

(No Model.)

J. S. MARTIN.
FENCE STAY.

No. 564,439.

Patented July 21, 1896.

Fig: 1.

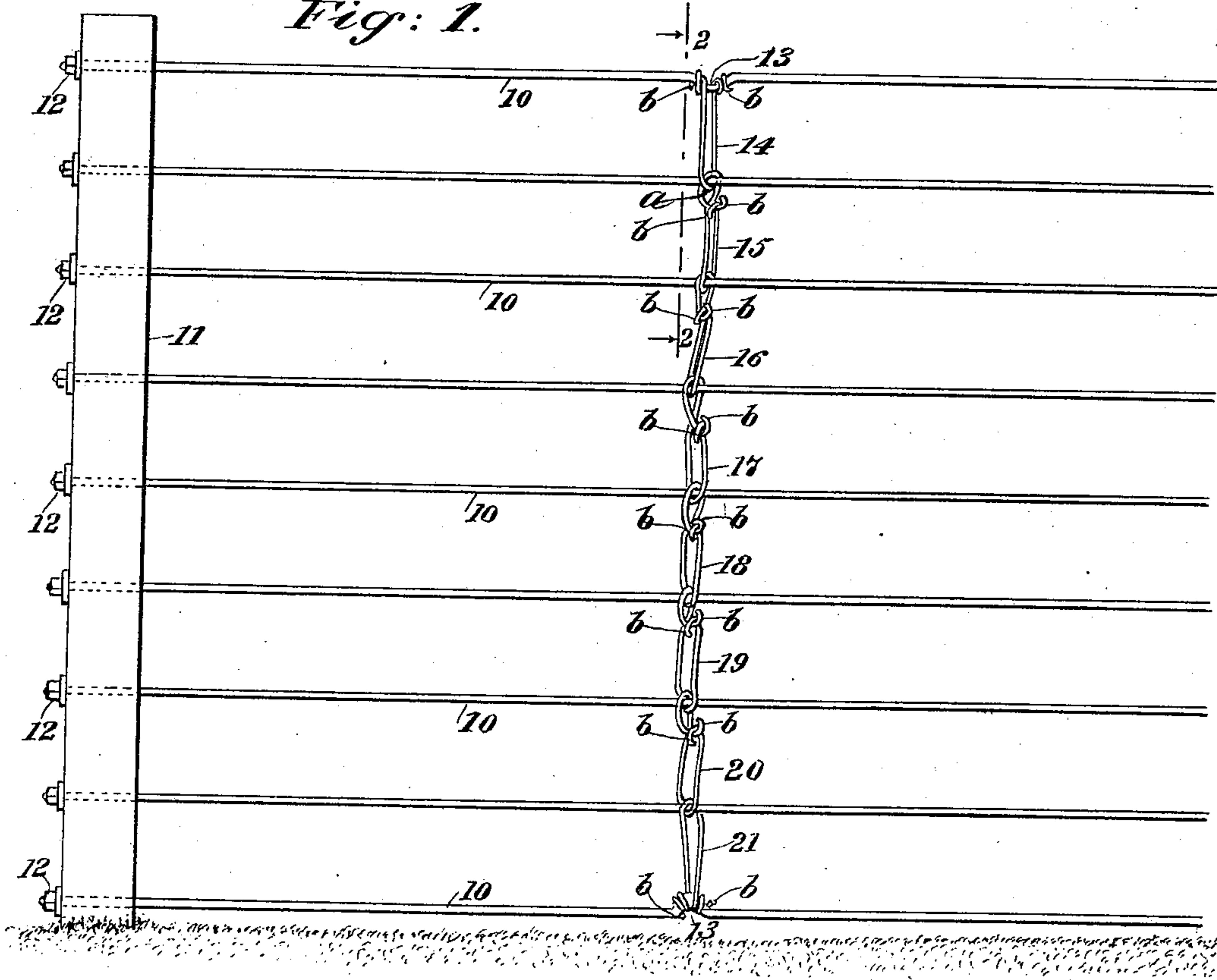


Fig: 2.

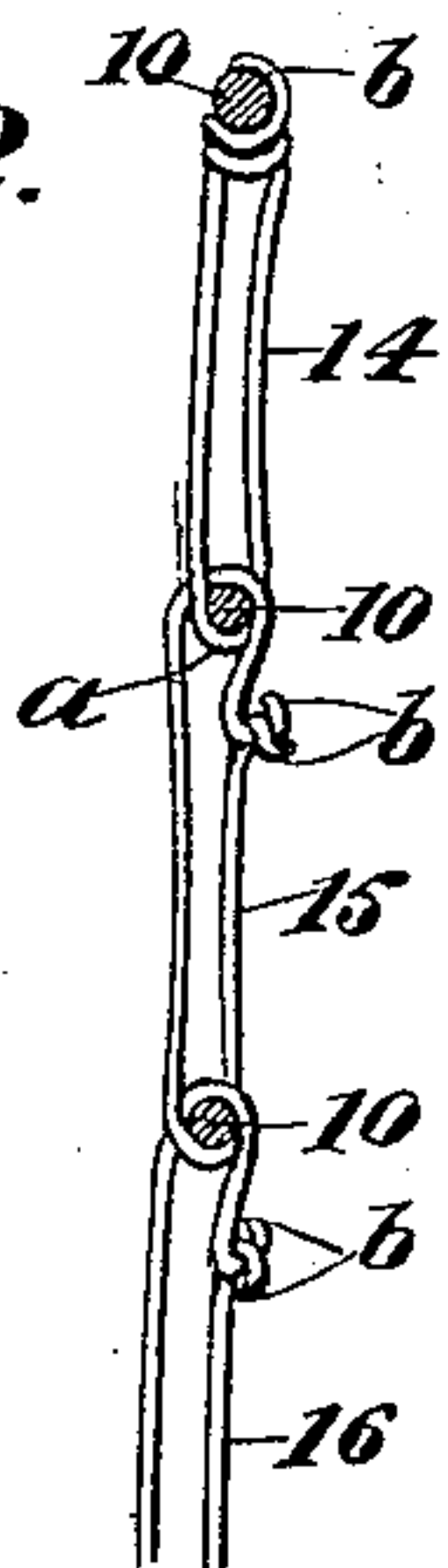


Fig: 3.

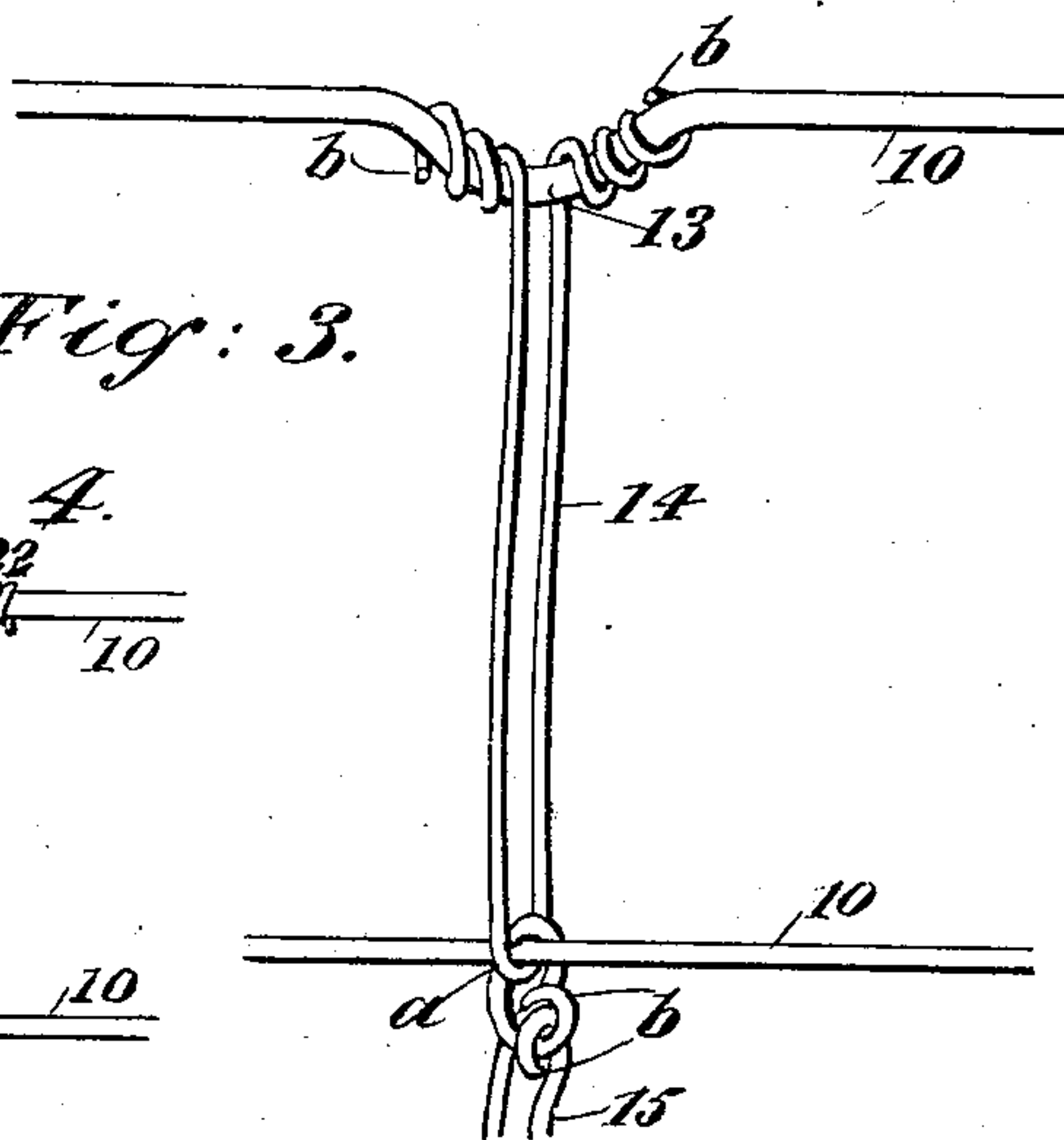
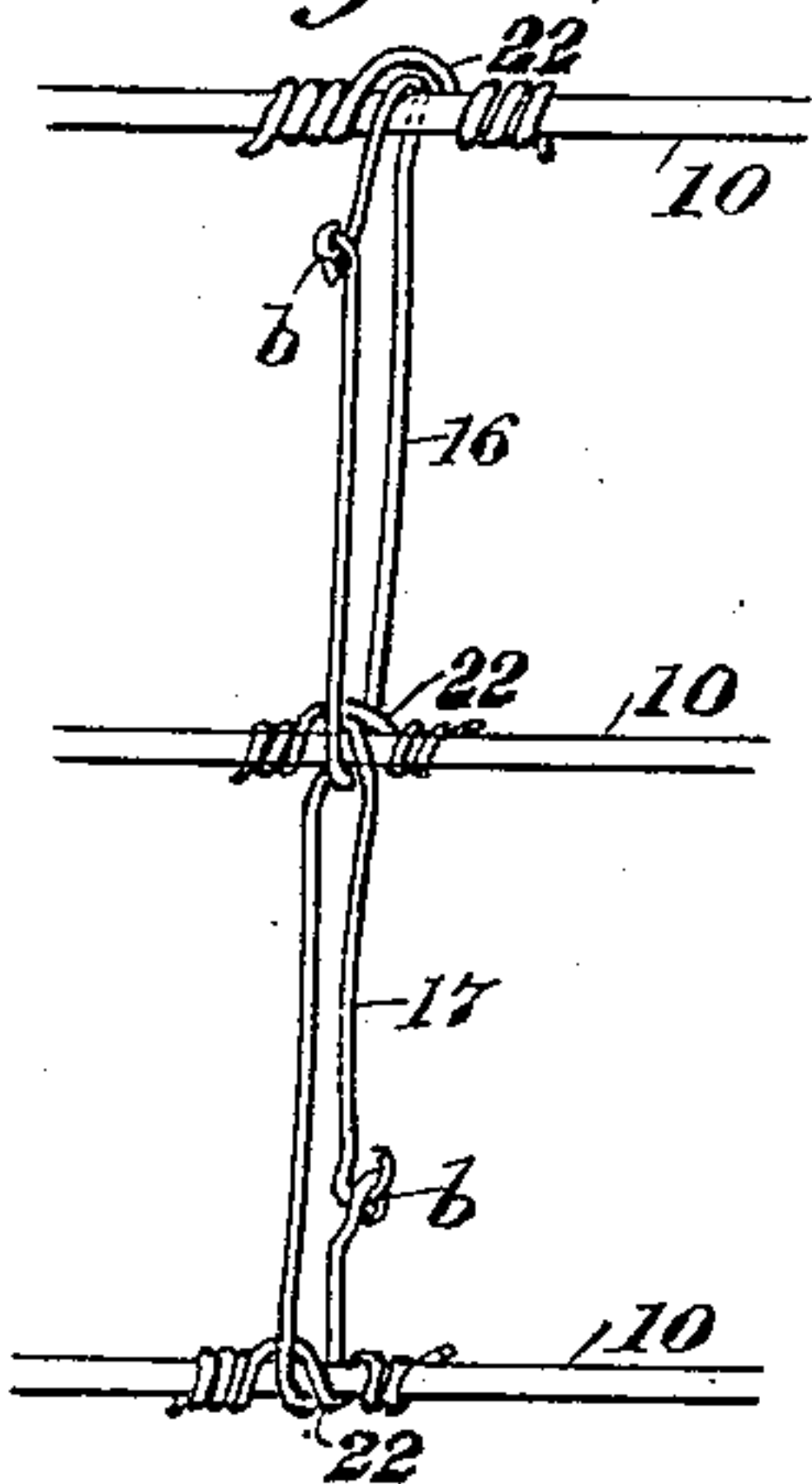


Fig: 4.



WITNESSES:

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FENCE-STAY.

SPECIFICATION forming part of Letters Patent No. 564,439, dated July 21, 1896.

Application filed October 9, 1895. Serial No. 565,113. (No model.)

To all whom it may concern:

Be it known that I, JOHN S. MARTIN, of Baughman township, in the county of Wayne and State of Ohio, have invented a new and Improved Fence-Stay, of which the following is a full, clear, and exact description.

This invention relates to the stays or braces used to space apart and support the runners or strands of a wire fence, and has for its object to provide stays in link form, that when secured in place will retain the fence-wires in spaced condition and adapt them to resume their normal position when pressed upon laterally or upon the upper strand of the fence, a further object being to prevent displacement of the stays by providing simple means for retaining them spaced apart on the fence-panel.

The invention consists in the construction and combination of parts, as is hereinafter described, and indicated in the claim.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side view of an end portion of a wire fence and one complete fence-stay applied thereto. Fig. 2 is an enlarged transverse sectional view of the upper portion of a wire fence, substantially on the line 2 2 in Fig. 1, showing the improvement in part as applied to the fence-wires. Fig. 3 is an enlarged fragmentary side view of the improved fence-stay in position on portions of two fence-wires; and Fig. 4 is a fragmentary side view of a fence-panel and of the improved fence-stay, showing a modified means for securing the stay-links from shifting on the fence-wires.

The end portion of a wire fence (shown to illustrate the application of the improvement to such a fence) comprises a series of fence-wires 10, that are secured by one end on the post 11, it being obvious that in the construction of a line of the fence a suitable number of posts 11 are to be provided, which when erected at proper intervals will support the wires 10, that are thereto secured by any approved means. The fence-wires may be stretched taut by nuts 12, engaging the ends of the said wires that project through the post 11 at the end of a panel, as indicated in

Fig. 1, or by any other available or preferred means.

At proper intervals of separation the improved fence-stays are secured on the fence-wires 10, one stay being shown as thereto applied in Fig. 1, and as represented in the drawings, said improvement comprises a series of wire links, which are locked to each other and to the fence-wires, as will presently be explained.

At suitable points the upper and lower fence-wires 10 of a panel are bent to form opposite single kinks or substantially U-shaped undulations 13 in said wires that project toward each other, these formations in the fence-wires being provided to prevent the fence brace or stay from being accidentally moved from its proper position along the wires.

As shown in Figs. 1 and 3, the upper portion of the novel fence-stay which extends between the upper and adjacent wires of the fence-panel consists of a wire strand 14, that is bent to form a loop *a* at one end of a link that is open at the opposite end.

The length of the two members of the upper link 14 is so proportioned that the open link may be located on the second wire of the fence and its members extended toward the upper wire and wrapped at their ends *b* around the latter, so as to occupy the kink 13 therein, which will retain the said ends in position, with the body of the link depending and its bight or looped end *a* in contact with and sustaining the fence-wire below and next to the upper wire. The stay-link 15 next in series is formed oblong, with its ends both looped, and the terminations of the wire strand comprising the link left uncoupled until the link is placed in position, to effect which one member of the link is passed over the second fence-wire 10, considered from the top of the fence, and through the link *a* of the upper link 14, the remaining member of the oblong loop 15 being hooked around the third fence-wire from the top of the panel, so that the terminations *b* of the link 15 may be twisted or hooked together and thus close the link, the length of which adapts it to engage its looped ends with the second and third fence-wires, counting from the top of the fence. The remaining stay-links 16 to 20, inclusive, (shown

in Fig. 1,) are formed and applied to the fence-wires that lie between the third wire from the top of the fence and the lowermost fence-wire of the series, and of said links each engages
 5 the two adjacent fence-wires to be supported and the looped end of the link next above it in precisely the same manner as has been explained with regard to the link 15, so that
 10 there is an interlocking connection of the ends of the successive links effected, as well as a supporting engagement of said stay-links with the fence-wires.

It will be seen that the lower link 21 of the fence-stay device is essentially similar in
 15 form to the upper link 14 and in a like manner hooks over the fence-wire next to the lowermost one of the panel, its looped end also inclosing the looped end of the stay-link 20. The extremities of the lower link 21 are
 20 wrapped around the kink 13 of the lowermost fence-wire, and in this manner coact with the wrapped ends of the upper link 14 to hold the complete fence-stay in place on the fence-panel.

25 If the several links of the fence-stay are correctly proportioned in length, it will be evident that the wrapping of the ends of the links 14 and 21 on the upper and lower fence-wires, respectively, will draw the fence-stay
 30 taut and correctly space the several runners or longitudinal wires 10 of a fence-panel, and if a suitable number of the fence-stays is provided, and located at correct intervals where kinks 13 are produced in the upper
 35 and lower wires of the fence-panel, the wire fence will be rendered strong and capable of resisting lateral pressure on either side between the posts of a panel.

40 In Fig. 4 means are shown for retaining the fence-stay at a desired point on a fence-panel, these consisting of a wire strand wrapped on each fence-wire so as to form loops 22, which interlock with the looped

ends of the stay-links, and as the end portions of the said strands are forcibly wound
 45 on the fence-wires it will be seen that they serve to prevent sliding movement of the fence-stay on the fence-panel.

From the peculiar construction of the improved fence-stay a limited amount of elasticity is given to the same at the interlocked
 50 connections of its links with each other and with the fence-wires, so that pressure which would bend and permanently distort a fence having rigid fence-stays will be counteracted,
 55 and the fence will regain its normal straight condition after it is relieved from pressure applied at either side or on top of the same.

The extreme simplicity, ease of application, and cheapness of construction are manifest features of advantage pertaining to the improved fence-stay.

Having thus described my invention, I claim as new and desire to secure by Letters
 65 Patent—

A fence having running wires, the uppermost and lowermost wires of which are formed with kinks bent inwardly toward the center of the fence, an end link for each uppermost and lowermost running wire, the links respectively being bent between their terminals
 70 to embrace the adjacent running wire and having their terminals coiled within the kinks of the respective uppermost and lowermost running wires, and a series of intermediate
 75 links, said links being each formed of a length of wire, the terminals of which are joined to each other between the respective running wires and the ends of the links embracing the adjacent running wires and interlocking with
 80 the ends of the contiguous links, substantially as described.

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Witnesses:

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