

S. C. CAPERTON.
RAILWAY TIE.
APPLICATION FILED OCT. 30, 1906.

916,841.

Patented Mar. 30, 1909.
2 SHEETS—SHEET 1.

Fig. I.

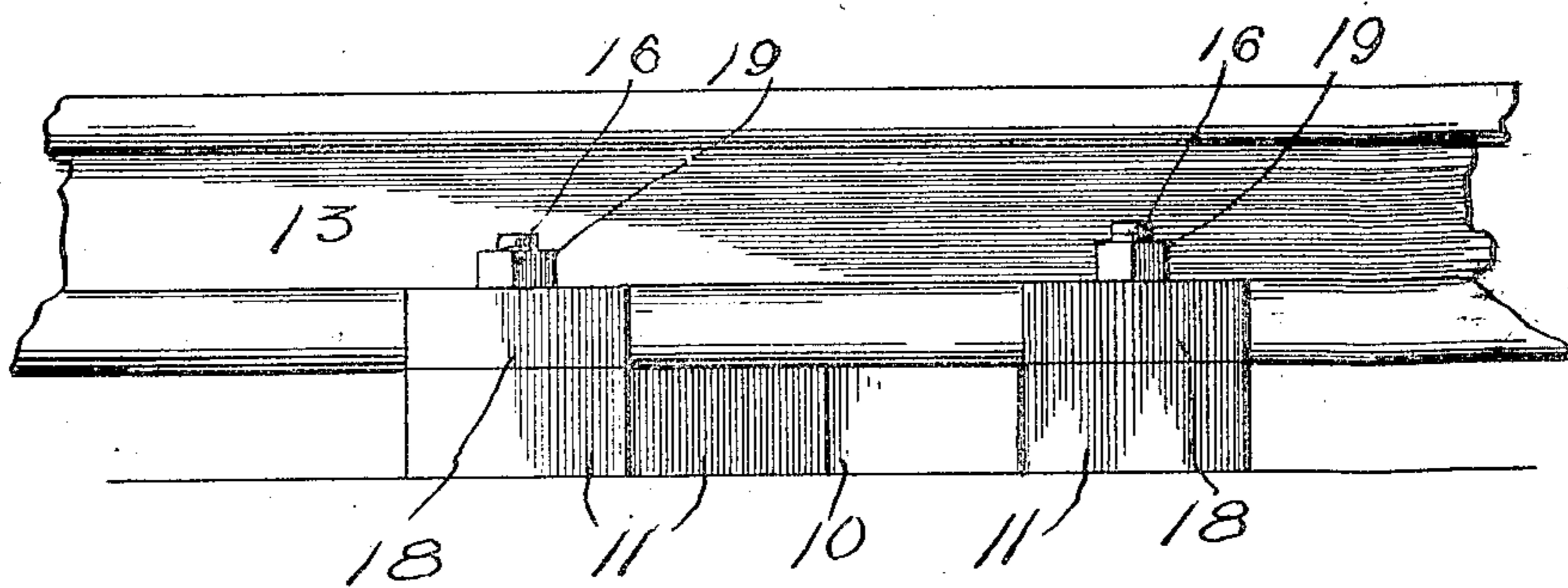
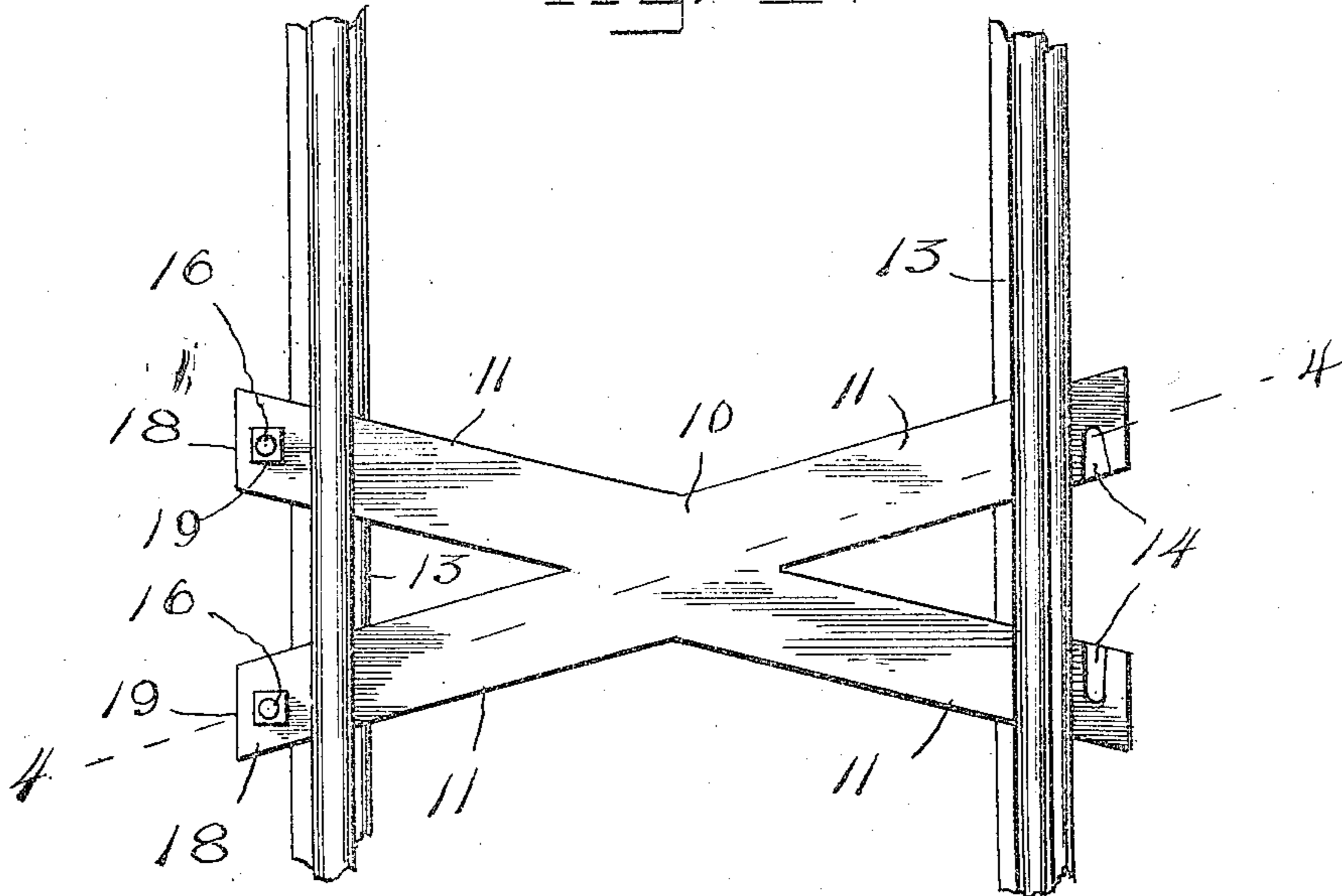


Fig. 2.

Witnesses
J. C. Simpson.
J. W. Linn.

Inventor
Samuel C. Caperton
By *Charles C. Caperton*
Attorney

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2 SHEETS—SHEET 2.

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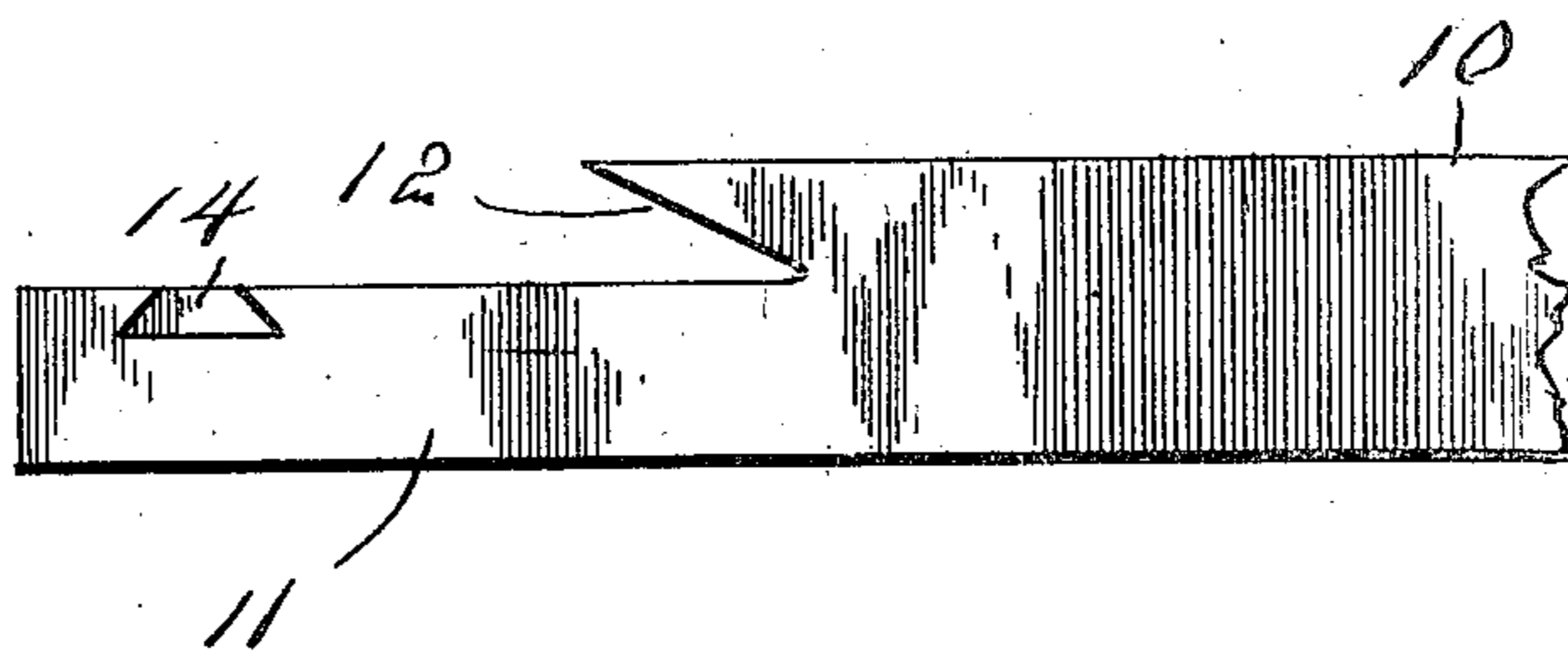


Fig. 3

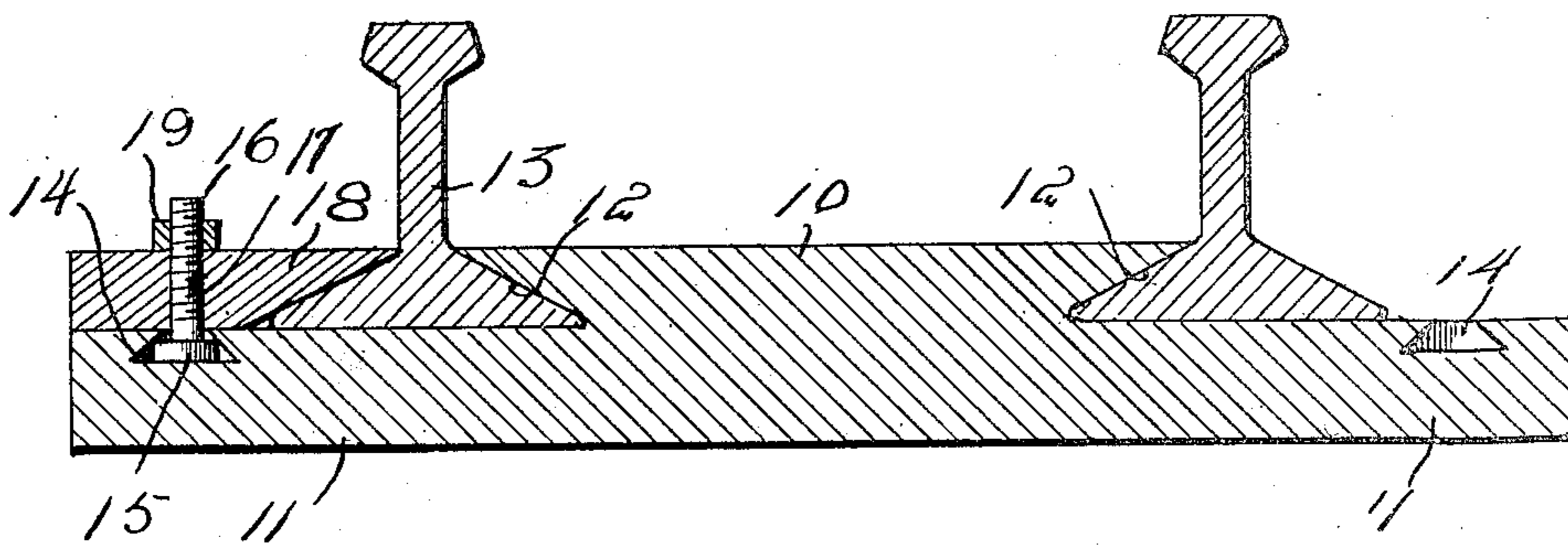


Fig. 4

Witnesses
J. C. Simpson.
J. W. Quinn.

Inventor
Samuel C. Caperton.
By *Charles Chandler*
Attorneys

UNITED STATES PATENT OFFICE.

SAMUEL C. CAPERTON, OF CAMPBELLSVILLE, TENNESSEE.

RAILWAY-TIE.

No. 916,841.

Specification of Letters Patent.

Patented March 30, 1909.

Application filed October 30, 1906. Serial No. 341,210.

To all whom it may concern:

Be it known that I, SAMUEL C. CAPERTON, a citizen of the United States, residing at Campbellsville, in the county of Giles, State of Tennessee, have invented certain new and useful Improvements in Railway-Ties; and I do hereby 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.

This invention appertains to metallic railway ties; and it is the purpose, of the invention, to provide a tie that will not only be lasting, enduring ten or more times the service of the best wood, but be firmer on the road-bed, having a broader bearing thereon, and permitting of the ballast to act thereon more efficiently, and that will hold the rails with greater security upon the ties and against spreading.

The nature of the invention may be ascertained from the device portrayed in the accompanying drawings, which is one of the best forms now known to me in which the invention may be embodied, in view of which drawings, the invention will first be described, and then pointed out in the subjoined claim.

Of the said drawings—Figure 1 is a plan of the invention showing the rails as secured in position on two ends. Fig. 2 is an end elevation. Fig. 3 is an inside view of one of the ends of the tie. Fig. 4 is a longitudinal section view through one end of the tie in the plane 4—4 of Fig. 1.

Similar numerals of reference designate similar parts or features, as the case may be, wherever they occur.

In plan my improved tie is made in a form resembling the letter X—that is, it is made as though consisting of two ties crossed at their longitudinal centers and integrally joined at the point of crossing. They may be of any desired form in cross section, though herein shown as of rectangular shape in the said section. I have considered a form in which their under surfaces might be inclined from opposite sides in order to facilitate the tamping of the ballast under and against the sides of the ties, but this is a matter so well understood by those skilled in the art as not to require illustration or explanation.

In the drawings 10 designates the tie-body made as described, and 11 designates

the end portions upon which the rails forming the track are designed to rest. The said ends are reduced in height, having their upper portions cut away, and the adjacent inner portions undercut in an inwardly sloping direction as at 12, that the inner flange of the rail 13, the upper side of which slopes downward, will fit in said undercut, the base of the rails resting upon the flat upper surfaces of the reduced parts of the ends. Extending laterally outward from the inner sides of the reduced ends are the dovetail spaced grooves 14 having their sides undercut for sliding the head 15 of a bolt, 16, properly formed into said slot, the screw-threaded end of the bolt extending up vertically so as to be passed through a hole, 17, in a bevel edged clamping block 18, the inner edge of which is inclined downward and outward so as to fit over the outer flange of the rail. A nut, 19, is turned on the upper end of each bolt so as to secure the blocks in place and hold the rails down and securely against spreading.

It is obvious that other ways of securing the blocks to the ties may be provided, and that more than one bolt 16 may be employed for the purpose. However, what is shown and has been described will be sufficient for the purposes of this specification.

It is also obvious that my improved tie may be made to rest firmly and steadily on the bed, without liability of rocking or yielding in any direction, and when made of metal, as of steel, for example, will be quite durable and lasting.

What is claimed is—

A metallic tie, cast to form two members held X-wise, said members being of equal length and rectangular in cross-section, the four ends of said tie being reduced in such a manner as to provide four overhanging shoulders, each having a beveled under surface adapted to fit upon the base of a suitable rail, each reduced end having a laterally-extending dove tail shaped groove, a bolt slidably held within each of said grooves, and a bevel edged clamping plate carried by each of said bolts, all arranged as set forth.

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

SAMUEL C. CAPERTON.

Witnesses:

W. H. MEEK,

SOLON BUCHANAN.