

M. M. MITMAN.
METALLIC RAILWAY TIE.
APPLICATION FILED FEB. 27, 1909.

929,685.

Patented Aug. 3, 1909.

FIG. 1.

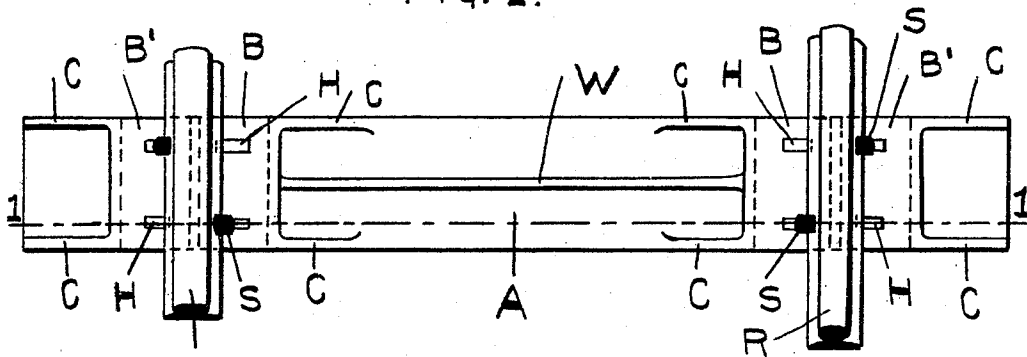
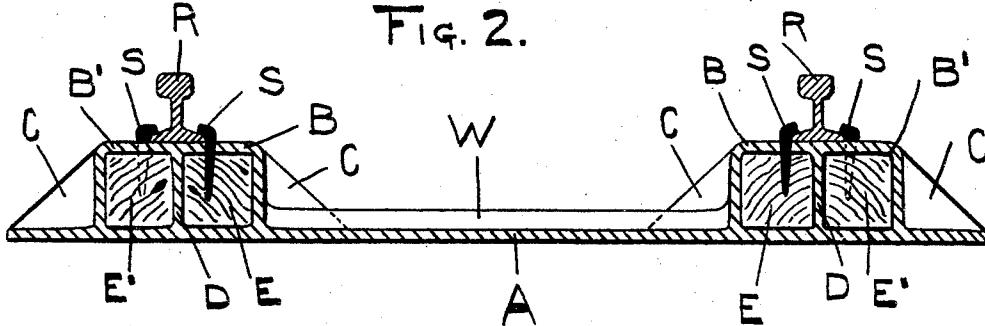


FIG. 2.



WITNESSES.

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METALLIC RAILWAY-TIE.

No. 929,685.

Specification of Letters Patent.

Patented Aug. 3, 1909.

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To all whom it may concern:

Be it known that I, MILTON M. MITMAN, a citizen of the United States, residing at Bethlehem, Northampton county, State of Pennsylvania, have invented certain new and useful Improvements in Metallic Railway-Ties, of which the following is a specification, reference being had therein to the accompanying drawings.

10 The invention relates to certain new and useful improvements in metallic railway ties; and the primary object of the invention is to provide a simple, strong, light and inexpensive tie to which the rails can be easily and securely fastened.

15 In its preferred form my improved tie is a metal inverted T-beam having a flat horizontal base and a central upwardly extending web, and cellular box-like receptacles at either end for the insertion of wooden blocks or fastening supports for the rail. The central upwardly extending web might in some cases be dispensed with for a portion of the tie section and strengthening webs be supplied for that portion of tie only at or near the box-like receptacles.

20 Referring to the accompanying drawings, Figure 1 is a plan view of my preferred form of tie. Fig. 2 is a section on line 1—1 of Fig. 2.

30 These drawings are illustrative merely and show the general construction of my tie.

The tie illustrated consists of a metal base plate A provided with double or cellular box-like receptacles B and B¹ at either end portion, supported by webs C—C at their outer and inner portions. Blocks E and E¹ made preferably of wood or the like are placed in the receptacles B and B¹ respectively, said blocks being separated from one another by the vertical retaining wall D. A central upwardly extending web W is preferably employed to connect the inner box-like receptacles B—B and firmly bind the same to the base plate A. Holes H—H are provided in the upper face of the receptacles B and B¹ respectively for the reception of rail fastenings S—S. The flange of the rails R—R being firmly held down on the upper portion of the receptacles B—B¹ by the said fastening spikes S—S. The central portion of the rails R—R being preferably placed directly over the vertical retaining walls D—D. The

holes H—H are made of such size that various widths of rail flange or base may be secured to the top of the receptacles without any special adjustment or fitting being made necessary.

From the construction of the receptacles B—B¹ it will be seen that the blocks E—E¹ may readily be replaced at any time should this be desired, without removing the rails R—R. All that is necessary is to release the fastenings S, remove the block E or E¹ as may be desired and insert another block and re-insert the fastener S. As relatively small blocks E—E¹ of wood or the like will suffice in my construction, and as these may readily be renewed when so desired, the inexpensive nature of my tie will be apparent to those familiar with the art. Each block and receptacles being independent of the other, the removal of any blocks may be accomplished without disturbing the others in the same tie. The blocks E—E¹ are locked to the metallic tie by the locking means S—S which passing through the holes H—H prevent any lateral motion of the blocks.

The body of my tie is usually made from cast steel, with the scale or skin left thereon and will thus be less subject to atmospheric influences than rolled sections.

Having thus described my invention, I claim:—

1. A metallic-railway-tie, having a central section of inverted T-beam construction, box-like rail supports at either end thereof, said boxes being integrally formed with the central section of the tie, and upper face plates covering said boxes and integrally formed therewith as and for the purpose set forth.

2. A metallic railway-tie having a central section of inverted T-beam construction, box-like rail supports at either end thereof, the said boxes each being subdivided into a plurality of receptacles and upper face plates covering the said boxes, the latter being integrally formed both with the central section of the tie and with the face plates, as for the purpose set forth.

3. A metallic railway-tie having a central section of inverted T-beam construction, box-like rail supports at either end thereof, face plates covering the upper portion of the said boxes; the central section of the tie, boxes and face plates being formed in-

tegrally one with the other; in combination with wooden fastening blocks for the rails secured in the aforesaid boxes and means for fastening the rails to the face plates and wooden blocks, substantially as shown and described.

Bethlehem, Pa., February 19, 1909.

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

MILTON M. MITMAN.

Witnesses:

E. E. EARICH,

EMIL GATHMANN,