

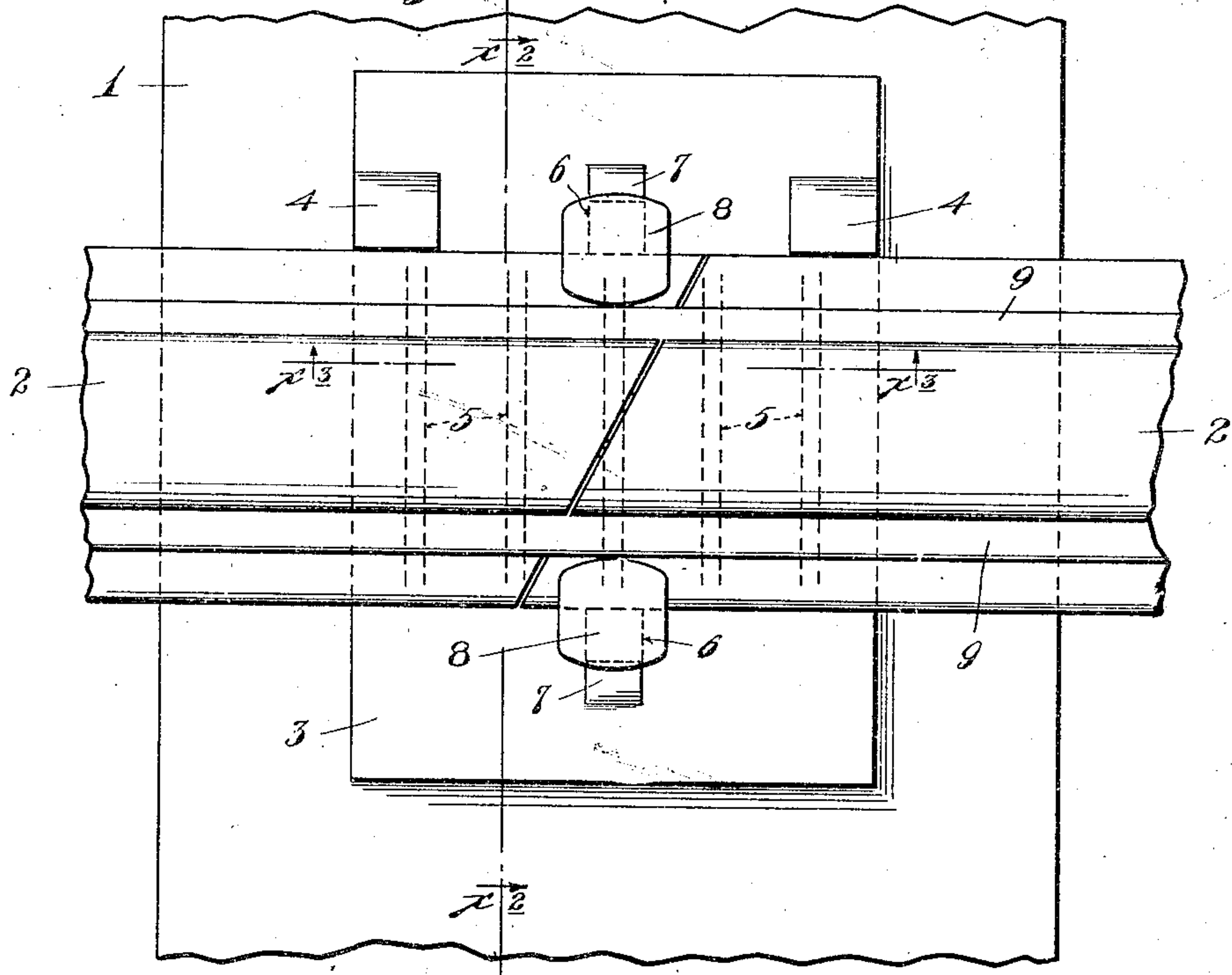
No. 845,313.

PATENTED FEB. 26, 1907.

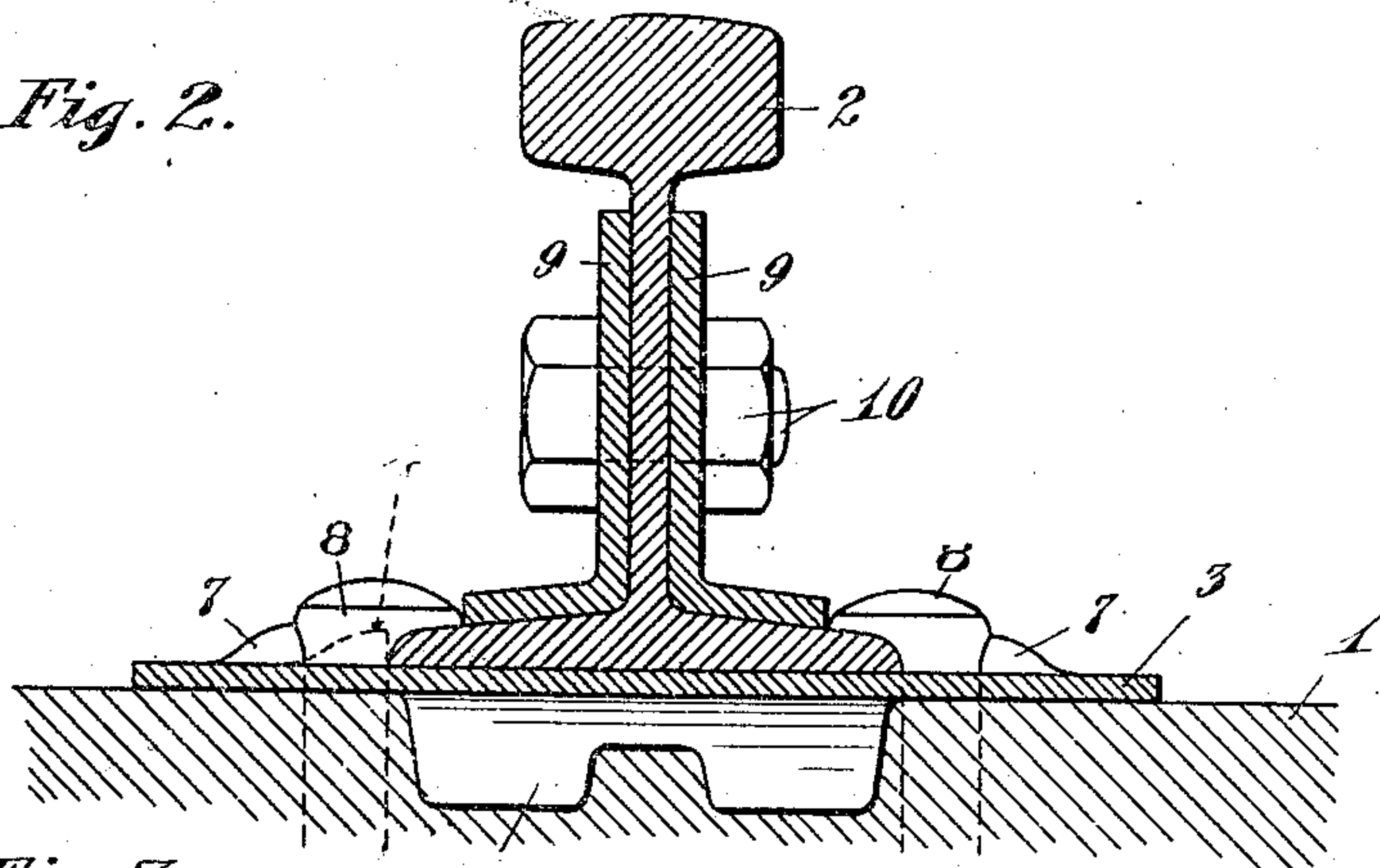
N. MYRIN.  
RAIL JOINT.

APPLICATION FILED MAY 16, 1906.

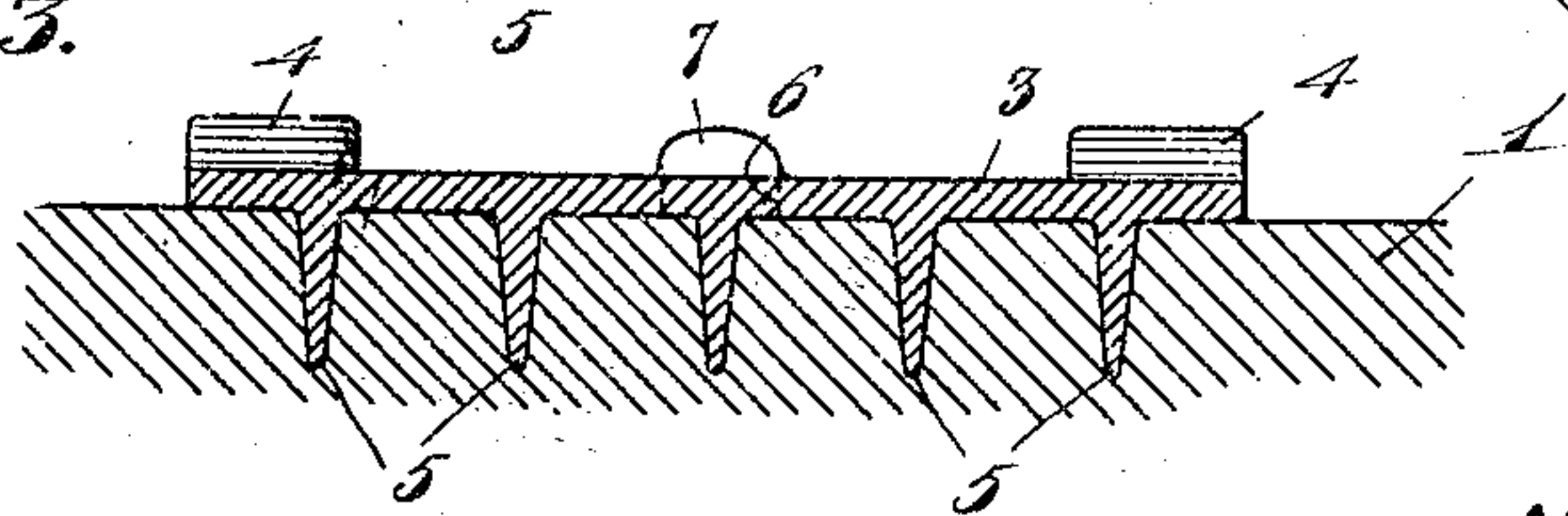
*Fig. 1*



*Fig. 2.*



*Fig. 3.*



*Witnesses.*  
*E. W. Juppner.*  
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# UNITED STATES PATENT OFFICE.

NILS MYRIN, OF THIEF RIVER FALLS, MINNESOTA.

## RAIL-JOINT.

No. 845,313.

Specification of Letters Patent.

Patented Feb. 26, 1907.

Application filed May 16, 1906. Serial No. 317,063.

*To all whom it may concern:*

Be it known that I, NILS MYRIN, a citizen of the United States, residing at Thief River Falls, in the county of Red Lake and State of Minnesota, have invented certain new and useful Improvements in Rail-Joints; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has for its object to provide an improved rail-joint; and to this end it consists of the novel construction and combination of parts hereinafter described, and defined in the claim:

The invention is illustrated in the accompanying drawings, wherein like characters indicate like parts throughout the several views.

Referring to the drawings, Figure 1 is a plan view illustrating my invention applied to connect the abutting ends of two alined rails to a tie. Fig. 2 is a vertical section taken on the line  $x^2x^2$  of Fig. 1, and Fig. 3 is a vertical section taken on the line  $x^3x^3$  of Fig. 1.

The numeral 1 indicates an ordinary railway-tie, and the numeral 2 indicates abutting end portions of rails, which, except as hereinafter pointed out, are of the usual construction.

The numeral 3 indicates a metallic saddle-plate which is placed upon the tie 1 and upon which the abutting or adjoining ends of the rails 2 are rested flatwise. On the outer side of the rail the saddle-plate 3 is formed with laterally-spaced stop-lugs 4, against which the outer edges of the foot-flange of the rails directly press. These stop-lugs 4 prevent spreading of the rails. The saddle-plate 3 is formed with a plurality of depending transversely-extended anchoring-flanges 5, that are quite sharp at their lower edges and are pressed into the tie 1, thereby preventing creeping movements of the saddle-plates in the direction of the rails and also transversely of the rails. At transversely-opposite points and at its intermediate portion the saddle-plate 3 is formed with spike-passages 6, and just outward of these spike-passages said plate is preferably formed with raised lugs 7, against which the outer portions of the spike-heads engage, as best shown in Fig. 2. The spikes 8 are driven

through these passages 6, and the inwardly-extended flanges of their heads impinge upon the foot-flanges of the rails to lock the rails to the saddle-plate 3, and hence to the tie 1.

In accordance with my invention the abutting ends of the rails are beveled or cut at an oblique angle, the said oblique cut being in a plane that extends from a point on the one side of the head of the one spike to a point on the other side of the head of the other spike, as clearly shown in Fig. 1. With this construction the two spikes 8 may be and are located at transversely-opposite points, so that they act upon the rail in very much the same manner as if the rail was not cut or separated in the vicinity thereof.

The numeral 9 indicates angular fish-plates that overlap the points between abutting ends of the rails and are clamped to the opposite sides thereof by means of nutted bolts 10. The seats in the vertical webs of the rails through which the bolts 10 are passed should in practice be elongated, so as to permit endwise expansions and contractions of the rails.

The device while efficient for the purposes had in view affords a cheap and practical construction.

What I claim is—

The combination with a tie and a saddle-plate secured thereon, said saddle-plate having spike-passages and lugs 7 all located in a vertical plane that intersects the track at right angles, and having at its outer side laterally-spaced rail-engaging stop-lugs 4, of alined rails having their abutting ends resting upon said saddle-plate, the said abutting ends being cut obliquely from a point on one side of one of the spike-passages of said saddle-plate, to a point on the other side of the spike-passage of said plate, fish-plates secured to said rails and overlapping the joint between the same, and spikes driven into said tie through the transversely-alined passages of said saddle-plate, with their heads impinging upon the foot-flanges of said rails, substantially as described.

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

NILS MYRIN.)

Witnesses:

G. K. FARGO,  
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