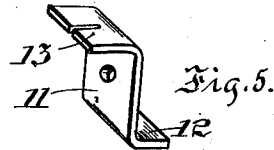
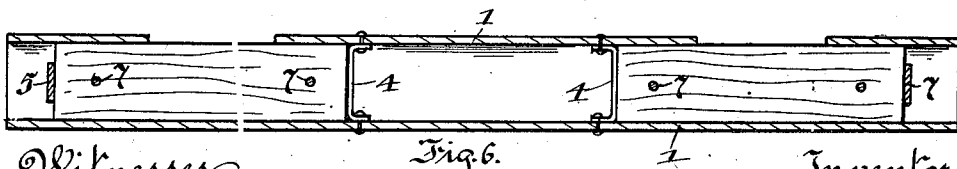
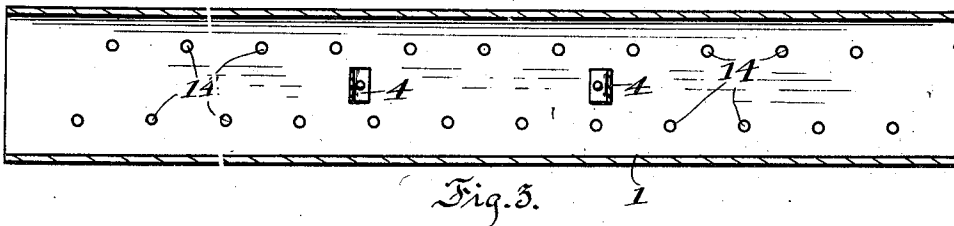
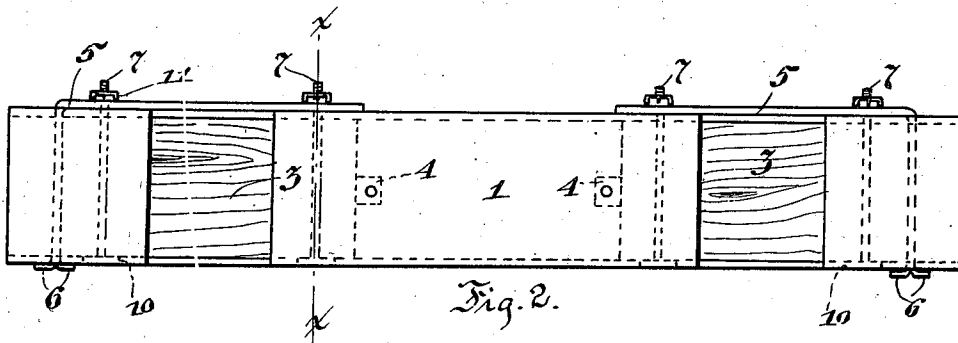
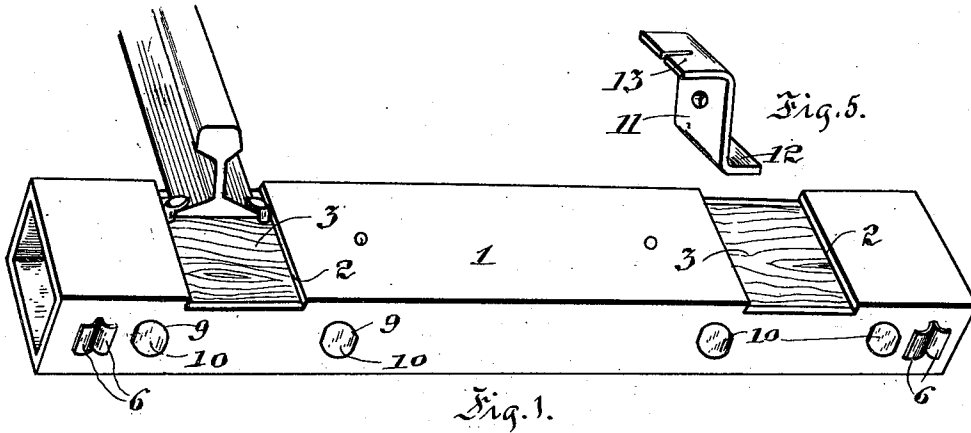


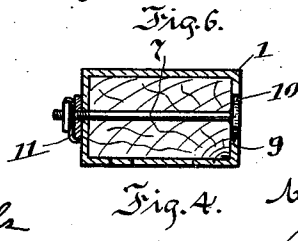
W. J. WATTERSON.
RAILROAD TIE.
APPLICATION FILED AUG. 7, 1911.

1,014,351.

Patented Jan. 9, 1912.



Witnesses
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Inventor
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UNITED STATES PATENT OFFICE.

WALTER J. WATTERSON, OF STRAWN, ILLINOIS.

RAILROAD-TIE.

1,014,351.

Specification of Letters Patent.

Patented Jan. 9, 1912.

Application filed August 7, 1911. Serial No. 842,652.

To all whom it may concern.

Be it known that I, WALTER J. WATTERSON, a citizen of the United States, and a resident of the city of Strawn, county of Livingston, and State of Illinois, have invented certain new and useful Improvements in Railroad-Ties, of which the following is a specification.

My invention relates to improvements in railroad ties and has for its object the provision of an improved railroad tie of simple construction and efficient in operation.

The invention consists in the combination and arrangement of parts all as will be hereinafter fully described and more particularly pointed out in the appended claims.

My invention will be more readily understood by reference to the accompanying drawings forming a part of this specification, and in which,

Figure 1 is a perspective view of a tie embodying my invention, Fig. 2, a top plan view of the tie, Fig. 3, a horizontal section of the tie with the rail securing block removed, Fig. 4, a section taken on line $x-x$ of Fig. 2, Fig. 5, a perspective view of a nut lock employed in the tie and Fig. 6, a longitudinal vertical section of the tie.

The preferred form of construction as illustrated in the accompanying drawings comprises a hollow rectangular metallic shell 1 having notches 2 in its upper side adapted to receive the flanges of the rails as indicated in Fig. 1. A wooden block 3 is placed in shell 1 under each of the notches 2 and serves as a support for the rail, spikes being driven into said block in the usual manner. Vertical posts 4 are secured in shell 1 adjacent the inner ends of blocks 3 to prevent inward movement of said blocks. An angular member 5 has one of its legs passed through the shell 1 transversely adjacent the outer end of each of the blocks 3, the other leg of said member lying flat against the side of said shell. The end of the leg which is passed through the shell is split into two portions 6 and said portions 6 are bent back against the side of the shell to secure member 5 in position. Bolts 7 are passed through the other leg of member 5, the adjacent side of shell 1 and blocks 4 as indicated. Shell 1 is provided with perforations 9 adapted to receive the heads 10 of bolts 7 and permit said heads to contact with the sides of blocks 3, the bolts 7 thus

serving to securely lock the blocks 3 against one side of shell 1. The perforations 9 and heads 10 are made with flattened sides as shown so as to prevent rotation of the bolts. The nuts on bolts 7 are provided with nut locks 11 which consist of a centrally perforated plate adapted to rest under the nut and a flange 12 at one end of said plate adapted to take over the side of member 5. The other end 13 of plate 11 is adapted to be bent against the side of the nut and lock it in position after it has been tightened. A series of perforations 14 is provided in the bottom of shell 1 for the escape of water or moisture. A tie constructed as above set forth will be found to be highly efficient in use.

While I have illustrated and described the preferred form for carrying my invention into effect, this is capable of variation and modification without departing from the spirit of the invention. I therefore do not wish to be limited to the precise details of construction set forth, but desire to avail myself of such variations and modifications as come within the scope of the appended claims.

Having described my invention what I claim as new and desire to secure by Letters Patent is:

1. A railroad tie comprising a hollow metallic shell notched on its upper side for the reception of the rail flanges; wooden blocks placed in said shell under said notches; and angular members having one leg passed through said shell laterally adjacent the outer ends of said blocks with the other leg thereof resting against the side of said shell, the end of said first mentioned leg being split and bent back against the side of said shell, substantially as described.

2. A railroad tie comprising a hollow metallic shell notched on its upper side for the reception of the rail flanges; wooden blocks placed in said shell under said notches; vertical posts secured in said shell against the inner ends of said blocks; and angular members having one leg passed through said shell laterally adjacent the outer ends of said blocks with the other leg thereof resting against the side of said shell, the end of said first-mentioned leg being split and bent back against the side of said shell substantially as described.

3. A railroad tie comprising a hollow rectangular metallic shell notched on its upper

side for the reception of the rail flanges; wooden blocks placed in said shell under said notches; vertical posts secured in said shell against the inner ends of said blocks; 5 and angular members having one leg passed through said shell laterally adjacent the outer ends of said blocks with the other leg thereof resting against the side of said shell, the end of said first-mentioned leg being 10 split and bent back against the side of said shell, substantially as described.

4. A railroad tie comprising a hollow rectangular metallic shell notched on its upper side for the reception of the rail flanges; 15 wooden blocks placed in said shell under said notches; vertical posts secured in said shell against the inner ends of said blocks; and angular members having one leg passed

through said shell laterally adjacent the outer ends of said blocks with the other leg 20 thereof resting against the side of said shell, the end of said first-mentioned leg being split and bent back against the side of said shell; there being bolts passed through the 25 second-mentioned leg, adjacent side of said shell and the corresponding block, said shell being perforated to permit the heads of said bolts to rest against the sides of said blocks, substantially as described.

In testimony whereof I have signed my 30 name to this specification in the presence of two subscribing witnesses.

WALTER J. WATTERSON.

Witnesses:

MYRON J. STOTLER,
W. H. OXLEY.