No. 767,145. PATENTED AUG. 9, 1904.

J. A. GUILER.

RAILROAD TIE.

APPLICATION FILED APR. 27, 1904.

NO MODEL.

Fig. 1.

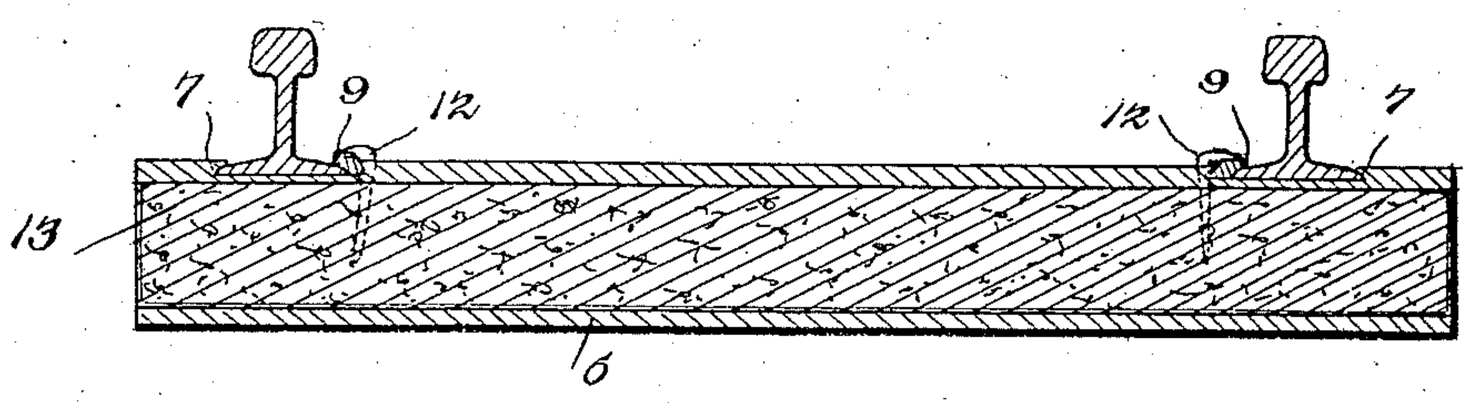


Fig. 2.

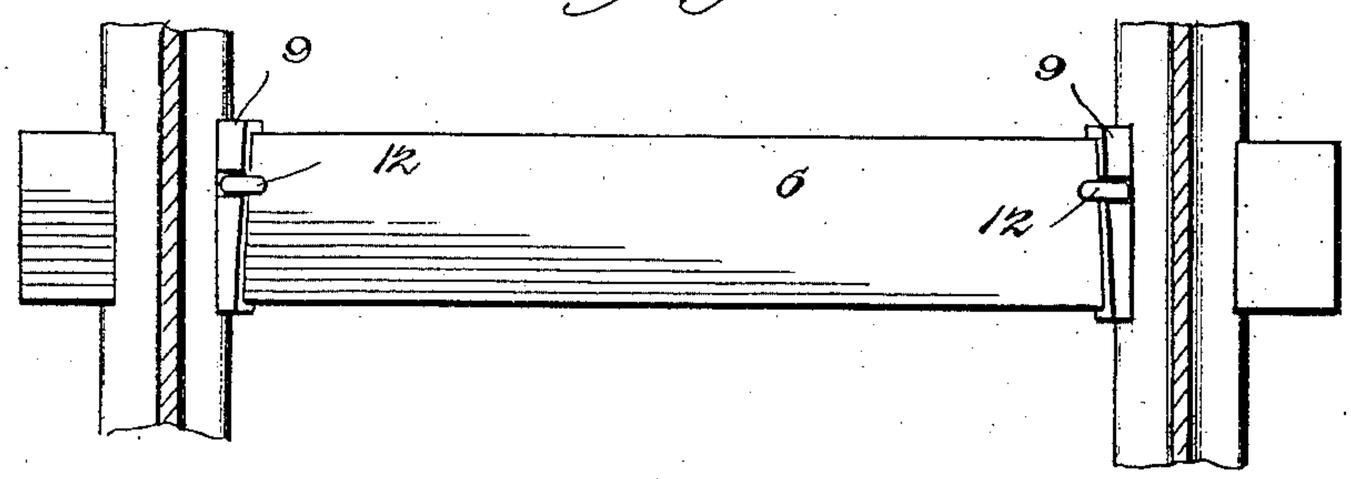


Fig. 3.

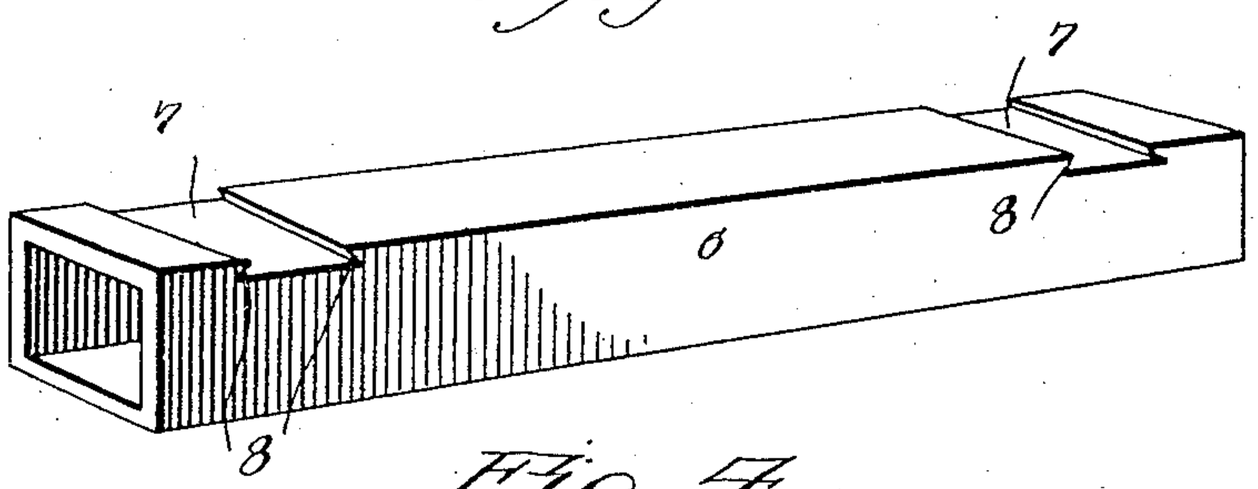


Fig. 4.

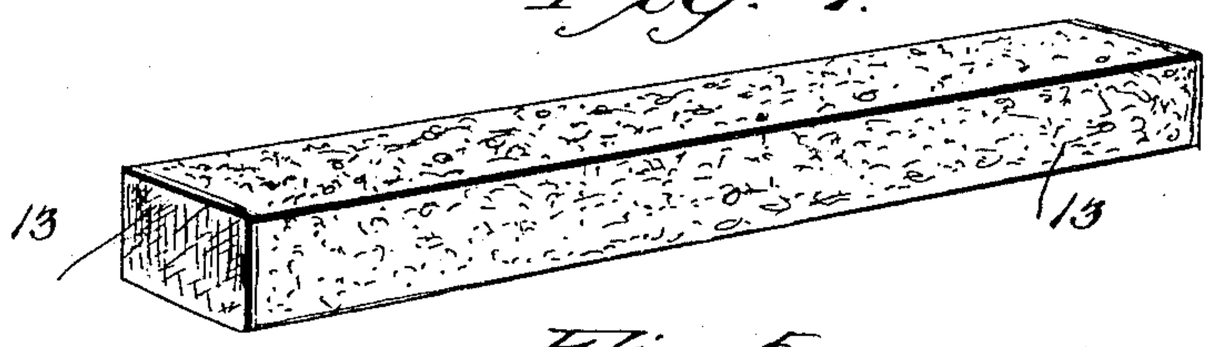
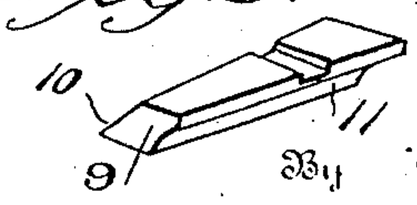


Fig. 5.



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UNITED STATES PATENT OFFICE.

JOHN A. GUILER, OF CONNELLSVILLE, PENNSYLVANIA.

RAILROAD-TIE.

SPECIFICATION forming part of Letters Patent No. 767,145, dated August 9, 1904.

Application filed April 27, 1904. Serial No. 205,195. (No model.)

To all whom it may concern:

Be it known that I, JOHN A. GUILER, a citizen of the United States, residing at Connellsville, in the county of Fayette and State of Pennsylvania, have invented new and useful Improvements in Railroad-Ties, of which the following is a specification.

My invention relates to improvements in metallic railroad-ties, the object thereof being to provide a hollow metallic tie provided with fastening means, whereby the rails may be securely fastened thereto, as well as providing the interior of said shell with an elastic member composed of compressed cork to furnish a cushioning means for a purpose hereinafter specified.

In the drawings forming a part of this specification, Figure 1 represents a longitudinal section of my improved tie with rail-sections positioned thereon. Fig. 2 is a top plan view of the tie, showing fragmentary portions of the rail-sections in place. Fig. 3 is a perspective of the tie-shell constructed in accordance with my invention. Fig. 4 is a like view of the elastic member adapted to slidingly fit within the shell shown by Fig. 3. Fig. 5 is a detail showing the wedge member for clamping the rail-section to the tie.

Like numerals indicate like parts in the several figures.

6 designates a tubular metallic cross-tie rectangular in cross-section and provided on its upper surface adjacent to its ends with rail-bearing recesses or sockets 7, arranged transversely thereof and in spaced parallelism. The walls 8 of these recesses are undercut or beveled, as shown, one of said walls being designed to contact with the adjacent base-flange of the rail seated in said recess, and between the opposite base-flange of the rail and the other undercut wall is provided an intervening space designed for the reception of a rail-clamping wedge member 9, the length of which is substantially equal to that of the recess 7. The wedge member 9 is provided on one side throughout its length with a bevel-face 10 to correspond with that of the bevel of the abutting wall of the recess, and its opposite side is provided with a cut-away portion 11 to match and fit the contiguous face of the base-flange of the rail, as shown. From this construction and arrangement it will be seen that the rail is secured to the tie by an interlocking wedge member requiring only one spike 12 to prevent its displacement.

13 designates an elastic member of a size and shape to fit flush within the shell or tie 6, and said member consists of compressed cork and when introduced in said shell is prevented from displacement by the spike 12. This elastic member serves primarily as a cushion when the shell or body portion of the tie is subject to the stress of compression under the load imposed by the rolling-stock passing thereover in that it tends to relieve any injurious action or strain of such compressing force, as well as aiding the reaction of the resilient shell in recovering its natural lines of structural adjustment upon the removal of the load, and thereby serves to prolong the life of said tie. The elastic member also serves to deaden the sound ordinarily occasioned by the passage of the rolling-stock over the metallic tie.

Having thus described my invention, what I desire to claim as new and useful is—

1. A cross-tie comprising a metallic shell, having rail-receiving recesses in its upper surface, an elastic member adapted to fit within said shell, a rail-clamping wedge for clamping a rail to the tie within the recesses and a spike for holding, respectively, from displacement, the said clamping wedge and elastic member, substantially as described.

2. As an article of manufacture, a cross-tie comprising a metallic shell, and a compressed-cork member arranged to slidingly fit within said shell.

3. A metallic railroad-tie, having receiving-recesses on its top surface, adjacent to its outer ends, provided with undercut or beveled walls, in combination with a rail to engage one of said recesses, and clamping wedge members arranged to slide in the intervening space between one of the walls of said recesses and the contiguous base-flange of the rail, and a spike for holding the said wedge member from displacement, as set forth.

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

JOHN A. GUILER.

Witnesses:
H. A. CROW,
R. W. CADDELL.