

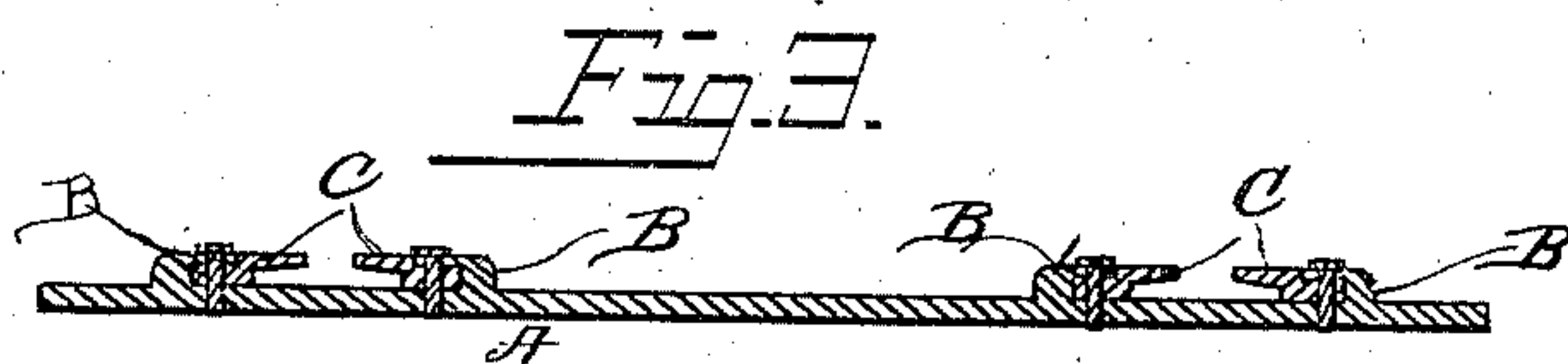
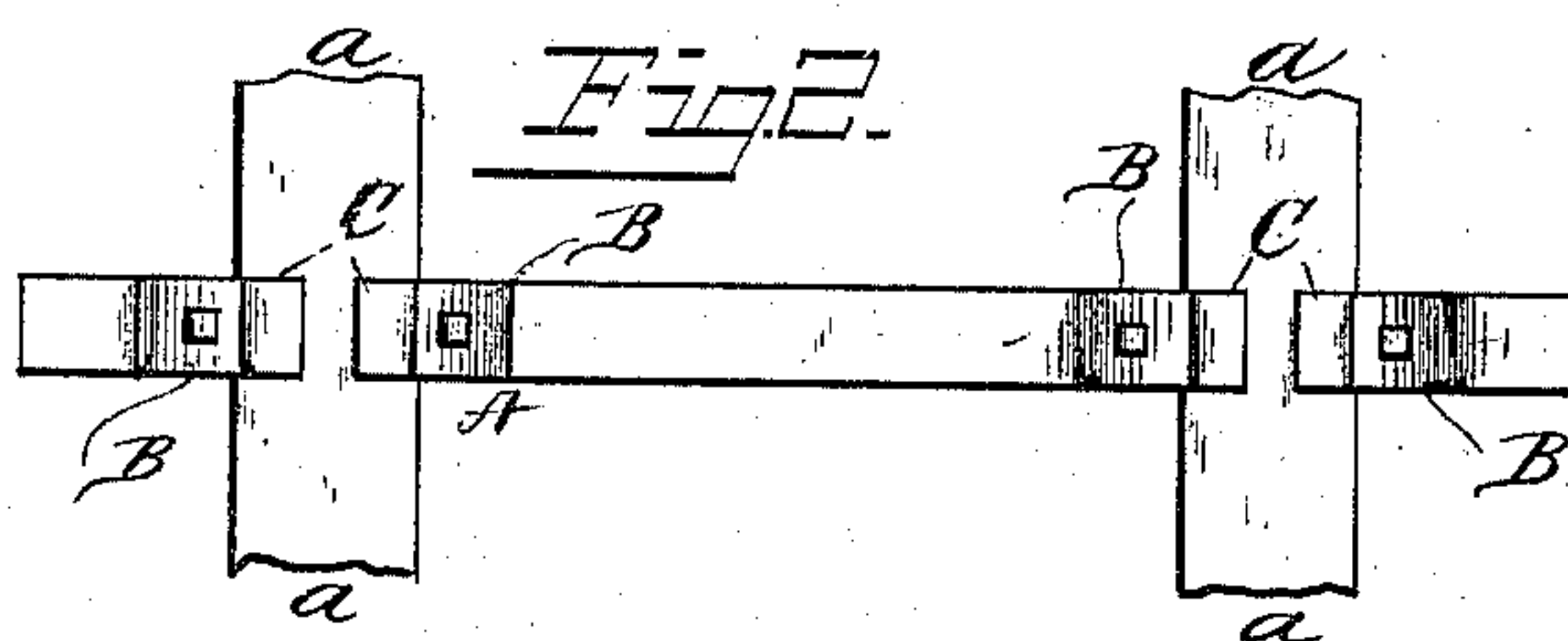
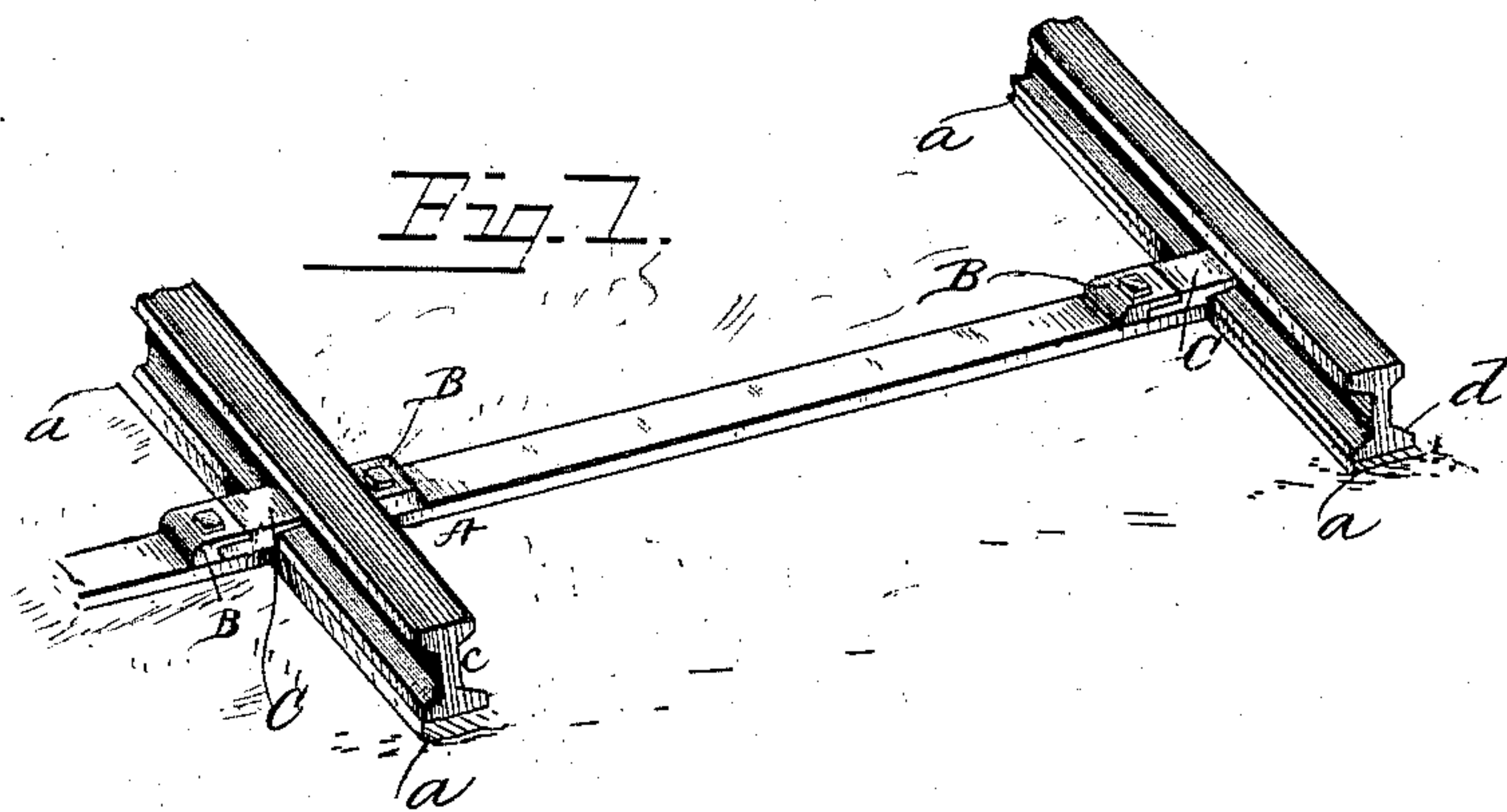
(No Model.)

A. A. HARISON.

RAILROAD TIE.

No. 313,072.

Patented Mar. 3, 1885.



WITNESSES
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UNITED STATES PATENT OFFICE.

ALFERD ALLEN HARISON, OF ELMORE, OHIO.

RAILROAD-TIE.

SPECIFICATION forming part of Letters Patent No. 313,072, dated March 3, 1885.

Application filed May 17, 1884. (No model.)

To all whom it may concern:

Be it known that I, ALFERD ALLEN HARISON, a citizen of the United States, residing at Elmore, in the county of Ottawa and State of Ohio, have invented a new and useful Improvement in Railroad-Ties, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to railroad-ties, and it has for its object to provide a device of this character which shall be cheap and simple in its construction and durable in its use.

A further object of the invention is to provide improved means for fastening the rail to the tie whereby the same may be readily removed and yet readily firmly held in place upon the tie.

With these ends in view, the invention consists in the improved construction and combinations of parts hereinafter fully described, and pointed out in the claim.

In the drawings, Figure 1 is a perspective view of a sufficient portion of a railroad track and ties to illustrate my invention. Fig. 2 is a plan view of a tie detached, and Fig. 3 is a cross-section of the same.

In the accompanying drawings, in which like letters refer to corresponding parts in the several figures, A represents a railroad-tie, which is preferably constructed of metal and is provided near its ends, on each of its sides, with oppositely-extending wings *a*, formed integral with the said tie A.

By constructing the ties of metal it will be seen that all liability of the rails to break is prevented and a firm seat or base afforded for the rail, the wings of the adjacent ties meeting at their ends, so that there is a continuous connection, while heretofore in the use of the wooden ties a space has been left

between each two of them, which in some cases has resulted in serious accidents. Further, by constructing ties of iron they can be manufactured and supplied cheaper than the wooden tie, and are more lasting and durable.

My preferred manner of securing the rails to the ties is as follows: Adjacent to the rails on both their inner and outer sides, is cast integral with the tie a bracket, B. The inner under sides of these brackets B are cut away, as shown, to form seats for clamping-plates C, said clamping-plates being secured in said seats by means of bolts.

In applying the rails to the ties one end of the rail is slid between the clamping-plates C, the inner ends of said clamping-plates bearing against the body portion of the rail, while said rail is prevented from any upward movement whatever by said plates bearing against the flange which is, as shown, of the ordinary T shape. By this manner of securing the rails to the ties it will be seen that the same may be readily removed when desired.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination, with a railroad-tie having the oppositely-extending wings *a*, and the brackets B, having seats, as shown, of clamping-plates C, adapted to be secured in the seats of said brackets B, substantially as set forth.

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

ALFERD ALLEN HARISON.

Witnesses:

R. T. CHAFIN,
THEO. F. SHIPHERD.