No. 890,914. PATENTED JUNE 16, 1908.

J. F. LEWIS.

RAILWAY RAIL CHAIR.

APPLICATION FILED MAY 17, 1907.

Fig. 1.

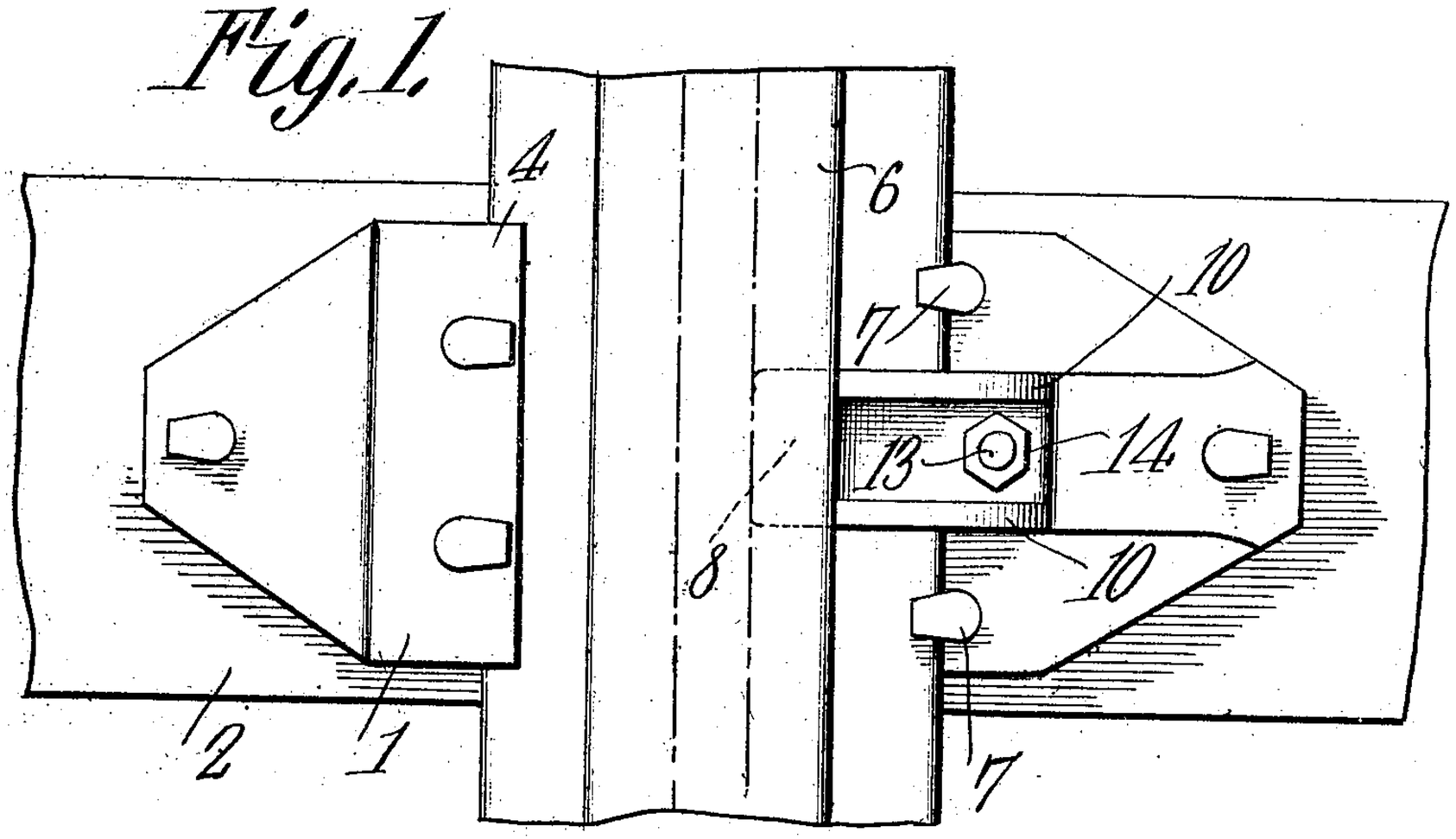


Fig. 2.

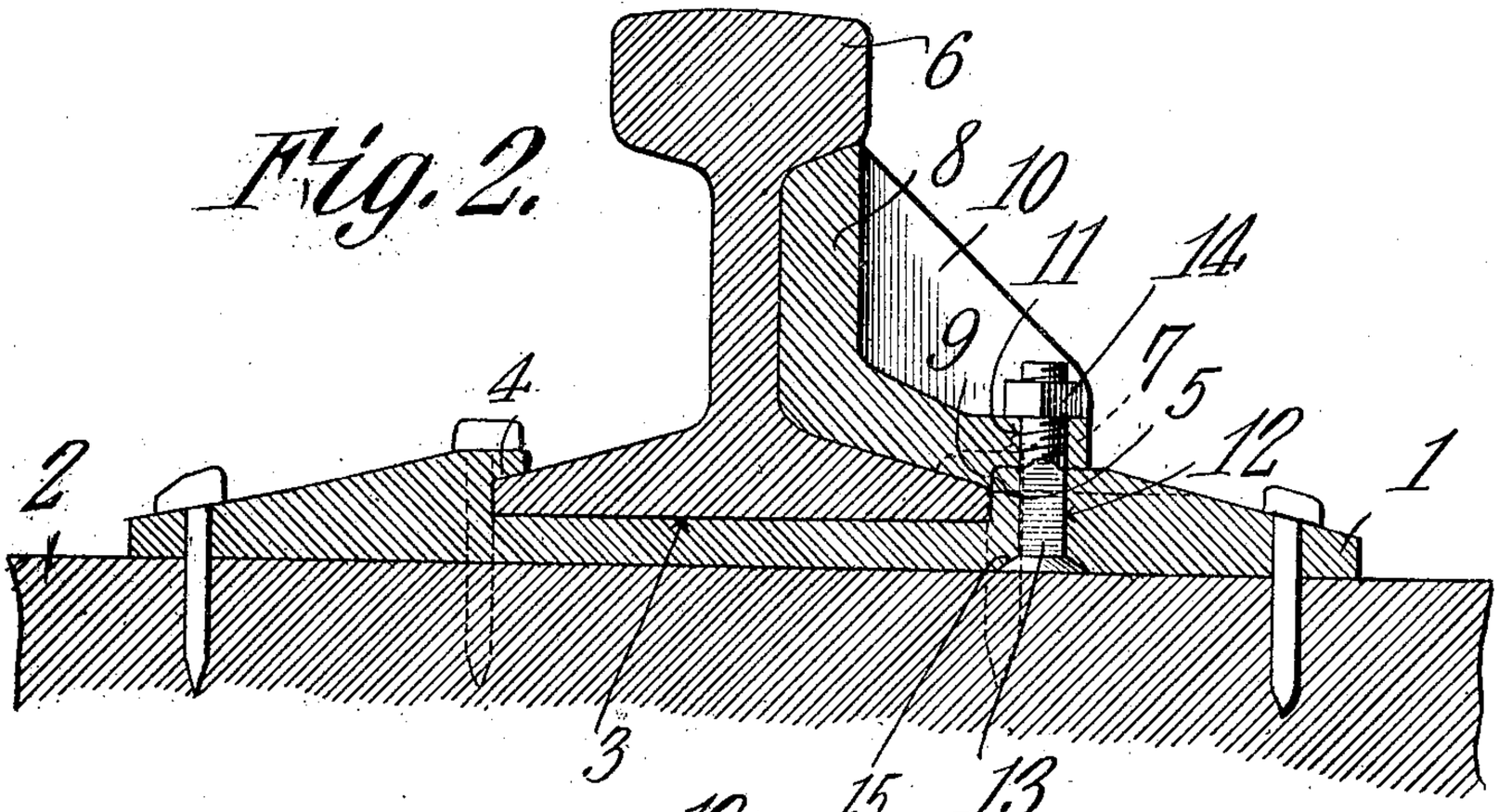
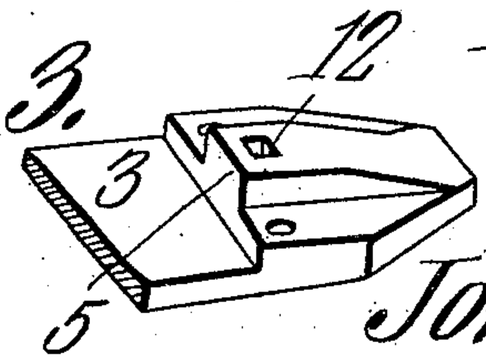


Fig. 3.



WITNESSES.

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JOHN FRANKLIN LEWIS, OF KANSAS CITY, KANSAS.

RAILWAY-RAIL CHAIR.

No. 890,914. Specification of Letters Patent. Patented June 16, 1908.

Application filed May 17, 1907. Serial No. 374,181.

To all whom it may concern:

Be it known that I, JOHN FRANKLIN LEWIS, a citizen of the United States, residing at Kansas City, in the county of Wyandotte and State of Kansas, have invented a new and useful Railway-Rail Chair, of which the following is a specification.

This invention relates to railway rail chairs and its object is to provide simple and efficient means whereby the rails can be supported upon the ties or sleepers and secured thereto.

A still further object is to provide bracing means of novel form for use upon curves or wherever the rails are subjected to lateral or side pressure.

A still further object is to provide a combined chair and brace which is simple, durable and efficient in construction and which can be readily placed in position.

With these and other objects in view the invention consists of certain novel features of construction and combinations of parts which will be hereinafter more fully described and pointed out in the claims.

In the accompanying drawings is shown the preferred form of the invention.

In said drawings: Figure 1 is a plan view of the chair and brace embodying the present improvements, a rail being shown in position thereon; Fig. 2 is a longitudinal section through the chair and brace, the rail being shown in transverse section; and Fig. 3 is a detail view of one end portion of the chair.

Referring to the figures by characters of reference, 1 designates the base plate constituting the chair proper and this plate is designed to be fastened to a tie 2 by means of spikes as ordinarily. The plate is thickened transversely at the center and provided in its upper face with a broad rail receiving groove 3 one wall of which is undercut as shown at 4 so as to lap the inner base flange of a rail and prevent it from tilting outwardly when subjected to a side pressure. A part of the opposite wall of the recess 3 extends above the adjoining base flange of the rail as shown at 5 and constitutes an abutment for the purpose hereinafter disclosed. The rail, which has been indicated at 6, is held within the groove 3 by means of spikes 7 which extend through the plate 1. These spikes are so located that the heads thereof will lap the base flanges of the rail 6 and hold said rail firmly within the groove 3.

Along straight stretches of road the fastening means above described will be found sufficient to hold the rails securely in place but where the rails are disposed along curves they are preferably provided with braces for the purpose of preventing them from tilting and spreading apart when subjected to the side thrust or pressure exerted by the wheels of a car when rounding a curve. Each of these braces is formed preferably in a single casting and comprises a body 8 shaped to fit snugly upon one of the base flanges and against the web of the rail, the upper end of the body bearing against the lower face of the rail head. A shoulder 9 extends transversely along the lower face of the brace and is designed to bear against the abutment 5 so that after the brace has once been placed in position the shoulder and abutment serve to hold it against displacement. Webs 10 are formed integral with the body at the side edges thereof and a bolt opening 11 is formed in said body and is designed to register with an opening 12 in the base plate 1. This opening 12 is disposed to receive an angular bolt 13 the threaded portion of which projects through the opening 11 and between the webs 10 and is adapted to be engaged by a nut such as shown at 14. By screwing this nut onto the bolt the brace will be firmly clamped upon the plate 1 and the shoulder 9 held positively against the abutment 5. The brace will obviously resist any lateral pressure which may be exerted against the rail and therefore the spreading of the rails will be effectually prevented. The bolt opening 12 is preferably counterbored as at 15 to receive the head of the bolt and permit the plate 1 to rest flat upon the tie. Not only does the brace 8 serve to uphold the rail against lateral pressure but also coöperates with the fasteners 7 for the purpose of securing the rail within the groove 3.

What is claimed is:

1. A rail chair comprising a base plate having a rail receiving groove in the upper face thereof, one wall of the groove being disposed to lap one base flange of a rail, the other wall of said groove being perpendicular, a portion of said perpendicular wall being extended upward to constitute an abutment, a brace disposed to lap the groove and bearing upon the extension, said brace having a shoulder disposed to bear against the abutment, and means extending through the extension and brace for securing the brace upon the extension.

2. The combination with a base plate having a groove in one face thereof, one wall of the groove being perpendicular and the other wall being undercut; of a rail insertible downward into the groove and into engagement with the undercut wall of the groove and against the perpendicular wall, an extension upon the base and above said perpendicular wall, said extension constituting an abutment disposed above the base flange of the rail, a brace bearing against the rail and upon the extension, said brace having a shoulder bearing against the abutment, and means extending through the base plate for binding the brace upon the extension.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in presence of two witnesses.

JOHN FRANKLIN LEWIS.

Witnesses:

A. HYMAN,

M. SHANE.