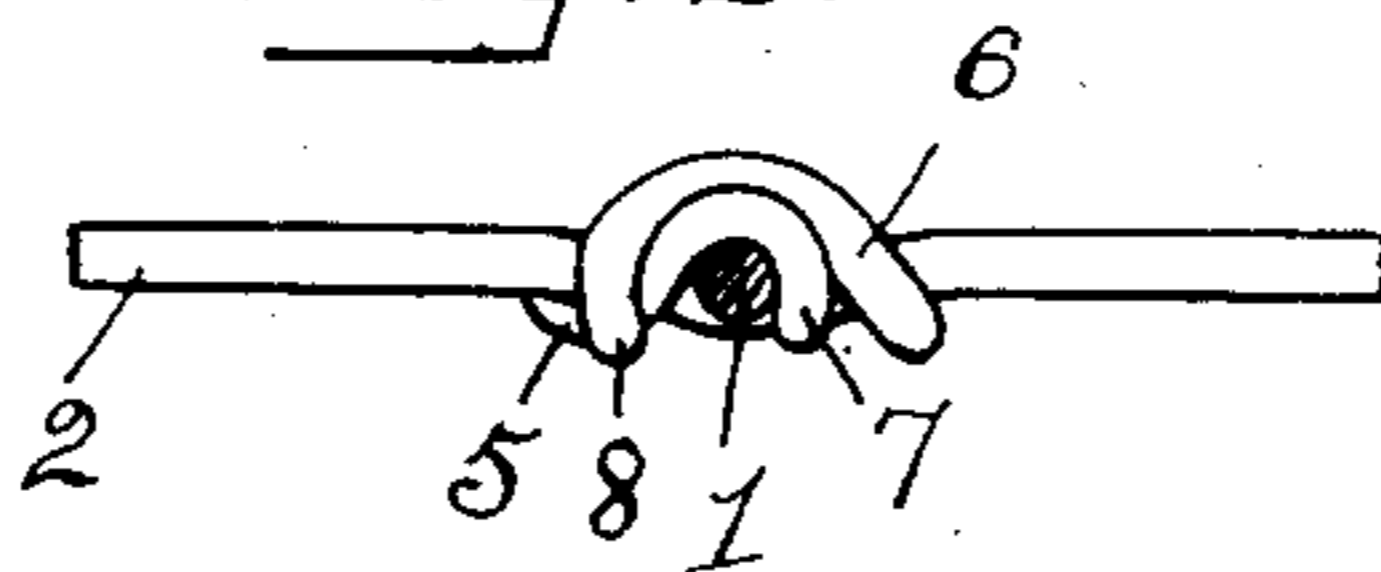
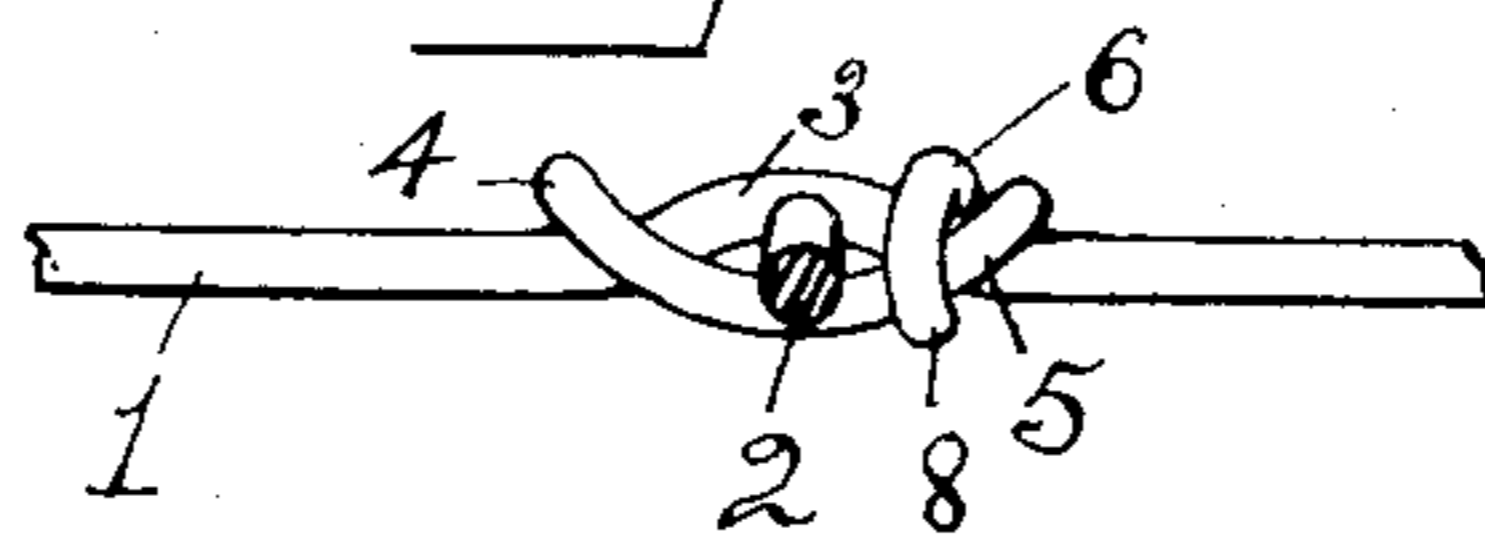


Fig. 3.



WITNESSES:

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TIE FOR WIRE FENCING.

No. 830,750.

Specification of Letters Patent.

Patented Sept. 11, 1908.

Application filed December 13, 1905. Serial No. 291,507.

To all whom it may concern:

Be it known that I, ERNEST E. TOBIAS, a citizen of the United States, and a resident of Adrian, in the county of Lenawee and State of Michigan, have invented certain new and useful Improvements in Ties for Wire Fencing; 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, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to ties for locking or uniting the stay or vertical wires of woven-wire fencing to the horizontal or line wires thereof at their points of intersection, whereby to hold said wires in rigid relation to each other; and it consists in the peculiar and specific structure hereinafter set forth, and particularly pointed out in the claim.

The object of my invention is the provision of a tie or knot of the class described which is so shaped about the intersecting wires adjacent their point of crossing as to form a strong and compact tie and avoid abrupt or acute bends in its formation, thus overcoming excessive resistance in the driving operation thereof.

To this end the invention consists of certain novel features of construction, combination, and arrangement of the parts, as fully described in the following specification and shown in the accompanying drawings, in which—

Figure 1 is a perspective view illustrating my improved tie as applied to the cross-wires of wire fencing. Fig. 2 is an end view, and Fig. 3 a side view thereof.

Referring to the drawings, 1 represents the horizontal or line wire, and 2 a vertical or stay wire of a woven-wire fence or fabric. These wires at their point of crossing are each provided with a kink or bend 3, which enables the major portions of the crossing wires to lie in a common plane and assists in maintaining them in place in a manner to prevent slipping.

The tie comprising my invention is of the staple class and is driven between suitable dies over the line or horizontal wire 1 from the opposite side thereof to that on which the stay-wire 2 is disposed, with its loop or body portion 4 coacting with the contiguous shoulder of the kink or bend 3 of the line-wire and

its legs 5 and 6 passing in rear of the stay-wire on opposite sides of the line-wire and each preferably in contact with the contiguous shoulder of the kink or bend 3 of the stay-wire. After crossing in rear of the stay-wire the legs 5 and 6 bend forward on converging curves and cross the outer or opposite side of the line-wire, the former crossing at a point more remote from the stay-wire than the point of crossing of the other leg and having its end formed with a return-bend the reëntrant portion 7 of which lies at the side of and has its terminal passed under and in contact with the contiguous portion of the leg 6, substantially as shown, while the leg 6 after crossing the line-wire passes at an oblique angle over the major portion of the leg 5, which lies intermediate the stay-wire and its reëntrant portion, and has its terminal 8 formed with a returning bend which completely embraces the outer arc of the leg thus crossed, as shown. It will be noted from this formation of tie that the leg 5 is twice crossed by the leg 6 on opposite sides of its point of contact with the line-wire, thus more firmly retaining the leg 5 to its contact with the line-wire and at the same time avoiding abrupt bends, which not only tend to weaken the tie, but also establish a considerable resistance to the driving of the staple, and that the provision of the hooked terminal 8 tends to more firmly unite the staple-legs and to prevent a spreading of the leg-terminals, due to a lateral strain on the crossed wires.

In Fig. 4, which illustrates a modification of my improved tie, 9 and 10 represent the line and stay wires, respectively, and 11 the loop of the staple, which embraces the outer side of the line-wire and has its legs 12 and 13 passed under the stay-wire and over the line-wire in the same manner as above described, the terminal of the leg 12 being formed into a recurved or reëntrant portion similar to the portion 7 in Figs. 1 and 2, while the terminal of the other leg crosses the leg 12 and is formed with a bend or hook 14, which partially passes around said leg 12, as shown. The provision of the hooked terminal 14 tends to more firmly unite the staple-legs and to prevent a spreading of the leg-terminals, due to a lateral strain on the line-wire.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In a wire fence, the combination with the intersecting line and stay wires crimped at

their points of crossing, of a staple having its
loop in contact with the face of the line-wire
at one side of the stay and its legs passed in
rear of the stay-wire and thence converging
5 and crossing the face of the line-wire—one
leg crossing the line-wire at a point more re-
mote from the stay-wire than the point of
crossing of the other leg, and the other leg
having its terminal crossing the face of the
10 leg disposed on the opposite side of the line-
wire to its major portion and formed with a
returning bend which completely embraces
the outer arc or side of the portion of the leg

thus crossed and terminates in a plane below
the rear surface of such leg, whereby to rig- 15
idly unite the terminal of the crossing leg to
the crossed leg and prevent a relative spread-
ing thereof.

In testimony whereof I have hereunto
signed my name to this specification in the 20
presence of two subscribing witnesses.

ERNEST E. TOBIAS.

Witnesses:

CHARLES S. WHITNEY,
MARY A. DUNN.