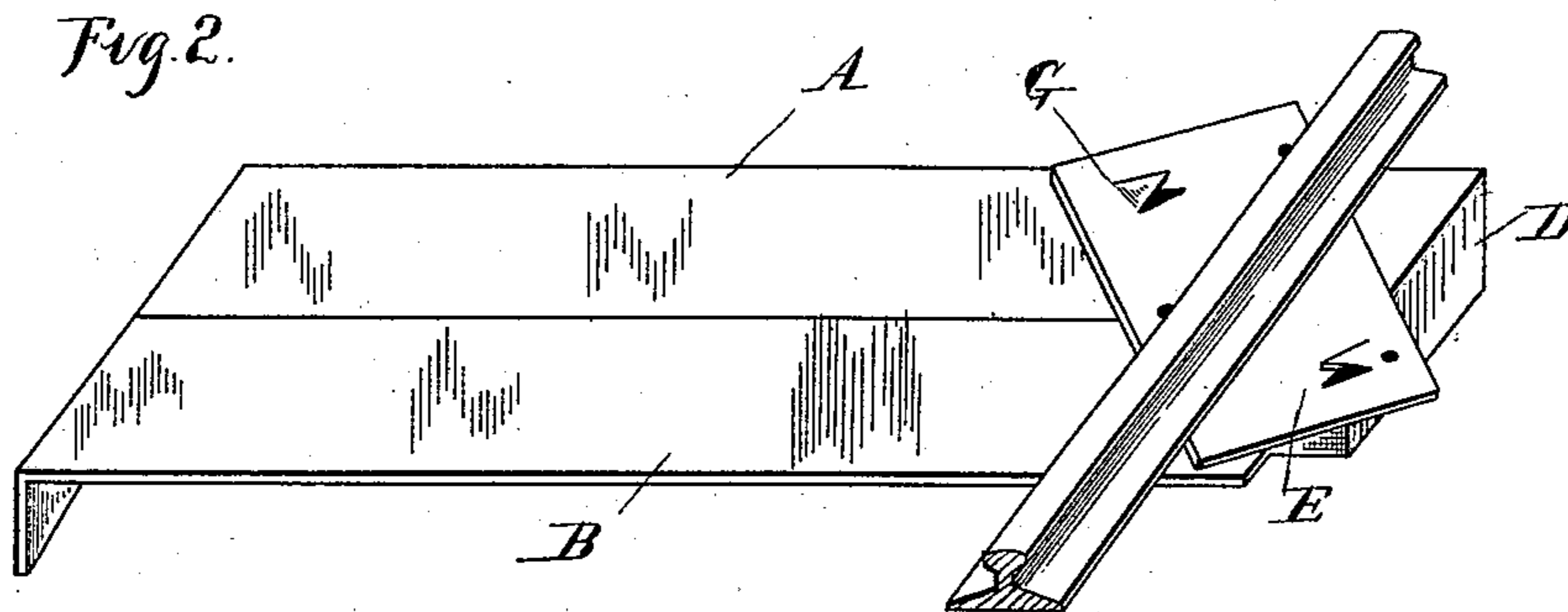
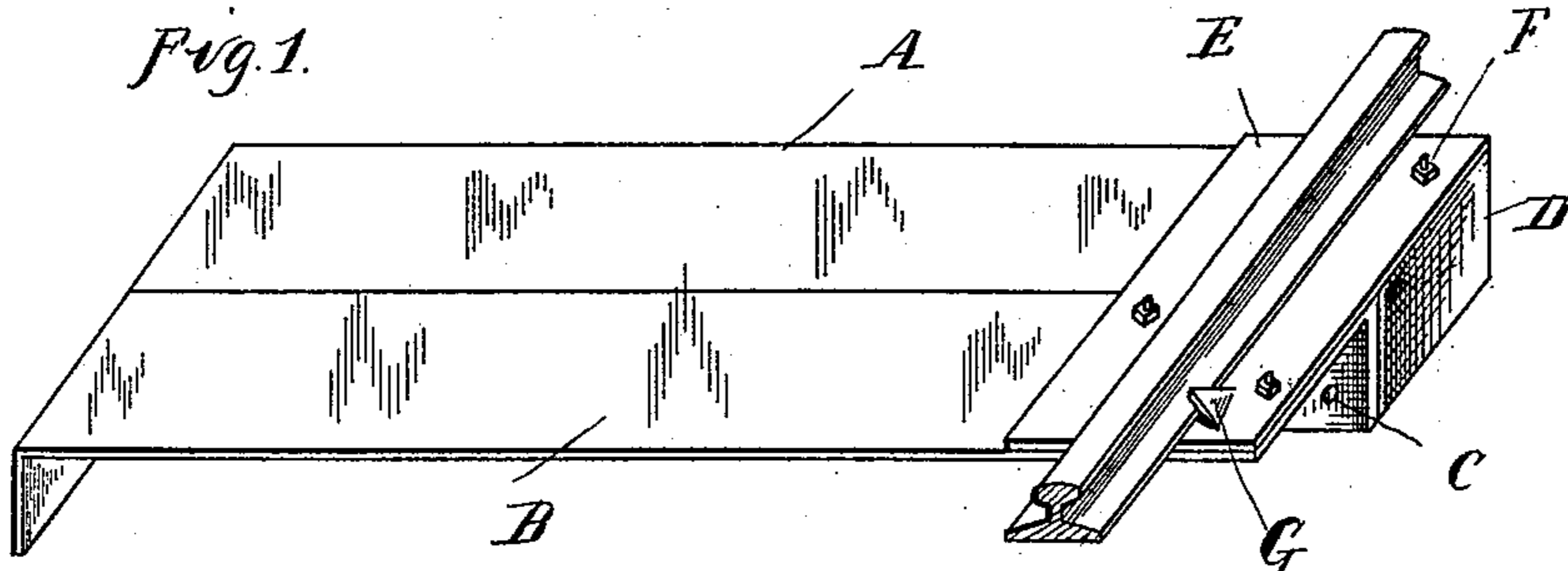


(No Model.)

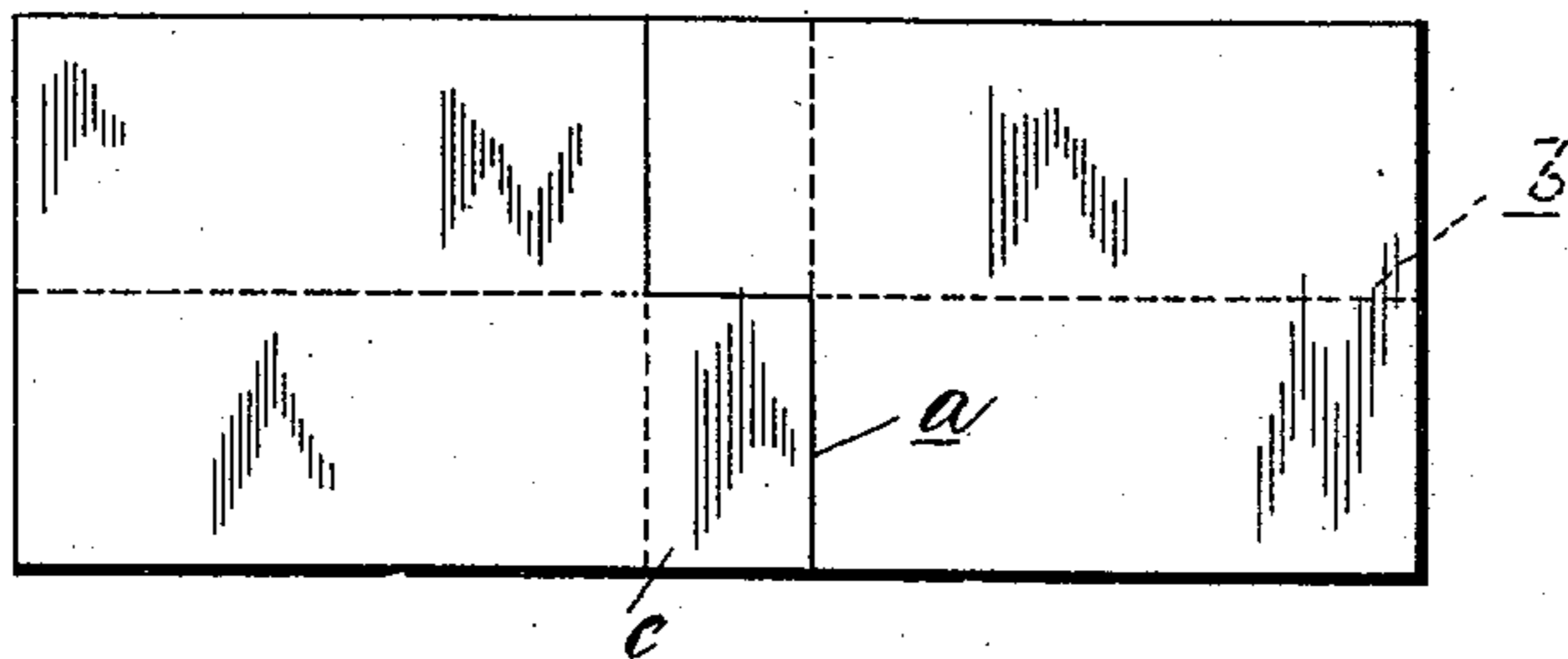
W. B. TEALL.  
RAILROAD TIE.

No. 464,309.

Patented Dec. 1, 1891.



*Fig. 3.*



Witnesses  
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Attys.

# UNITED STATES PATENT OFFICE.

WILLIAM B. TEALL, OF MASON, MICHIGAN.

## RAILROAD-TIE.

SPECIFICATION forming part of Letters Patent No. 464,309, dated December 1, 1891.

Application filed February 11, 1891. Serial No. 381,096. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM B. TEALL, a citizen of the United States, residing at Mason, in the county of Ingham and State of Michigan, have invented certain new and useful Improvements in Railroad-Ties, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to new and useful improvements in metallic ties for railways; and the invention consists in the peculiar construction of the tie and in the peculiar means of securing the rail to the tie, and, further, 15 in the construction, arrangement, and combination of the various parts, all as more fully hereinafter described.

In the accompanying drawings, Figure 1 is a detached perspective view of my improved 20 tie. Fig. 2 is a similar view illustrating the manner of securing the clip-plate in position. Fig. 3 is a plan view showing a blank from which my tie may be made.

I construct my tie of two pieces of angle-iron A B, abutting the two vertical portions thereof and securing them together in any 25 suitable manner, such as by bolts C, forming a tie of T-shaped cross-section, the vertical portion or stem of which is adapted to enter the road-bed, while the flange or head rests upon the top and forms a flat bearing for the rail.

At one end of each section of my tie I form a depending vertical plate or wing D, extending 35 some distance into the road-bed to prevent end movement of the tie.

In the manufacture of my tie, to utilize all the material I preferably cut it from a block, as shown in Fig. 3, making a zigzag central cross-cut, as shown at *a*, then forming each 40 blank into an angle-plate by bending it along the longitudinal line *b*, and then bending down the end extension *c*. Thus I can form my tie with the least waste of material.

At each end of the tie upon the flat upper 45 surface I place a rail-plate E, which I pivotally secure to the tie by a bolt F, near the middle of the plate. G are oppositely-extending clips upon the plate, preferably formed by striking up a portion of the metal, as 50 plainly shown in the drawings. The rail being laid in position upon the track, by turning the rail-plate upon its pivot the clips will be made to embrace the foot of the rail upon 55 opposite sides, firmly holding it in position, when the plate may be secured in its adjusted position by means of bolts passing through the plate and the top of the tie, as plainly shown in Fig. 1. It is evident that the plate 60 may be turned to its locked position without the use of the pivotal bolt, which, however, is preferable.

What I claim as my invention is—

1. A railway-tie composed of two angle-plates secured together to form a T shape in 65 cross-section and vertically-depending plates at one end only of each of said plates, substantially as described.

2. The combination, with a railway-tie of the kind described, of a plate having oppositely-arranged clips centrally pivoted to the 70 end of the tie and adapted to be turned to embrace the foot of the rail on opposite sides, and of securing-bolts for said plate, substantially as described.

3. A metallic tie composed of two like angle-plates secured together to form a T shape 75 in cross-section and depending plates at opposite ends only of the respective portions of said tie formed by an integral flange bent 80 down from the angle-plates, substantially as described.

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

WILLIAM B. TEALL.

Witnesses:

D. F. MOREY,  
A. B. HAYNES.