(No Model.)

T. J. BRONSON & A. ARMSTRONG.

METALLIC RAILWAY TIE.

No. 491,922. Patented Feb. 14, 1893.

Fig. 1.

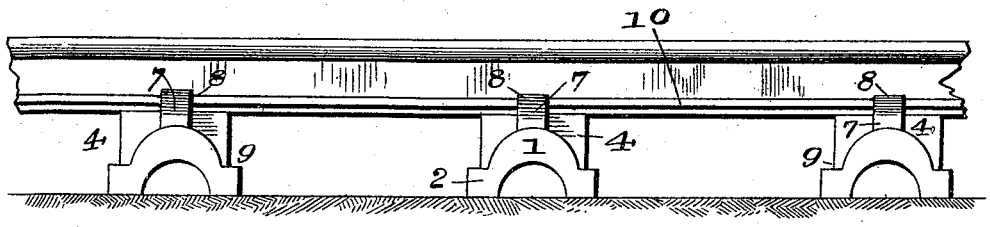


Fig. 2.

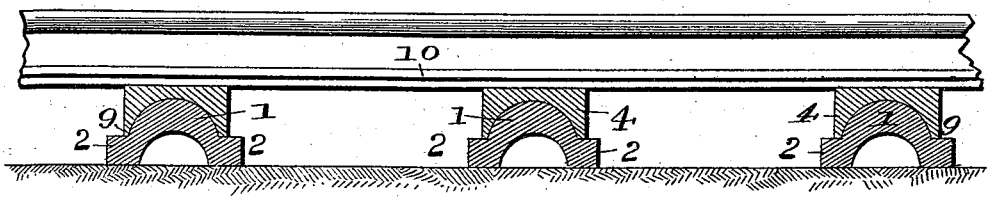


Fig. 3

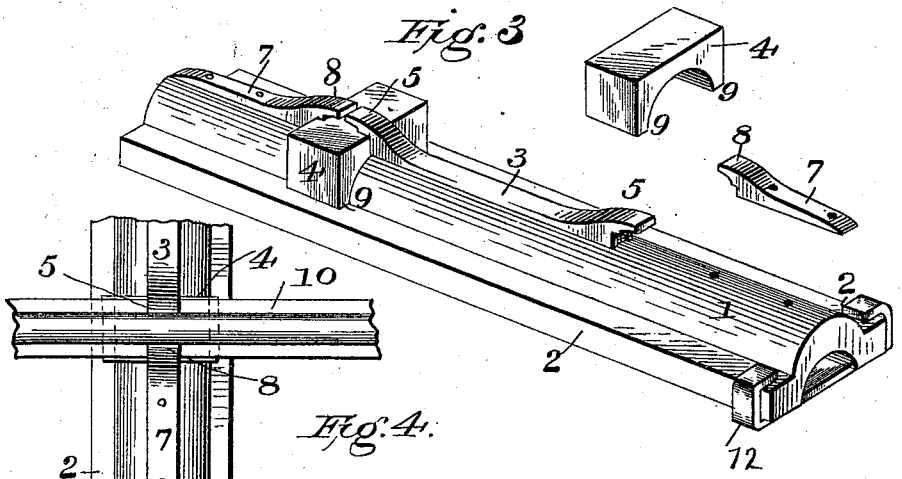
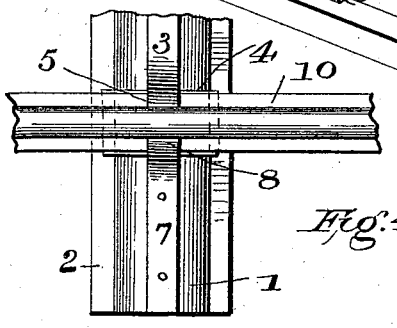


Fig. 4.



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UNITED STATES PATENT OFFICE.

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METALLIC RAILWAY-TIE.

SPECIFICATION forming part of Letters Patent No. 491,922, dated February 14, 1893.

Application filed July 15, 1892. Serial No. 440,095. (No model.)

To all whom it may concern:

Be it known that we, THOMAS J. BRONSON and ALEXANDER ARMSTRONG, citizens of the United States, and residents of Jacksonville, in the county of Morgan and State of Illinois, have invented certain new and useful Improvements in Metallic Railway-Ties; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Our invention relates to improvements in metallic railway ties and bearing blocks connected therewith for supporting the rails, the object being to provide an improved construction of same, whereby we secure superior advantages with respect to efficiency.

The invention consists in the novel construction and combination of parts hereinafter fully described and claimed.

In the accompanying drawings: Figure 1 is a view of a railway showing our improved tie and supporting block in elevation; Fig. 2 is a similar view showing the tie and block in section; Fig. 3 is a perspective view of the tie with the saddles at one end removed; Fig. 4 is a detail plan view.

In the said drawings the reference numeral 1 designates the tie, made of metal, arch-shaped or semi-circular in cross section and its bottom edges formed or provided with horizontal flanges 2, which rest upon the ground when the tie is in place.

Formed with or secured to the tie is a rib or clip 3, the ends of which are cut away forming recesses to receive the inner sides of the saddles or bearing blocks 4, and also forming lugs 5, the under sides of which are beveled or curved to conform to the shape of the base of a rail. These lugs project over the saddles, toward, but not quite to the center thereof. Similar ribs or clips 7 are formed with or secured to the ends of the tie, with similarly beveled or curved lugs 8, which project over the outer sides of the saddles. These ribs or clips 7 are preferably removably connected with the ribs, by bolts or otherwise, so as to be readily detached for convenience in laying the rails while the clip 3 is preferably made integral with the tie.

The saddles 4 consist of rectangular metal blocks having their under sides recessed to correspond with the curvature of the tie, and are secured between the clips 3 and 7, with their lower edges 9, resting upon the flanges 2 of the tie. The cut away ends of the clips do no not meet over the saddles, thereby leaving a space for the web of the rail 10.

We are aware that a metallic arched railway tie, having clips formed with or secured thereto with their ends resting over a rail so as to hold it in place, in itself, is not broadly new, and we are also aware that a saddle or bearing block for supporting a rail is old, and such are not claimed by us, our invention being confined to the peculiar construction and combination of parts whereby we attain superior advantages over other devices now in use for supporting and holding railroad rails.

For the purpose of strengthening and bracing the tie, we provide the ends of the same with clips 12, consisting of strips of metal having their ends bent upwardly and inwardly so as to embrace the flanges 2, as seen in Fig. 3.

Having thus described our invention, what we claim is—

In a railroad, the combination with a metallic arched railway tie formed with horizontal flanges and also formed on its upper side with a rib or clip having its ends cut away forming shouldered recesses and curved or beveled lugs conforming to the contour of the base of a rail, and with inwardly projecting clips or ribs at its ends with similar recesses and lugs, of the saddle consisting of a rectangular metal block, recessed on its under side to conform to the shape of the tie and with its lower edges resting on the flanges of the tie, and the end clips embracing the flanges of the tie, substantially as described.

In testimony that we claim the foregoing as our own we have hereunto affixed our signatures in presence of two witnesses.

THOMAS J. BRONSON.
ALEXANDER ARMSTRONG.

Witnesses:
JOSEPH F. HETNER,
WESLEY S. SNYDER.