

No. 840,113.

PATENTED JAN. 1, 1907.

E. W. CORNELL.
WIRE FENCE CONSTRUCTION.
APPLICATION FILED FEB. 10, 1906.

Fig. 1.



Fig. 2.

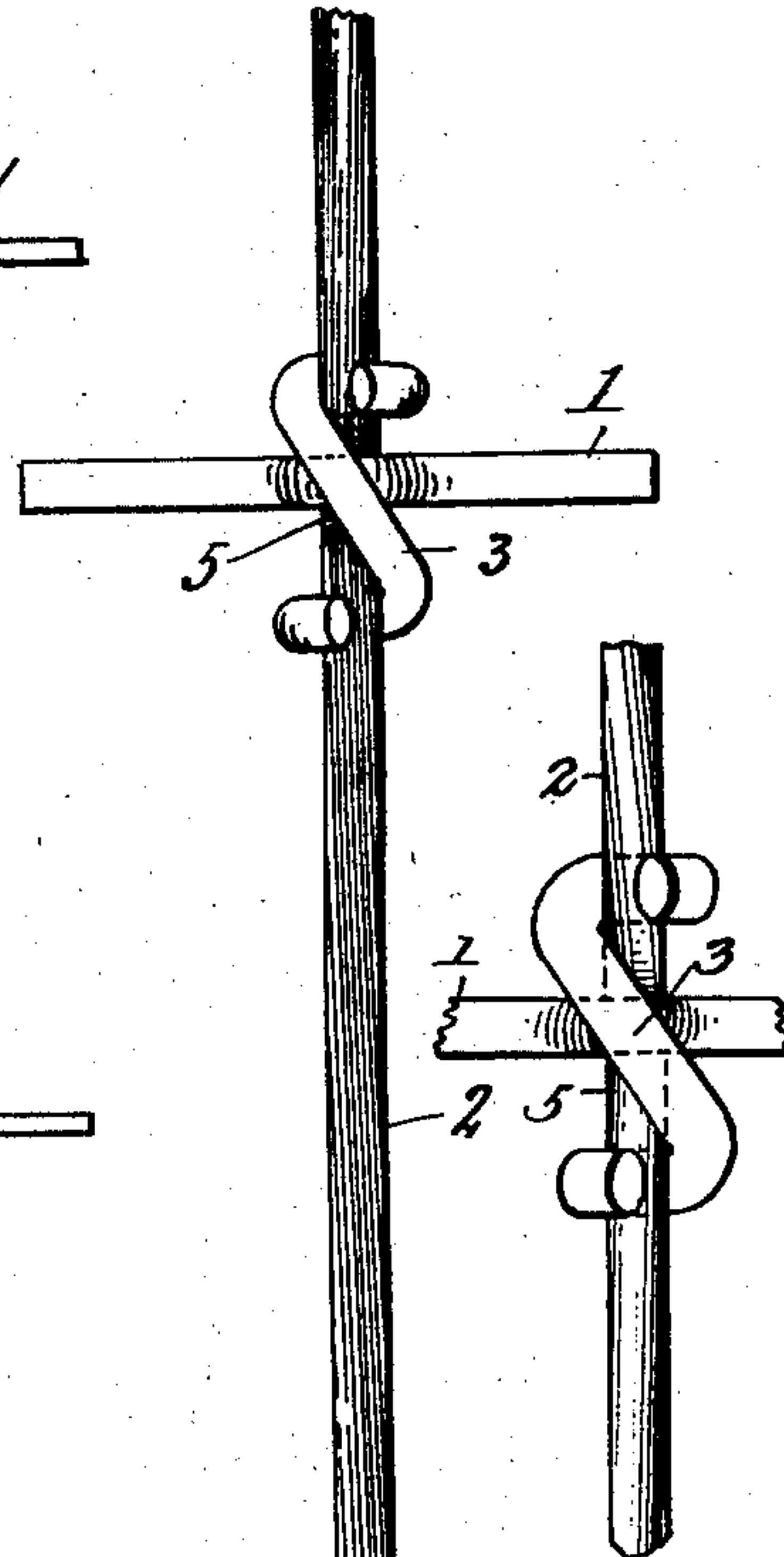
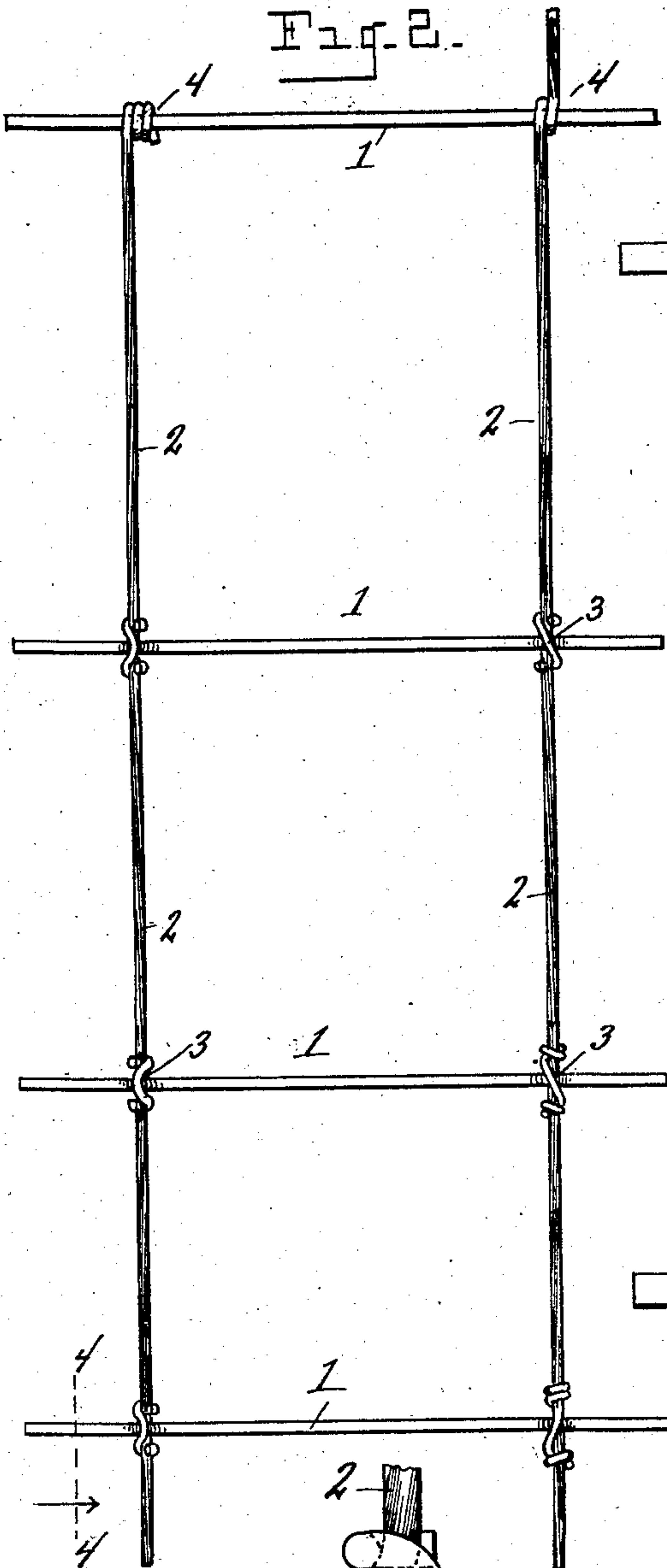


Fig. 5.

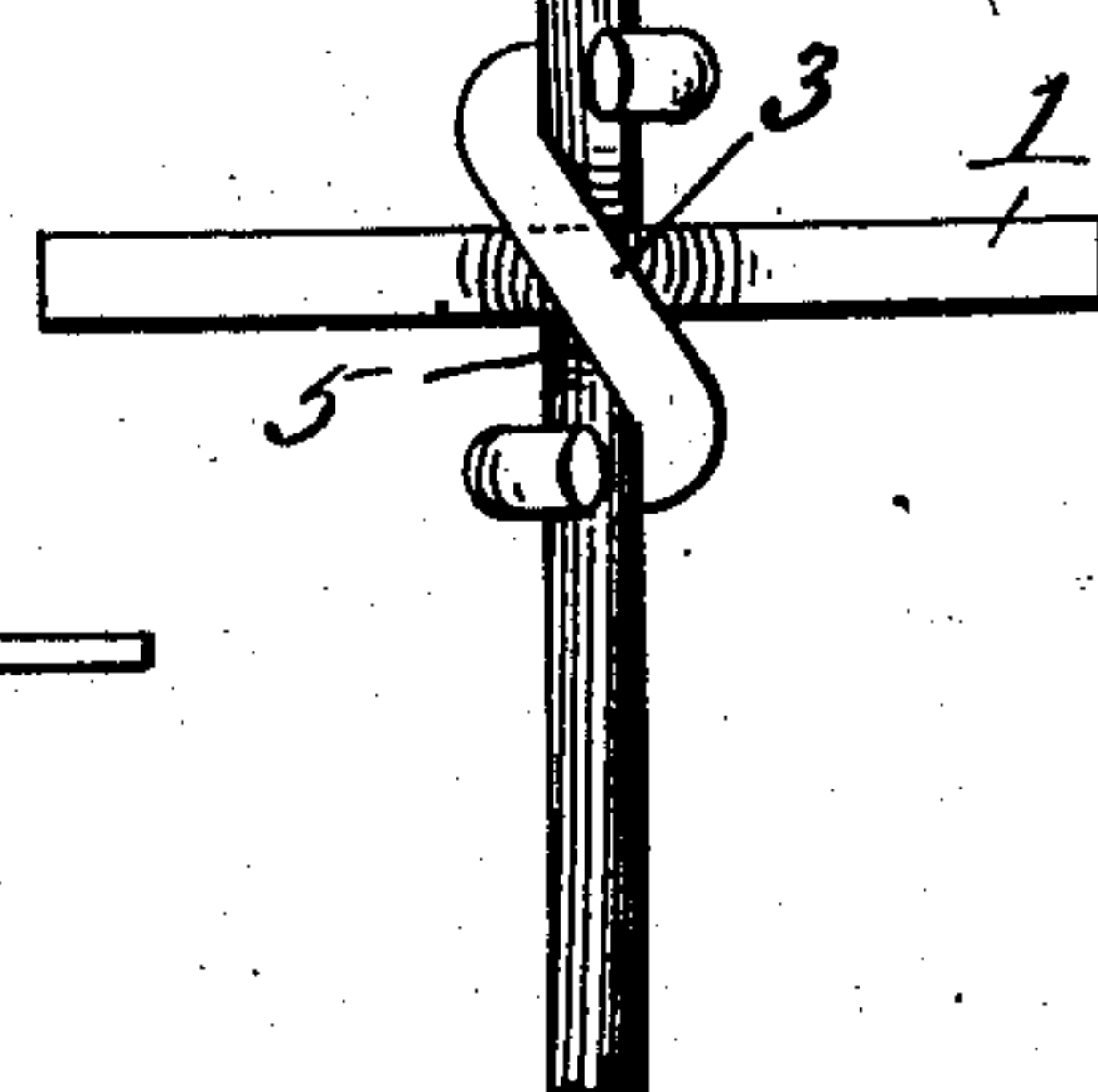


Fig. 3.

Witnesses.—
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UNITED STATES PATENT OFFICE.

EVAN W. CORNELL, OF ADRIAN, MICHIGAN.

WIRE-FENCE CONSTRUCTION.

No. 840,113.

Specification of Letters Patent.

Patented Jan. 1, 1907.

Application filed February 10, 1906. Serial No. 300,379.

To all whom it may concern:

Be it known that I, EVAN W. CORNELL, 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 Wire - Fence Construction; 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 new and useful improvements in wire-fence construction; and it consists in the peculiar association and combination of parts hereinafter fully set forth, and pointed out particularly in the claims.

The object of the invention is to provide means for joining the crossed strands of a wire fencing or fabric in such manner as to prevent a lateral displacement of said strands and to maintain the strands at the junction thereof firmly in contact. The above object is attained by the structure illustrated in the accompanying drawings, in which—

Figure 1 is an end elevation of a section of wire fencing involving my invention. Fig. 2 is a plan or side elevation thereof. Fig. 3 is an enlarged view of a cross or stay wire attached to the longitudinal wires in a manner involving my invention. Fig. 4 is a fragmentary view in section as on line 4 4 of Fig. 2. Fig. 5 is an exaggerated view showing the torsion or twist of the stay-wire on each side of the line-wire.

Referring to the characters of reference, 1 designates the line-wires of a wire fencing, and 2 the vertical or stay wires. In the manufacture of fencing herein shown the crossed stay and strand wires are joined at their points of intersection by means of staples or other forms of ties 3 or by making the stay-wires in sections and wrapping their meeting ends around each other in a manner to securely bind said wires and the structures together. In making such fencing it has been found somewhat difficult to so join the crossed strands of the fence in a manner to prevent lateral displacement of said strands at their intersecting points. To maintain the crossed strands always firmly joined at their intersecting points in a manner to prevent lateral displacement, I conceived the

idea of employing the torsional force of the wire itself by twisting the stay-wire between the intersecting strand-wires before or after the application of the tie which joins said wires together.

In the application of my invention the end of the stay-wire is secured to the marginal wire of the fabric by wrapping the stay-wire around the marginal wire, as shown at 4, or by securing the end of the stay-wire to the marginal wire in any other suitable manner. The stay-wire is then twisted at or near the marginal wire, and at or near the next succeeding strand-wire, and at the point of crossing the strand-wire a lateral bend 5 is formed therein. This torsion, which is placed in the stay-wire, is more clearly shown in an exaggerated form in Fig. 5. While the stay-wire is still twisted, the tie or staple 3, of any suitable form, is applied to unite the stay and strand wires. Thus secured by the tie or staple, the tendency of the stay-wire to untwist will cause the bend 5 therein to bear forcibly against the strand-wire, thereby holding the stay-wire against slipping longitudinally of said strand-wire. The torsional spring, which is stored in the strand-wire by twisting, is also exerted to prevent the coil 4 from slipping upon the marginal strand of the fabric. It will be understood that the stay-wire is twisted between each of the strand-wires that it crosses before the application of the tie or staple, which secures the stay to said strands, the stay being preferably twisted in opposite directions between the several strand-wires, first to the left and then to the right; the torsional strain which is placed on the stay-wire being indicated by the spiral lines thereon in the drawings.

It will now be understood that the tendency of the twisted portions of the stay-wire to untwist will cause the bend 5 in said wire at the point of intersection of each of the strand-wires to bear forcibly against said strand-wire in a manner to bind it between said bend and the staple or tie 3, so as to prevent slippage and always maintain the tie-wire firmly in place.

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

1. A wire fabric consisting of intersecting strands, one of which is twisted to place a torsional strain thereon, a tie for uniting the strands at their points of intersection, and means of which said tie is a part for prevent-

ing the untwisting of the strand to which the torsional strain is applied.

2. A wire fabric, consisting of crossed strands, one of which is twisted at or near the
5 intersecting strands to place a torsional strain thereon, the twisted strand having lateral bends which engage the intersecting strands to prevent the untwisting of the

twisted strand, and ties for joining said strands at their points of intersection. 10

In testimony whereof I sign this specification in the presence of two witnesses.

EVAN W. CORNELL.

Witnesses:

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