

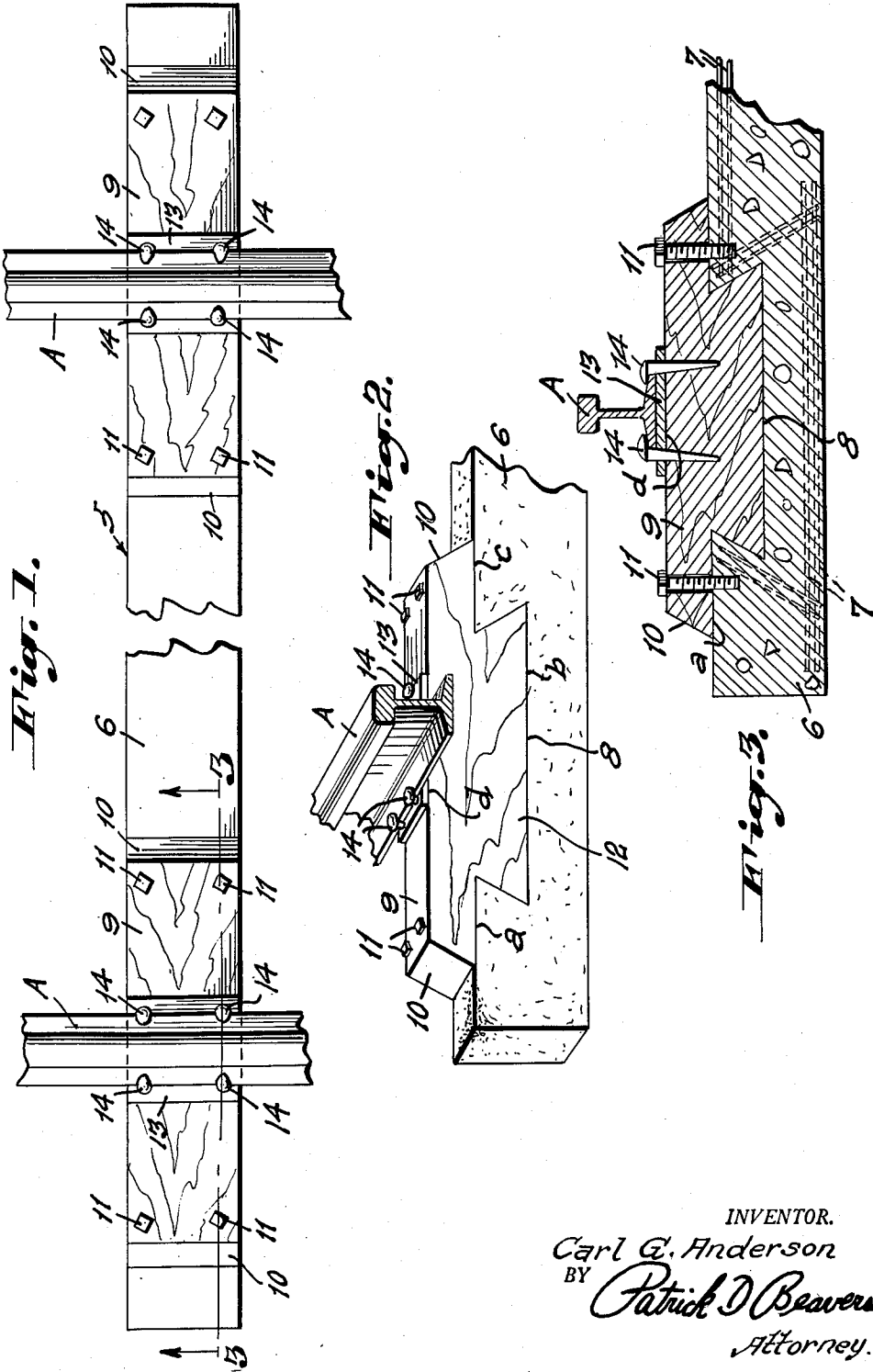
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CINDER AND CEMENT RAILROAD TIE WITH CUSHIONING MEANS

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CINDER AND CEMENT RAILROAD TIE WITH CUSHIONING MEANS

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1 Claim. (Cl. 238—84)

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The present invention appertains to improvements in railroad surface track ties.

The principal object of the present invention is to provide a more permanent tie capable of being manufactured for a nominal price and which over its longer period of life will be much more economical than present day ties.

Another object of the invention is to provide a railroad tie composed of concrete or concrete with cinders and wherein wooden inserts or cushions are employed to directly support the rails, thus doing away with the full length wooden ties, which have to be expensively replaced from time to time.

These and various other objects and advantages of the invention will become apparent to the reader of the following description.

In the drawing:

Figure 1 is a fragmentary top plan view showing one of the ties.

Figure 2 is a fragmentary perspective view showing one end portion of the improved tie.

Figure 3 is a fragmentary longitudinal sectional view taken on line 3—3 of Figure 1.

Referring to the drawing wherein like numerals designated like parts, it can be seen that reference characters A denote the usual pair of spaced rails of a railroad surface trackway, while numeral 5 generally refers to the improved tie.

The improved tie consists of an elongated tie formed structure 6, this being made up of concrete and cinders with suitable reinforcing rods 7 throughout. This tie is formed at each end with a dovetail channel 8 for receiving the depending portion of a dovetail shaped cushion block 9, this block being preferably of wood with its grain running lengthwise and this wood may be white oak, black gum or any other suitable durable wood. As a matter of fact other materials having substantially the same resiliency of wood may be used.

The ends of the cushion block 9 are preferably bevelled as at 10 and inwardly of these bevelled ends, the block is formed with openings to receive lag bolts 11, these extending downwardly into the tie body 6.

As is apparent in Figure 2, the cushion block 9 has a dovetail shaped depending formation 12, which fits snugly into the dovetail shaped channel 8 of the tie body 6 and this affords cushion or bearing surfaces at the points a, b and c and a further cushion area d by reason of the presence of a rail plate 13 located immediately upon the block 9 and upon which a corresponding rail A rests, the rail of course being held in place by spikes 14 driven through the plate 13 and into the cushion block 9 with their heads overlapping the base flange of the rail A.

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It can thus be seen that the tie body 6 is a permanent fixture and needs no replacement over many years use. The cushion block 9 may be cut from select wood and due to the fact that it is not subject to contact with the roadbed, pools of water, etc., its durability is enhanced over the present wooden ties and it is obvious that these inserts or cushion blocks 9 can be replaced very easily, it not being necessary to remove the entire tie, to replace the same.

Therefore it appears that over a period of years enlarged over the durability of present day wooden ties, this tie structure will be much more economical.

While the foregoing description sets forth the invention in specific terms, it is to be understood that numerous changes in the shape, size and materials may be resorted to without departing from the spirit and scope of the invention as claimed hereinafter.

Having described the invention what is claimed as new is:

A railroad tie comprising an elongated body for supporting a pair of railway rails, a cushion structure on each end portion of the body, said cushion structures being in the form of inserts upon which the rails are disposed, said body being formed with dovetail shaped channels, said cushion structures each being provided with an integrally formed reduced dependent dovetail formation for disposition in a corresponding dovetail channel, said structures each being provided with lateral wing portions for rest upon said elongated body and said structures each having a vertical opening in each end thereof for the reception therethrough of lag bolts engageable with said body on either side of said channels.

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