

A. FREY.  
METALLIC RAILWAY TIE.  
APPLICATION FILED MAR. 2, 1908.

937,063.

Patented Oct. 19, 1909.

Fig. 1.

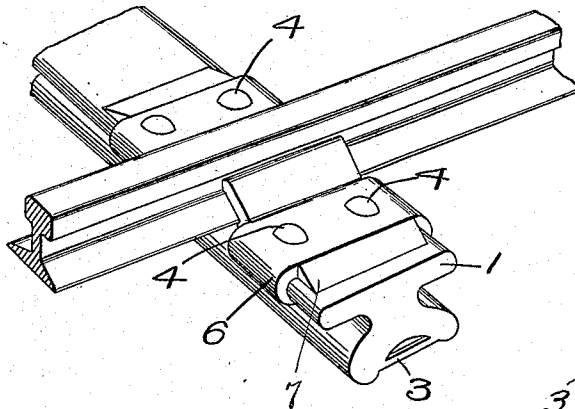


Fig. 7.

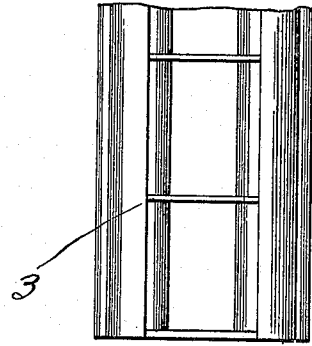


Fig. 2.

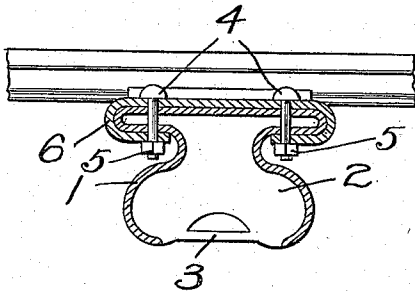


Fig. 3.

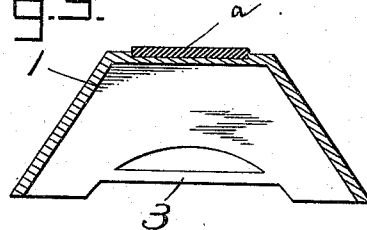


Fig. 4.

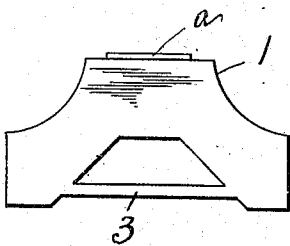


Fig. 5.

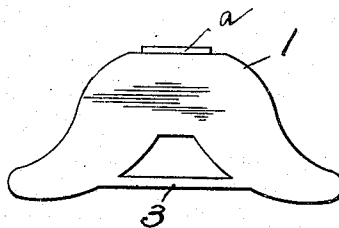
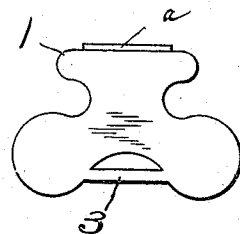


Fig. 6.



Witnesses  
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# UNITED STATES PATENT OFFICE.

ALBERT FREY, OF CRETE, ILLINOIS.

METALLIC RAILWAY-TIE.

937,063.

Specification of Letters Patent.

Patented Oct. 19, 1909.

Application filed March 2, 1908. Serial No. 418,875.

*To all whom it may concern:*

Be it known that I, ALBERT FREY, a citizen of the United States, residing at Crete, in the county of Will and State of Illinois, have invented a new and useful Metallic Railway-Tie; 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.

The invention relates to improvement in railway ties, and has for its object to provide a metallic tie adapted for use on railways and street car lines.

A further object of the invention is to produce a device of this character, so constructed as to eliminate unnecessary weight and material.

A further object of the invention is to produce a device of this character having means for preventing the same from sinking into the ground.

With these and other objects in view, the invention consists in the novel construction and arrangement of parts hereinafter described and shown and particularly pointed out in the appended claim.

In the drawings:—Figure 1 is a perspective view of one end of my tie showing the same in engagement with a rail. Fig. 2 is a vertical sectional view through said tie. Figs. 3, 4, 5 and 6 are views and elevations, showing modified forms of the flared portions of my tie. Fig. 7 is an inverted view of a portion of the tie.

Referring to the drawings 1 designates a metallic railroad tie which is cast into one piece, the lower portion of which is flared as shown at 2, thus preventing the rail from sinking readily into the ground. It is understood that these flared portions may be of various dimensions and forms. Arranged transversely of said flared portions

are flanges 3 which extend from side to side of the lower surface of said tie. These transverse flanges are designed to prevent the creeping of the ties especially at curves where they are frequently inclined to move by reason of the pressure exerted by a fast moving train.

Mounted on the upper portion of the tie is a pair of jaws having downwardly curved flanges 6 which are engaged by bolts 4, which bolts are provided with screw threaded nuts 5. The bolts pierce the curved flanges 6 in two places and also a portion of the tie. The jaws are provided with a bracing flange 7 which extends outwardly beyond the curved flanges 6.

The upper surface of the tie is provided with a resilient seat *a* which is designed to promote the smoothness of action of the train in passing thereover.

What is claimed is:—

A device of the class described comprising a metallic railway tie, oppositely disposed projections extending from each side thereof, a clamp mounted on said tie and having flanges engaging said projections, bolts piercing said projections and clamp, bracing flanges extending rearwardly of said first mentioned flanges and adapted to reinforce said clamp, the lower surface of said tie being flared where it engages the surface of the ground whereby it is prevented from sinking into the ground, a series of flanges arranged transversely of said flared portion and formed integrally with said tie, for preventing creeping of the same.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ALBERT FREY.

Witnesses:

J. W. COOK,  
EMIL BOELMAR.