

No. 781,196.

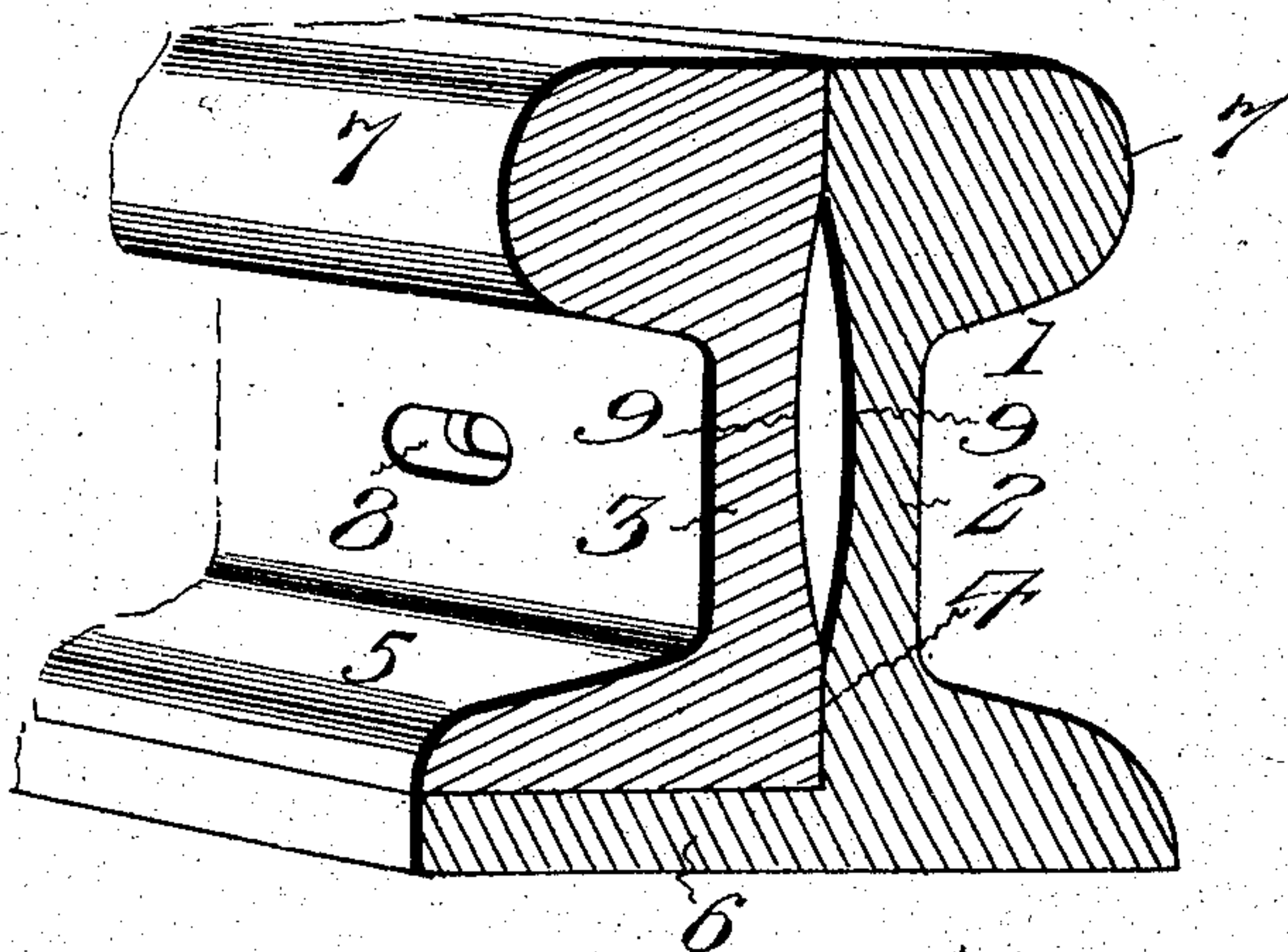
PATENTED JAN. 31, 1905.

P. EPPERSON.

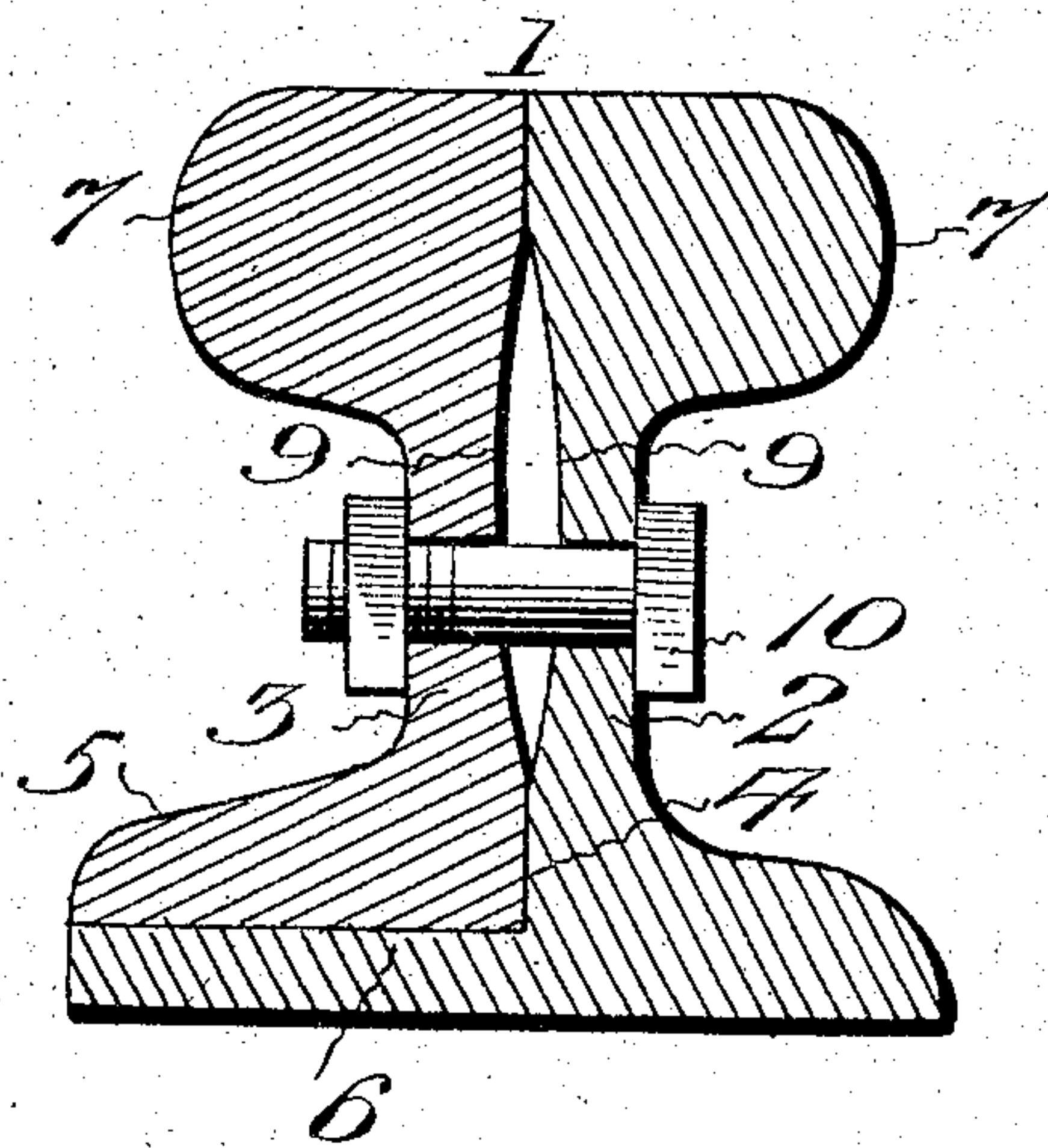
RAIL JOINT.

APPLICATION FILED MAR. 1, 1904.

*Fig. 1.*



*Fig. 2.*



Witnesses

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# UNITED STATES PATENT OFFICE.

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## RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 781,196, dated January 31, 1905.

Application filed March 1, 1904. Serial No. 195,960.

*To all whom it may concern:*

Be it known that I, PERRIN EPPERSON, a citizen of the United States, residing at Belt, in the county of Cascade and State of Montana, have invented new and useful Improvements in Rail-Joints, of which the following is a specification.

This invention relates to railway-rails and means for preventing the same from becoming laterally displaced or spreading; and it consists, essentially, in constructing a rail in two parts or sections by dividing an ordinary rail upon a longitudinal vertical plane passing through or near its center and arranging one part or member with a seat to receive the other part or member, the member having the seat also carrying the base-flange for both rails and having the seat terminating at its lower portion a slight distance below the upper surface of one side of the flange to permit the member adapted to engage the seat to complete the base-flange when the parts or members of the rail are associated, and thereby avoid weakening the base-flange structure by cutting the rail entirely through the same.

The invention further consists of rails longitudinally divided down to and through a portion of the base-flange of the ordinary rail structure and forming the inner opposing faces of the two members thus produced with concave recesses extending longitudinally thereof to compensate for lateral or transverse expansion and contraction and also to provide the two members with bolt openings or holes of oblong shape to allow for longitudinal contraction and expansion, said bolt-holes being so spaced that any two holes coinciding will cause the remaining holes in the assembled parts or members of the rail to aline, and thus permit the joints between the rail-sections to be made where desired and as long as may be necessary without requiring a particular terminal formation of the ends of the sections.

In the drawings, Figure 1 is a sectional perspective view of a portion of a rail embodying the features of the invention. Fig. 2 is a transverse vertical section through the rail.

Similar numerals of reference are employed

to indicate corresponding parts in both the views.

The numeral 1 designates a rail which is divided upon a longitudinal vertical plane passing through or near its center to form two L-shaped members 2 and 3, the division cut extending only partially through the base-flange of the complete rail, so that a seat 4 will be provided in the member 2 to receive the member 3, and when the latter is arranged in said seat the reduced base-flange 5 thereof bears upon the extended part 6 of the normal flange of the rail. This form of seat prevents the member 3 from moving vertically below a predetermined point and always maintains a coincidence of the upper surfaces of the two semihead portions 7 of the members. The members 2 and 3 have oblong bolt-holes 8 formed at regular intervals therein and so spaced apart that when any two of the holes are in coincidence the remaining holes of a like structure will aline, and by this means the two members or L-shaped parts of the rail may be disposed in relation to each other as found desirable in a longitudinal direction, particularly in the formation of overlapped joints at the terminals of contiguous rail-sections or for other purposes. The inner opposing sides of the members 2 and 3 have concave recesses 9 formed therein and extending fully throughout the length thereof. The elongated bolt-holes 8, as will be understood, are adapted to receive suitable coupling or securing bolts 10, and the members are permitted, through the provision of the oblong holes 8, to creep or shift longitudinally to compensate for lengthwise expansion and contraction. The recesses 9 take up transverse or side expansion of the rails and prevent the latter from buckling.

Having thus fully described the invention, what is claimed as new is—

A rail, divided longitudinally in a vertical plane through the center and partially through the base-flange, the latter being cut in a horizontal plane fully to the outer edge of one side thereof to form a horizontal seat which meets the vertical division in a plane at right angles to form one rail member with an L-

shaped flange which rests on the horizontally-cut portion of the flange of the remaining member, the inner opposing sides of both members being formed with concave recesses  
5 extending full length thereof, the web-sections of the members being constructed with oblong bolt-holes so spaced apart from each other that when any two of the said holes co-

incide the remaining holes will be disposed in alinement. 10

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

PERRIN EPPERSON.

Witnesses:

JAMES CHAMBERS,

HENRY L. DES COMBES.