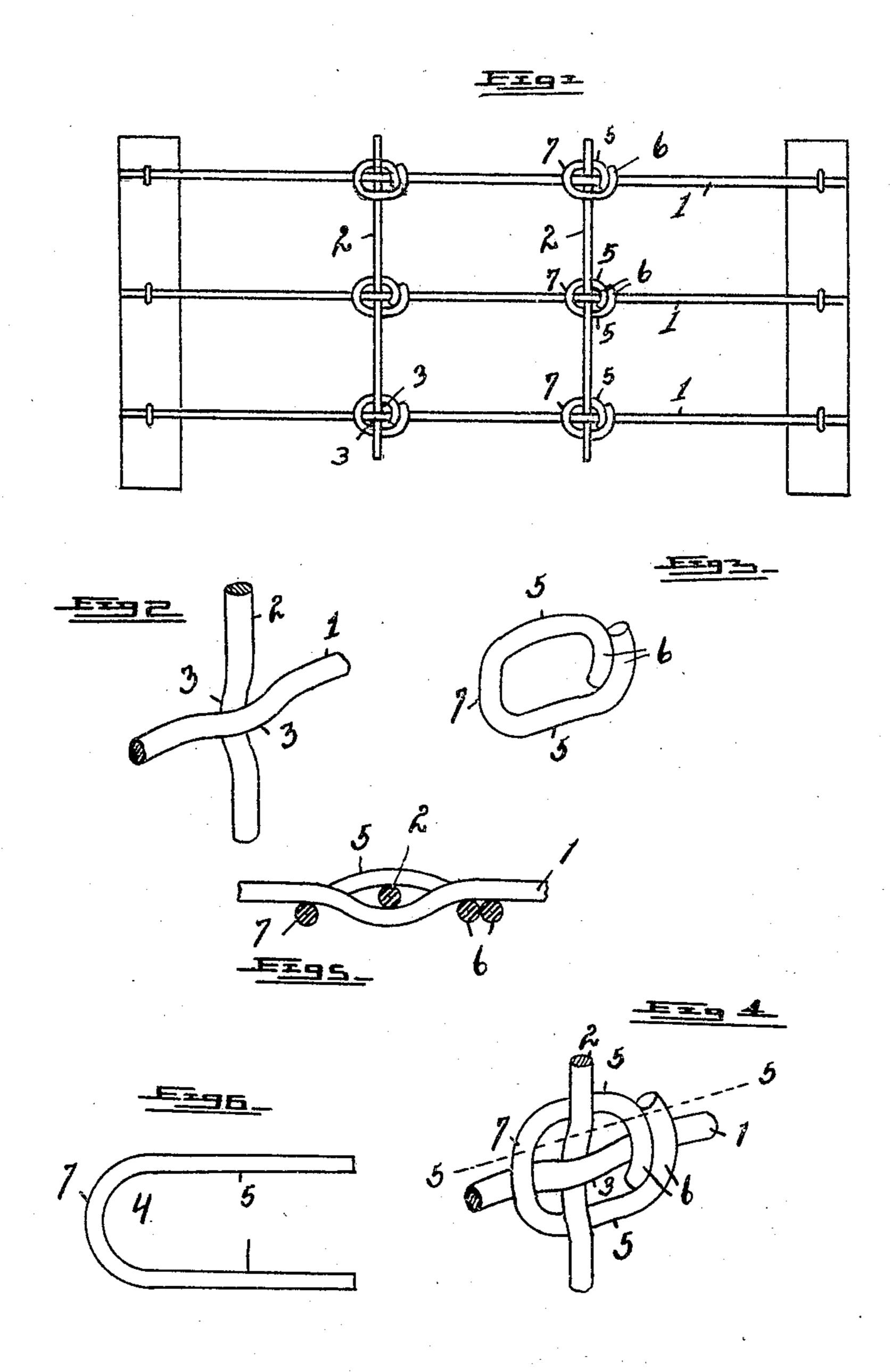
## G. S. TIFFANY. KNOT OR TIE FOR WIRE FENCES.

APPLICATION FILED MAY 29, 1903.

NO MODEL.



Mitnesses: P.G. Hall, P.G. Maight

By His Attorney & CS Wheeles Co Inventor Cares Siffany

## United States Patent Office.

GEORGE SYLVESTER TIFFANY, OF TECUMSEH, MICHIGAN, ASSIGNOR TO ADRIAN WIRE FENCE CO., OF ADRIAN, MICHIGAN, A CORPORATION.

## KNOT OR TIE FOR WIRE FENCES.

SPECIFICATION forming part of Letters Patent No. 774,210, dated November 8, 1904.

Application filed May 29, 1903. Serial No. 159,228. (No model.)

To all whom it may concern:

Be it known that I, George Sylvester Tiffany, a citizen of the United States, residing at Tecumseh, in the county of Lenawee, State of Michigan, have invented certain new and useful Improvements in Knots or Ties for Wire Fences; 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 a knot or tie for uniting the intersecting wires in wire fencing and wire fabric; and it consists in the peculiar and specific structure hereinafter fully set forth, and pointed out particularly in the claim.

The object of the invention is to provide a simple, compact, and strong tie which requires but a comparatively small amount of wire in its formation and which is of such shape as to enable it to be readily driven into place in properly-formed dies, which embrace and confine the cross-wires of the fencing during the operation of forcing the knot or tie thereon.

The above object is attained by the knot or tie illustrated in the accompanying drawings, in which—

Figure 1 shows a section of fencing wherein the intersecting wires are united by means of this improved tie. Fig. 2 is a perspective view of the cross-wires before the application of the tie thereto. Fig. 3 is a perspective view of the tie in the form which it occupies when in position to unite the cross-wires of the fence. Fig. 4 is a perspective view of the tie mounted upon and uniting said wires. Fig. 5 is a horizontal section as on line 5 5 of Fig. 4. Fig. 6 is a plan view of the staple which forms the tie before being driven into position on the intersecting wires.

Referring to the characters of reference, 1 designates the longitudinal or horizontal wires of the fence or fabric, and 2 the stay or vertical transverse wires. These wires at their point of crossing are provided with a kink or

bend 3, which causes said wires to lie one with- 50 in the other and assists in maintaining them in place in a manner to obviate slipping. The tie which unites said wires is originally in the form of a staple 4, as shown in Fig. 6.

To force the staple into position upon the 55 crossed wires so as to firmly tie them together, suitable dies (not shown) are employed, which guide the legs 5 of said staple, so as to cause them to pass in the rear of the vertical wire 2 and direct their end portions 6 upon and 60 across the horizontal wire 1 beyond said vertical wire, causing said end portions to lie in concentric curves across said wire in the same plane, while the loop portion 7 of said tie or staple lies upon the cross-wire 1 upon the op-65 posite side of the vertical wire.

In the art of securing the intersecting wires of fencing and other fabric at their point of crossing by means of a staple or tie-wire which is driven into position upon and about said 70 cross-wires it is essential that said tie be given such shape when forced into position as to render the driving of it into place practically and mechanically possible. Where the staple or tie when driven into place is required to assume 75 a shape which involves an abrupt or material departure from a uniform and general direction, the resistance offered by said staple necessary to cause it to depart thus abruptly from general course is in deflecting the ends of the 80 staple laterally to bend them around the horizontal wire, will cause the staple to buckle and loose its formation, rendering the driving of it in the manner described impracticable. The knot or tie herein shown overcomes these 85 objections, for the reason that it may be readily driven into place, owing to the fact that it is not caused to make an unusual departure from the direct or general course which it follows in shaping itself upon the crossed wires. The 90 end portions 6 of the staple or tie are caused to lie one within the other, describing the arcs of concentric circles and extending past one another, so as to lie in the same plane, thereby avoiding any abrupt angles, which tend to re- 95 tard the shaping of the staple into the required form of tie when driven into position.

Notwithstanding the fact that the tie herein

shown may be readily and easily formed upon the cross-wires, it is of such a character as to securely unite said wires, owing to the fact that the concentric end portions 6 extend well beyond the longitudinal wire in both directions.

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

Letters Patent, is—

The combination with the intersecting strand and stay wires crimped at their point of crossing; of a tie comprising a loop having one end crossing the face of the strand-wire

at one side of the stay, legs passing in rear of the stay, and hook-shaped terminals standing in parallel relation to each other, one more remote from the stay than the other and contacting with the straight portion of the strandwire and adjacent its shoulder, while the other contacts with the face of said shoulder.

In testimony whereof I sign this specifica-

tion in the presence of two witnesses.

GEORGE SYLVESTER TIFFANY.

Witnesses:

N. B. HAYES, GERTRUDE SCOTT.