

No. 850,283.

PATENTED APR. 16, 1907.

J. P. ANGELL.
RAILROAD TIE.
APPLICATION FILED FEB. 5, 1907.

Fig. 1.

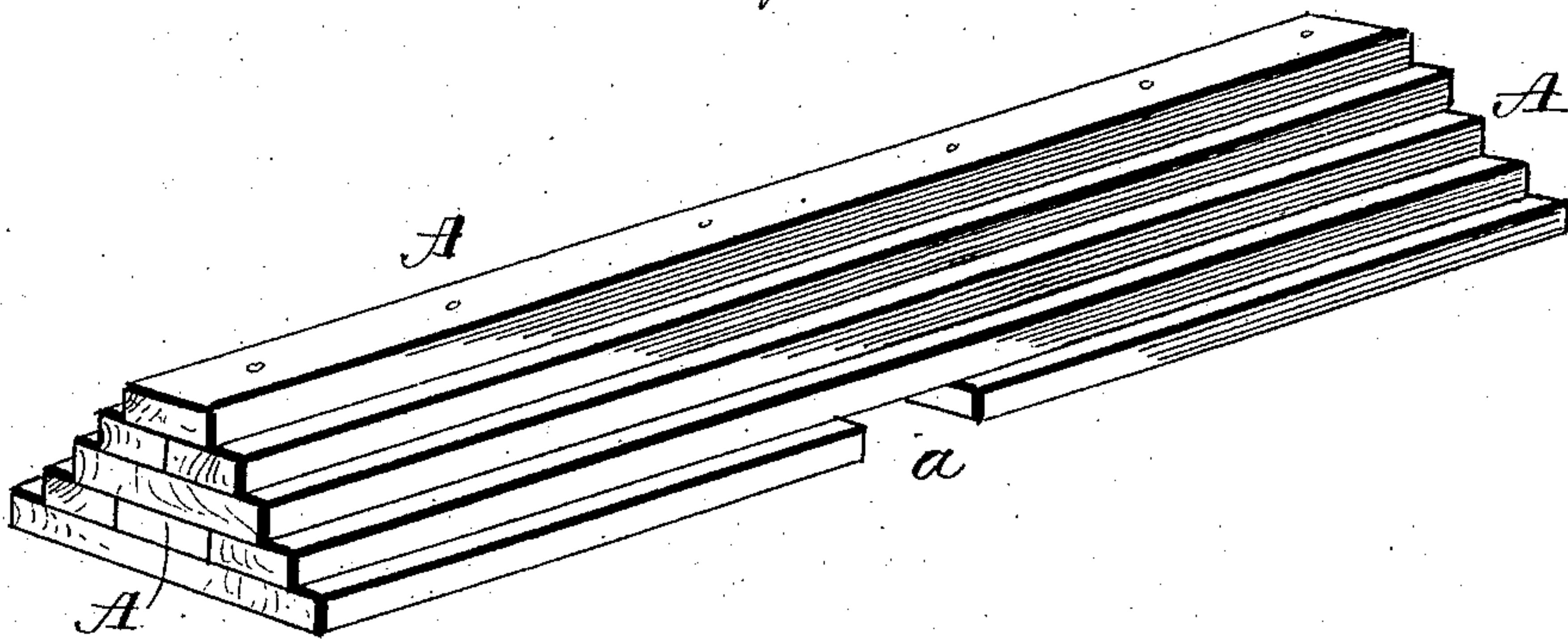


Fig. 2.

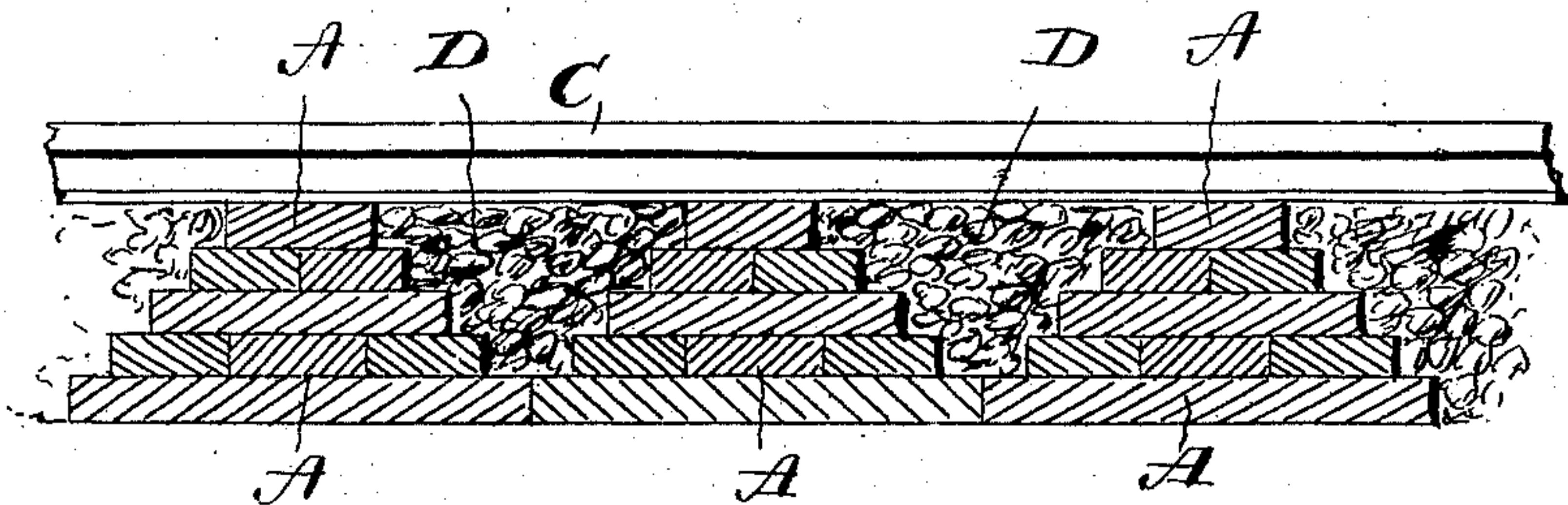
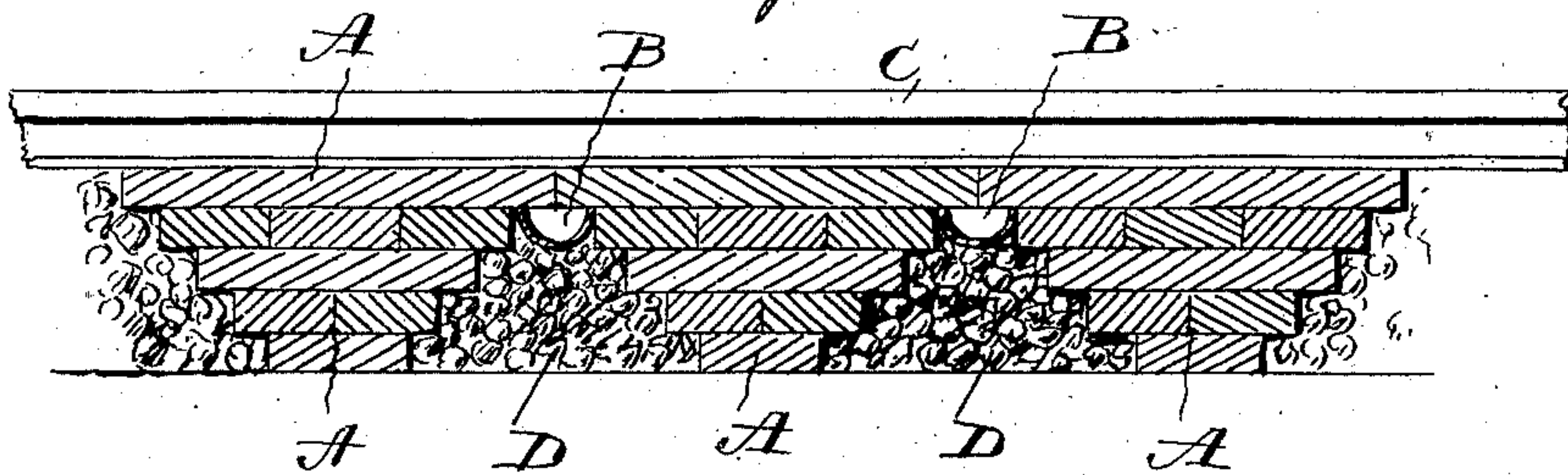


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

JOSEPH P. ANGELL, OF PINE BLUFF, ARKANSAS.

RAILROAD-TIE.

No. 850,283.

Specification of Letters Patent.

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Application filed February 5, 1907. Serial No. 355,941.

To all whom it may concern:

Be it known that I, JOSEPH P. ANGELL, of Pine Bluff, in the county of Jefferson, and in the State of Arkansas, have invented a certain new and useful Improvement in Railroad-Ties; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of a railroad-tie embodying my invention. Fig. 2 is a longitudinal section of portion of a railroad-track equipped with my ties; Fig. 3, a like view showing the ties in a position the reverse of that shown in Fig. 2.

The object of my invention is to provide a railroad-tie which besides possessing important structural advantages enables the use of timber or lumber not otherwise fitted or available for ties as commonly made; and to this end my invention consists in the tie constructed substantially as hereinafter specified and claimed.

In producing my tie I have had in view the utilization of timber or lumber that because of small cross-section or for other reasons is not otherwise available for ties, and to do this I form such timber or lumber into strips or boards A and lay them one upon the other, so as to break joints, as in bricklaying, fastening them together, as by spikes or nails and bolts, and thereby make a built-up structure that in cross-section is triangular or the frustum of a triangle in shape. The successive layers, it will be seen, differ uniformly in width, and each layer may be composed of several strips or boards. Preferably the strips or boards are treated with some wood preservative before they are placed together to form a tie, and then the tie as a whole is made waterproof.

The whole tie need not be made of wood of the same kind; but, for example, hard durable woods may be used for the outside and softer woods for the interior, so that wood may be used in this manner that would not answer for a whole tie.

A tie constructed in accordance with my invention will not warp or split, as will ties of usual construction, and they may be made of uniform size, a matter of importance in saving time and labor in replacing ties.

My tie may be used in any position desired. Thus, as shown in Fig. 2, they may be laid so that the apex of the triangle is uppermost and the rails C laid thereon and with the edge of the broad base of one tie touching the next with ballast between them, or, as shown in Fig. 3, they may be laid with the apex downward and the edges of the broad tops in contact, making a continuous bearing-surface for the rails and ballast being placed between them. With this arrangement the appearance presented is that of a series of arches, and the construction is a strong and durable one. If desired, a trough B may be placed beneath the joint between adjacent ties to catch and convey to the side of the track any surface water.

When used as shown in Fig. 3, the ballast D is thrown in the space between the ties from each end and followed up with the tamping-tool, and a very important advantage from this arrangement is that too much ballast will not be put at the mid-length of the ties, which, if it occurs, will cause a sawing motion of the ties. To produce the same result when the ties are arranged as shown in Fig. 2, a transverse section is removed from the ties at mid-length, as shown at a.

Of course instead of laying the ties in contact with each other they may be spaced apart, as is ordinarily the practice.

Having thus described my invention, what I claim is—

1. A railway-tie, composed of superimposed strips or boards, arranged so that the tie is triangular in cross-section.

2. A railway-tie, composed of layers of strips or boards arranged to break joints and so that the tie is triangular in cross-section.

3. A railway-tie, composed of layers of strips or boards, the layers being successively narrower.

In testimony that I claim the foregoing I have hereunto set my hand.

JOSEPH P. ANGELL.

Witnesses;

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