

No. 615,965.

Patented Dec. 13, 1898.

E. W. CORNELL.
STAY FOR WIRE FENCES.

(Application filed Apr. 22, 1897.)

(No Model.)

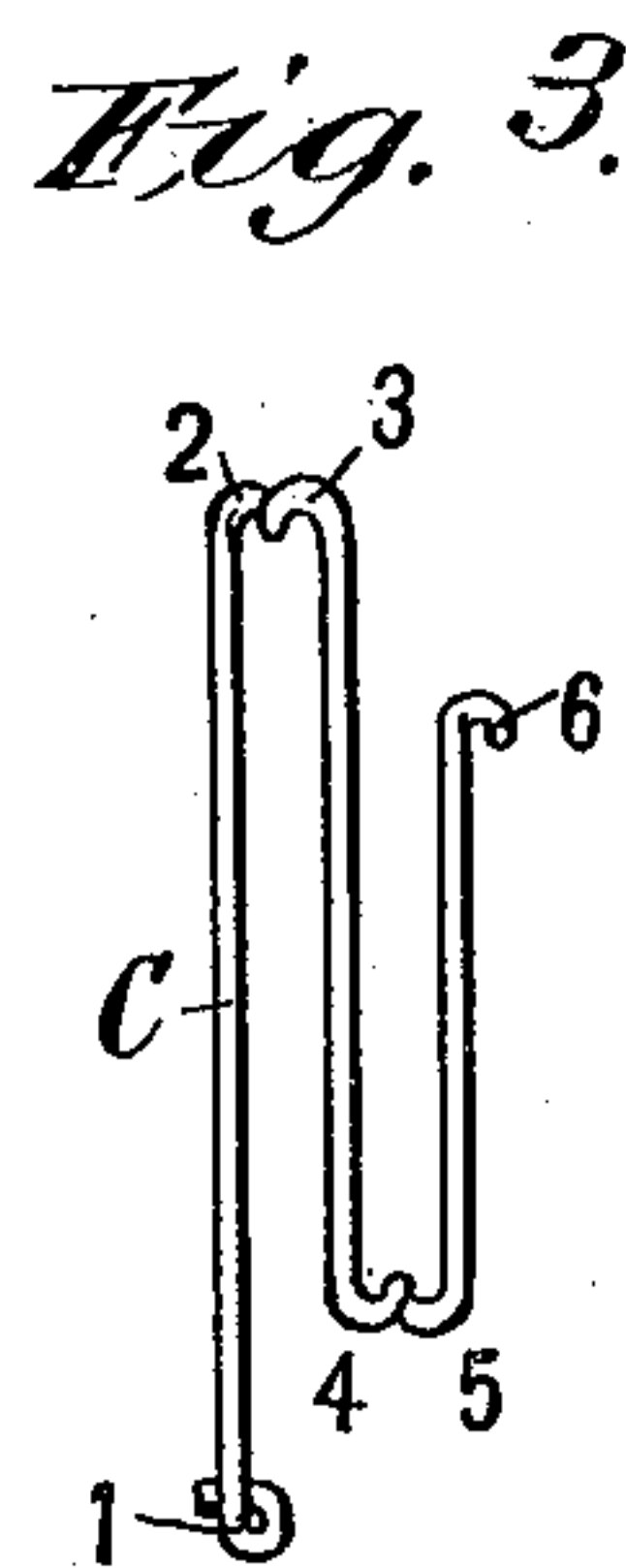
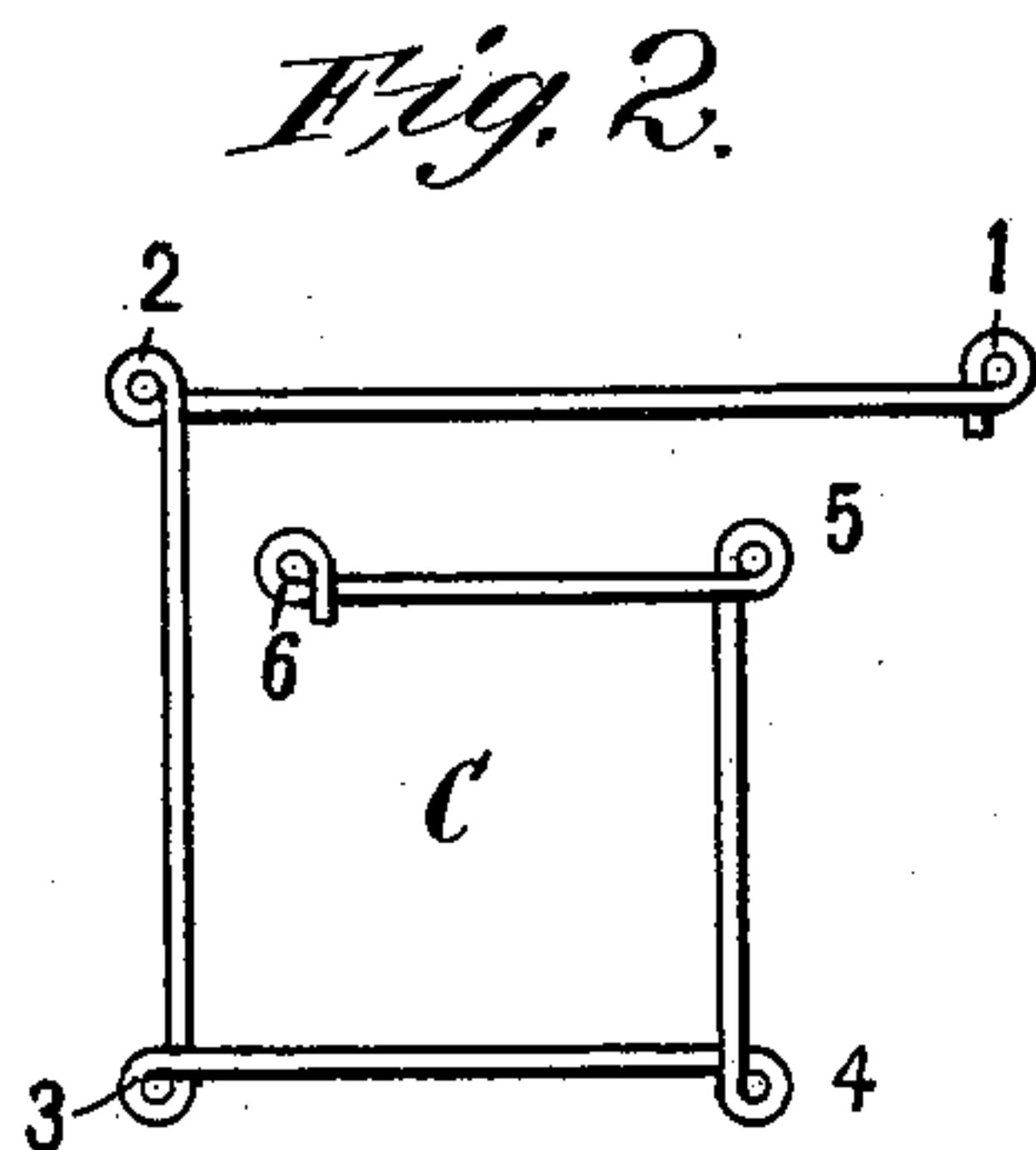
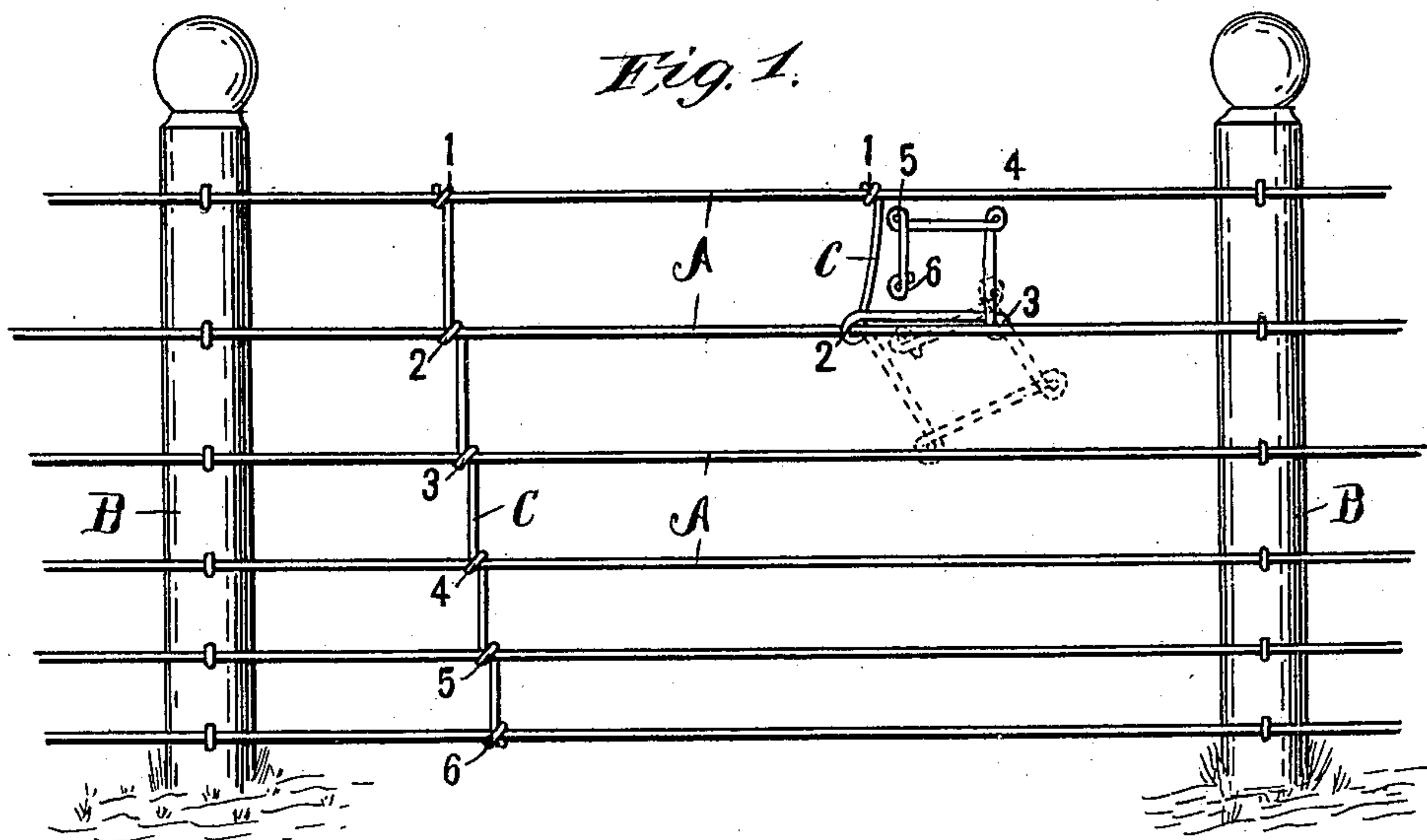
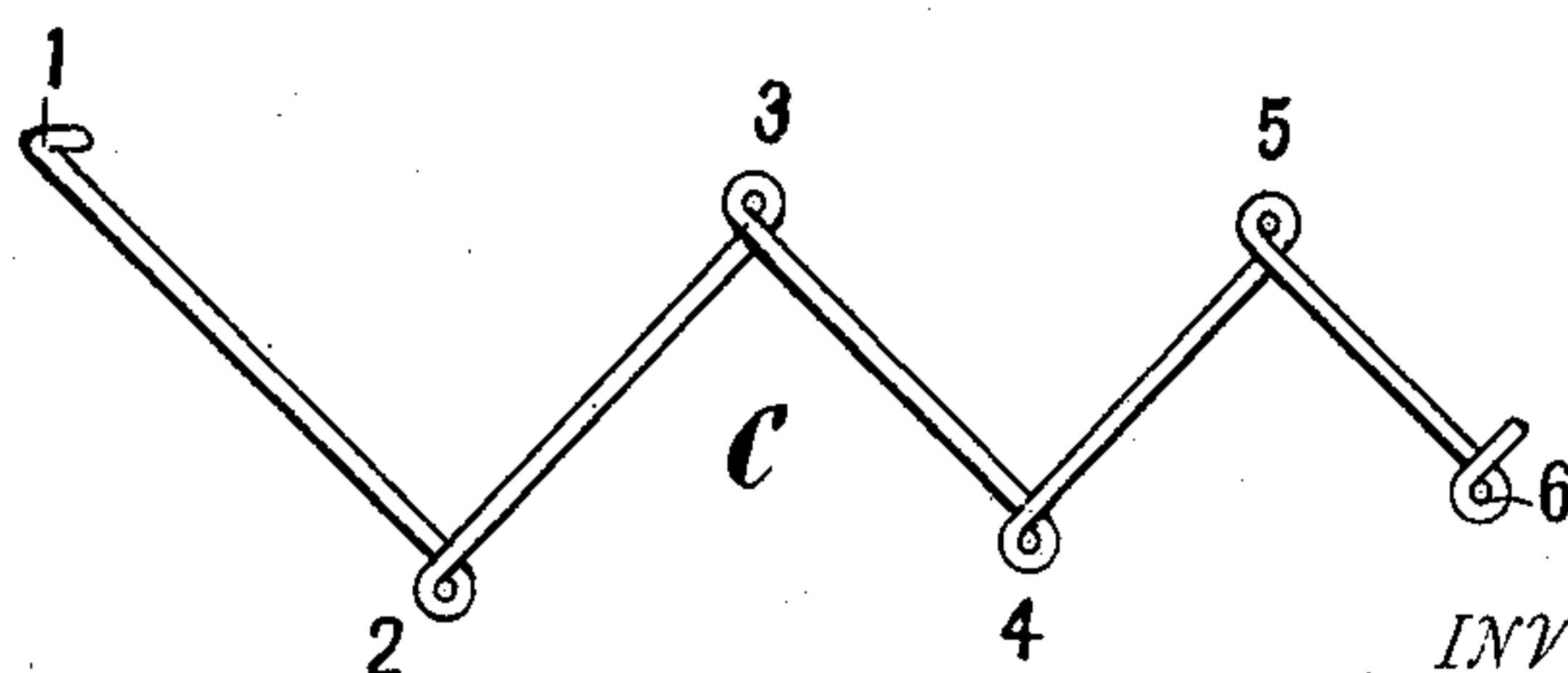


Fig. 4.



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STAY FOR WIRE FENCES.

SPECIFICATION forming part of Letters Patent No. 615,965, dated December 13, 1898.

Application filed April 22, 1897. Serial No. 633,241. (No model.)

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 Stays 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 letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to vertical stay-wires for wire fences; and it consists of a folded stay having a partially-closed coil therein at the angle of each fold, which partially-closed coils are spaced to correspond with the spaces between the horizontal wires of the fence, around which said coils are adapted to be successively engaged by the operation of passing the folded portion of the stay around the successive longitudinal wires of the fence in the act of attaching the stay thereto.

The object of the invention is to provide suitable vertical stay-wires for the fence in such shape as to enable them to be conveniently handled and readily attached to the line-wires, so as to securely support and brace said line-wires, producing a fence of strong and simple construction, in which the stay-wires may be readily attached to the line-wires thereof. This object is attained by the construction illustrated in the accompanying drawings, in which—

Figure 1 is an elevation of a section of the wire fence, showing manner of attaching my improved stay to the line-wires thereof. Fig. 2 is a plan view of the folded stay. Fig. 3 is an edge elevation of Fig. 2. Fig. 4 is a view of the stay in a slightly-modified form.

Referring to the letters of reference, A designates the line-wires of the fence, which are supported by a suitable post B in any desired manner.

C designates the vertical stay, which consists of a continuous strand of wire of suitable gage, which is preferably folded into the quadrangular form shown in Fig. 2, in which the stay describes a figure consisting of a series of right-angle bends forming a

quadrangle and having partially-closed coils at each bend or turn in the line of said figure.

It is the practice in wire-fence construction, as shown in Fig. 1, to string the line-wires of the fence closer together at the bottom than at the top for the purpose of turning small stock. It is therefore essential that the loops or coils formed in the stay-wire which are adapted to embrace said line-wires shall be such distance apart as to correspond with said line-wires when said stay is applied thereto. Therefore the stay is so formed that the distance between the several coils therein shall correspond with the predetermined distance between the line-wires of the fence, and the bends or folds in said stay will be equal to the number of line-wires which the fence contains. The purpose of folding the stay is not alone to render it compact and convenient to handle, but rather to make possible the application of a previously-formed simple stay of this character to the line-wires of the fence in a secure manner and by making but one coil of said stay-wire around each successive line-wire, thereby effecting economy in the use of material and facilitating the application of the stay to the fence.

The stay shown in the accompanying drawings comprises six partially-closed loops or coils numbered from 1 to 6, inclusive, which are located at the point of angle formed by the folds or bends in said stay. The coils in the stay not being closed, as clearly shown in Fig. 3, the line-wires of the fence are enabled to be engaged in said coils as the stay is applied thereto. The application of this improved stay is illustrated at the right of Fig. 1, in which operation the coil 1 of the stay is first secured to the upper line-wire of the fence by entering the wire in said coil and closing the coil thereon by means of a pair of pliers or other suitable tool. The remaining folded portion of the stay is then sprung down and passed under the succeeding lower wire, as clearly shown by dotted lines in said figure, so that the next loop 2 in said stay is caused to embrace said second wire. The solid lines in said view show the folded portion of the stay in the act of being passed over said second wire to complete the formation of the second loop or coil 2 therearound. Con-

tinuing the operation the stay is drawn down so as to tighten the coil 2 and place the remaining folded portion in position to be passed under and around the third wire of the fence, so that the third coil in said stay may be caused to embrace said third wire, and so on the operation continues in like manner until the last coil 6 in the stay shall have been attached to the bottom wire in the fence, in which position the stay describes a single strand of wire crossing vertically the line-wires of the fence and wound once around each of said line-wires at the point of intersection of said wires. The partially-closed coils in the stay are made slightly smaller than the diameter of the line-wires of the fence, so that when closed thereon by any suitable tool said coils will tightly embrace said line-wires and retain the stay firmly in position. These stays may be formed at the factory or where the fence is being built without the use of expensive machinery and may be readily and firmly secured to the line-wires without the use of any tool other than a pair of pliers.

The modification of the stay shown in Fig. 4 provides for the application thereof to the line-wires of the fence in substantially the same manner as the stay shown in Figs. 2 and

3 and involves the same principle, but is perhaps not quite so convenient to handle.

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

1. A stay for wire fences consisting of a single strand of wire bent to form a series of straight sections standing at right angles to one another, which sections are united by a single coil.

2. A stay-wire for fences consisting of a single strand of wire bent so as to describe a quadrangular figure and provided at each bend thereof with a partially-closed coil substantially as set forth.

3. A stay for wire fences consisting of a single strand of wire bent to form a series of straight sections standing at angles to one another, which sections are united by a single coil whose extremities at the point of junction with said straight sections cross and stand apart.

In testimony whereof I affix my signature in presence of two witnesses.

EVAN W. CORNELL.

Witnesses:

D. B. MORGAN,
RAY B. MORGAN.