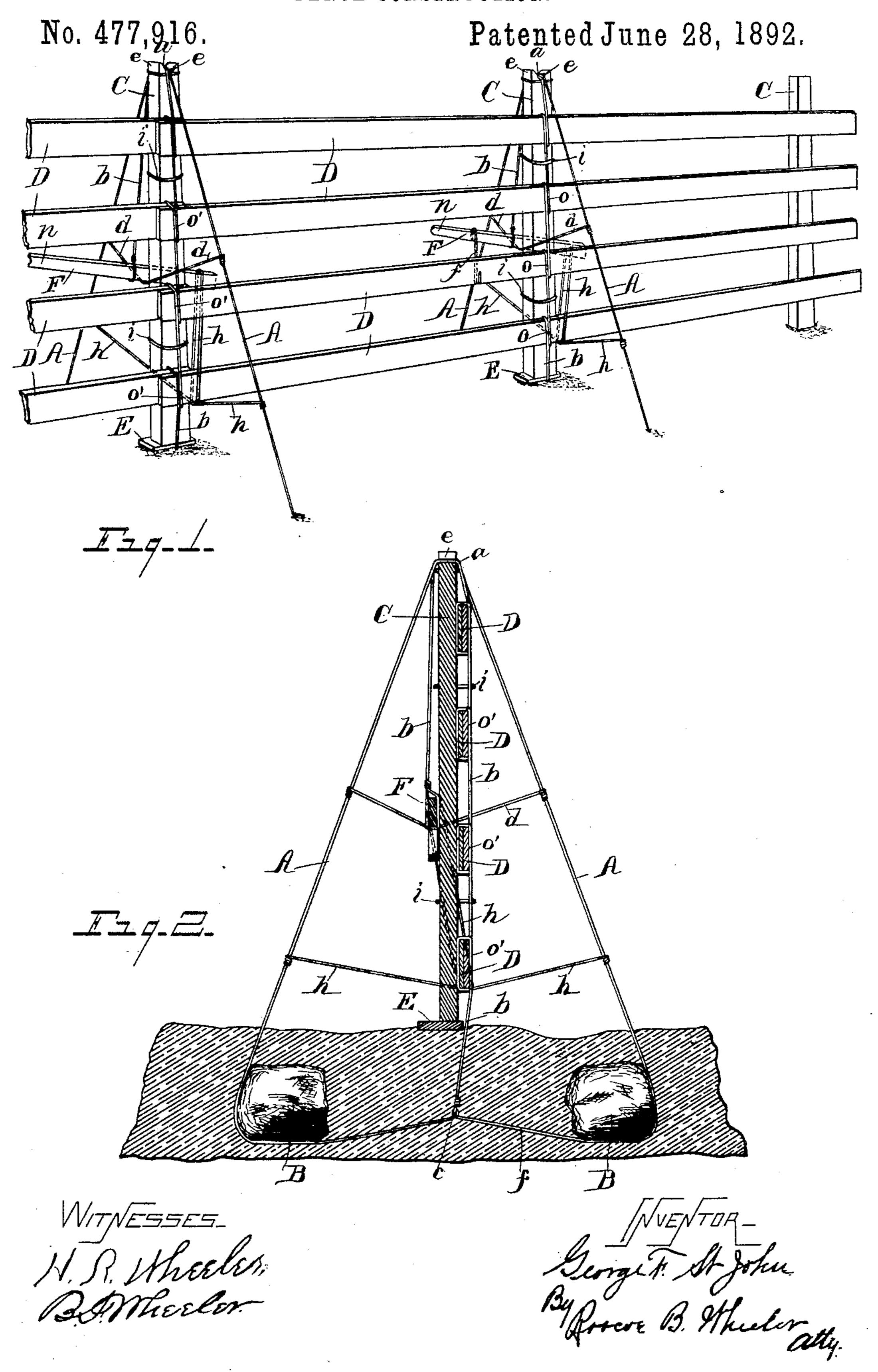
G. F. ST. JOHN.
FENCE CONSTRUCTION.



United States Patent Office.

GEORGE F. ST. JOHN, OF HIGHLAND STATION, MICHIGAN.

FENCE CONSTRUCTION.

SPECIFICATION forming part of Letters Patent No. 477,916, dated June 28, 1892.

Application filed December 21, 1891. Serial No. 415,734. (No model.)

To all whom it may concern:

Be it known that I, GEORGE F. St. John, a citizen of the United States, residing at Highland Station, in the county of Oakland and State of Michigan, have invented certain new and useful Improvements in Fence Construction; 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 of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in fences; and it consists in a certain construction and arrangement of parts, fully hereinafter set forth, the essential features of which being pointed out particularly in the claims.

The object of the invention is to provide cheap, simple, and effective means for constructing and supporting fences without the use of nails, and a further provision whereby sufficient tension may be applied to the supports or stays to give the fence the desired rigidity. This object is attained by the construction illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a line of fence embodying my improved features. Fig. 2 is a vertical cross-section through the fence and a portion of the ground, showing the fence construction and the manner of anchoring the traverse stays.

Referring to the letters of reference, A designates the stays or guy-wires that support the fence laterally. Said guys are anchored in the ground at right angles to the line of the 40 fence, as shown in Fig. 2, the wire passing around the anchor-stones B and being drawn obliquely from each side to the top of the post C of the fence, in which a notch a is formed that receives the wire and around the ears e 45 of which the ends of the wire are secured, thereby effecting a strong support for the fence and enabling the employment of short and light posts, the lower ends of which stand on a stone or base block E. The horizontal 50 boards or bars D of the fence are supported by means of the vertical wire b, the lower end of which is attached at c to an eye formed in I

the horizontal portion f of the stays or guys A, and, said wire being wound about each of the bars D successively, as shown at o, to retain 55 them the proper distance apart. Its upper end, passing over the top of the post and extending downward, is attached to the lever F. Where the ends of the bars D meet, they are lapped and the wire b passed around their 60 lapped ends, as shown at o'. To prevent the bars so supported from swinging away from the posts, the binding-wire i is passed around the wire b and the post, whereby the bars are secured to the posts and supported the proper 65 distance apart without the use of nails. To apply tension to the guys A, so as to give the desired rigidity to the fence, the lever F is employed, which is fulcrumed on the cross-wire d, the ends of which are attached to the guys A. 70

h designates the tension-wire, which is looped at its center to receive the end of the lever F, one of the end portions of said wire h passing downward on one side of the bars and, crossing under the bottom bar, is attached 75 to one of the guys A, the other end portion of said wire passing downward on the other side of the bars and, crossing under the bottom bar, is attached to the opposite guy, so that the ends of the wire h are crossed under the bot- 80 tom bar of the fence and, extending in opposite directions, are attached to the opposite guys, respectively, whereby by applying a downward force to the handle n of the lever F the ends of the wire h will draw upon the 85 guys A and place the desired tension thereon, drawing alike on each of said guys to retain the fence in a perfectly-vertical line. The crosswire d, which serves as a fulcrum of the lever and bears the force applied thereto, also draws 90 on the guys A. The vertical wire b being attached at its free end to the lever F, as said lever is depressed said wire b is drawn to render the parts tight and firm. The lower end of said wire, being attached to the horizontal 95 portion of the guys A, is prevented from being drawn out of the ground and takes the slack out of the guy-wires between the anchors B and assists in placing the tension thereon.

To provide means for locking the lever F 102 to retain the tension placed upon the guys, there is employed a duplex hook f, (shown in Fig. 1,) that engages the lever and the under edge of one of the bars of the fence, and which

may be slid along as the lever is depressed to secure it in place.

It will now be apparent that this improved means may also be employed for supporting a slat-and-wire fence, if desired.

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

Letters Patent, is—

1. In a fence, the combination of the post, the guys attached thereto, the series of bars having overlapping ends, the vertical wire wound around the lapped ends of each series of bars, the lever, and the transverse tension-wire attached to the lever and crossed under said bars, its ends being attached to the guys.

2. In a fence, the combination of the post, the guys, the lever, the cross-wire on which the lever is fulcrumed, attached to the guys, the tension-wire attached to the guys and looped around the end of said lever, and means for locking said lever, substantially as specified.

3. In a fence, the combination of the post,

the triangular guy-wire attached thereto, the lever, the vertical wire attached at its lower 25 end to the horizontal portion of the guy and passing over the post, its other end being attached to the lever, the tension-wire attached to the lever and its ends attached to the guy, and means for locking said lever, substan-30 tially as set forth.

4. In a fence, the combination of the post, the guys, the bars, the lever, the vertical supporting-wire wound around said bars and attached at its free end to said lever, the cross-wire on which the lever is fulcrumed, and the tension-wire attached to the lever and having its ends coupled to the guys, substantially as

specified.

In testimony whereof I affix my signature in 40 presence of two witnesses.

GEORGE F. ST. JOHN.

Witnesses:
FREDERICK HARRIS,

C. A. HARRIS.