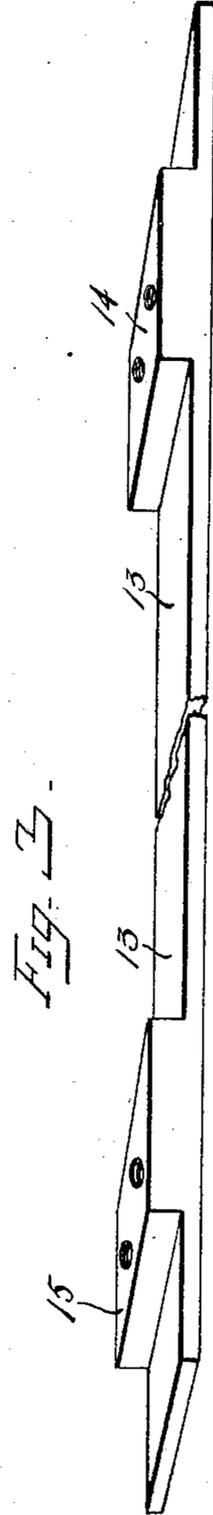
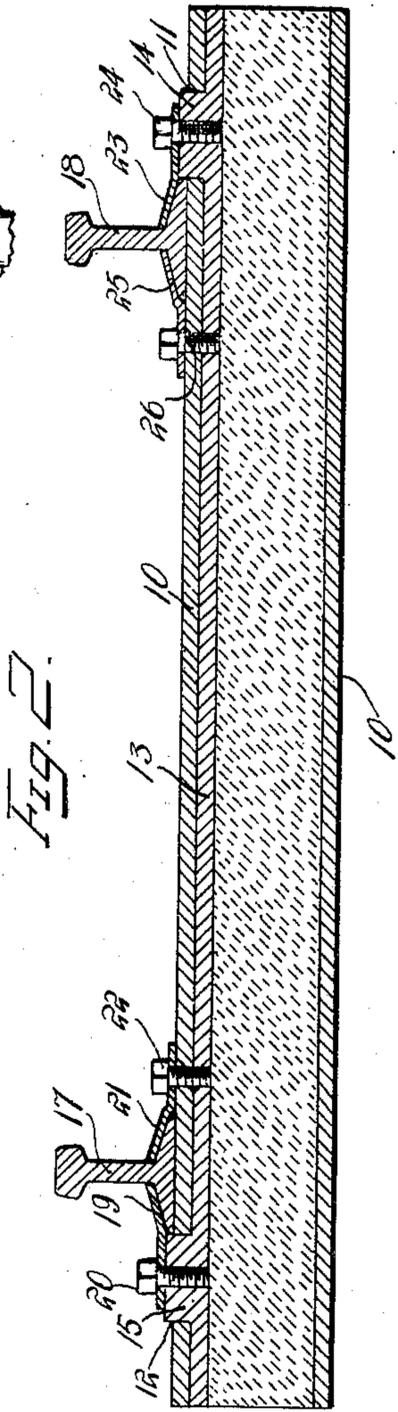
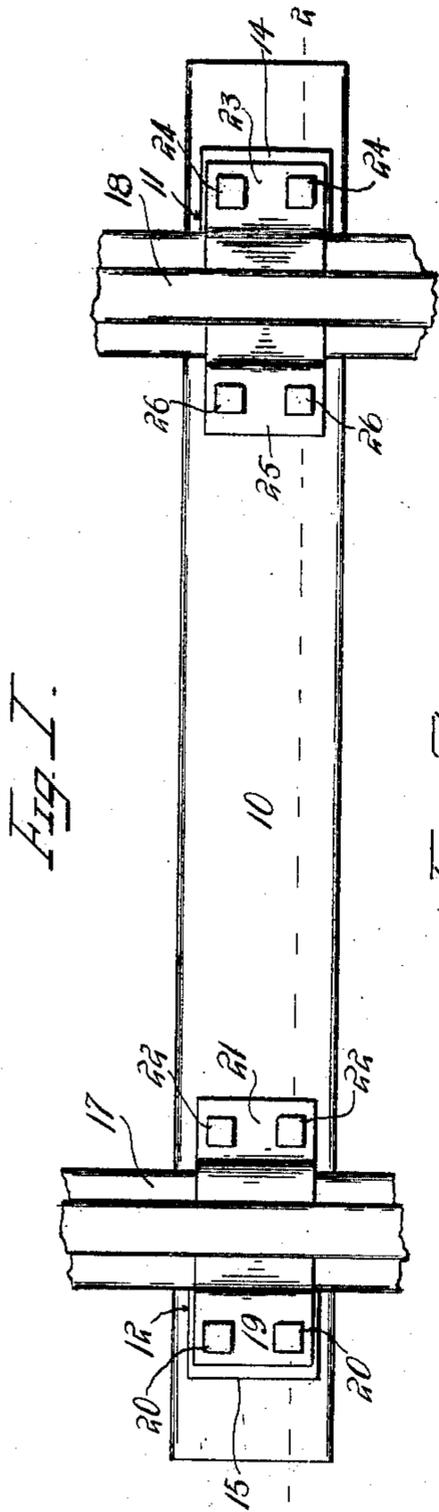


S. E. BERRIER.  
 RAILWAY TIE.  
 APPLICATION FILED FEB. 11, 1911.

990,696.

Patented Apr. 25, 1911.



Witnesses  
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# UNITED STATES PATENT OFFICE.

STEPHEN E. BERRIER, OF BATAVIA, IOWA.

RAILWAY-TIE.

990,696.

Specification of Letters Patent.

Patented Apr. 25, 1911.

Application filed February 11, 1911. Serial No. 607,957.

*To all whom it may concern:*

Be it known that I, STEPHEN E. BERRIER, a citizen of the United States, residing at Batavia, in the county of Jefferson, State of Iowa, 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 relates to railway ties.

The object of the invention resides in the provision of a railway tie which includes means whereby the rails attached thereto are effectively secured against spreading.

A further object of the invention resides in the provision of a railway tie which is adapted to sufficiently support the rails and which will be simple in construction, durable, and of such a nature that the same may be manufactured and installed at an exceedingly small cost.

With these and other objects in view, the invention consists in the details of construction and arrangement and combination of parts to be hereinafter more fully described and particularly pointed out in the appended claim.

In describing the invention in detail reference will be had to the accompanying drawing, wherein like characters of reference denote corresponding parts in the several views; and in which,

Figure 1 is a plan view of a railway tie constructed in accordance with the invention, a fragment of the rails being shown secured thereon; Fig. 2, a section on the line 2—2 of Fig. 1; and Fig. 3, a detail perspective view of the plate contained within the tie and which is provided with means adapted to extend from the upper side of the tie and engage the respective rails to prevent the latter from spreading.

Referring to the drawing, the tie is shown as comprising a tubular member 10 of substantially square cross section, the top of which member is provided with spaced openings 11 and 12. Disposed within the member 10 and secured against the inner face of

the top of said member is a plate 13 which has formed thereon projections 14 and 15 extending respectively through the openings 11 and 12. The interior of the member 10 beneath the plate 13 is provided with a plastic filling formed of cement or other suitable material.

Seated upon the top of the member 10 adjacent the projection 15 is a rail 17, while another rail 18 is seated upon the top of the member 10 adjacent the projection 14. The rail 17 is positioned with the outer side edge of its base in engagement with the adjacent side face of the projection 15, and is secured to the top of the member 10 by means of a clamping plate 19 overlapping the base thereof and secured to the projection 15 by screw bolts 20. The rail 17 is further secured to the top of the member 10 by means of a clamping plate 21 which overlaps the inner portion of the base of said rail and is secured to the top of the member 10 by screw bolts 22 which latter also serve to secure the plate 13 to the top of the member 10. The rail 18 is likewise secured to the top of the member 10 by a clamping plate 23 which overlaps the outer portion of the base of the rail 18 and is secured to the projection 14 by means of screw bolts 24. This rail 18 is further secured to the top of the member 10 by another clamping plate 25 which overlaps the inner portion of the base of the rail 18 and is secured to the top of the member 10 by means of screw bolts 26, which latter also serve to secure the plate 13 to the top of the member 10. By this construction it will be apparent that any tendency of the rails 17 and 18 to spread will be effectively resisted and prevented by the projections 15 and 14 respectively. It will also be apparent that a tie constructed in accordance with that heretofore described will offer a very solid foundation for the rails and will possess sufficient resiliency to assist in absorbing the vibrations during the travel of trains thereover.

What is claimed is:—

A railway tie comprising a tubular member having spaced openings in the top thereof, a plate disposed within and secured

against the top of said member, projections  
on said plate extending through said open-  
ings respectively; means for securing rails  
upon the top of said member with the outer  
5 side edges of their bases in engagement with  
said projections respectively, and a plastic  
filling in said member beneath the plate.

In testimony whereof, I affix my signa-  
ture, in presence of two witnesses.

STEPHEN E. BERRIER.

Witnesses:

W. S. CAMPBELL,  
S. J. BECK.

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,  
Washington, D. C."

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