No. 855,914. PATENTED JUNE 4, 1907.

S. G. WEIR.

RAIL JOINT.

APPLICATION FILED SEPT. 4, 1906.

Fig. 1.

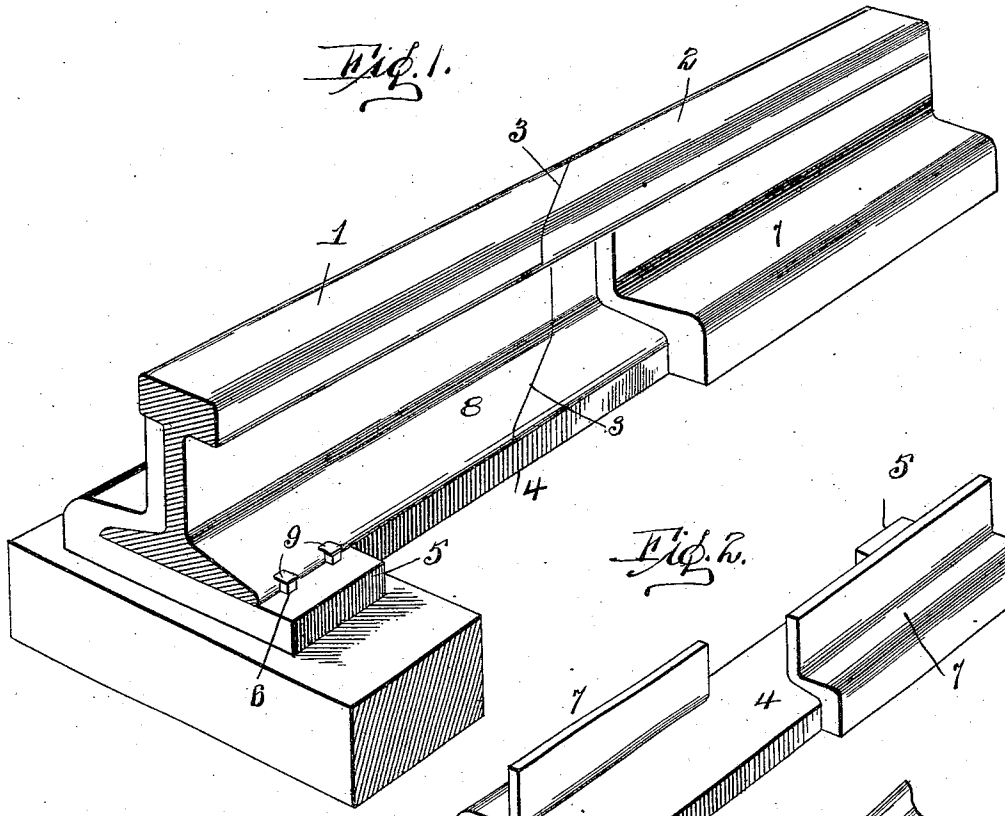
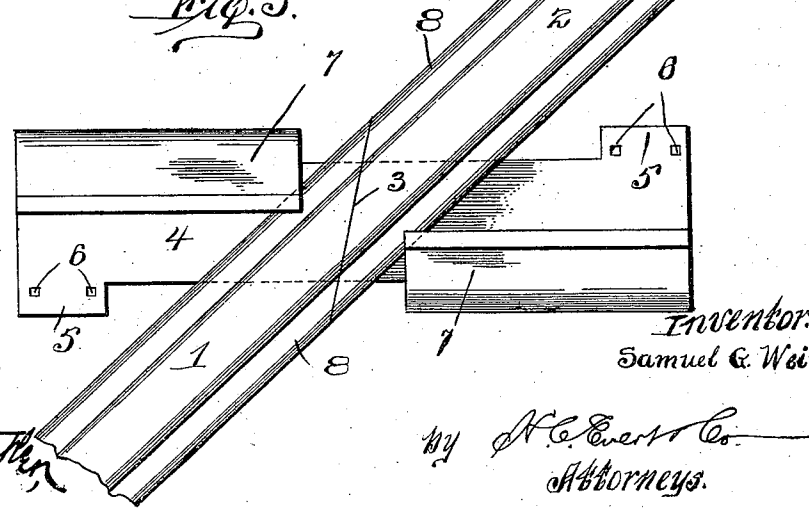



Fig. 2.




Fig. 3.

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# UNITED STATES PATENT OFFICE.

SAMUEL G. WEIR, OF ECONOMY, PENNSYLVANIA.

## RAIL-JOINT.

No. 855,914. Specification of Letters Patent. Patented June 4, 1907.

Application filed September 4, 1906. Serial No. 333,250.

*To all whom it may concern.*

Be it known that I, SAMUEL G. WEIR, a citizen of the United States of America, residing at Economy, in the county of Beaver and State of Pennsylvania, have invented certain new and useful Improvements in Rail-Joints, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to certain new and useful improvements in rail joints, and the invention has for its object the provision of novel means for connecting the confronting ends of two rails, without the use of bolts and nuts.

Another object of this invention is to provide a rail joint which can be easily and quickly placed in engagement with two rails, to prevent their displacement from ordinary use.

A further object of the invention is to provide a simple and inexpensive rail connection requiring no skill whatever to install.

With these and other objects in view, the invention consists in the novel construction and arrangement of parts to be presently described and then specifically pointed out in the appended claims.

Referring to the drawing forming part of this specification, like numerals of reference designate corresponding parts throughout the several views, in which;—

Figure 1 is a perspective view of my improved joint. Fig. 2 is a similar view of a chair constituting the main feature of my invention, and, Fig. 3 is a plan of the chair illustrating the manner in which the chair is placed in engagement with the rails.

To put my invention into practice, I provide the rails 1 and 2 to be joined with beveled confronting ends. To retain the ends together, I employ a chair consisting of an oblong plate 4 of sufficient length to be supported by two ties or sleepers. The plate 4 upon one side edge, at the end thereof, and on the opposite side edge, at the opposite end, is provided with right angular extensions 5 having spike openings 6 formed therein, whereby the plate 4 can be secured to ties or sleepers.

The plate 4 at its side edges is provided with integral clamp plates 7 adapted to overlie the base flanges 8 of the rails 1 and 2, one of said clamp plates engaging one rail, while the other clamp plate engages the other rail.

To place the plate 4 in engagement with the rails 1 and 2, it is necessary that the ends 3 of the rails be placed together, and the plate 4 placed under the rails at an angle thereto, the near corners of the clamp plates 7 engaging the base flanges 8 of the rails. The plate 4 is then swung around until the clamp plates 7 engage the base flanges 8, at which time the plate 4 can be spiked to the ties or sleepers.

The manner in which the plate 4 is placed in engagement with the rails 1 and 2 is important owing to the fact that the clamp plates 7 are nearly opposite one another. The clamp plates 7 prevent the lateral displacement of the rails, but allow for the expansion and contraction of said rails. It is obvious that vertical displacement is prevented by the spikes 9 and the clamp plates 7.

The beveled form of the abutting ends 3 of the rails is an important feature of the invention, as the rails are thereby effectually prevented from lateral displacement, thus relieving the spikes 9 from a large amount of the lateral strain.

My improved chair is constructed of strong and durable metal.

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

A rail joint consisting of a tie plate corresponding in width throughout with the tie flanges of the rails and extending over two ties and with laterally extending lugs provided with spike apertures at its diagonally opposite corners and with rail clamp plates extending from its opposite edges and at opposite sides of the center of the plate and likewise opposite said apertured lugs, the inner ends of the clamp plates being spaced apart, in combination with rails bearing upon the tie plate and with their abutting ends beveled opposite the space between the clamp plates.

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

SAMUEL G. WEIR.

Witnesses:

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