

No. 810,321.

PATENTED JAN. 16, 1906.

S. T. CARROLL.
METALLIC RAILROAD TIE.
APPLICATION FILED JUNE 10, 1905.

Fig. 1.

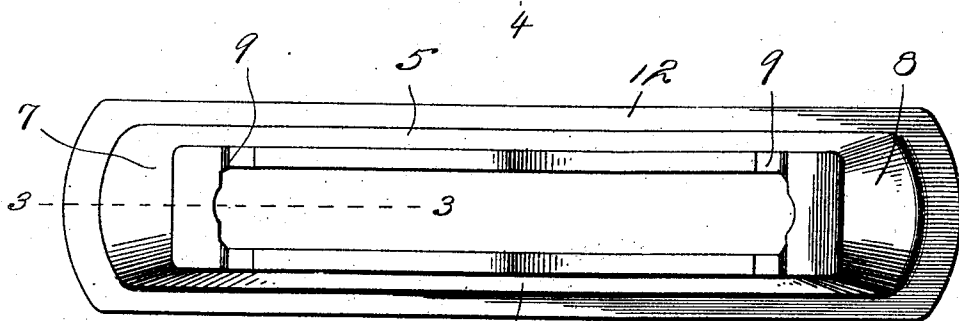
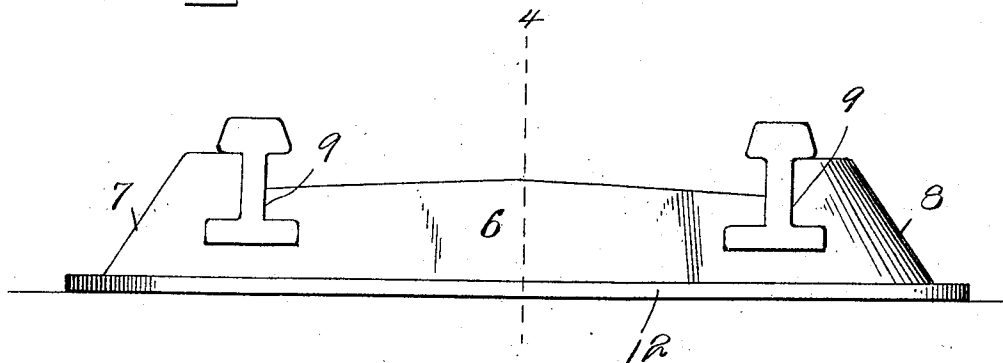


Fig. 2.

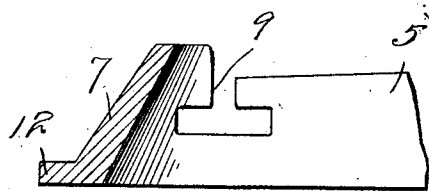


Fig. 3.

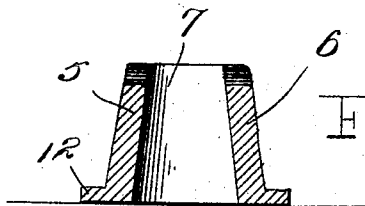


Fig. 4.

Witnesses
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METALLIC RAILROAD-TIE.

No. 810,321.

Specification of Letters Patent.

Patented Jan. 16, 1906.

Application filed June 10, 1905. Serial No. 264,614.

To all whom it may concern:

Be it known that I, SAMUEL T. CARROLL, a citizen of the United States, residing at Crothers, in the county of Washington, State of Pennsylvania, have invented certain new and useful Improvements in Metallic Railroad-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, and more particularly to the class of metallic railway-ties, the object of the invention being to provide a construction which will permit of the tie being cast integral and which will require a minimum quantity of material, while maintaining proper strength and rigidity.

A further object of the invention is to provide a tie which will thoroughly drain and which will be held securely by the ballast.

Other objects and advantages of the invention will be understood from the following description.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a side elevation of a tie embodying the present invention. Fig. 2 is a top plan view. Fig. 3 is a vertical longitudinal section through one end portion of the tie on line 3 3 of Fig. 2. Fig. 4 is a section on line 4 4 of Fig. 1.

Referring now to the drawings, the present railroad-tie comprises laterally-spaced sides 5 and 6, which diverge downwardly and which connect the end portions 7 and 8, which also diverge downwardly, the inner faces of these end portions being transversely concaved. The end portions 7 and 8 rise above the sides 5 and 6, and in the angle between each side and the projecting portion of each end is formed a downwardly-extending opening 9, which is broadened at its lower end, as illustrated, each of these slots being de-

signed to receive the flange and a portion of the web of the rail, while the inner faces of the upwardly-extending portions of the ends 7 and 8 fit snugly beneath the tread of the rail. Each of the sides 5 and 6 is somewhat higher midway between its ends than at its end portions to contribute strength and rigidity to the structure.

A base-flange 12 is provided at the bottom of the tie and extends continuously along its sides and ends, so that when the tie is in place the ballast may lie in part upon this flange to hold the tie in place. While the base-flange prevents sinking of the tie, the opening of the tie or the hollow formation thereof permits the tie to be filled in part or in whole with ballast and permits, furthermore, a free circulation of air to dry the tie.

The rails in practice are engaged in the sockets or openings of the ties, and the latter are then slid along the rails to the proper position.

What is claimed is—

1. A railway-tie comprising a hollow body open at its top and bottom and including spaced downwardly-diverging sides and connected downwardly-diverging end portions that extend above the sides, and a base-flange extending continuously about the sides and ends of the body portion, said body portion having rail-receiving sockets opening through the angles between the sides and the upwardly-extending portions of the ends.

2. A railway-tie comprising laterally-spaced sides that diverge downwardly and connected ends that diverge downwardly and project above the sides, there being rail-receiving sockets opening through the angles between the sides and the upwardly-projecting portions of the ends.

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

SAMUEL T. CARROLL.

Witnesses:

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