

No. 633,250.

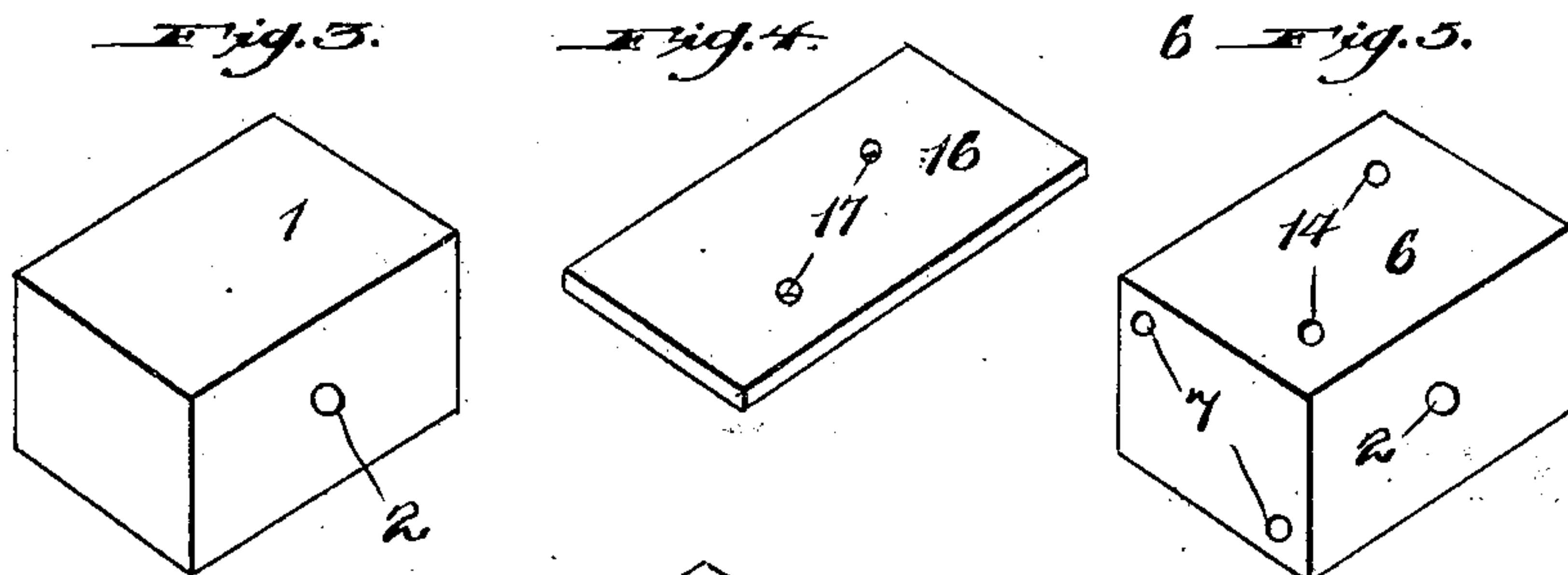
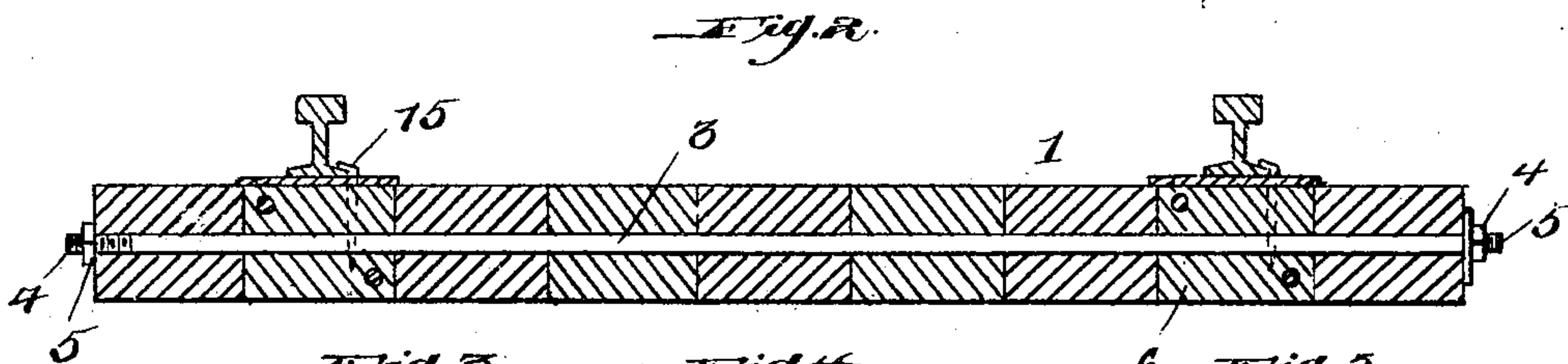
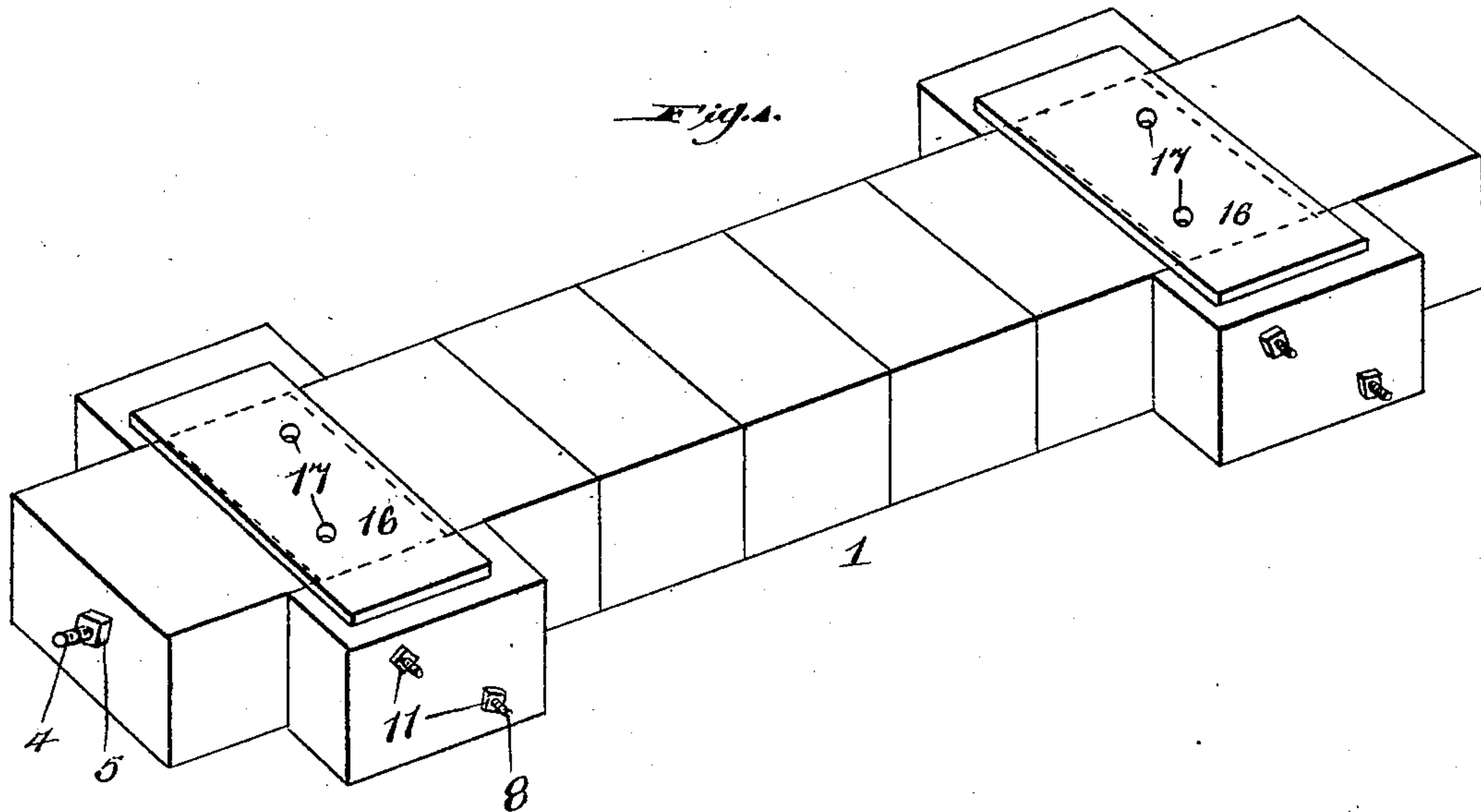
Patented Sept. 19, 1899.

J. S. SHERMAN.

RAILROAD TIE.

(Application filed Mar. 16, 1898.)

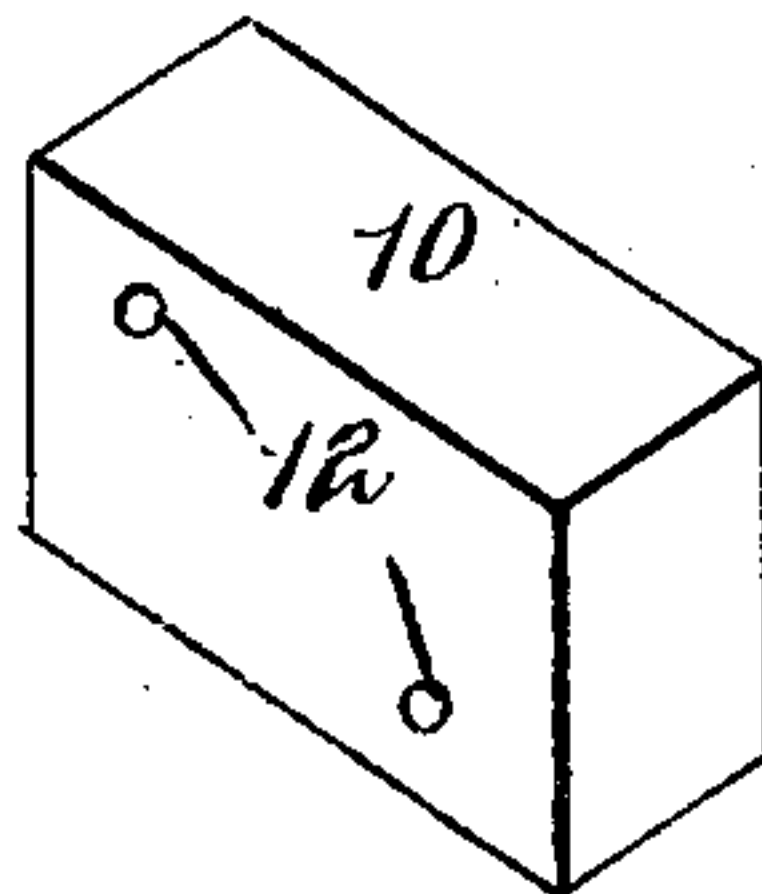
(No Model.)



WITNESSES:

*J. P. Hoffman.*  
*N. L. Bogart.*

*Fig. 6.*



INVENTOR

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# UNITED STATES PATENT OFFICE.

JOHN S. SHERMAN, OF LOWELL, KANSAS.

## RAILROAD-TIE.

SPECIFICATION forming part of Letters Patent No. 633,250, dated September 19, 1899.

Application filed March 16, 1898. Serial No. 674,128. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN S. SHERMAN, a citizen of the United States, residing at Lowell, in the county of Cherokee, State of Kansas, have invented a new and useful Railroad-Tie, of which the following is a specification.

This invention relates to certain new and useful improvements in railroad-ties.

The invention has for its object to construct a railroad-tie composed of a series of sections or blocks of mineral or other substance not liable to become affected by exposure to the weather and to secure these sections or blocks firmly together to form the tie.

Another object of the invention is to construct a tie of this nature which will adjust itself to an uneven surface or road-bed, and thereby lessen the liability of the tie being broken by the strain brought to bear upon the same.

Briefly described, my invention consists of a series of blocks or sections which may be composed of any suitable substance—such as bluff-shale, clay, or the like—which is finely ground, molded into shape, and burned or baked to the desired hardness. These sections or blocks are each provided with a centrally-arranged aperture to receive a securing-rod by means of which the series of blocks or sections are secured together. I preferably arrange two wing or side blocks at each side of the tie, so as to provide a greater bearing area for the rail, and secure these wing or side blocks to those forming the tie by means of bolts, all of which construction will be hereinafter more specifically described, and then particularly claimed.

In describing the invention in detail reference will be had to the accompanying drawings, forming a part of this specification, and wherein like figures of reference will be used to indicate similar parts throughout the several views, in which—

Figure 1 is a perspective view of a railroad-tie constructed in accordance with my invention. Fig. 2 is a longitudinal sectional view of the same. Fig. 3 is a perspective view of one of the blocks or sections of which the tie is formed. Fig. 4 is a similar view of the saddle-plate interposed between the tie and the rail. Fig. 5 is a perspective view of the

form of block or section used at points of the tie underneath the saddle-plates and rails. Fig. 6 is a perspective view of one of the wing or side blocks employed underneath the rails. 55

To put my invention into practice, I provide a series of blocks or sections 1, composed of suitable material, as before stated, and which may also be of an equal size. I provide each of these blocks or sections with a central opening or aperture 2, so that when the blocks or sections are placed together a longitudinal opening will be provided through the series to receive the securing-rod or truss-bolt 3, which is preferably formed with screw-threads 4 at each end to receive the securing-nuts 5. By forming each end of the rod or bolt the same it may be passed through the series of blocks or sections from either direction. The two blocks or sections 6 of each tie, which are the two blocks that are beneath the rails, are further provided with two transversely-extending apertures 7, diagonally disposed near two corners of the said blocks, and are adapted to receive the transversely-extending rods or bolts 8, by means of which the wing or side supporting blocks or sections 10 are secured to the two blocks or sections 6. These rods or bolts 8 are also provided with screw-threaded ends to receive the securing-nuts 11, registering with the apertures 7 in the blocks 6 to receive said rods or bolts. The two blocks or sections 6 are also provided in their upper face with two diagonally-disposed recesses 14 to receive the securing-spikes 15, by means of which the rails are fastened thereto. 75 80 85

I preferably provide a steel or other metallic saddle-plate 16, provided with diagonally-disposed apertures 17, adapted to register with the recesses 14 in the blocks 6 to receive the securing-spikes 15. These plates are placed upon the top of each of the blocks or sections 6 and are of a length sufficient for their ends to rest upon the side or wing blocks 10. By providing these side or wing blocks on each tie a greater bearing-surface for the rail is obtained. 95

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is— 100

A railroad-tie consisting of a series of solid

oblong blocks of stone or like substance suit-  
ably connected together, a supporting solid  
oblong block of stone or like substance ar-  
ranged at each side near each end of the se-  
5 ries of solid oblong blocks of stone or like  
substance and suitably secured to one of the  
said series of blocks, and a saddle - plate  
mounted on one of the blocks of the said se-

ries and two of the supporting-blocks adapt-  
ed to have mounted thereon a rail, substan- 10  
tially as set forth.

JOHN S. SHERMAN.

Witnesses:

K. SHERMAN,  
A. C. BARRETT.