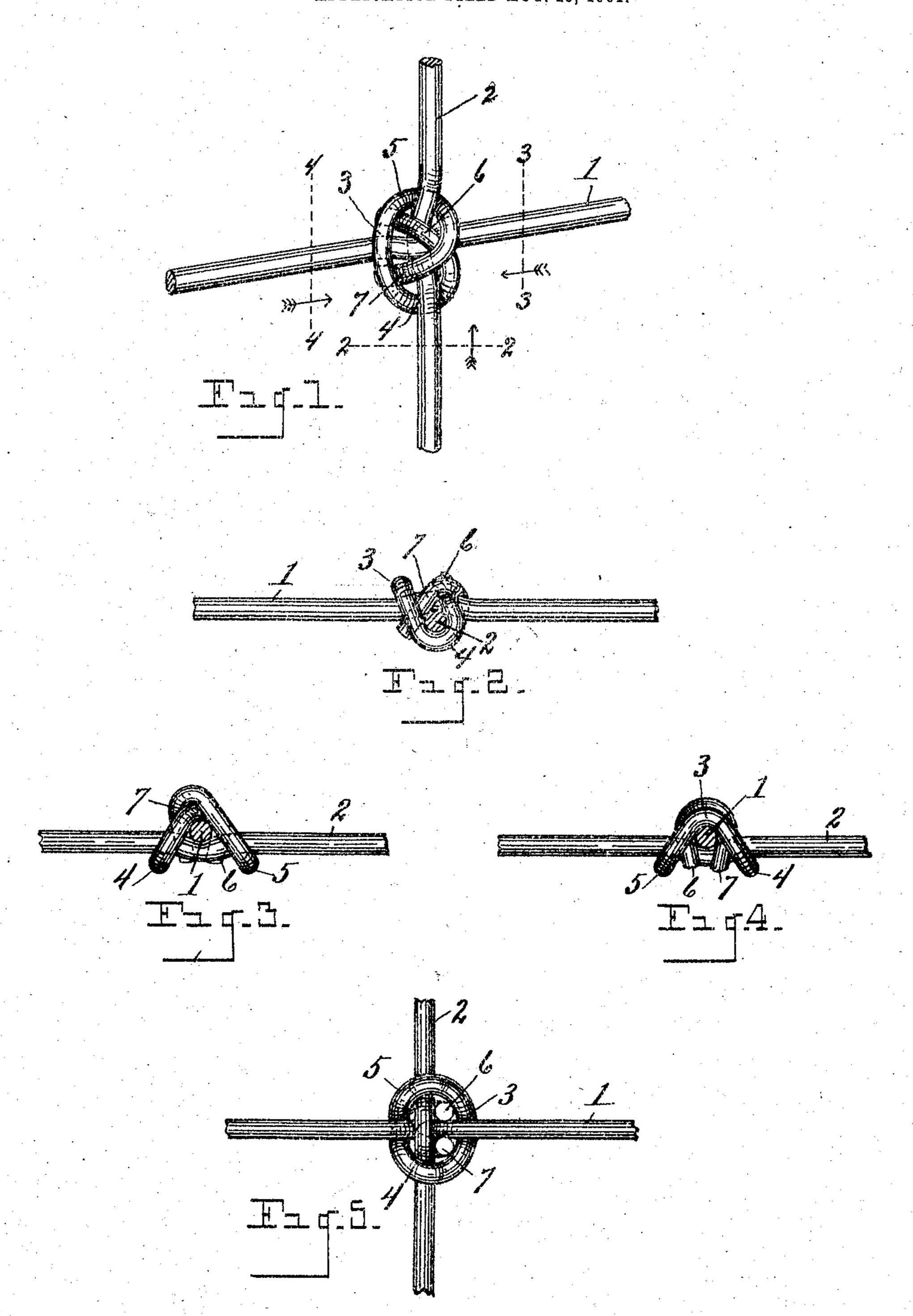
## S. S. WITHINGTON. TIE FOR WIRE FENCING. APPLICATION FILED AUG. 13, 1904.



Witnesses: O. Breiziger

## United States Patent Office.

SHERMAN S. WITHINGTON, OF ADRIAN, MICHIGAN.

## TIE FOR WIRE FENCING.

SPECIFICATION forming part of Letters Patent No. 786,931, dated April 11, 1905.

Application filed August 13, 1904. Serial No. 220,635.

To all whom it may concern:

Be it known that I, Sherman S. Withington, a citizen of the United States, residing at Adrian, in the county of Lenawee, State of Michigan, have invented certain new and useful Improvements in Ties for Wire Fencing; and I dodeclare 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 a tie for wire fencing or wire fabric; and it consists in the peculiar formation hereinafter fully set forth, and pointed out particularly in the claims.

The object of the invention is to provide a tie for the crossed strands of a wire fencing or fabric wherein the arrangement is such as to economize in the length of wire used, to form a firm and compact tie which will securely unite the crossed strands at their junction, and to dispose of the ends of the tie in a manner to prevent their protrusion. The above object is attained by the structure illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a tie involving my invention uniting the crossed strands of a wire fencing. Fig. 2 is a sectional view through the vertical or stay wire as on line 2 2 of Fig. 1. Fig. 3 is a sectional view through the longitudinal or strand wire as on line 3 3 of Fig. 1. Fig. 4 is a sectional view through the strand-wire as on line 4 4 of Fig. 1. Fig. 5 is an inverted plan view of the tie and united strands.

Referring to the characters of reference, 1
designates the longitudinal or strand wire, and
2 the vertical or stay wire of a wire fencing.
These wires, as is common in the art, are
crimped at their point of crossing to prevent
lateral displacement thereof. The tie-wire
is first made in the form of a staple and is
caused to form itself around the crossed strands
to unite them, as shown, in suitable dies, (not
shown,) in which said staple is driven. When
the staple or tie-wire is driven into place, its
loop end 3 is caused to lie across the strand-

wire, and one leg, 4, thereof is caused to pass under the stay-wire and upwardly across the strand-wire on the opposite side of the staywire, its terminal portion 6 lying between the stay-wire and the loop of the staple, while the 55 leg 5 of the staple also passes under the staywire on the opposite side of the line-wire from leg 4, thence upwardly over the line-wire and the leg 6 of the staple, so that said legs cross nearly at right angles, the terminal portion 60 7 of leg 5 terminating between the loop of the staple and the stay-wire on the opposite side of the line-wire from terminal 6 of leg 4. By this arrangement a very compact tie is formed which requires but a comparatively 65 short length of wire and in which the terminals of the tie are confined and protected in a manner to prevent them from protruding beyond the plane of the tie, obviating the liability of anything becoming caught thereon. 70 The tucking of the terminals of the legs of the staple between the loop of the staple and the stay-wire not only protects said terminals, but materially strengthens the tie. Owing to the fact that the terminals are so positioned, it is 75 impossible to disengage them by any lateral strain upon the strand-wire.

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 stay and strand wires crossing at right angles, of the tie-wire in the form of a staple, the loop of which crosses the strandwire and whose legs pass in the rear of the 85 stay-wire, the terminals of said legs curving upwardly and forming return-bends which cross the strand-wire and each other, their end portions lying between the loop of the staple and the stay-wire on each side of the strand-90 wire.

2. In a tie for wire fencing, the combination with the stay and strand wires crossing at right angles, of the tie-wire in the form of a staple, the loop thereof crossing the strand-95 wire and the legs of the staple passing in the rear of the stay-wire, the end portions of the legs curving upwardly and crossing the strandwire on the opposite side of the stay-wire from the loop and also crossing each other, the ter-

minals of said legs lying between the loop of

the staple and the stay-wire.

3. In a tie for wire fencing, the combination with the strand and stay wires crossing at right angles, of the tie-wire in the form of a staple, the loop thereof crossing the strandwire and the legs of the staple passing in the rear of the stay-wire, the end portions of the legs curving upwardly and across the strand-wire on the opposite side of the stay-wire from

the loop, and also crossing each other at right angles, the ends of said legs terminating at a point between the loop of the staple and the stay-wire.

In testimony whereof I sign this specification 15

in the presence of two witnesses.

SHERMAN S. WITHINGTON.

Witnesses:

Wallace Westerman, Kathryn E. Becker.