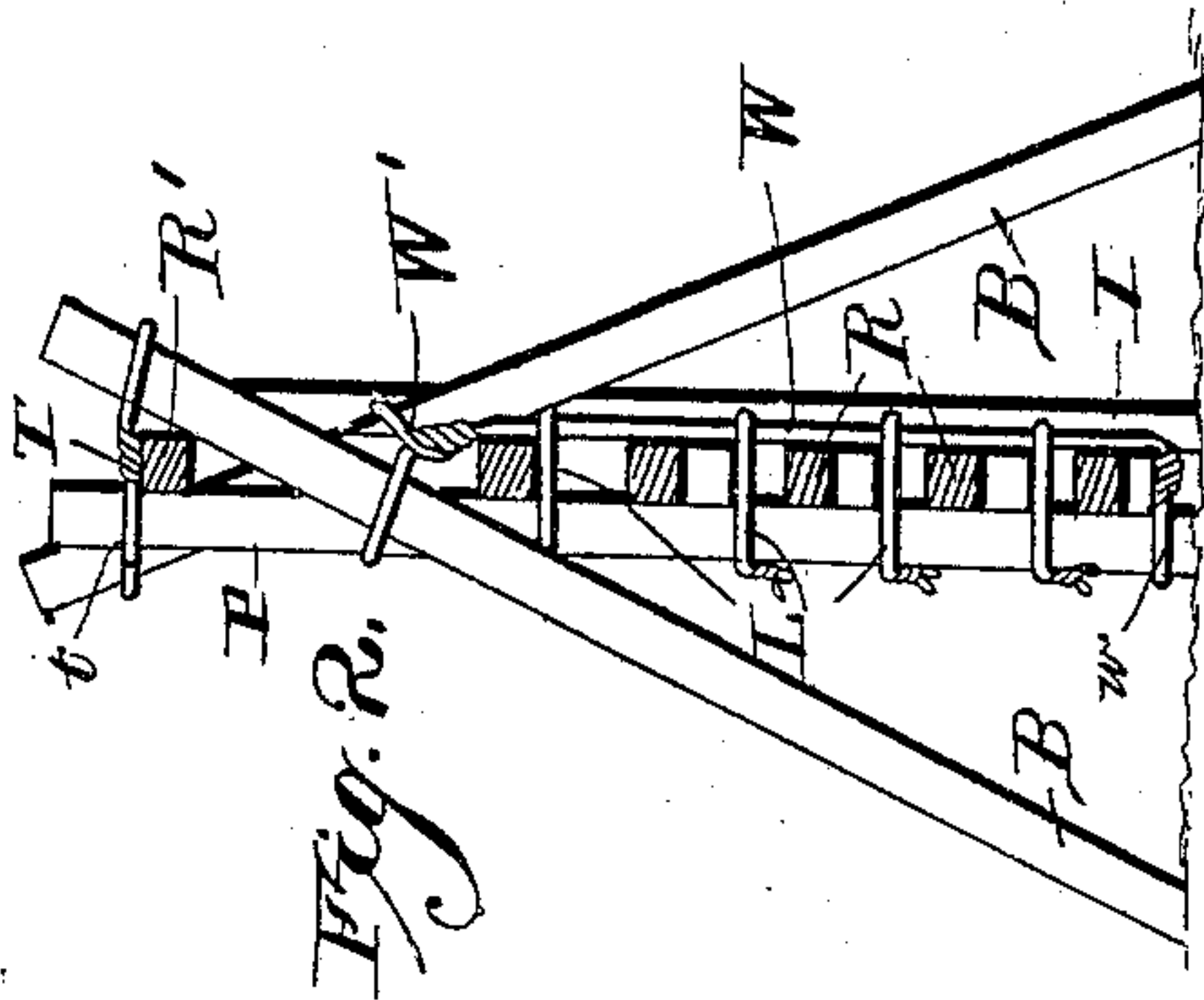
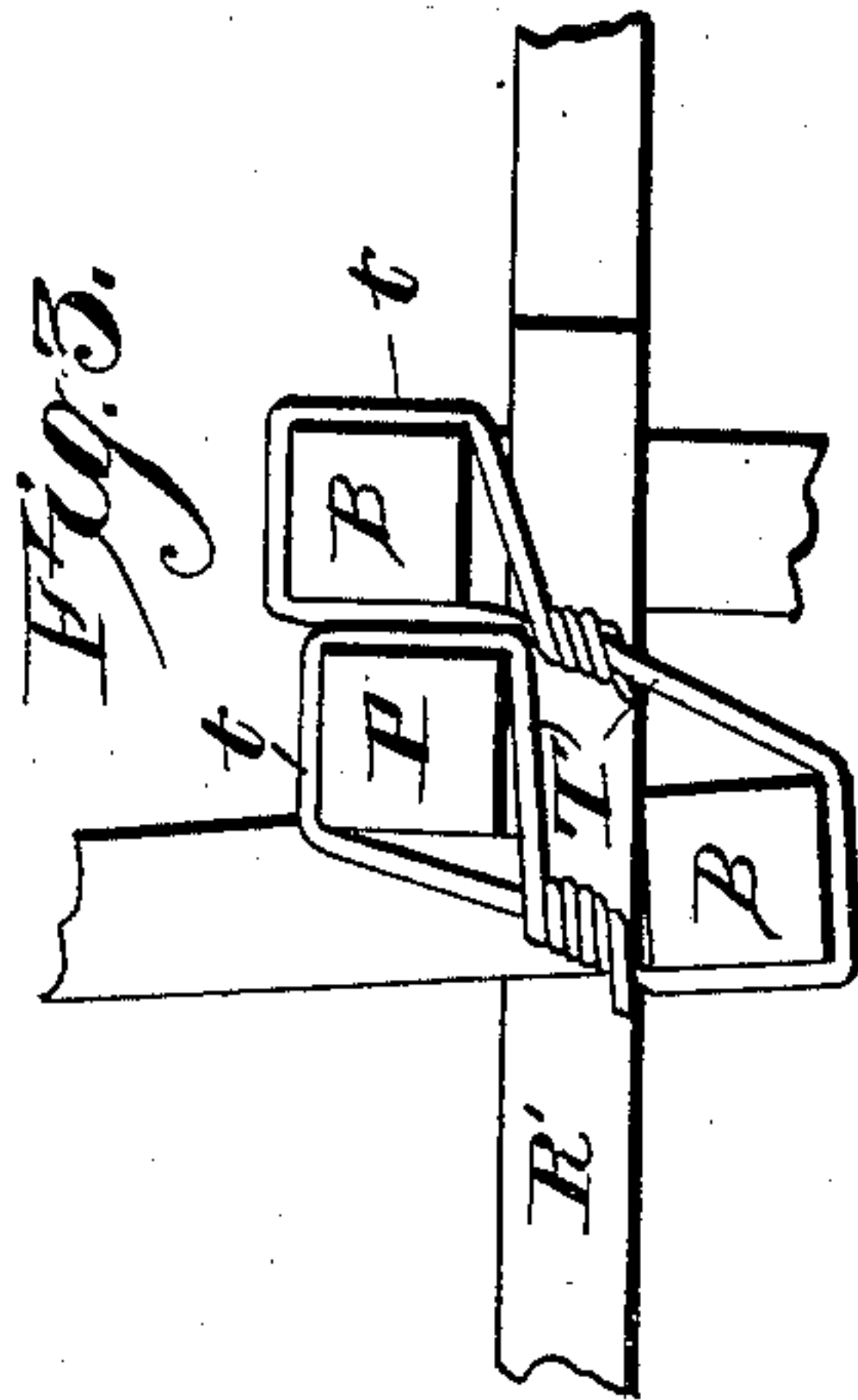
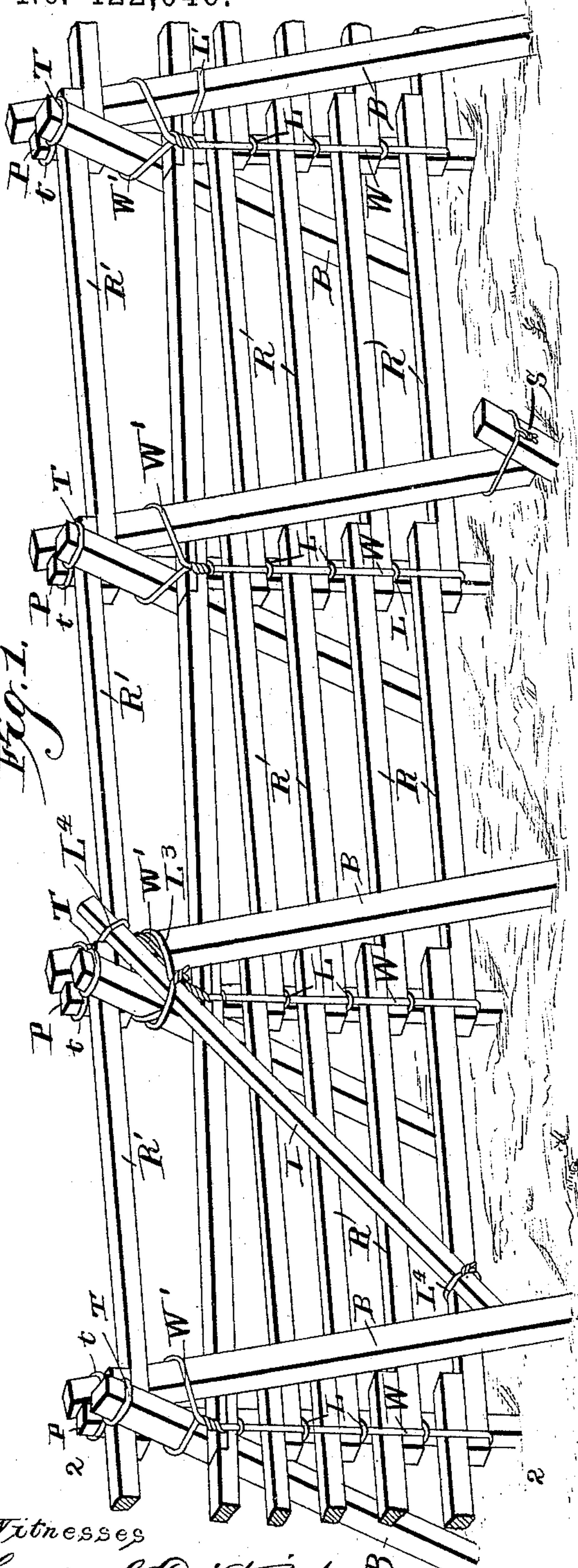


(No Model.)

E. M. ANDREWS.  
FENCE.

No. 422,046.

Patented Feb. 25, 1890.



Witnesses

Henry G. Dieterich  
E. J. Siggers

By his Attorneys

Inventor

Edward M. Andrews,

Ed. Andrews



# UNITED STATES PATENT OFFICE.

EDWARD M. ANDREWS, OF FREEPORT, MICHIGAN.

## FENCE.

SPECIFICATION forming part of Letters Patent No. 422,046, dated February 25, 1890.

Application filed May 21, 1889. Serial No. 311,612. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD M. ANDREWS, a citizen of the United States, residing at Freeport, in the county of Barry and State of Michigan, have invented a new and useful Fence, of which the following is a specification.

This invention relates to fences of that class in which the posts, braces, and rails are of wood, locked or tied together by wires; and the same consists of the peculiar manner in which the parts are connected, whereby a stronger fence is made than any heretofore in use, all as hereinafter described, and illustrated in the accompanying drawings, forming a part of this specification.

In the said drawings, wherein the same letters of reference are applied to corresponding parts throughout, Figure 1 is a perspective view of a few sections of my fence complete. Fig. 2 is a vertical cross-section on line 2 2 of Fig. 1; and Fig. 3 is an enlarged plan view of the upper ends of the posts and braces, showing their manner of connection.

Referring by letter to the said drawings, P designates the vertical posts, seated in the ground at suitable distance apart, and B are the braces, whereof there are two at each post. At their lower ends the braces are also driven into the ground or are wired or nailed to the upper ends of stub-posts S, seated therein, as shown at the right of Fig. 1, and near their upper ends they cross the posts P at opposite points on the sides thereof.

R are the rails, which extend longitudinally of the fence and are tied to the posts, the uppermost rail R' being tied into the V-shaped crotch formed between the upper ends of the braces B.

If desired, inclined braces I may be employed, as shown at the left of Fig. 1, to strengthen the fence and prevent its longitudinal displacement; but I consider these generally unnecessary in view of the strong tying I employ.

Thus far all the parts are old and of the well-known construction and arrangement, my invention consisting more particularly in the parts hereinafter described.

Wires W are passed by their lower looped ends *w* over each post P, the lower rails laid thereon, their ends lapping each other, as

shown, and a wire loop L tied around the post and the body of the wire. The next rails are then laid on the loop L, their ends lapping in the same manner, and another loop L tied on above them. The wire W is thence carried up in front of the post P until all of the rails are clamped thereby in place, and its upper end W' is then drawn tight and looped around the post P and two braces B at their point of crossing.

By means of the wires W, which have the loops W' at their upper ends, the weight of the fence or the parallel rails R are centrally suspended from and supported by a tripod composed of the inclined stakes B and I, or practically a tripod formed by the inclined stakes B. By this construction the weight of the fence tends to hold the parts together, which is a great advantage. If desired, the rail R just beneath such crossing may be supported upon an independent loop L', which encircles the two braces and crosses at its center beneath said rail, as shown at the right of Fig. 1; but I prefer, usually, to use the loops L, as above described. The upper rails R' are then laid in place with their ends lapping, as above described, and a wire tying-loop T, having its ends formed into eyes *t*, is attached to hold them in position. One of the eyes *t* is passed over the upper end of the post, the body thereof carried over the rail and around the upper end of the opposite brace, and, after being drawn tight, the other end is formed into an eye *t* and passed over the upper end of the remaining brace B. If they are to be used, the inclined braces I are then applied, being tied to the upper and lower rails by loops L<sup>3</sup> and crossing the posts P opposite the crossing-points of the braces B. At this point their bodies may be included within the loop W' of the wire W, or another independent loop L<sup>4</sup> may be used, as shown, in order that these inclined braces may be removed at will without necessitating the removal of the other portions of the fence.

It is obvious that almost any number of rails may be used, or that the inclined braces may be entirely dispensed with without departing from the spirit of my invention; also, that the wires W or tie-loops T could be used on other fences than the one specifically described herein. These tie-loops form such a

strong connection with the upper rail R', if properly applied, that the fence is to a great degree strengthened longitudinally, and the use of the stub-posts S prevents its being  
5 blown over by fierce winds or knocked down by cattle, especially if said stub-posts are set in the ground at an angle, as shown.

I claim as the salient points of my invention—

- 10 The combination, in a fence, of the inclined stakes B and I and the vertical posts crossing each other at the same point and forming tripods, the parallel rails R, and the wires W, supporting the parallel rails R and provided

at their upper ends with loops W', encircling 15 the stake and posts at their points of crossing and suspending the rails centrally from the said tripods, whereby the weight of the fence will hold the parts together, substantially as described. 20

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

EDWARD M. ANDREWS.

Witnesses:

THOMAS SULLIVAN,  
VERNOR S. WARD.