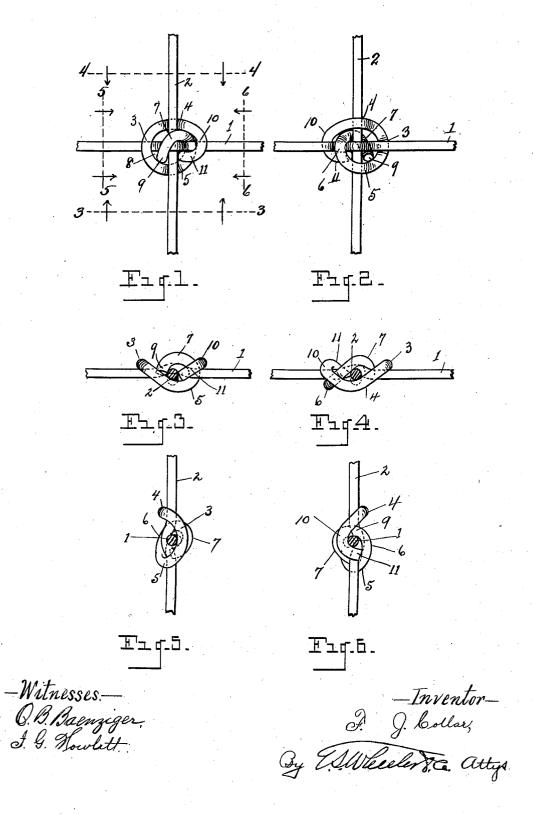
## F. J. COLLAR. TIE FOR WIRE FENCING. APPLICATION FILED APR. 21, 1906.



## UNITED STATES PATENT OFFICE.

FREDDIE J. COLLAR, OF ADRIAN, MICHIGAN.

## TIE FOR WIRE FENCING.

No. 836,179.

Specification of Letters Patent.

Patented Nov. 20, 1906.

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To all whom it may concern:

Be it known that I, FREDDIE J. COLLAR, a citizen of the United States, residing at Adrian, in the county of Lenawee, State of 5 Michigan, have invented certain new and useful Improvements in Ties for Wire Fencing; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in 10 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.

This invention relates to new and useful improvements in ties for joining the crossed strands of a wire fencing or fabric; and it consists in the formation illustrated in the accompanying drawings, and pointed out in

The object of the invention is to provide a tie that is simple and compact in form and wherein the arrangement is such as to enable the tie to be driven in suitable dies to 25 form it upon the crossed strands of a wire fencing in a manner to firmly tie said strands together.

The above object is attained by the tie illustrated in the accompanying drawings, in

30 which-

Figure 1 is an elevation of a fence-tie embodying my invention. Fig. 2 is an elevation of the reverse side of the tie. Fig. 3 is a sectional view through the stay-wire as on 35 line 3 3 of Fig. 1. Fig. 4 is a sectional view through the stay-wire as on line 4 4 of Fig. 1. Fig. 5 is a sectional view through the linewire as on line 5 5 of Fig. 1, and Fig. 6 is a sectional view through the line-wire as on 40 line 6 6 of Fig. 1.

Referring to the parts by their characters of reference, 1 designates the line-wire, and 2 the stay-wire, of a wire fencing, said wires crossing each other at right angles and being 45 crimped at the point of crossing to prevent lateral displacement, as will be well under-

stood in the art.

The tie employed to unite the crossed strands of the fencing is initially in the form 50 of a staple and is forced into place upon the crossed strands of the fencing to unite them in suitable dies, (not shown,) between the working faces of which the staple is mechanically driven. The tie is preferably driven 55 parallel with the line-wire, and when in its completed form upon the crossed wires of the

fabric the loop 3 of the tie or staple engages and crosses the line-wire with the legs 4 and 5 of the staple passing in the rear of the stay-wire. Leg 5 of the staple after passing 60 the stay-wire also crosses the line-wire in the rear thereof, as shown at 6, the end portion thereof bending upwardly around said linewire and terminating in an arc 7, which crosses the line-wire obliquely and whose 65 free extremity turns downwardly into the opening 8, formed between the loop of the tie and the crossed strands of the fabric, as shown at 9. The end portion of leg 4 bends upwardly and across the line-wire, as shown 70 at 10, the extremity of said leg terminating in a hook 11, which engages a side of the line-wire substantially parallel thereto and rests upon the leg 5 of the tie contiguous or in proximity to the stay-wire. By this ar- 75 rangement the ends of the tie are so disposed of as to cause them to lie within the plane of the figure described by the tie without the liability of their catching anything which may come in contact with the fencing, at the 80 same time uniting the crossed strands in a most substantial manner yet producing a tie that may be readily driven.

It will be noted that leg 5 at its terminal portion is formed into an enlarged eye which 85 embraces both of the crossed strands of the fencing, thereby preventing lateral displacement of said strands. It will also be observed that leg 4 in passing from the rear of the stay-wire upwardly across the line-wire 90 contacts the curved portion of leg 5, thereby assisting to lock said curved portion more

firmly in place.

Having thus fully set forth my invention, what I claim as new, and desire to secure by 95

Letters Patent, is-

1. The combination with the strand and stay wires crossing at right angles, of a tiewire in the form of a staple, having its loop engaging the strand-wire at one side of the 100 stay-wire, legs passing in the rear of the staywire, one leg after passing in the rear of the stay-wire also passing in the rear of the strand-wire and curving outwardly over the strand and stay wires obliquely thereto, the 105 other leg after passing the stay-wire curving outwardly across the strand-wire, having a hook-shape terminal which engages the side of the strand-wire nearly parallel therewith and adjacent to the stay-wire.

2. In a tie for wire fencing, the combina-

tion of the crossed strand and stay wires, of a

tie consisting of a staple having its loop contacting the strand-wire, legs passing in the rear of the stay-wire, one leg after passing the stay-wire curving outwardly across the strand-wire and having a hook-terminal which engages the strand-wire, the other leg after passing in the rear of the stay-wire also passing in the rear of the strand-wire and curving outwardly between the strand-10 wire and said first-mentioned leg, the end portion of said last-mentioned leg lying ob-

liquely across the strand-wire in the arc of a circle, its extremity terminating in the opening between the loop of the staple and the crossed wires of the fencing.
In testimony whereof I sign this specifica-

tion in the presence of two witnesses.

FRED. J. COLLAR.

Witnesses:

Anna Noone, J. N. Sampson.