

(No Model.)

2 Sheets—Sheet 1.

G. M. DEPEW.
WIRE FENCE.

No. 525,448.

Patented Sept. 4, 1894.

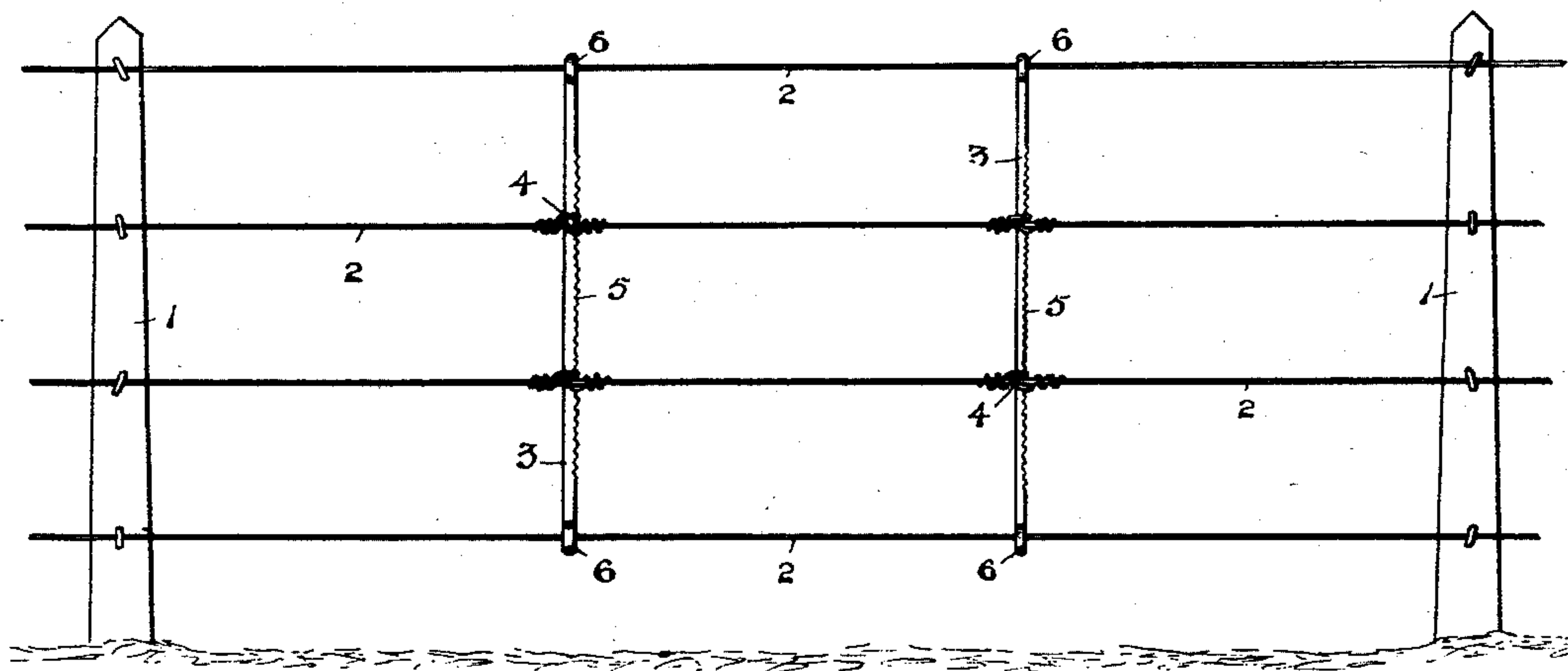
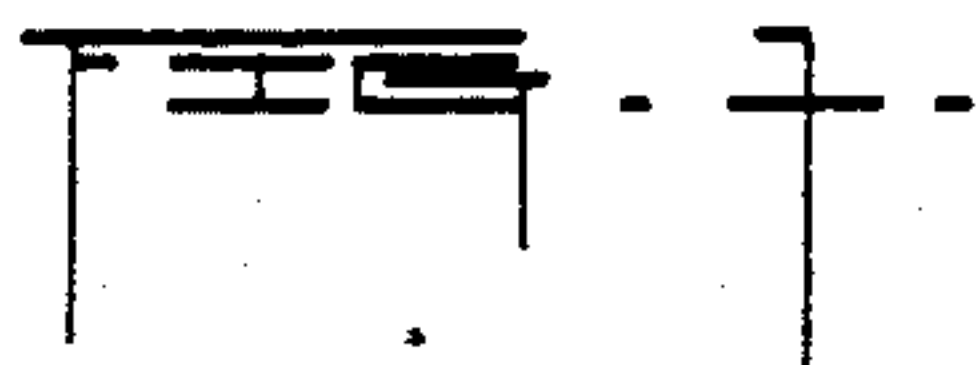


FIG. 2

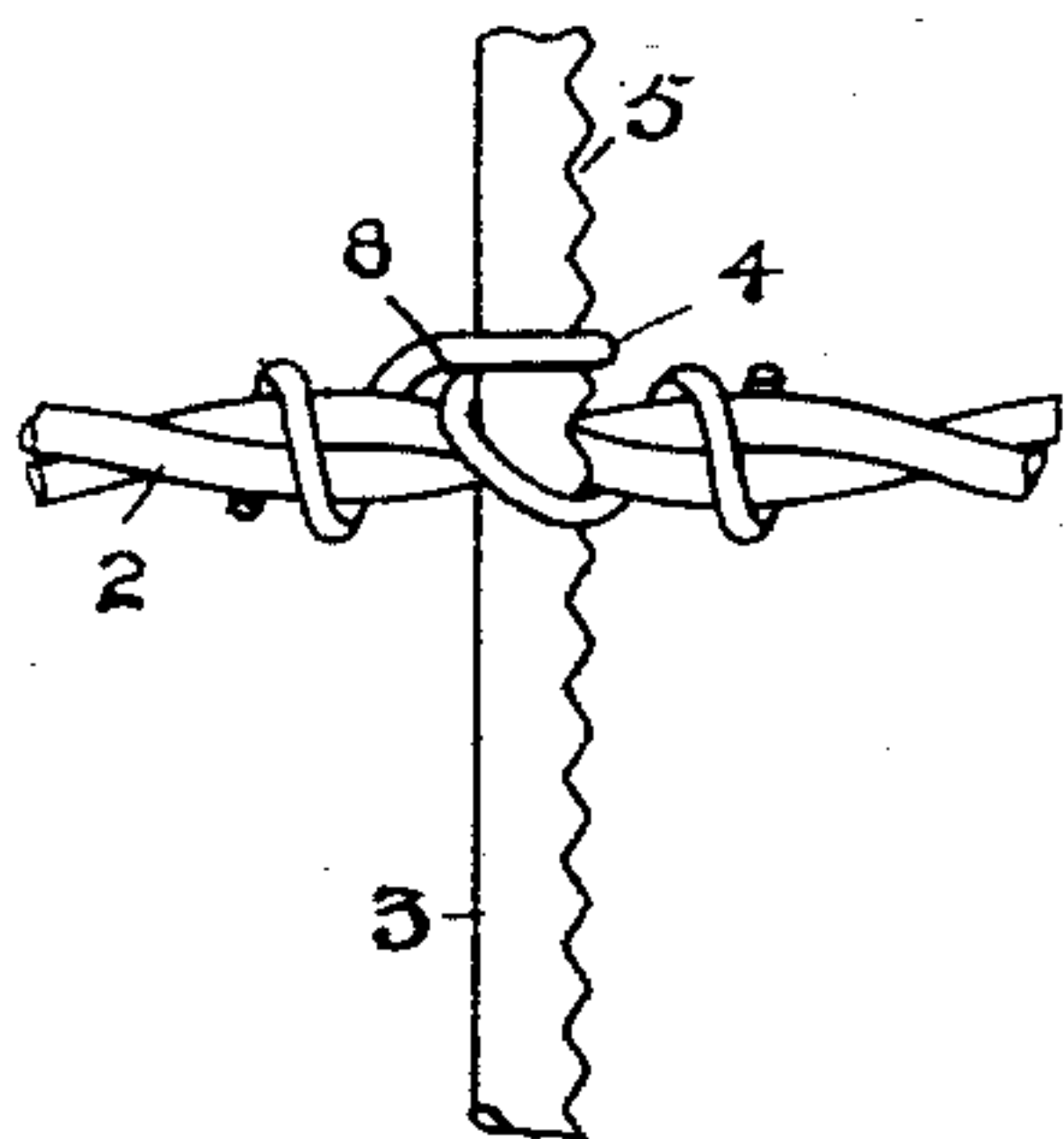
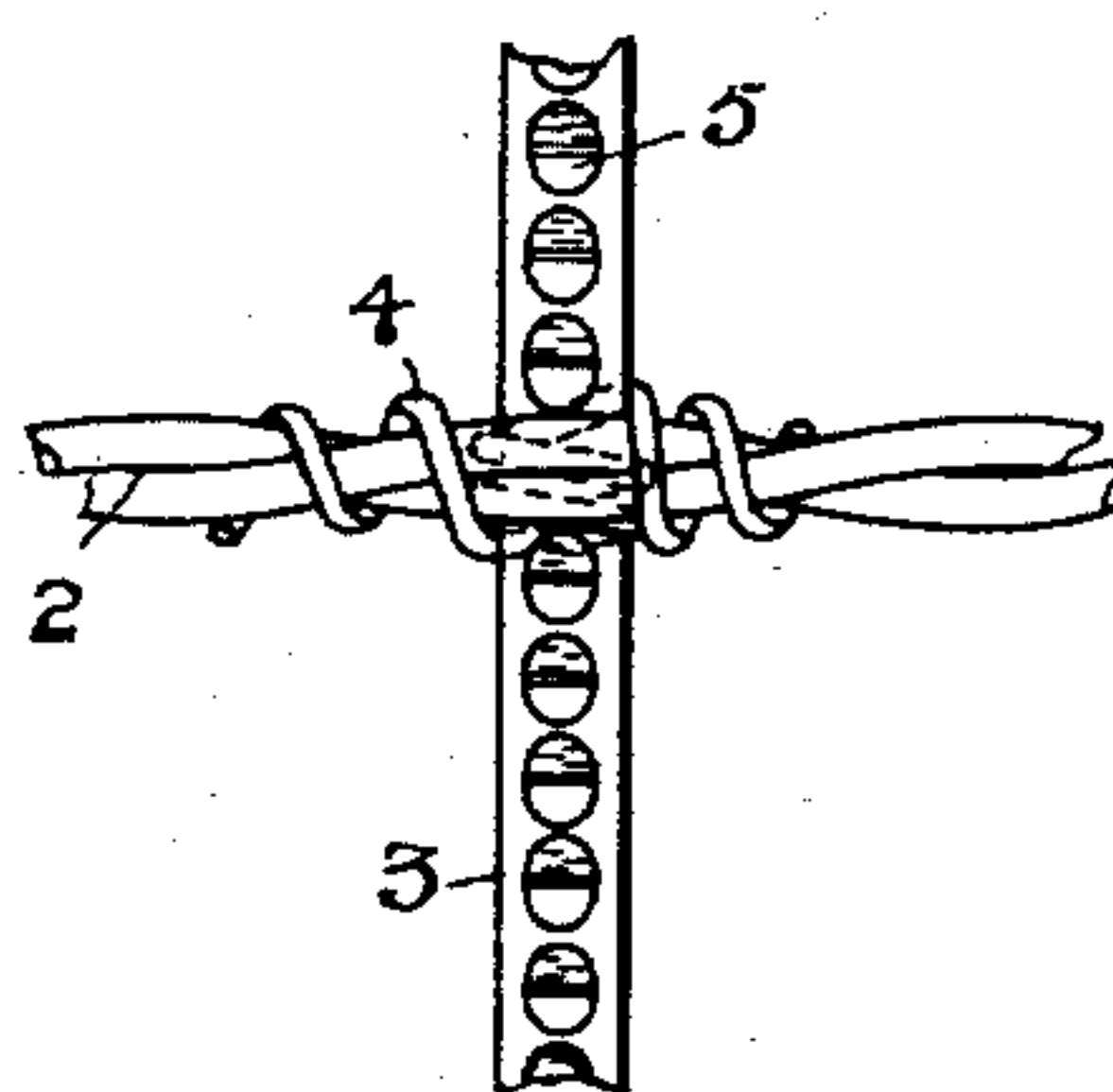


FIG. 3.



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by
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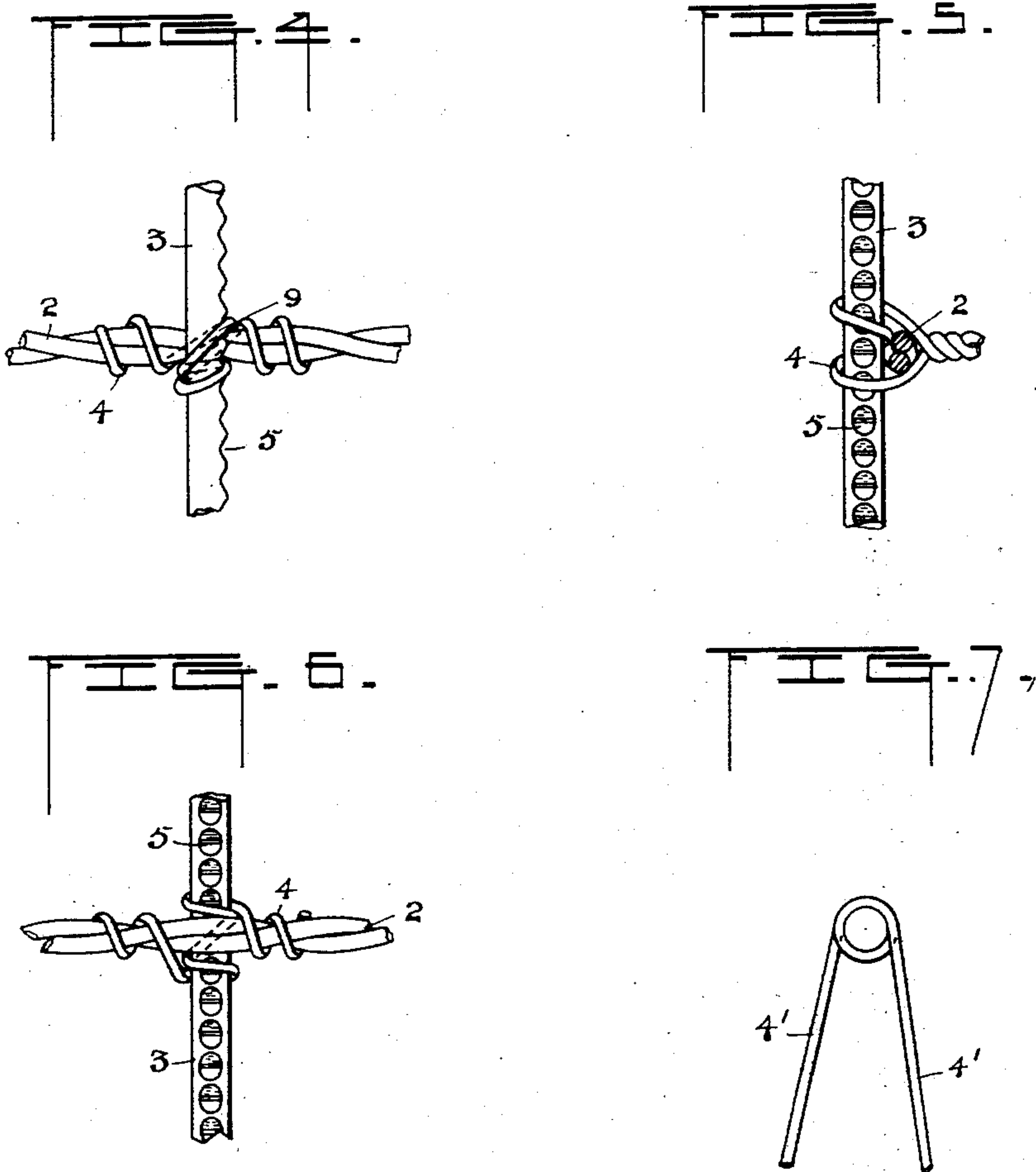
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UNITED STATES PATENT OFFICE.

GEORGE M. DEPEW, OF CANANDAIGUA, NEW YORK.

WIRE FENCE.

SPECIFICATION forming part of Letters Patent No. 525,448, dated September 4, 1894.

Application filed March 28, 1894. Serial No. 505,460. (No model.)

To all whom it may concern:

Be it known that I, GEORGE M. DEPEW, a resident of Canandaigua, in the county of Ontario and State of New York, have invented certain new and useful Improvements in Wire Fences; and I do hereby 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 pertains to make and use the same.

The invention relates to wire fences.

It is desirable that a wire fence stay and tie should be of such form that they can be completed in the shop by machinery or otherwise and also be suitably connected to be transported together to the place of use and that the tie shall then be held and presented to the line wire in a manner to readily receive said wire preparatory to securing it and the stay together and that the stay and tie be equally applicable to fences having different numbers of line wires and that their connection with each other and with each line wire be free from danger of displacement or injury.

The general object of this invention is therefore to provide a simple and secure stay and tie for supporting the line wires of a fence intermediate the main posts that can be cheaply supplied to the public and conveniently applied to any ordinary wire fence; and it consists in the construction hereinafter described and particularly pointed out.

In the accompanying drawings Figure 1 is an elevation of a portion of fence. Fig. 2 is an enlarged view showing means for tying a line wire and stay. Figs. 3, 4, 5 and 6 are views of modifications. Fig. 7 represents a tie adapted to be slipped over the end of a stay.

Numeral 1 denotes the fence posts, 2 the line wires, 3 the stays and 4 the ties. The stays are preferably made of heavy wire indented upon one side as shown at 5, but they may be indented on more than one side. These indentations are formed in the wire by suitable dies and pressure, or by equivalent means, though they may be formed by sawing or cutting. They extend by preference throughout the whole or the greater part of the length of the stay. 6 denotes eyes or

loops whereby the stay can be connected to the top and bottom line wire.

Each tie wire is wound about the stay and engages these indentations in such manner as to prevent the tie from being slipped either up or down and so as to present two free ends adapted to receive a line wire between them preparatory to the winding of those ends about said line wire. The ties may be wound about the stay by machinery and the stay and tie sent to market or to the field for use as one, or the tie can be partly formed and so as to leave the coil sufficiently open to permit its slipping freely over and along the stay when it is to be applied to a fence.

Preferably the stay will be arranged with respect to the line wires as shown in Fig. 2 with the indentations on the side of the stay toward the length of the fence. The coiled part of the tie is by preference made to embrace two or more of the indentations by being wound one and a half times about the stay as represented in said Fig. 2. The line wire is conveniently introduced between the ends of the tie indicated in Fig. 7 and each end is then wound about the line wire on opposite sides of the stay, one of the ends crossing the other as indicated at 8. In Fig. 3 the tie is shown as wound two and a half times about the stay and the latter arranged to face the line wire. In Fig. 4 both ends of the tie are bent diagonally across the line wire as at 9. The ends of the tie may be twisted together as indicated in Fig. 5 without sacrificing all the advantages of the improvement. Each of two coils of a tie may be wound in a separate indentation and the line wire tied into an intermediate one as indicated in Fig. 6.

As the stays are provided with indentations throughout the greater part of their length they can be applied to fences having any desired number of line wires and these can be arranged at various distances apart. The indentations provide bearing shoulders for the tie, and for the line wire also, if desired, which preclude any accidental slipping of the tie and line wire on the stay even under the weight of a person climbing over the fence or by the rubbing or crowding of animals. It is also obvious that the stay having ties

wound thereon may be made to receive the upper and lower line wire or the upper wire alone in its end loops and then suitably hold the free ends of the ties in horizontal position so that additional line wires may be readily inserted between the ends so held and the latter conveniently secured by twisting. It is also obvious that when the tie is applied to the stay it will necessarily and without attention engage an indentation and further that the line wire, stay and tie cannot be connected by winding the tie without either the tie or the line wire or both engaging in one or more indentations. And further the wire in practice must be light to permit the bending operation without breaking and the bends in such wire will give way under the weight of a person climbing over the fence and will also be of little use under the pressure of swine or cattle putting their necks between line wires or pressing down upon a wire.

It has been proposed to roughen the stays to prevent the slipping of ties as set forth in the patent of W. M. Clow, No. 368,459. Such means and the friction caused thereby are insufficient for the purposes of my improvement which require indentations that furnish a distinct seat for the transverse wires and that will positively and independently support the tie wires, both for the convenience of securely applying the said ties to the stays before they are carried to the field and also for security against the slipping of the ties or line wire in actual use. Further it is important that fence wire be galvanized and the utility of the galvanized coating is destroyed by roughening whether the wire be roughened before or after it is galvanized.

I expressly disclaim serrated or roughened wire stays such as illustrated in said patent and also wire stays having bends, as neither of these are practicable for the purposes of my improvement hereinafter particularly pointed out which requires indentations having a vertical and also a horizontal extent approximately equal to the diameter of the line wire and of such dimensions as to receive and support the tie and line wire as distinguished from mere serrations or from bends in wire which must necessarily be too light and weak.

My indentations are made in stays of such size and stiffness as cannot readily be bent to form receptacles or shoulders for the wire without breaking the same.

Stays have heretofore been provided with bends scattered in groups between their ends and adapted to receive line wires in any one

of the several bends of a group, and a tie has been secured about the line wire in the bend. By my improvement the tie wires rest in indentations distinct from those which receive the line wires whereby the indentations may be made shallower and yet afford, owing to the vertical support given to the tie, greater security than by the prior construction.

To provide for arranging the wires at different elevations as circumstances may render desirable the indentations are required on every part of the stay and the groups of bends above referred to would be insufficient for my improvement.

An additional and important purpose of the independent indentations for the tie wire consists in the security and certainty of its maintaining its situation when applied to the stay at the shop or elsewhere with its ends open and extended to receive the line wire preparatory to tying.

In the bent stay above referred to but one notch was utilized for the line wire and tie and the latter was necessarily applied to the stay after the line wire was placed in position and such prior construction is thus distinguished from my improvement.

Having thus described my invention, what I claim is—

In a wire fence the stay provided with directly transverse and continuously disposed indentations formed in the body of the stay and having both a vertical and a horizontal extent approximately equal to the diameter of the fence wire, the line wire and the tie, said line wires each resting within an indentation and above a shoulder formed thereby and each of the tie wires being wound about the stay within one or more of the indentations distinct from that which holds the line wire and having its ends wound about the line wire substantially as set forth whereby the ties may be first and separately secured each in an independent indentation and securely held against slipping in any direction and in manner to receive the line wires and whereby they and the tie wires may be positively supported within the indentations at any desired distance apart.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

GEORGE M. DEPEW.

Witnesses:

ROYAL R. SCOTT,
M. N. CLEMENT.