

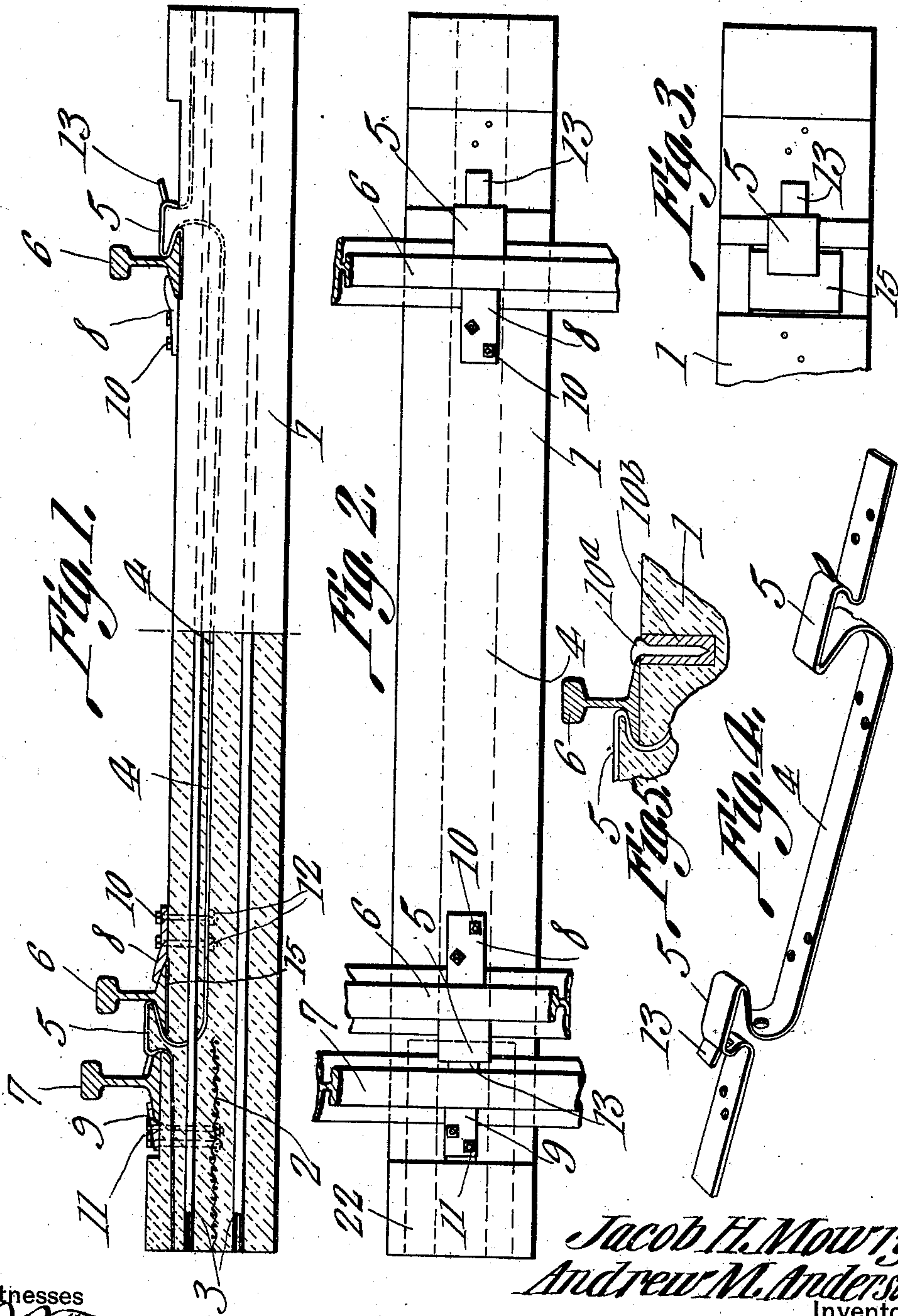
J. H. MOWRY & A. M. ANDERSON.

RAILROAD TIE.

APPLICATION FILED OCT. 22, 1910.

987,252.

Patented Mar. 21, 1911.



Witnesses

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# UNITED STATES PATENT OFFICE.

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## RAILROAD-TIE.

987,252.

Specification of Letters Patent.

Patented Mar. 21, 1911.

Application filed October 22, 1910. Serial No. 588,470.

*To all whom it may concern:*

Be it known that we, JACOB H. MOWRY and ANDREW M. ANDERSON, citizens of the United States, residing, respectively, at Nezperce and Moscow, in the counties of Nezperce and Latah, State of Idaho, have invented a new and useful Railroad-Tie, of which the following is a specification.

It is the object of the invention to provide novel means for reinforcing a cement railroad tie, and to provide novel means for securing the rail to the tie.

In the drawings:—Figure 1 is a view partly in side elevation and partly in section, showing means for anchoring the rails in place and for strengthening the tie. Fig. 2 is a top plan of the railway tie. Fig. 3 is a detail plan showing one of the cushioning members for the rails. Fig. 4 is a detail perspective of the sheet metal strengthening bar. Fig. 5 is a detail sectional view showing a modified means for securing certain of the rails.

As to the drawings, 1 represents a cement railway tie, in each end of which are embedded sheets of screen or mesh work 2. The members 2 are arranged in position in the form, during the depositing of the cement, so as to be positioned properly in the tie to act as reinforcing elements. Also embedded in the tie are tubular members 3, which extend the full length of the tie, as shown in Fig. 1. These tubular members act as reinforcing elements holding the tie together. To strengthen the tie further, there is embedded therein a sheet metal bar or plate 4. This sheet metal bar or plate adjacent each end of the tie is formed into loops or tongues 5, and when the tie is molded the cement fills inside of the loops, thereby reinforcing them. The tongues 5 at their inner ends extend over the outer flanges of the rails 6, while the outer end of one of the said tongues engages over the inner flange of the rail 7. Upon the inner sides of said rails 6, plates 8 are arranged, the plates being anchored to the tie by means of bolts 10, anchored to the sheet metal plate or bar 4, as shown at 12. The bolts 11 are extended through a plate 9 overlapping the outer flange of the rail 7, said bolts being anchored to the screen or mesh work 2 and extended through the plate 4. The sheet metal bar or plate has tongues 13 struck out of it, and designed to engage the

inner flange of the rail 7. It will be observed that the rail 7 may be disposed upon the outer side of either of the rails 6, and there held by one of the tongues 13. The plates are so shaped as to overhang the inner flanges of the rails 6, and to cooperate with the tongues 5 in such a manner as to prevent spreading of the rails.

From the foregoing it is clear that a novel form of railway tie is provided, in which portions of the strengthening means are utilized as anchoring or holding means for the rails. Furthermore, it will be observed that the sheet metal bar or plate and the tubing insure rigidity, as well as strength.

Beneath the rails 6 there are arranged cushioning members 15, which may be composed of wood, rubber or any other suitable material. These members are designed to relieve the jar incident to the passing of a train over the rails.

The invention having been set forth, what is claimed as new and useful is:—

1. A device of the class described comprising a railway tie, a plate embedded therein and so formed as to provide a loop acting as a tongue to extend between two rails, said tongue constituting means to engage the adjacent flanges of the two rails, devices to engage the opposite flanges of the rails, and means for anchoring said devices to the first named plate.

2. A device of the class described comprising a railway tie, a plate embedded therein and so formed as to provide a loop acting as a tongue to extend between two rails, said tongue constituting means to engage the adjacent flanges of the two rails, devices to engage the opposite flanges of the rails, means for anchoring said devices to the plate, said tie having a reinforcing element embedded therein, one of said anchoring means being united with the reinforcing element.

3. A device of the class described comprising a railway tie, a plate embedded therein and so formed as to provide a loop acting as a tongue to extend between two rails, said tongue constituting means to engage the adjacent flanges of the two rails, devices to engage the opposite flanges of the rails, means for anchoring said devices to the first named plate, said tie having embedded therein a sheet of screening or mesh work, means anchored to the screening or mesh



work for holding one of said devices in position, and tubular members embedded in the tie.

4. A device of the class described comprising a railway tie adapted to support the main rails and a third rail, said tie being reversible and having a plate embedded therein, said plate being shaped to form loops which extend between one of the main rails and the third rail, to engage the adjacent flanges of one of the main rails and the third rail, said loops having supplemental tongues to engage the third rail, and tie-carried means to engage the remote flanges of said main rail and third rail.

5. A device of the class described comprising a railway tie adapted to support the main rails and a third rail, said tie being reversible and having a plate embedded

therein, said plate being shaped to form loops which extend between one of the main rails and the third rail, to engage the adjacent flanges of one of the main rails and the third rail, said loops having supplemental tongues to engage the third rail, devices to engage the remote flanges of said rails, a reinforcing element embedded in the tie, means for anchoring one of said devices to the plate, and means for anchoring the other of said devices to the reinforcing element.

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

JACOB H. MOWRY.

ANDREW M. ANDERSON.

Witnesses:

S. B. H. MCGOWAN,  
GLADYS SWAIM.

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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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