

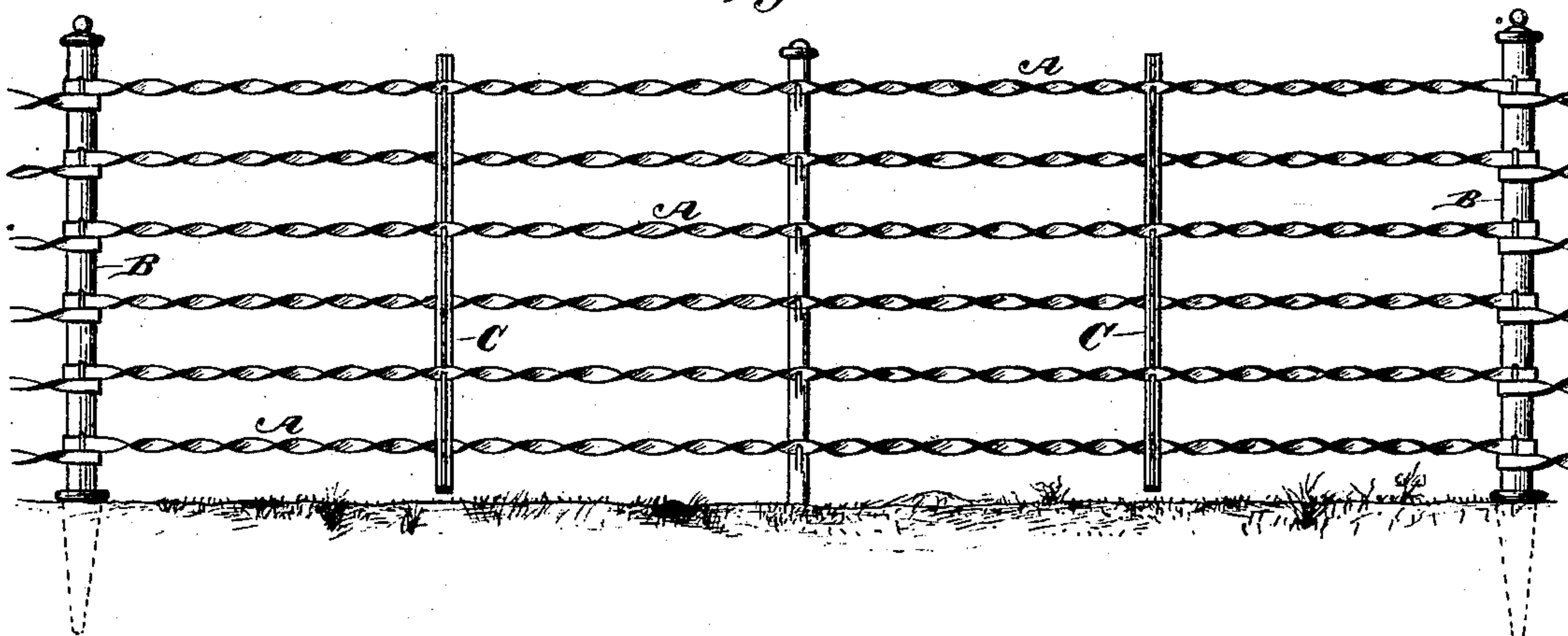
(No Model.)

P. HAYDEN.  
CENTER BRACE FOR FENCES.

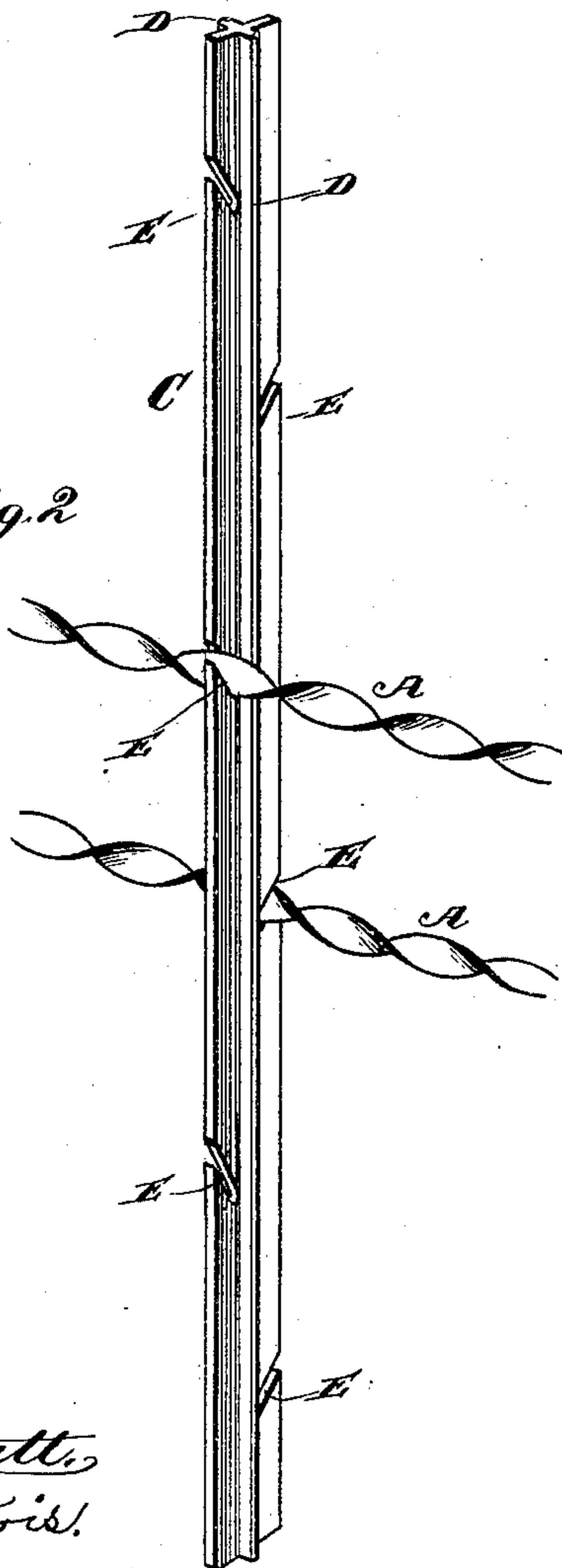
No. 245,921.

Patented Aug. 16, 1881.

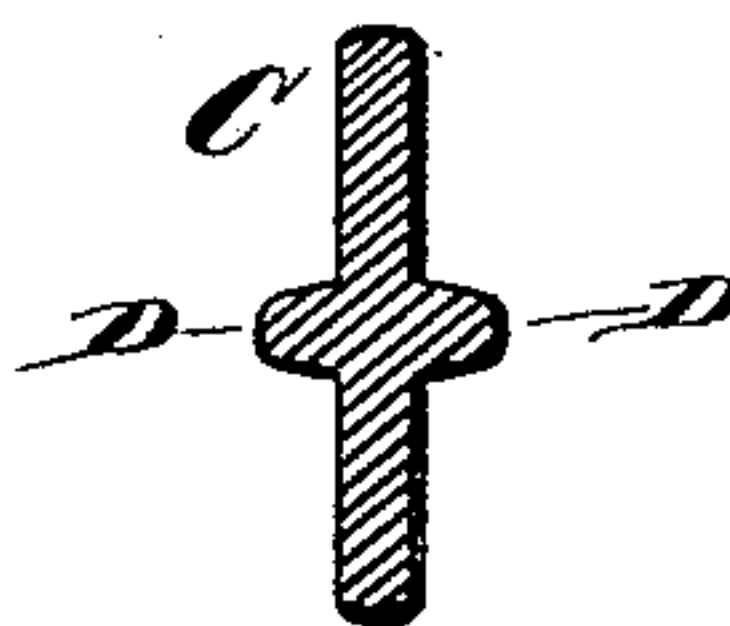
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



Witnesses,  
*Robert Everett,*  
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# UNITED STATES PATENT OFFICE.

PETER HAYDEN, OF NEW YORK, N. Y.

## CENTER BRACE FOR FENCES.

SPECIFICATION forming part of Letters Patent No. 245,921, dated August 16, 1881.

Application filed May 16, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, PETER HAYDEN, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented new and useful Improvements in Center Braces for Strengthening the Metallic Strips or Strands of Fences, of which the following is a specification.

This invention relates to that class of iron fences in which the metallic strips or strands are composed of strips or strands of wrought iron or steel twisted separately into spiral form and secured by winding around the posts.

I will here premise that a wire fence has been provided with flat vertical strips of wood suspended from a top rail and hung upon the wires between the fence-posts, said strips being formed with horizontal grooves or notches made alternately upon opposite sides thereof. Braces or droppers for a wire fence have also been formed of a V-shaped metal strip with openings cut horizontally across the ridge or angle, said droppers being hung upon the wires and secured in place by wedges inserted between the wires and the ridges of the droppers. Flat wooden pickets for fences composed of single wires have been formed with inclined grooves all on one and the same side, the fence-wires being secured in the said grooves. A post for a wire fence has also been formed of a flat body having wings or flanges extending in both directions at right angles to the body, so as to form in transverse section a cross, the four wings or flanges being formed with T-shaped notches to receive the fence-wires, which are held in said notches by means of suitable keys. Finally, in a fence patented to me August 27, 1878, I support twisted strips of metal, which constitute the rails of the fence, by means of tongues that are punched out of the iron fence-posts. The difference, however, between all of these various devices and my present invention will be apparent, since, first, the horizontal or T-shaped slots of the braces referred to are not so well adapted to receive, seat, and brace the twisted strips or strands as the inclined slots; secondly, the inclined slots must be made upon both sides of the brace and the brace must be made of metal; otherwise the expansion or any tendency of the twisted metal strip to untwist under heat would split a wooden brace; thirdly, the peculiar na-

ture of the fence to which my improvement is applied, and which will be hereinafter described, requires the brace to possess strength and rigidity. This is effected by the ribs, which are not wings or flanges, as in the case before referred to, but strengthening-ribs, designed to strengthen the brace without necessitating the cost of a large thick bar of metal.

My improvement comprises a new article of manufacture, consisting of a metal center brace for a fence formed with longitudinal central strengthening-ribs upon opposite sides, and with inclined slots or seats alternately extending from the opposite edges of the brace inwardly toward the center thereof for seating, strengthening, and bracing the spiral strips or strands of a fence, as hereinafter more fully described.

In the accompanying drawings, Figure 1 is a side elevation of an iron fence having my improved metallic center brace connected with the spiral strips or strands which form the stringers of the fence. Fig. 2 is a perspective view of one of the metallic center braces constructed for application to the strips or strands; and Fig. 3 is a transverse section of the said metallic center brace, illustrating the ribs on each of its sides.

A A indicate the metallic spiral strips or strands, which, in a fence of this character, have heretofore been made of wrought-iron strips twisted separately into spiral form and secured to the posts B as illustrated or as usual, said strips or strands being put around the posts and then twisted so as to take up the slack by applying a twister to the strip or strand at a point between the posts, the strip or strand at opposite sides of said twister being necessarily twisted in reverse directions.

The metallic center brace, the chief subject of my invention, is indicated by the letters C C, and said center brace is made of wrought-iron. It can be produced rapidly and cheaply by rolling out the metal into a bar of proper shape and diameter and then cutting the same into suitable lengths, said bar being preferably formed by said rolling operation with a central longitudinal rib, D, upon each side, which not only serves to strengthen the bar, but also forms a seat for the strips or strands, as will be presently explained. The bar or the length cut therefrom to form the center brace



will have the inclined slots or notches E formed alternately on opposite sides thereof, the said slots being cut from the edge of the strip or strand down to or near the longitudinal ribs D D. These inclined slots may be formed in the bar before or after it is severed into the desired lengths to form the center braces. These slots incline upwardly, so that when the center brace is applied to the strips or strands the weight of the said brace will serve to hold it down in place. Its lower end may reach the ground. The slots in the center brace receive and seat the strips or strands, the twist or spiral form adapting the strip to the incline of the slot, and, as illustrated in Fig. 2, the edge of the strip or strand rests against the inner end of the slot, and also against the ribs, which constitute broad seats or bearings, and thereby more efficiently brace the strips or strands and prevent the center brace from turning or accidental detachment.

It is obvious that, by reason of the spiral form of the strip or strand, the center brace cannot be shifted out of place; and hence that

the normal condition, beauty, and symmetry of the fence will always be preserved, the strips or strands being seated, braced, strengthened, and maintained at a uniform distance apart without necessitating the use of wires or other contrivances for securing and holding the center brace in position.

What I claim is—

As a new article of manufacture, the metallic center brace formed with longitudinal central strengthening-ribs upon opposite sides, and with inclined slots or seats alternately extending from the opposite edges of the brace inwardly toward the strengthening-ribs, for seating, strengthening, and bracing the spiral strips or strands of a fence, substantially as shown and described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

PETER HAYDEN.

Witnesses:

GEO. S. HICKOK,  
ADAM HILL.