

No. 705,452.

Patented July 22, 1902.

S. A. SHARUM.
METALLIC RAILWAY TIE.
(Application filed Nov. 19, 1901.)

(No Model.)

Fig. 1.

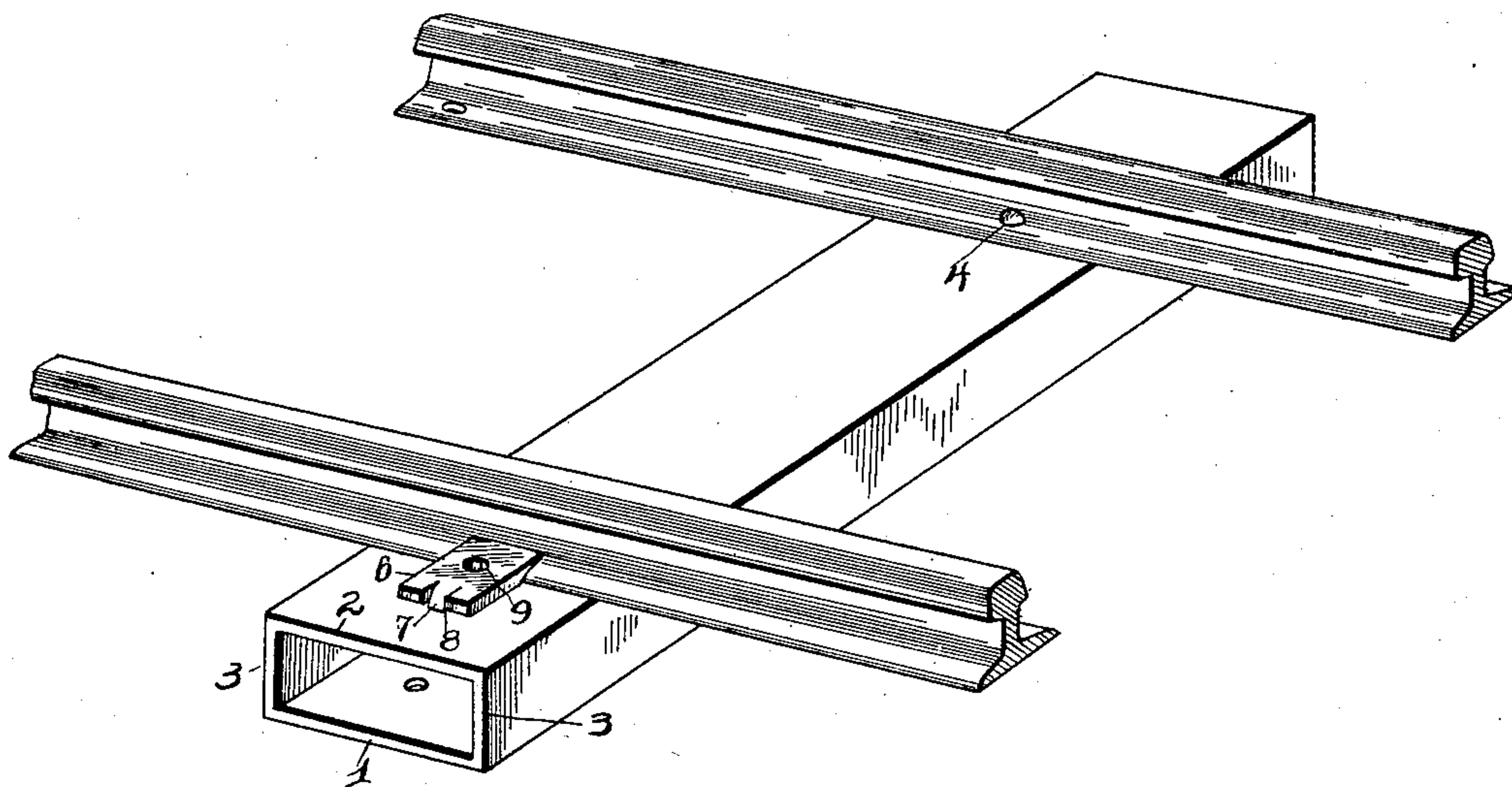
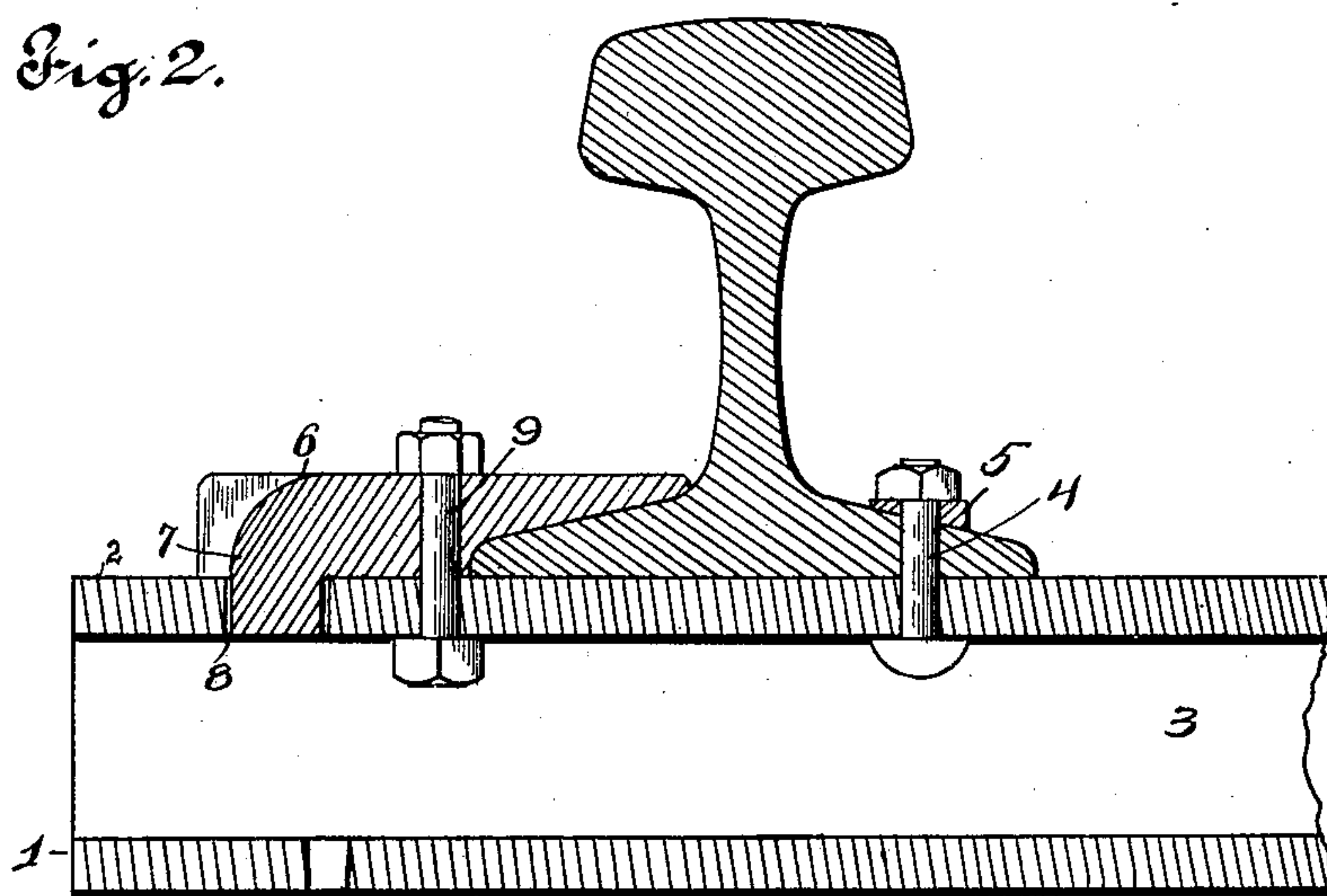


Fig. 2.



Witnesses

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UNITED STATES PATENT OFFICE.

STEPHEN A. SHARUM, OF BOB, INDIAN TERRITORY.

METALLIC RAILWAY-TIE.

SPECIFICATION forming part of Letters Patent No. 705,452, dated July 22, 1902.

Application filed November 19, 1901. Serial No. 82,941. (No model.)

To all whom it may concern:

Be it known that I, STEPHEN A. SHARUM, residing at Bob, Chickasaw Nation, Indian Territory, have invented certain new and useful
5 Improvements in Metallic Railway-Ties, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

This invention relates to a metallic tie; and
10 it consists of the novel construction, combination, and arrangement of parts hereinafter shown, described, and claimed.

Figure 1 is a perspective view of the complete tie with the rail mounted thereon. Fig.
15 2 is a sectional view of the part of the tie, showing the clamp which is secured on each side of the base of the rail on each tie.

The tie consists of a hollow rectangular casting, consisting of the bottom 1, which
20 rests upon the earth or ballast, and the parallel top 2, which is connected to the said bottom by means of the integral vertical sides 3. The ends of the tie are open, as shown, and the interior of the tie is unobstructed throughout
25 its length, so that access may be readily had to any part of the inside of the tie.

It is intended that the rails rest directly upon the upper surface of the tie, as shown, and through the bases of the rails on each
30 side and form openings, and corresponding openings are formed through the top 2 of the tie, so that the bolts 4 may be readily passed through said openings to hold the rails in position. I make use of a washer 5 on each
35 bolt, the upper surface of which is flat or horizontal and the lower surface of which is beveled and rests upon the inclined upper surface with the base of the rail. The purpose of this is to provide a flat bearing-surface for
40 the head of the bolt 4 or nut, which rests upon the said washer.

6 indicates a metallic clamp which is provided with an integral tongue or extension 7, which projects into an opening 8, formed in
45 the top 2 of the tie. There is one of the openings near each end of the tie, so that one of said clamps may be provided for each rail.

The purpose of the tongue 7 is to prevent the clamp from being turned or otherwise displaced or dislocated when in position. The
50 inner end of the under side of the clamp is cut out, as may be seen in Fig. 2, corresponding to the outer side of the base of the rail, which rests in the said cut-out portion, while the outer portion of the clamp rests upon the top 2
55 of the tie, as shown. An opening is formed through the said clamp adjacent to the edge of the base of the rail, and a corresponding opening is formed through the top of the tie to receive a bolt 9, which is passed through said
60 openings and is made rigid therein in any desired or known manner. This will prevent the displacement of the clamp, which may be drawn securely over the base of the rail to hold the latter in position.

A tie constructed as described forms a lasting support for the rails, and the sides of the tie being formed vertical and connected by integral base or bottom 1 are very firm and do
65 not readily yield to any force or lateral pressure.

In some instances I may place the clamps on both sides of the rail, thereby rigidly supporting the rail and preventing it from shifting or becoming displaced.

I claim—

A railway-tie consisting of the hollow rectangular casting having the bottom 1, and the parallel top 2 connected to the bottom by means of the integral vertical sides 3, 3, said
80 casting being open at the ends; the clamp 6, having an integral tongue 7 which projects into an opening in the top 2; and a bolt inserted through said top and through the lower flange of the rail; a bolt inserted through said
85 top and through said clamp, substantially as specified.

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

STEPHEN A. SHARUM.

Witnesses:

WM. WESSELHOFT,
F. G. GREGORY.