

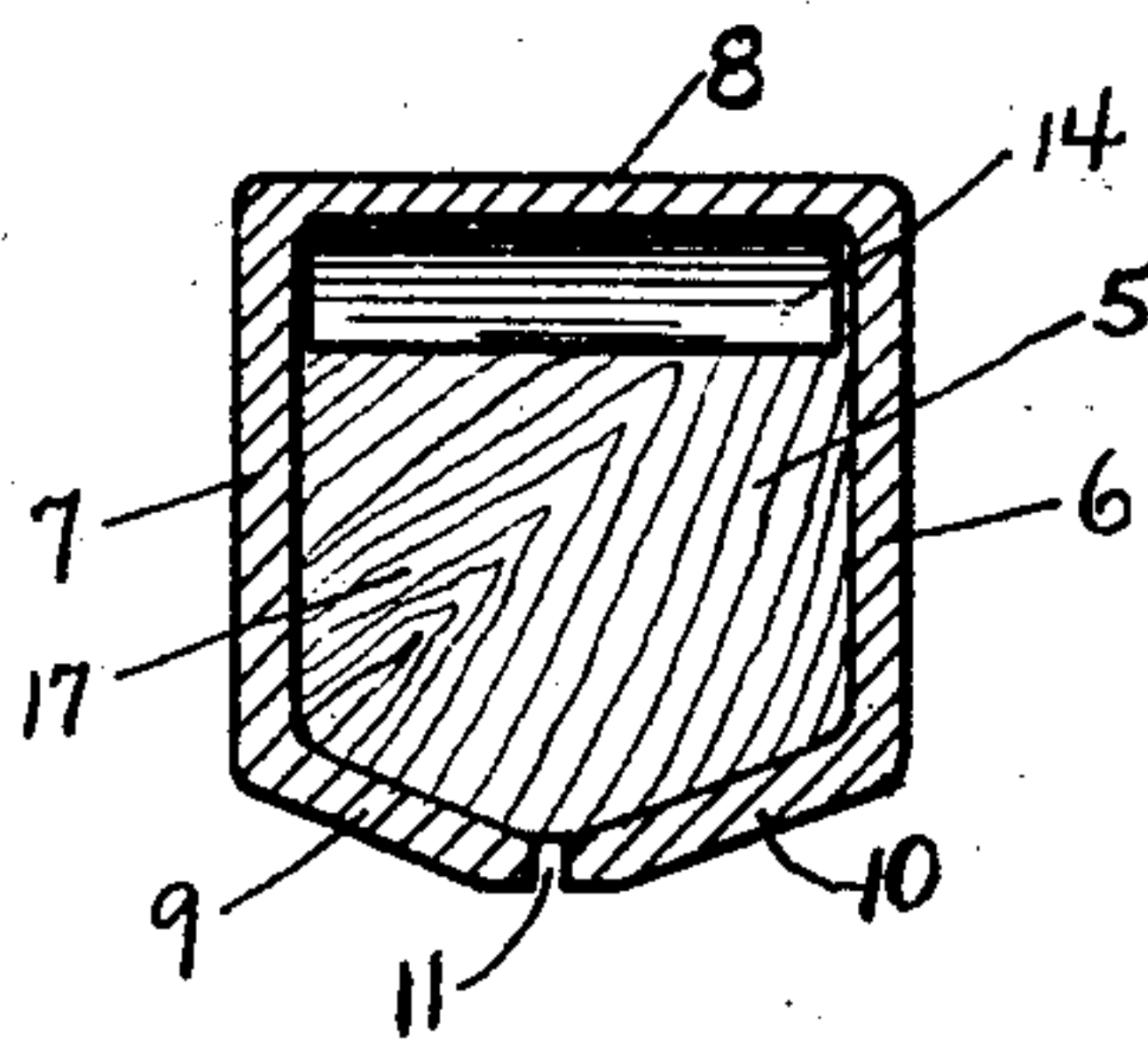
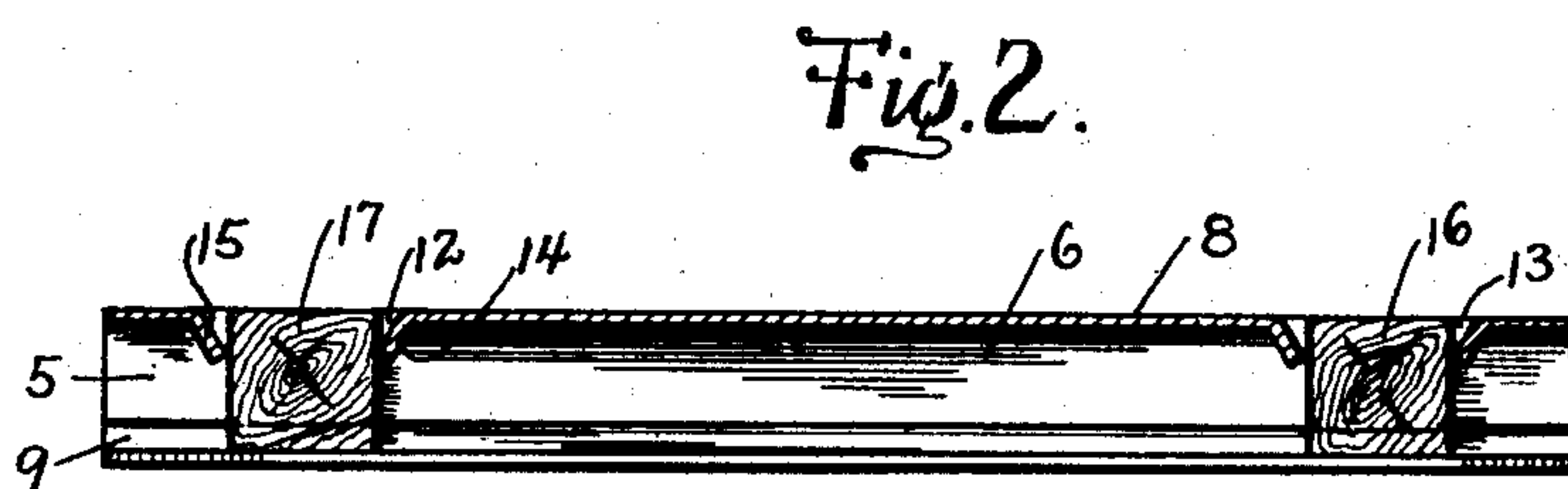
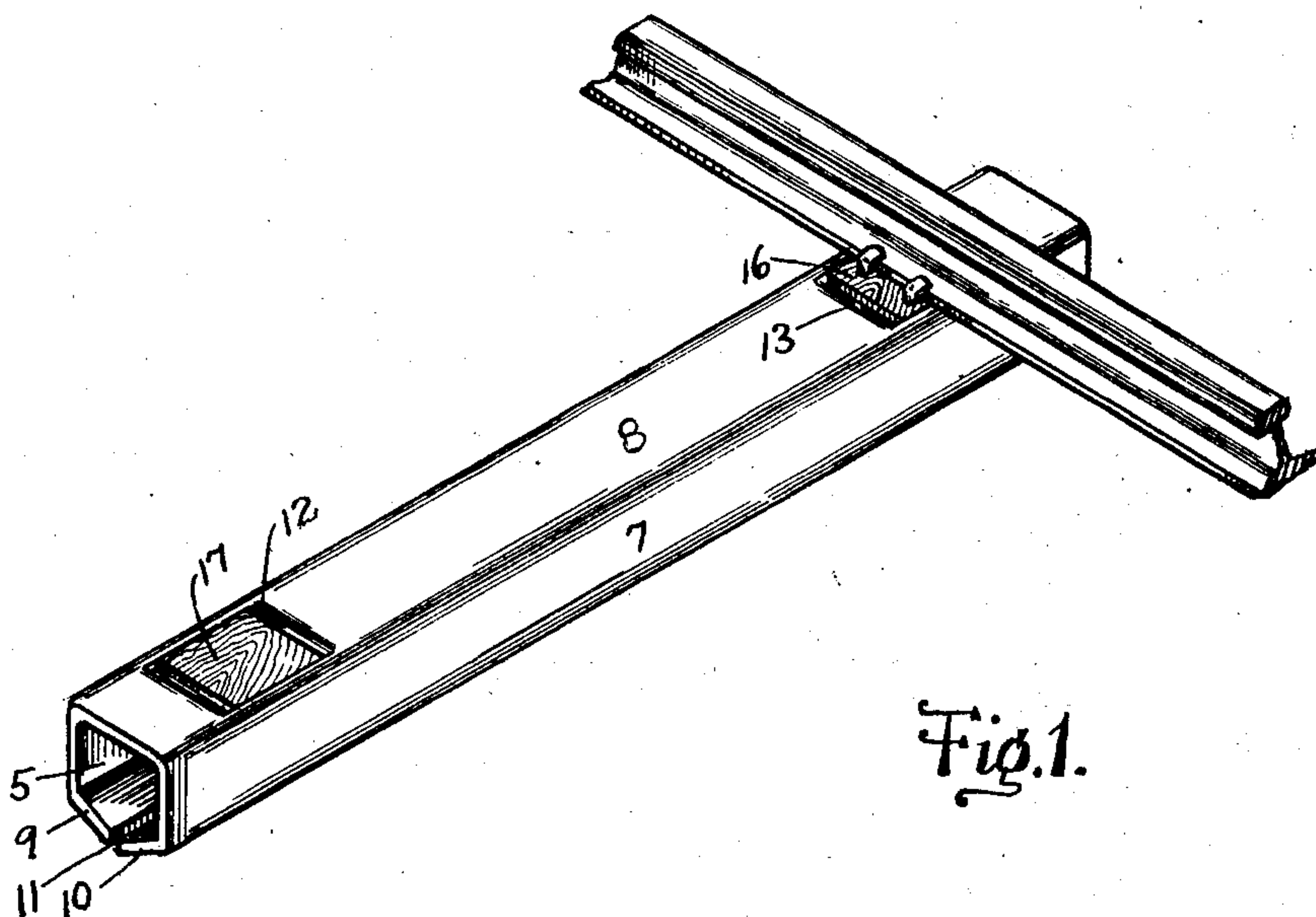
No. 733,878.

PATENTED JULY 14, 1903.

C. C. SHATTO.  
RAILWAY TIE.

APPLICATION FILED APR. 24, 1903.

NO MODEL.



Witnesses  
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# UNITED STATES PATENT OFFICE.

CURTIS C. SHATTO, OF EAST TOLEDO, OHIO.

## RAILWAY-TIE.

SPECIFICATION forming part of Letters Patent No. 733,878, dated July 14, 1903.

Application filed April 24, 1903. Serial No. 154,047. (No model.)

*To all whom it may concern:*

Be it known that I, CURTIS C. SHATTO, a citizen of the United States, residing at East Toledo, in the county of Lucas, State of Ohio, have invented certain new and useful Improvements in Railway-Ties; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to railway-ties, and more particularly to the class of combination-ties; and it has for its object to provide a tie which may be made of sheet metal at a minimum cost and to which the ties may be spiked as readily as to the ordinary all-wood tie, a further object of the invention being to provide a specific construction wherein the wooden blocks to which the ties are spiked will be held securely in place and in which the holding means for the blocks may be chiefly formed, an additional object of the invention being to provide a construction wherein the tie will be well drained, so that rotting of the wooden blocks will be reduced to a minimum.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a perspective view showing a tie embodying the present invention and illustrating a portion of a rail secured at one end thereof. Fig. 2 is a vertical section taken longitudinally through the tie. Fig. 3 is a section taken transversely through the tie, including one of the wooden blocks.

Referring now to the drawings, there is shown a tie including a hollow body portion 5, which may be of sheet metal, including the vertical sides 6 and 7, the top 8 at right angles to the sides, and the bottom members 9 and 10, which are in the form of wings that extend inwardly and downwardly from the sides and are separated by a slight interspace 11, through which may drain any moisture that may find its way into the metallic body portion or shell. Through the top 8 of the body or shell and adjacent to the ends thereof are formed openings 12 and 13 by remov-

ing portions of the metal of the top of the tie, and at the ends of these openings the metal of the top is bent downwardly in the form of ears 14 and 15, which converge slightly, and through the openings between the convergent ears and into the body or shell of the tie are forced the wooden blocks 16 and 17, the upper faces of which are flush with the upper face of the body or casing. The ears between which the blocks are forced have a slight spring action, so that as the blocks are put in place the ears are forced slightly apart, so that they grip and hold the blocks securely, and accurate fitting of the blocks in the openings is insured, so that lateral displacement of the rails that are spiked to the blocks will not occur.

The ties are laid in the ballast in the ordinary manner, and the rails which are placed to rest upon the wooden blocks are spiked to the latter after the manner of spiking rails to the ordinary all-wood ties. The provision of these blocks permits of accurate spacing of the rails.

It will be understood that in practice modifications of the specific construction shown may be made and that any suitable materials and proportions may be used for the various parts without departing from the spirit of the invention.

What is claimed is—

1. A tie comprising a body portion which is hollow throughout its length, said body portion having openings in its upper face and ears depending from the ends of the opening and extending transversely of the tie, and wooden blocks held in the body portion between said ears with their upper faces exposed through the openings in the upper face of the body portion.

2. A tie consisting of a sheet of metal bent into box shape and having openings in its top and a longitudinal slot in its bottom toward which the bottom at both sides of the slot is sloped, and blocks of wood disposed within the inclosure of said metal plate and exposed through the openings in the top thereof.

3. A tie comprising a body portion which is hollow throughout its length, said body por-

tion having openings in its upper face and  
ears depending from the ends of the opening  
convergently and extending transversely of  
the tie, and wooden blocks held in the body  
5 portion between said ears and exposed  
through the openings in the upper face of the  
body portion.

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

CURTIS C. SHATTO.

Witnesses:

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