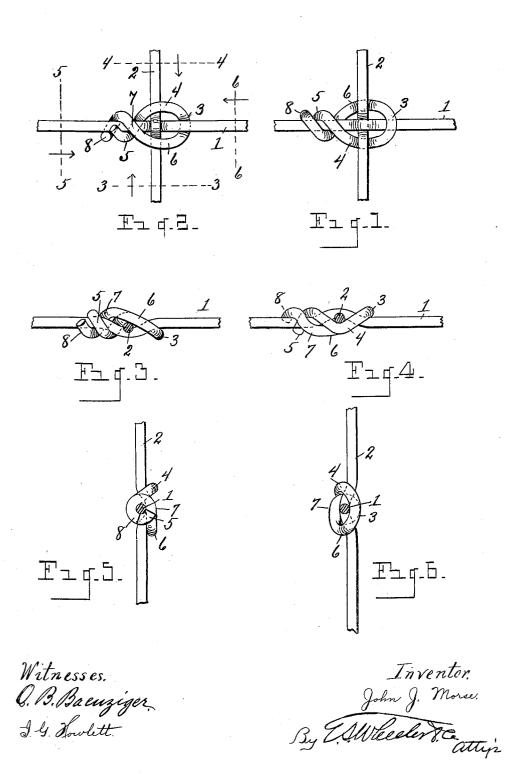
## J. J. MORSE. TIE FOR WIRE FENCING. APPLICATION FILED JULY 29, 1905.



## UNITED STATES PATENT OFFICE.

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## TIE FOR WIRE FENCING.

No. 823,224.

Specification of Letters Patent.

Patented June 12, 1906.

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To all whom it may concern:

Be it known that I, John J. Morse, a citizen of the United States, residing at Adrian, in the county of Lenawee, State of Michigan, 5 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 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 ties for uniting the transverse strands of wire fencing or other wire fabric; and it consists in the peculiar formation and association of parts hereinaf-

ter fully set forth and claimed.

The object of the invention is to provide a tie of the character described which may be readily driven between forming-dies for the purpose of directing the legs of the tying-staple around the crossed wires of the fabric and which will firmly unite said strands in a manner to prevent a longitudinal movement of said strands or a lateral separation thereof. The above object is attained by the structure illustrated in the accompanying drawings, in which—

Figure 1 is an elevation of the tie uniting the crossed strands of a fabric. Fig. 2 is an elevation of the side of the tie opposite to that shown in Fig. 1. Fig. 3 is a sectional view 35 through the stay-wire, as on line 3 3 of Fig. 2. Fig. 4 is a similar view as on line 4 4 of Fig. 2. Fig. 5 is a sectional view through the longitudinal or strand wire, as on line 5 5 of Fig. 2. Fig. 6 is a similar view as on line 6 6 of Fig. 2.

Referring to the characters of reference, 1 indicates the strand-wire, and 2 the transverse or stay wire which crosses the strandwire at right angles, said wires being crimped at their point of crossing to prevent lateral displacement, as is common in the art.

The tie is in the form of a wire staple which is driven between forming-dies (not shown) that embrace the crossed strands of the fab50 ric, said dies so directing the legs of the staple that when the tie is completed the loop end 3 of the staple will lie upon and across the strand-wire with the leg 4 passing in the rear

of the stay-wire and obliquely over the strand-wire beyond the stay, the terminal of said leg 4 55 being formed in a spiral twist 5 partially around the strand-wire, while the leg 6 also passes in the rear of the stay-wire and in the rear of the line-wire as well, crossing the line-wire on the side thereof opposite to that crossed 60 by the terminal of leg 4, as shown at 7 in Fig. 2, the terminal of said leg 6 winding in spiral form around the line-wire and terminating adjacent to the terminal 5, as shown at 8. By this arrangement the legs of the staple are 65 caused to first cross the line-wire on opposite sides thereof, whereby it is firmly held between said terminal portions, the extreme ends of the terminal portions being wound closely to the line-wire in a manner to 70 firmly secure the tie in place and permanently unite the crossed strands of the fabric.

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

Letters Patent, is—

1. In a tie for wire fencing, the combination with the crossed strand and stay wires of a tie-wire having its loop end crossing the line-wire at one side of the stay-wire, legs passing in the rear of the stay-wire, the terminal of one leg crossing in front of the line-wire beyond the stay and formed into a spiral twist which partially embraces the line-wire, the terminal of the other leg crossing the face of the line-wire opposite to that crossed by 85 the terminal of the first-mentioned leg, and culminating in a spiral twist around the line-

2. In a tie for wire fencing, the combination with the crossed strand and stay wires, 90 of a tie having its loop end crossing the strand-wire at one side of the stay-wire, legs passing in the rear of the stay-wire, the terminals of said legs crossing the strand-wire obliquely beyond the stay-wire on opposite 95 sides of said strand-wire, their end portions culminating in a spiral twist around the strand-wire and terminating in approximate relation.

In testimony whereof I sign this specifica- 100 tion in the presence of two witnesses.

JOHN J. MORSE.

Witnesses:

GEO. M. AYERS, GOLDIE S. ROGERS.