

J. F. HUGHES.
RAILWAY TIE.
APPLICATION FILED JULY 20, 1912.

1,055,537.

Patented Mar. 11, 1913.

Fig. 1.

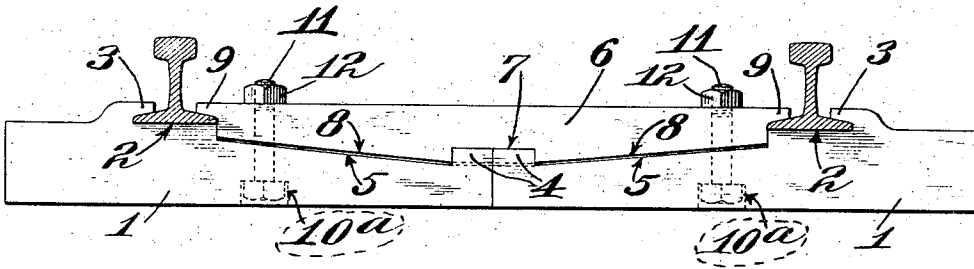


Fig. 2.

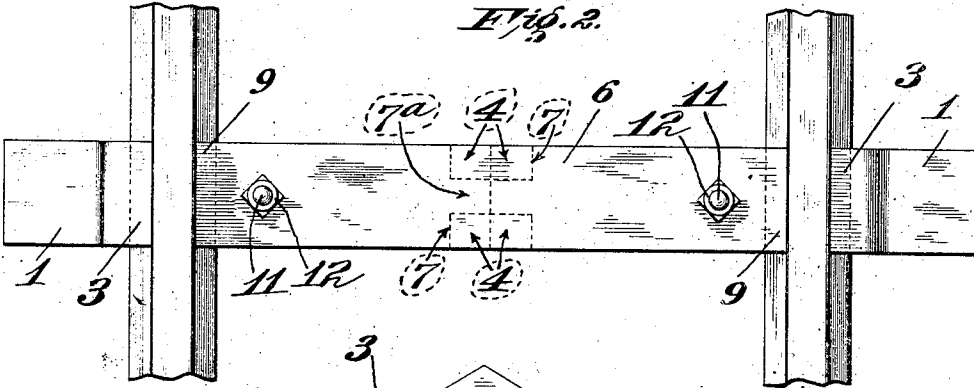


Fig. 3.

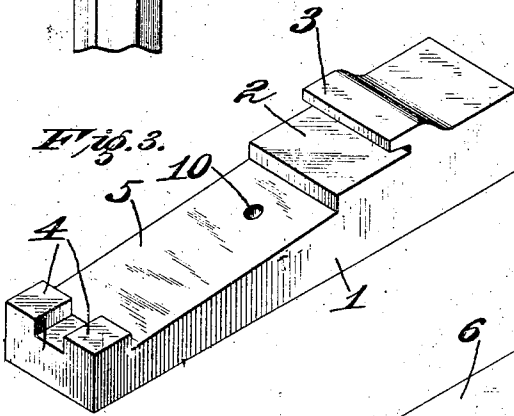


Fig. 4.

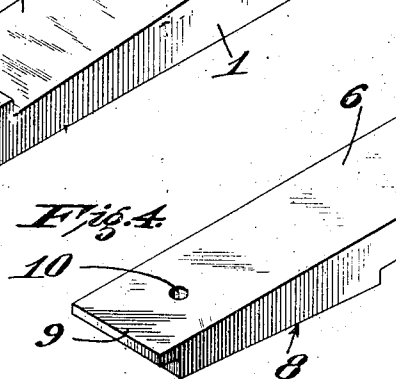
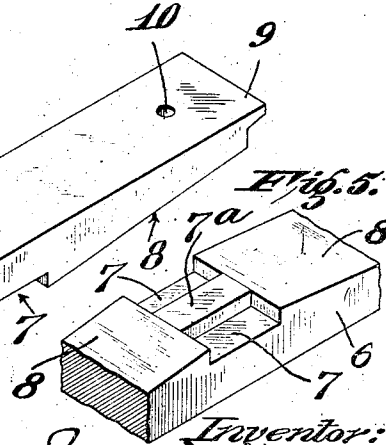


Fig. 5.



Witnesses:
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UNITED STATES PATENT OFFICE.

JAMES F. HUGHES, OF NEWBURG, MISSOURI.

RAILWAY-TIE.

1,055,537.

Specification of Letters Patent.

Patented Mar. 11, 1913.

Application filed July 20, 1912. Serial No. 710,642.

To all whom it may concern:

Be it known that I, JAMES F. HUGHES, a citizen of the United States, and a resident of the city of Newburg, in the county of Phelps and State of Missouri, have invented a new and useful Improvement in Railway-Ties, of which the following is a specification.

This invention relates to railway-ties and more particularly metallic ties.

It has for its principal objects to produce a railway-tie which is simple in construction and easily handled, to obviate the necessity for using separable fastening devices for the rails, and to attain certain advantages which will hereinafter more fully appear.

The invention consists in the parts and in the arrangements and combinations of parts hereinafter described and claimed.

In the accompanying drawing which forms part of this specification and wherein like symbols refer to like parts wherever they occur,—Figure 1 is a side elevation of a railway-tie embodying the invention, showing the rails in cross section; Fig. 2 is a top plan view; Fig. 3 is a perspective view of one of the base members; Fig. 4 is a perspective view of the securing member; and Fig. 5 is a fragmentary perspective view of the middle portion of the securing member inverted to show the recesses which receive the lugs on the base members.

As shown in the drawing, the tie comprises two separable base members 1 having seat portions 2 for the rails, said seat portions having overhanging lugs or lips 3 in cooperative relation thereto, so as to engage the base flanges of the rails. The meeting inner end portions of the base members 1 are provided with spaced upstanding lugs 4; and between these lugs 4 and the seat portions 2, the base members are preferably inclined, as at 5.

A securing member 6 is provided at its middle with recesses or gains 7 on opposite sides adapted to receive the upstanding lugs 4 of the base members, the portion 7^a between the recesses 7 fitting in the spaces between the lugs 4 and serving as a cross key to prevent independent lateral movement of the base members 1 and securing member 6. The bottom face of said member 6 is inclined, as at 8, to correspond to the inclined portions 5 of the base members. The end portions of the member 6 are rabbeted to provide ledges or lugs 9 adapted to over-

hang and engage the base flanges of the rails.

The base members 1 and securing member 6 are provided with vertical holes 10 through which securing bolts 11 are inserted, said bolts being inserted upward through the base members 1, which latter have countersinks 10^a adapted to receive the heads of the bolts.

The relative depth of the recesses 7 in the member 6 with respect to the lugs 4 of the base members 1 and also the relative position of the lugs or ledges 9 of the member 6 with respect to the seat portions 2 of the base members are such that there is a slight space between the inclined surfaces 5 and 8 so that, when the nuts 12 are tightened on the bolts 11, the lugs 4 at the meeting ends of the base members are drawn tight into the recesses or gains 7 and the lugs or ledges 9 are clamped tight upon the base flanges of the rails.

A tie constructed as herein set forth is easy to apply, especially in repairing the track, in which case it might be only necessary to remove and replace a tie at intervals. That is, after the securing member 6 is removed the base members may be easily moved endwise outward in opposite directions and replaced with new ones; whereas, if the tie base were made in one piece, the rails would have to be sprung from under the lugs 3 or else the lugs would have to be made detachable, and even then the removal of the tie would be difficult, owing to the limited space on either side of the track, especially in cuts.

While the tie may be constructed advantageously of metal, I do not wish to be limited to any particular material; nor to the specific construction and arrangement shown, as the structure admits of considerable modification without departing from the invention.

What I claim is:

1. A railway-tie comprising two separable base members whose inner ends abut, said base members having rail seats, a securing member having means at its ends adapted to secure the rails on said rail seats, the meeting end portions of said base members and the adjacent middle portion of the securing member being arranged and adapted to interlock, and means for fastening said base members and securing member together.

2. A railway-tie comprising two separable base members whose meeting ends abut and are provided with upstanding projections, said base members having rail seats, and a
5 securing member having a recess at its middle adapted to receive the upstanding projections on said base members and having its end portions arranged to clamp the rails upon said rail seats, and means for
10 fastening said base members and securing member together.

3. A railway-tie comprising two separable base members whose meeting ends abut and are provided with upstanding lugs, said
15 base members having rail seats, a securing member having a recess at its middle adapted to receive said lugs at the meeting ends of the base members, said securing member having overhanging ledges at its ends adapted
20 to engage the base flanges of the rails, and bolts for securing said base members and securing member together and for clamping the rails.

4. A railway-tie comprising two separable
25 base members having rail seats provided with overhanging lugs adapted to engage the outer base flanges of the rails, the inner ends of said base members abutting and having upstanding lugs terminating in a
30 plane below the rail seats, and a securing member having a recess at its middle adapted

ed to receive said upstanding lugs on the base members and having overhanging ledges at its ends adapted to engage the inner base flanges of the rails, and means
35 for securing said base members and said securing member together and for clamping the rails to the seats.

5. A railway-tie comprising two separable base members having rail seats provided
40 with overhanging lugs adapted to engage the outer base flanges of the rails, the inner ends of said base members abutting and having upstanding lugs terminating in a plane below the rail seats, the portions of the base
45 members between said lugs and rail seats being inclined, a securing member having a recess at its middle adapted to receive said lugs and having its end portions arranged to engage the inner base flanges of the rails, the
50 bottom of said securing member being inclined to correspond to the inclined portions of the base flanges, and means for securing said base members and said securing member together and for clamping the rails to
55 the seats.

Signed at Newburg, Missouri, this 13th day of July, 1912.

JAMES F. HUGHES.

Witnesses:

FRED BAILEY,
J. H. FREEMAN.