

P. P. COOKINGHAM.  
TUBULAR RAIL FOR RAILWAY TRACKS.  
APPLICATION FILED MAR. 11, 1908.

937,022.

Patented Oct. 12. 1909.

Fig. 1.

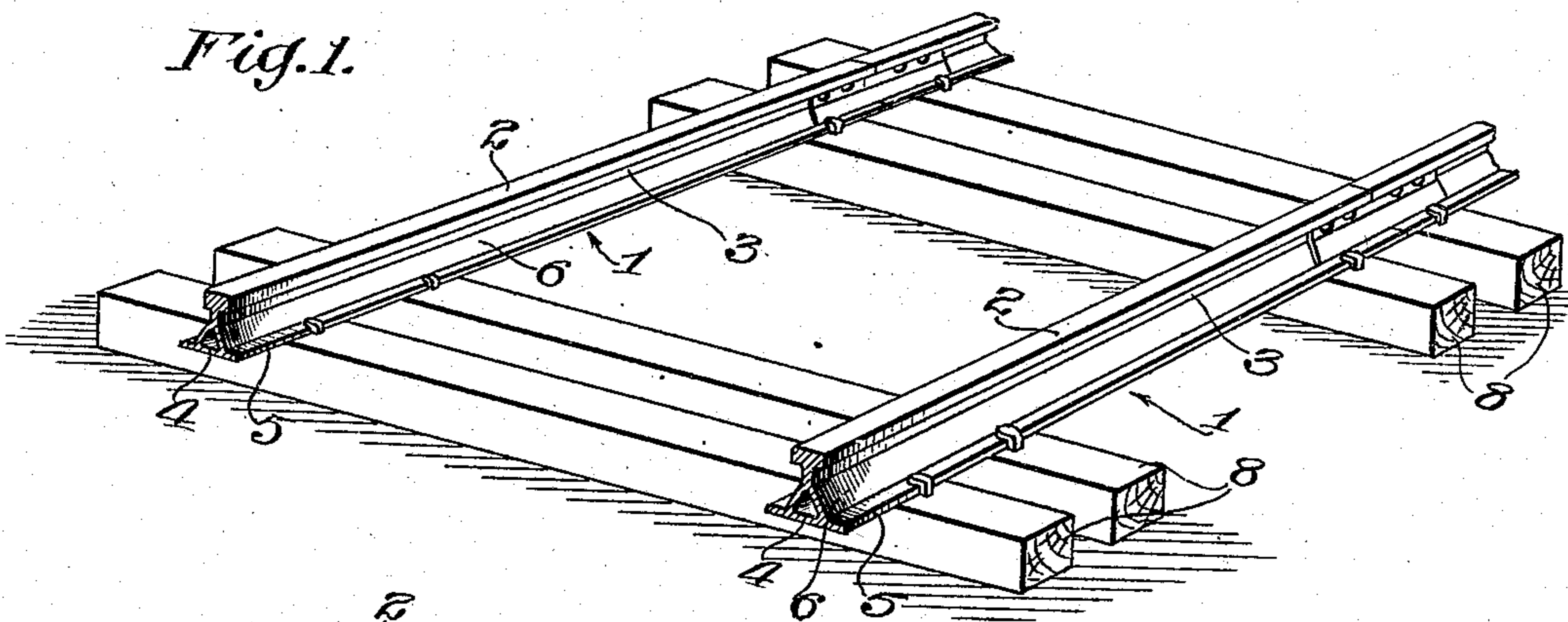


Fig. 2.

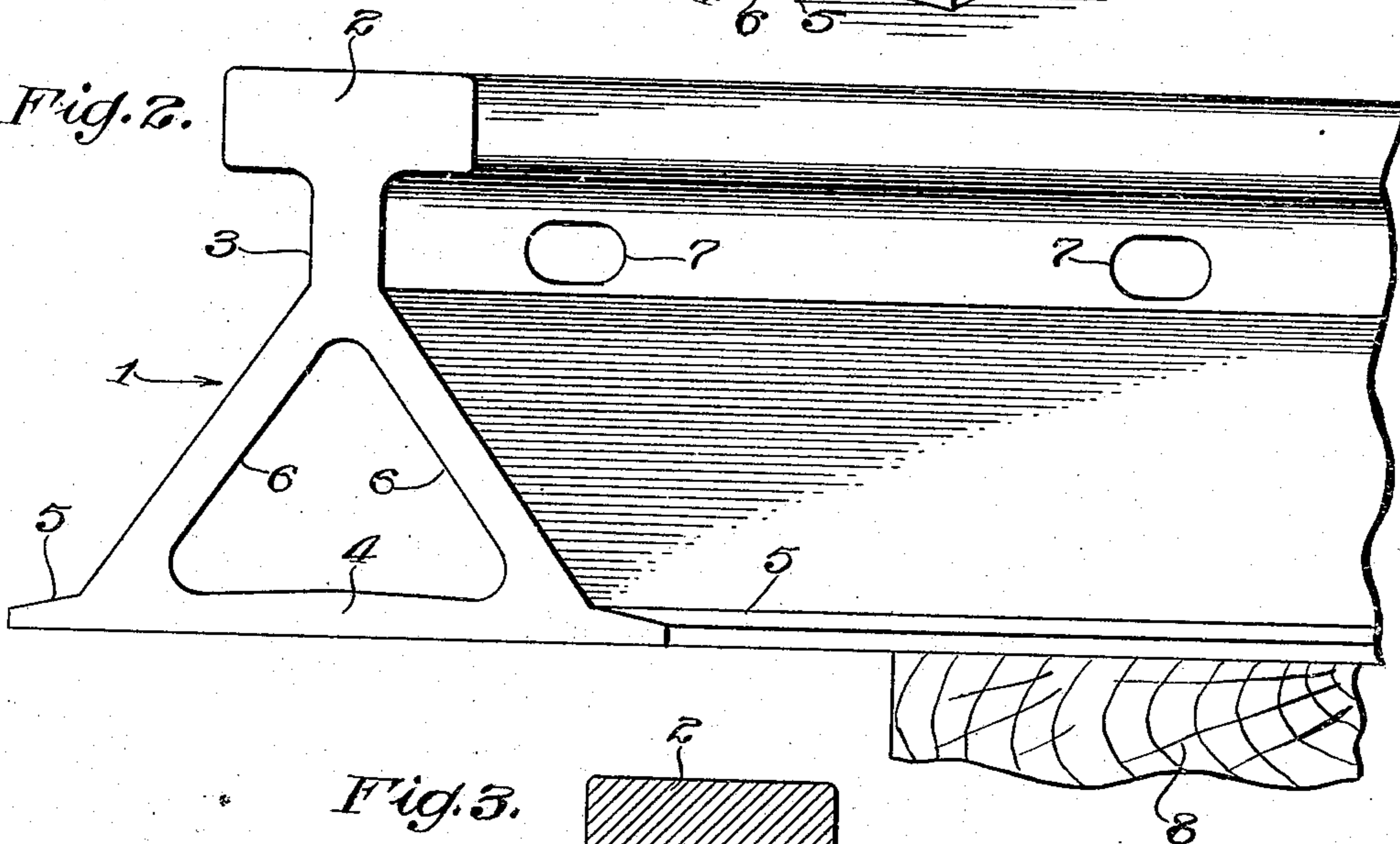
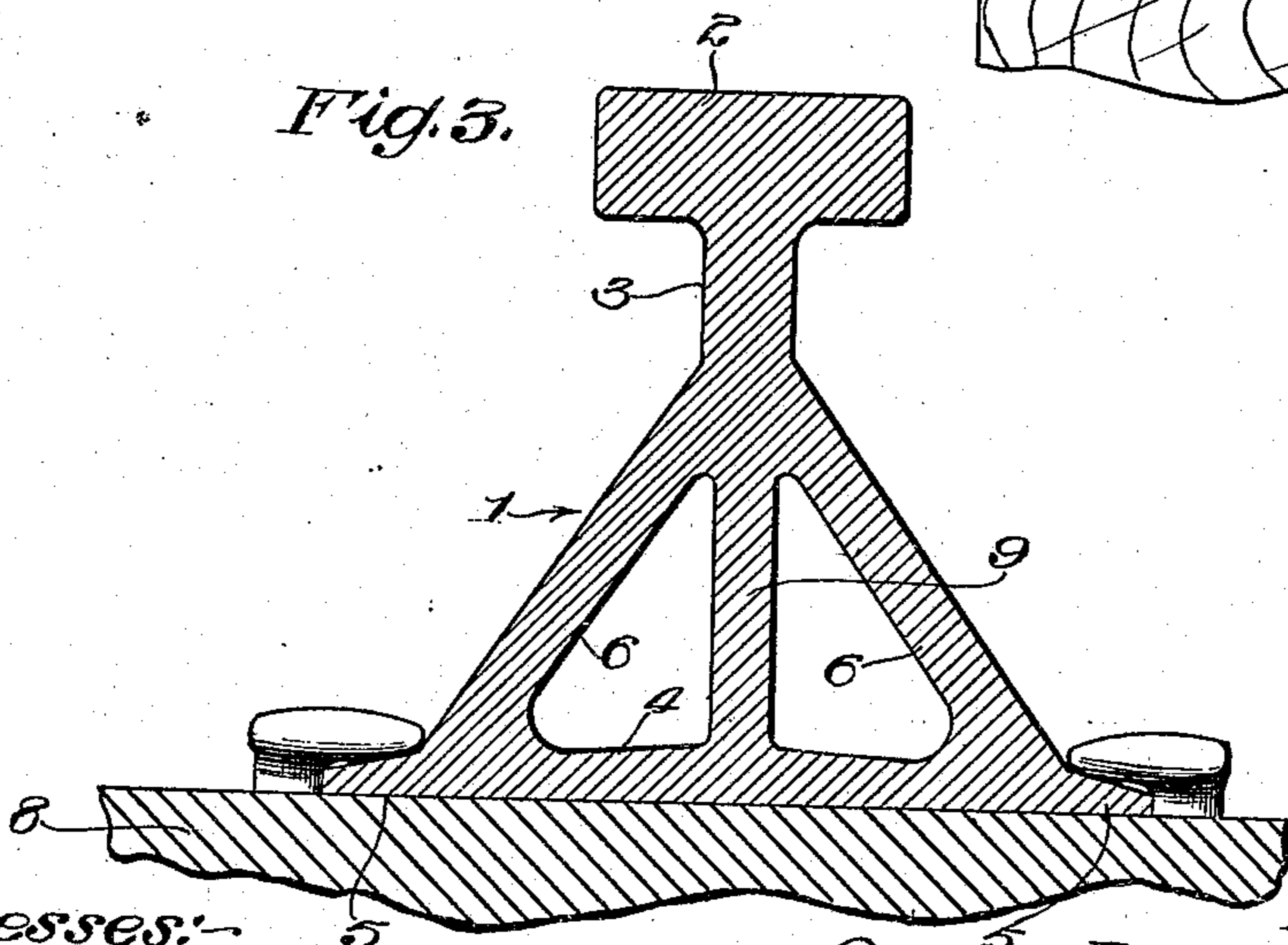


Fig. 3.



Witnesses:  
C. J. Williams  
Julia Townsend.

Inventor;  
Peter P. Cookingham  
by James R. Townsend  
his atty.

# UNITED STATES PATENT OFFICE.

PETER P. COOKINGHAM, OF LONGBEACH, CALIFORNIA, ASSIGNOR OF ONE-THIRD TO  
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## TUBULAR RAIL FOR RAILWAY-TRACKS.

937,022.

Specification of Letters Patent.

Patented Oct. 12, 1909.

Application filed March 11, 1908. Serial No. 420,512.

*To all whom it may concern:*

Be it known that I, PETER P. COOKINGHAM, a citizen of the United States, residing at Longbeach, in the county of Los Angeles and State of California, have invented a new and useful Tubular Rail for Railway-Tracks, of which the following is a specification.

An object of this invention is to provide a form of railway rail in which maximum strength and rigidity are secured with a minimum weight of metal.

An object is to improve the railway and at the same time reduce the cost thereof by enabling the constructor to dispense with about one-third of the ties now employed with rails of a given weight per yard.

The accompanying drawings illustrate the invention.

Figure 1 is a perspective view of a portion of a railway track provided with my newly-invented tubular rail. Fig. 2 is an enlarged distorted view showing an end elevation and side view of a rail constructed in accordance with this invention. Fig. 3 is a cross-section of a rail embodying the invention in another form.

The rail comprises a tubular base or body 1 and a tread or head 2 supported thereby. 3 designates a web connecting the tread or head 2 with the tubular base 1. Said base is preferably triangular in cross-section, and comprises a horizontal bottom limb or plate 4 provided with edge flanges 5 and two oblique limbs or plates 6 extending from the base plate 4 upward aslant toward the web 3.

All of the parts above-mentioned are integral with each other, and in practical manufacture the rail may be constructed in any well-known way as by spinning, after the manner of manufacturing hollow steel columns and gas and water pipe tubing.

The web 3 may be provided with bolt-holes 7 for the bolts of the fish-joint. The edged flanges 5 serve for engagement with the heads of the spikes or other fastening means by which the rail may be fastened to ties 8 as in the usual construction. The equilateral triangular form of the base shown in the drawing is at present regarded as the most desirable form for constructing the

body of the rail, but I do not propose to limit the invention to the specific form shown.

In Fig. 3 a central rib or web 9 is shown extending vertically from the uppermost angle of the tube to the base plate 4. The form of rail shown in this figure is not ordinarily deemed necessary, the purpose of the additional rib being simply to give greater resistance to vertical strain.

The invention is not limited to specific forms or sizes. In practical use the ties of the railway may be of the usual size, but I deem it preferable to use only two-thirds as many ties as is deemed necessary with the present construction of rail; and I also deem it preferable to place ties of the usual size in pairs, the ties of each pair being spaced apart only a sufficient distance to permit perfect tamping of the ballast thereunder in the process of laying the track, thus providing for larger areas of tamped portions of the track-bed, so that the portions of the bed which sustain the weight are of great solidity, the intermediate portions of the road-bed being bridged by this newly-invented rail, the rigidity of which enables it to sustain the weight over a greater span.

I claim:—

1. An integral railway-rail comprising a tread, a web to support the tread, and a tubular base supporting the web.

2. A railway-rail comprising a tread and a tubular base supporting the same, said base being provided with a bottom plate and with limbs extending aslant upwardly therefrom and united at the top to support the tread, the whole being of one piece.

3. A railway-rail comprising a tubular base triangular in cross-section and provided with flanges along the bottom plate thereof, a tread, and a web at the apex of the triangular base connecting said tread with the apex of said base, the whole being of one piece.

In testimony whereof, I have hereunto set my hand at Los Angeles, California, this 3d day of March, 1908.

PETER P. COOKINGHAM.

In presence of—

JAMES R. TOWNSEND,  
M. BEULAH TOWNSEND.