

(No Model.)

J. W. HOLLER.
FENCE.

No. 603,274.

Patented May 3, 1898.

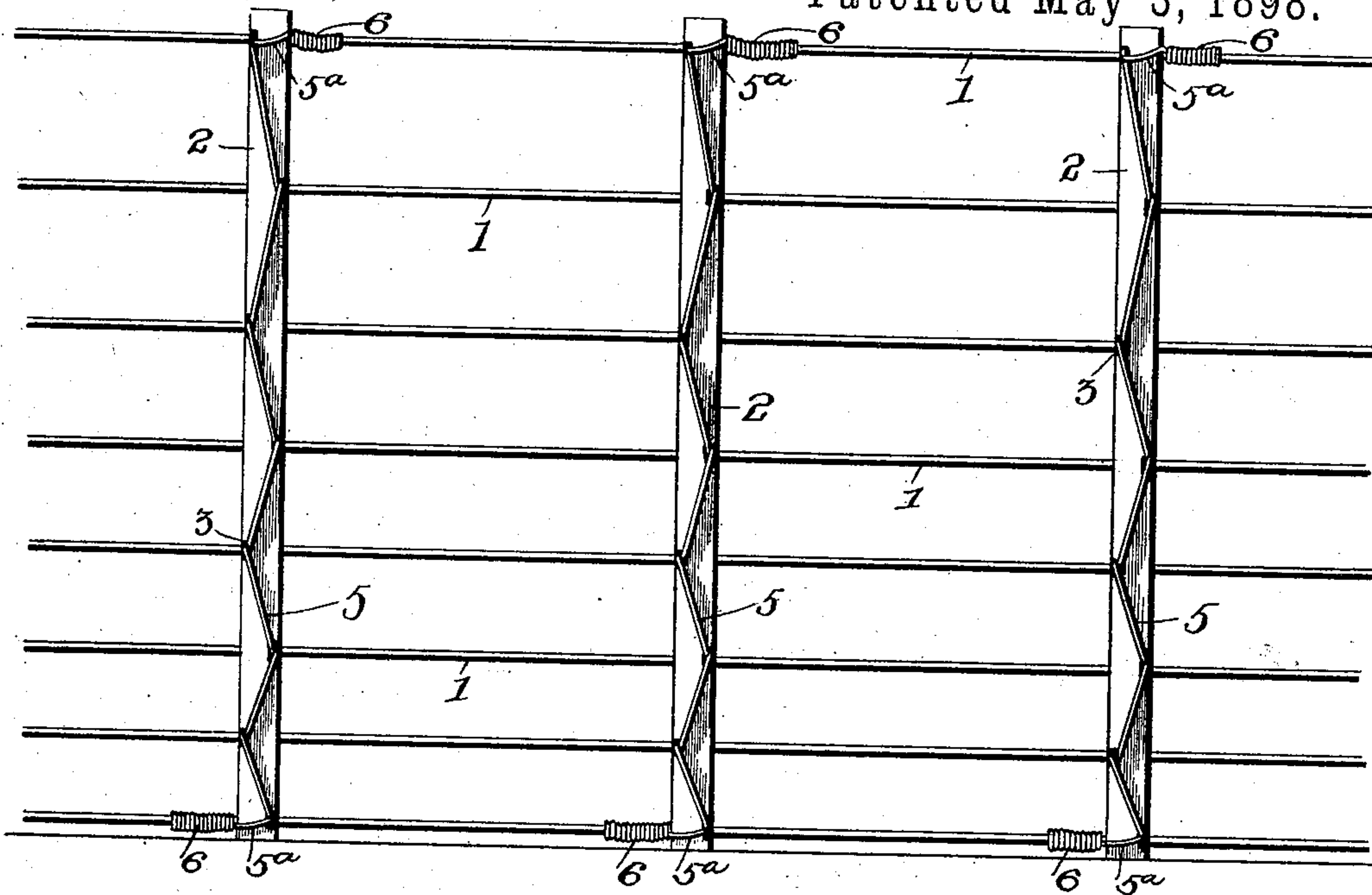


Fig. 1.

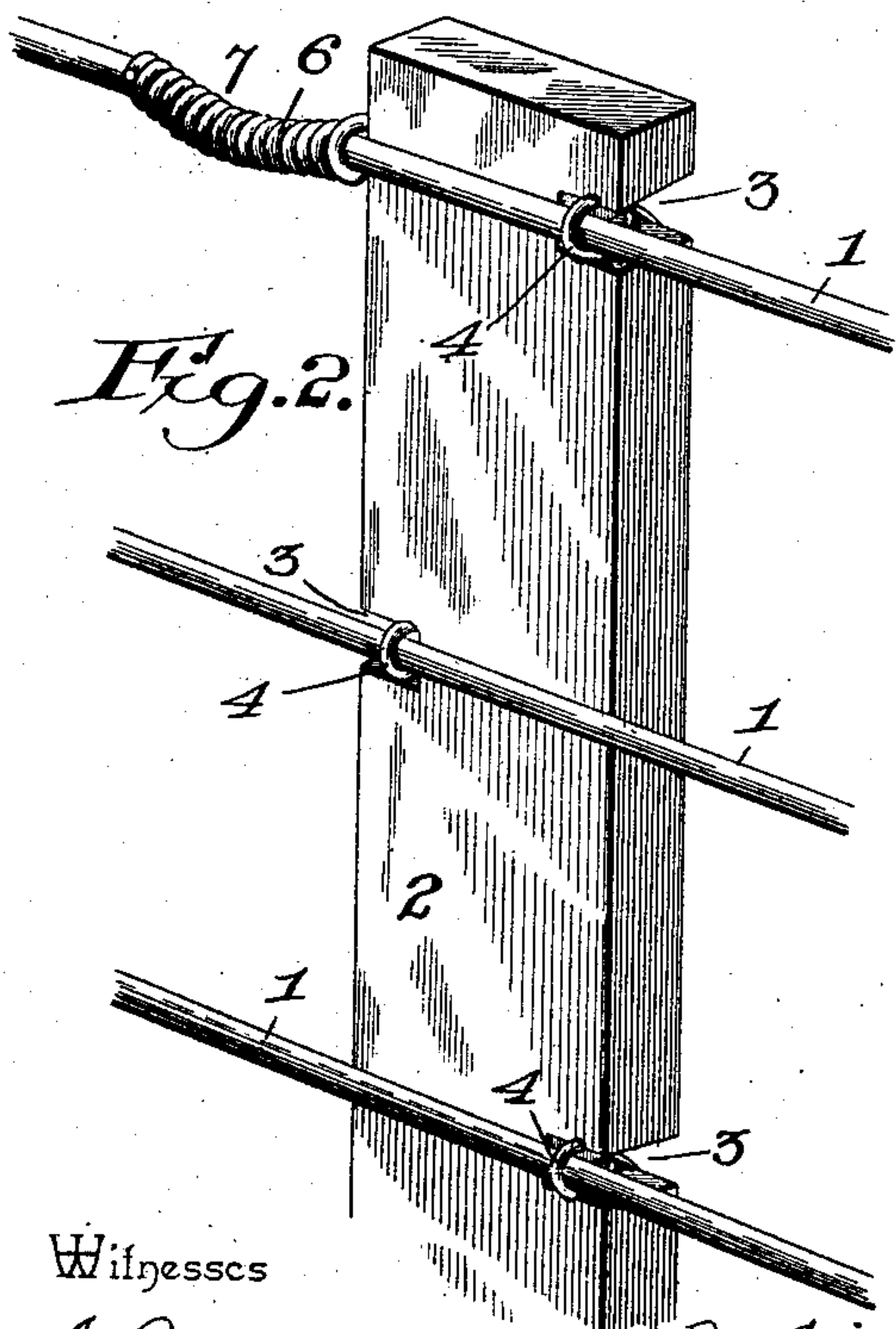


Fig. 2.

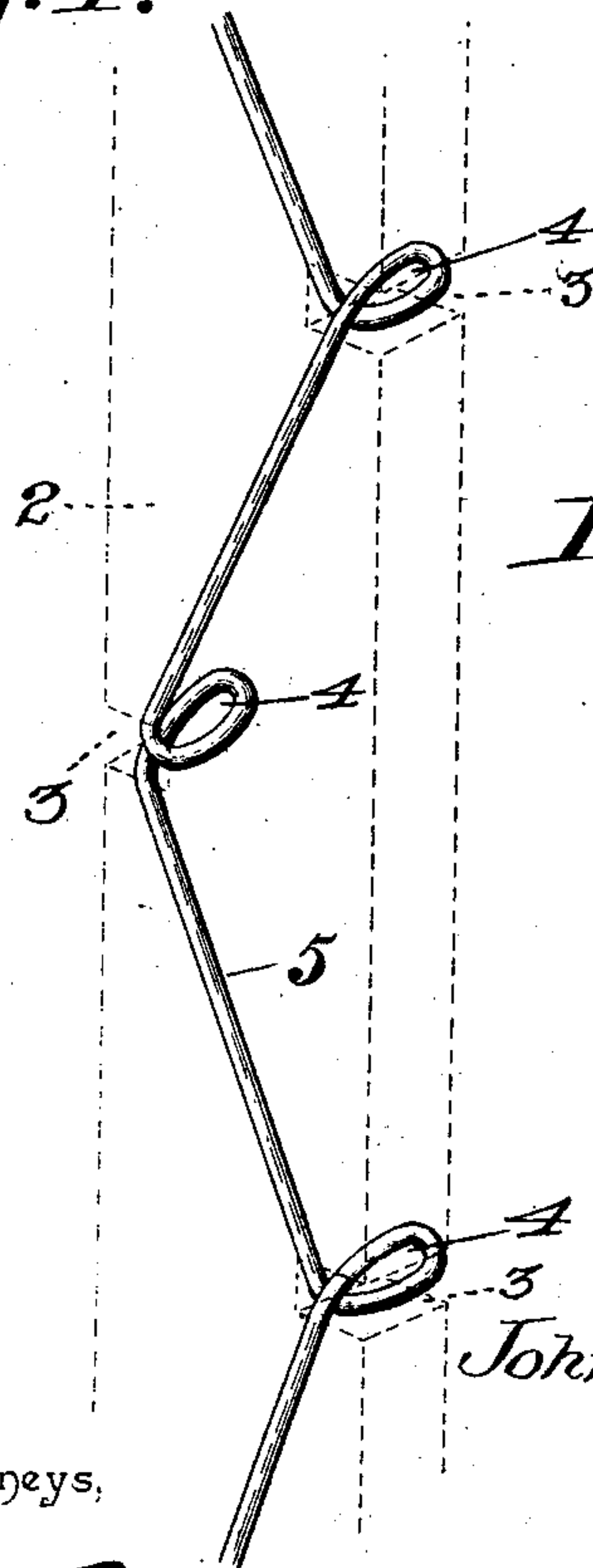


Fig. 3.

Witnesses

A. R. Apperand
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By his Attorneys,

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Inventor
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UNITED STATES PATENT OFFICE.

JOHN W. HOLLER, OF VAN BUREN, INDIANA, ASSIGNOR OF ONE-HALF TO
CHARLES D. GRANDSTAFF, OF SAME PLACE.

FENCE.

SPECIFICATION forming part of Letters Patent No. 603,274, dated May 3, 1898.

Application filed July 19, 1897. Serial No. 645,138. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. HOLLER, a citizen of the United States, residing at Van Buren, in the county of Grant and State of Indiana, have invented a new and useful Fence, of which the following is a specification.

My invention relates to fences, and particularly to a fence-stay and means for securing the same to the runners intersected thereby; and the object in view is to provide, in connection with a stay, means for engaging the runners, whereby an economy of material is attained without detracting from the efficiency of the attachment; to provide a stay with a plurality of runner-receiving eyes which are so connected to the stay as to prevent their detachment by straining the runners; to provide means whereby displacement of the stay parallel with the runners is prevented, while not interfering with the separate tightening of the runners; to provide runner-engaging means of such a construction as to be applicable to stays or pickets of wood and adapted to strengthen and prevent splitting of such stays, and, furthermore, to provide runner-engaging devices which may be applied quickly and efficiently by an unskilled person.

Further objects and advantages of this invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claims.

In the drawings, Figure 1 is a view of a portion of a fence-panel constructed in accordance with my invention. Fig. 2 is a detail view in perspective of a portion of a stay and the contiguous portions of the runners, showing the opposite side of the stay from that which is illustrated in Fig. 1. Fig. 3 is a detail view in perspective of a portion of the tie detached, showing the contiguous portion of the stay in dotted lines.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

The runners 1 are intersected by the stays or pickets 2, which may be constructed of either wood or metal, the former material being preferable, and the improved stay is pro-

vided in its edges with notches or seats 3, spaced apart to correspond with the intervals between the runners in the planes of which they are respectively arranged, the contiguous notches or seats being arranged at opposite edges of the stay. Thus the notches or seats are arranged alternately or in a zigzag series, extending from one terminal or bounding runner to the other. In these notches or seats are arranged runner-engaging eyes 4, consisting of looped portions of a continuous tie-wire 5, which extends from one end of the stay to the other in a zigzag direction, whereby portions of the tie-wire are arranged in inclined positions and extend from a point contiguous to one edge of the stay across to a point contiguous to the other edge thereof. The sides of each loop are also preferably crossed, as clearly shown in Fig. 3; but it is obvious that this feature of the construction is not indispensable, for the reason that the depth of the notches or seats is sufficient to insure the permanency of the tie without the crossing of the sides of the loops. The advantage of this crossing, however, resides in the fact that it enables the eyes to more snugly engage the runners, and thus adapt the eyes in diameter to the runners. Said eyes are not designed, however, to engage the intermediate runners, or those which are located between the terminal or bounding runners, with sufficient tightness to prevent the independent longitudinal adjustment of the runners, such adjustment being desirable in order to maintain the runners at the desired tension.

The extremities of the tie, after forming the loops or eyes, respectively, at the opposite extremities of the stay, are carried transversely across the stay, as shown at 5^a, and are wrapped around the contiguous portions of the terminal or bounding runners to form coils 6, and in order that this attachment of the tie-wire to the terminal or bounding runners may be sufficiently secure to prevent displacement of the stay parallel with the runners I preferably kink or crimp the runners, as shown at 7, and cover these kinks or crimps by means of the said coils.

From the above description it will be seen that the stay forming one element of my invention is provided upon one side with a plu-

5 rality of runner-engaging eyes which project
 beyond the surface of the stay and are ar-
 ranged in a zigzag series, contiguous eyes be-
 ing arranged adjacent to opposite edges of
 the stay, and these eyes are connected in se-
 10 ries by straight diagonally-disposed portions
 of the tie which lie in contact with the oppo-
 site side of the stay from that at which the
 eyes are located, said connecting portions
 15 serving to transversely span the stay, and
 thus prevent the longitudinal splitting there-
 of. In other words, said connecting portions
 of the tie, by extending diagonally across the
 same, serve to bind the stay and enable a
 20 stay or picket of wood to effectually resist
 any ordinary strain which may be applied
 thereto. Hence I am enabled to use a com-
 paratively light stay without detracting from
 the efficiency of the fence.

20 A further advantage of the construction
 above described resides in the fact that after
 terminally attaching the tie-wire at one end—
 say to the uppermost terminal or bounding
 25 runner—and extending the contiguous por-
 tion of the tie across the end of the stay and
 forming a loop therein to engage said upper-
 most runner at the opposite side of the stay
 the stay is supported during the subsequent
 engagement of the tie with the intermediate
 30 and lowermost runner. After thus securing
 the stay at one end the tie-wire is carried di-
 agonally across the stay to the adjacent notch
 or seat, is looped around the contiguous run-
 ner, both sides of the loop thus formed being
 35 arranged in the notch or seat, thence is car-
 ried diagonally in the opposite direction to
 the next notch or seat, and so on, to the op-
 posite extremity of the stay, where the ter-
 minal engagement is effected, as hereinbefore
 40 described.

Various changes in the form, proportion,
 and the minor details of construction may be
 resorted to without departing from the spirit
 or sacrificing any of the advantages of this
 45 invention.

Having described my invention, what I
 claim is—

1. A stay for wire-runner fences, provided
 with a plurality of runner-engaging eyes, pro-
 50 jecting from one side surface of the stay, and
 arranged in a zigzag series alternately adja-
 cent to opposite edges of the stay, each eye
 being closed and consisting of a loop having
 crossed sides, and diagonally-disposed con-
 55 nections between the eyes, arranged in con-
 tact with the opposite side of the stay, sub-
 stantially as specified.

2. A stay for wire-runner fences provided
 in its opposite edges with a zigzag series of
 60 notches or seats, in combination with a zig-
 zag tie-wire provided with spaced loops ar-
 ranged respectively in said notches or seats,
 with the connecting portions between said
 loops arranged diagonally in contact with
 65 one side surface of the stay, all of said loops

projecting perpendicularly beyond the oppo-
 site side surface of the stay to form runner-
 engaging eyes, substantially as specified.

3. A stay for wire-runner fences provided
 in its opposite edges with notches or seats ar- 70
 ranged in a zigzag series, in combination with
 a continuous tie-wire provided with spaced
 loops arranged respectively in said notches
 or seats to project beyond a common side
 surface of the stay, and having the sides of 75
 the loops crossed, the connecting portions of
 the tie-wire lying in contact with the oppo-
 site side surface of the stay, substantially as
 specified.

4. In a fence, the combination with run- 80
 ners, of an intersecting stay provided in its
 opposite edges with notches or seats arranged
 in a zigzag series, and a continuous tie-wire
 terminally attached to the uppermost and
 lowermost runners, and provided at intervals 85
 with loops extending respectively through
 said notches or seats, and engaging the run-
 ners at the opposite side surface of the stay,
 substantially as specified.

5. In a fence, the combination of runners, 90
 the uppermost and lowermost runners being
 provided with crimps, a stay arranged at one
 side surface in contact with the runners, and
 having its extremities arranged contiguous
 to said crimps in the uppermost and lower- 95
 most runners, said stay being provided in its
 opposite edges with a zigzag series of notches
 or seats, and a continuous tie-wire terminally
 coiled around the crimped portions of said
 uppermost and lowermost runners, and pro- 100
 vided with intermediate spaced loops ar-
 ranged respectively in said notches or seats
 to form runner-engaging eyes, substantially
 as specified.

6. In a fence, the combination with run- 105
 ners, of an intersecting stay provided in its
 opposite edges with notches or seats arranged
 in a zigzag series and disposed respectively
 in the planes of the runners, and a tie-wire
 terminally attached to the uppermost and low- 110
 ermost runners, extended transversely across
 the stay in the planes of said uppermost and
 lowermost runners, respectively, having its
 intermediate portion extended in a zigzag di- 115
 rection between said notches or seats, and
 provided at intervals with loops extending
 respectively through the notches or seats,
 and projecting beyond the opposite side sur-
 face of the stay, to form runner-engaging
 eyes, the intermediate eyes being loosely fit- 120
 ted upon the engaged runners, substantially
 as specified.

In testimony that I claim the foregoing as
 my own I have hereto affixed my signature in
 the presence of two witnesses.

JOHN W. HOLLER.

Witnesses:

G. W. CAMBLIN,
 ED. CUNINGHAM.