V. L. MILLER.

RAILWAY CROSS TIE.

APPLICATION FILED MAY 13, 1911.

1,006,256. Patented Oct. 17, 1911.

FIG. 1.

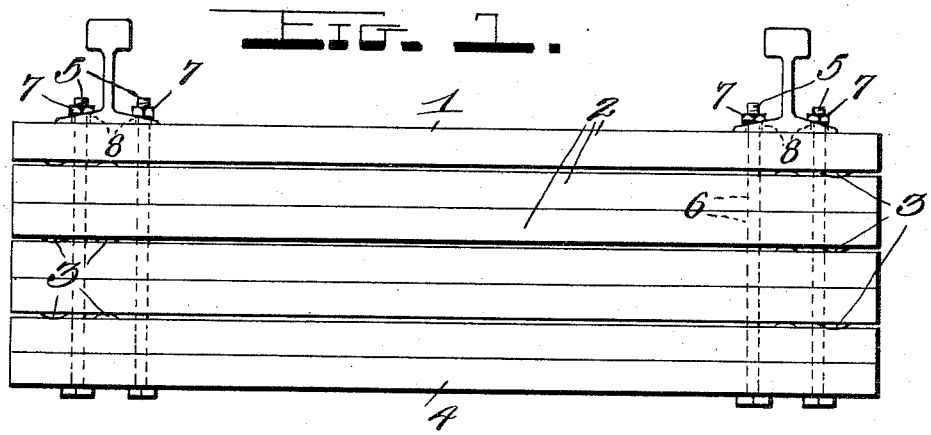


FIG. 2.

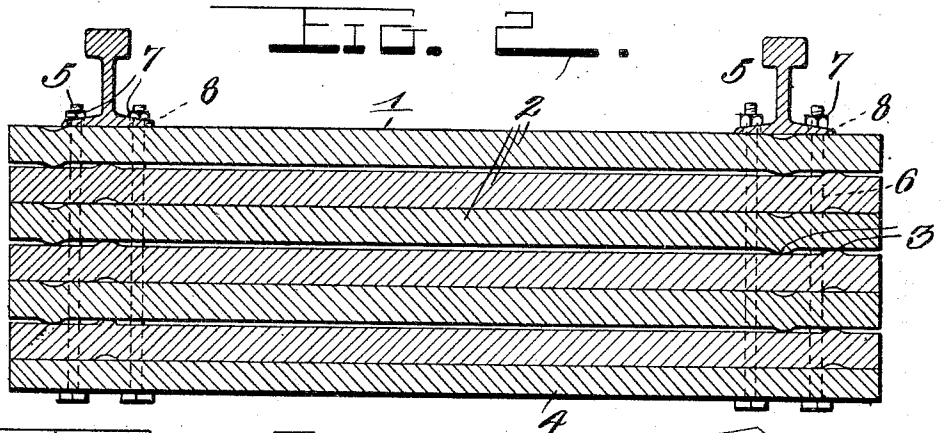
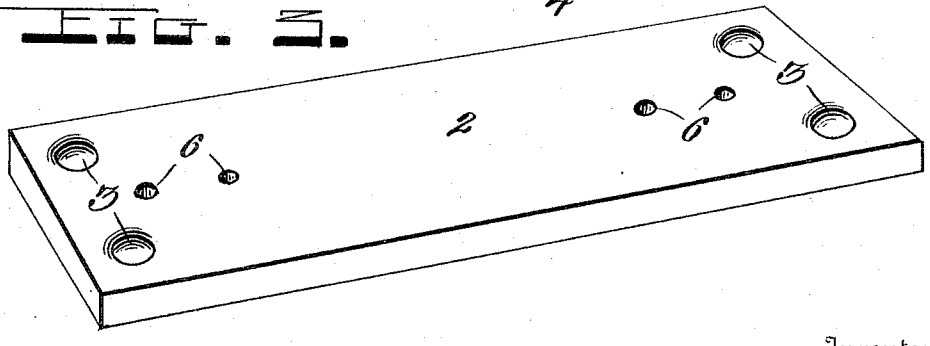


FIG. 3.



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UNITED STATES PATENT OFFICE.

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RAILWAY CROSS-TIE.

1,006,256. Specification of Letters Patent. Patented Oct. 17, 1911.

Application filed May 13, 1911. Serial No. 626,892.

To all whom it may concern:

Be it known that I, VETA L. MILLER, a citizen of the United States, residing at Miller, in the county of Natrona and State of Wyoming, have invented certain new and useful Improvements in Railway Cross-Ties, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to new and useful improvements in railway cross ties and more particularly to a tie made from a plurality of sheet metal strips provided with indentations in their outer ends and secured together in such a manner as to give a desired spring to the tie when complete, and has for its object to provide a tie of this character which will possess advantages in points of efficiency, durability, is inexpensive of manufacture and at the same time simple in construction and operation.

With the foregoing and other objects in view the invention consists in the novel features of construction and the combination and arrangement of parts hereinafter more fully described, pointed out in the claims and shown in the accompanying drawings in which:

Figure 1 is a side elevation of a tie constructed in accordance with my invention; Fig. 2 is a longitudinal sectional view; Fig. 3 is a perspective view of one of the steel strips.

Referring more particularly to the drawings 1 indicates the tie composed of laminated sheet metal strips 2. These strips are provided at each end with the indentations 3 which are formed in the strips in any desired manner.

In constructing a tie in accordance with my invention a flat sheet metal plate 4 is employed to form a base for the tie; one of the strips 2 is then laid on the base with the flat face down, so that the indentations extend up, a second strip is placed on the first with the indentations down, the indentations in this second strip are formed therein near enough to the ends so that they will come outside the indentations on the first strip and rest on the face thereof and the indentations on the first strip will be disposed against the under flat face of the second strip. These strips are laid together in this manner so that the indentations will run alternately the full thickness of the tie, and the strips are laid one on top of the other until the desired thickness is reached. In forming the tie in this manner the indentations formed therein will give the tie the desired spring.

After the strips have been laid together to the desired thickness the bolts 5 are disposed through the openings 6 in each end of the tie and the nuts 7 are threaded thereon to hold the strips securely together. Two bolts are used at each end of the tie to hold the strips rigidly in place, one bolt being disposed upon each side of the rail.

To secure the rails onto the ties in a simple and effective manner an opening 8 is formed in the flange of the rail upon each side thereof and the bolts 5 are disposed therethrough and the nuts 7 are then screwed on the bolts tightly down against the flange of the rail to hold the rails rigidly in place. It will be seen that as the bolts 6 are set rigidly in the ties the rails will have no chance to spread, whereas the method in present use allows the rails to spread to a certain extent thereby causing some very serious wrecks at times.

While I have shown and described the preferred form of my invention it will be obvious that various changes in the details of construction and in the proportions may be resorted to for successfully carrying my invention into practice without departing from the spirit of my invention and within the scope of the appended claims.

Having thus described my invention I claim:

1. A railway cross tie comprising a plurality of laminated sheet metal strips arranged in superimposed relation, indentations formed in the ends of said strips, and bolts disposed through openings in the ends of said strips adjacent the indentations to hold the strips rigidly together.

2. A railway cross tie comprising a plurality of laminated sheet metal strips arranged in superimposed relation to a desired thickness, a series of indentations formed in the ends of said strips and alternately disposed throughout the entire thickness of the tie, and bolts disposed through openings in the ends of said strips adjacent the indentations to hold the strips rigidly together.

3. A railway cross tie comprising a plurality of laminated sheet metal strips arranged in superimposed relation to a desired thickness, a series of indentations formed in the

ends of said strips and alternately disposed throughout the entire thickness of the tie, and bolts disposed through openings in the ends of said strips adjacent the indentations and disposed through openings in the flanges of the rails to hold the same securely to the tie.

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

VETA L. MILLER.

Witnesses:
A. J. MILLER,
C. M. MILLER.