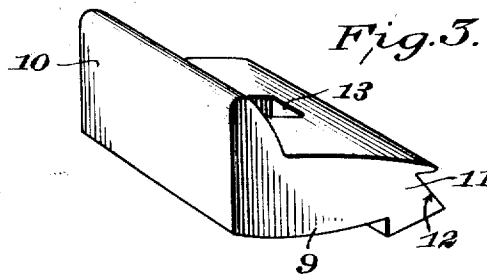
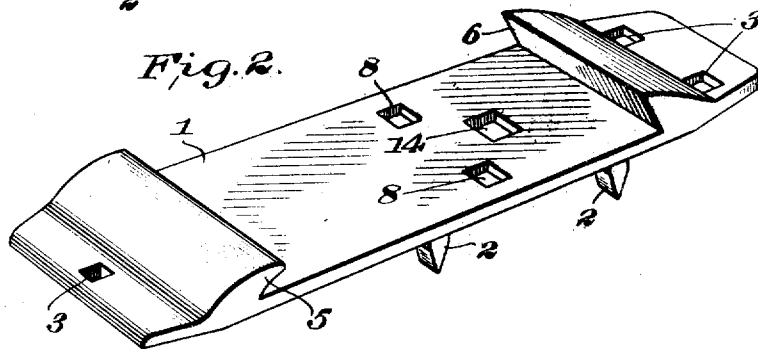
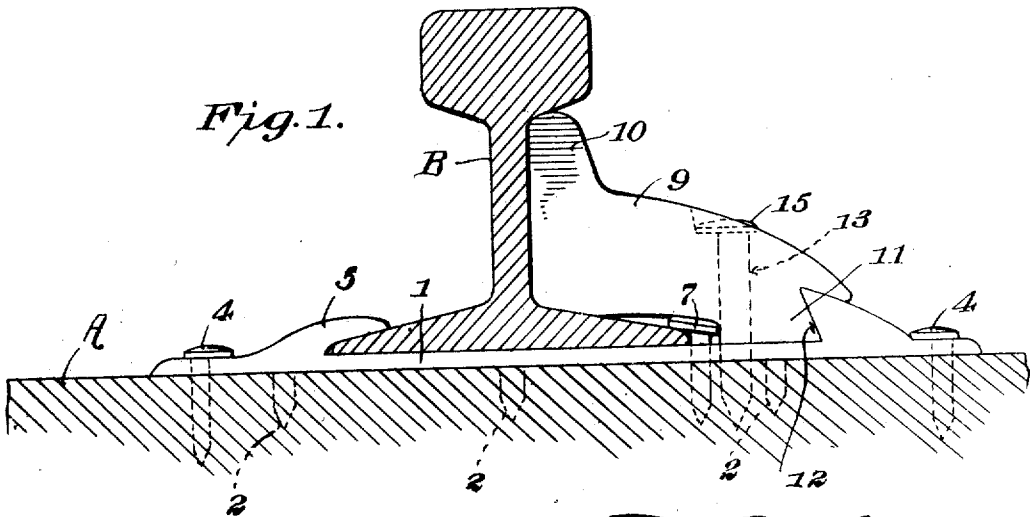


J. A. KERCHEVEAL.
RAIL CHAIR AND FASTENER.
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946,054.



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UNITED STATES PATENT OFFICE.

JOHN A. KERCHEVEAL, OF CUMBERLAND, MARYLAND, ASSIGNOR TO EDWARD HARRIS, OF CUMBERLAND, MARYLAND.

RAIL CHAIR AND FASTENER.

946,054.

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To all whom it may concern:

Be it known that I, JOHN A. KERCHEVEAL, citizen of the United States, residing at Cumberland, in the county of Allegany and State of Maryland, have invented certain new and useful Improvements in Rail Chairs and Fasteners, of which the following is a specification.

This invention comprehends certain new and useful improvements in track equipment for railways, and the invention has for its object an improved rail chair and fastener that is designed to support the rail firmly in position against accidental displacement, and which is primarily intended for use on curves to prevent the rails from spreading.

With this and other objects in view that will more fully appear as the description proceeds, the invention consists in certain constructions and arrangements of the parts that I shall hereinafter fully describe and then point out the novel features of in the appended claims.

For a full understanding of the invention and the merits thereof and to acquire a knowledge of the details of construction, reference is to be had to the following description and accompanying drawing, in which:

Figure 1 is a sectional view illustrating the application of the invention; Fig. 2 is a detail perspective view of the tie plate; and, Fig. 3 is a similar view of the cheek-piece.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawing by the same reference characters.

Referring to the drawing, the numeral 1 designates a tie plate which is designed to be applied to an ordinary wooden tie. A, and which is formed with depending projections, 2, adapted to be embedded in the tie to hold the plate against displacement thereon. If desired, the plate may be formed with a plurality of apertures 3 through which spikes 4 are driven to effect further attachment to the tie. This tie plate is formed with two longitudinally extending transversely spaced lips 5 and 6 which upstand from its upper face, and the adjacent walls of which constitute opposing shoulders and are preferably under-cut, as shown. The rail, B, rests on the tie plate between

the spaced lips, and one of the lips, designated 5, is arranged to take over one base flange of the rail. The lip 6 is spaced transversely from the other base flange of the rail, and the rail is fastened on such latter side through the instrumentality of spikes 7, or other suitable fastening elements, driven through apertures 8 in the tie plate and embedded in the tie. It is to be observed that the spikes 7 also assist the spikes 4 in attaching the plate to the tie.

9 designates a cheek-piece which extends over the last named base flange of the rail and which is extended upwardly at its inner end, as indicated at 10, so as to fit between the head and base flange of the rail and abut against the web thereof to serve as a track brace. At its outer end the cheek is formed with a downwardly disposed relatively narrow foot portion 11 that fits between the spikes 7 and the adjacent lip 6, the outer wall of the foot portion being preferably beveled, as indicated at 12, whereby to engage the under-cut wall of the lip and retain the cheek-piece against upward displacement. The cheek-piece is held against any longitudinal sliding movement by means of a key 15, that in the present instance is in the form of a spike and that is designed to be driven vertically downwardly through an opening 13 in the cheek-piece and a registering aperture 14 in the tie plate, and embedded in the tie.

From the foregoing description in connection with the accompanying drawing, it will be apparent that I have provided an improved rail attachment which serves to positively hold the rail in position against accidental displacement, the device being particularly susceptible of use on curves, or at other points where the rails have a tendency to spread. Furthermore, the cheek-piece effectually braces the rail, and in addition to this function extends across and bears upon the heads of the spikes 7 to maintain the same against any loosening movement.

Among the many advantages residing in this structure, attention is particularly directed to the fact that the device may be conveniently applied to the rail with a minimum expenditure of time and labor, and after once in position it is not likely to require attention; that it embodies to a marked degree the characteristics of simplicity and durability; and that it consists of compara-

tively few parts which may be easily and cheaply manufactured.

It is to be understood that the parts of my invention may be modified within the scope of the appended claims, so as to connect together the ends of the rails in event of the device being applied at the joint.

Having thus described the invention what is claimed as new is:

10 1. The combination with a tie plate and a rail resting thereon, of fastening elements driven through the tie plate and engaging one base flange of the rail, a cheek-piece abutting against the web of the rail and extending over said base flange and bearing upon the heads of the fastening elements, and means for securing the cheek-piece to the tie plate.

20 2. The combination with a tie plate formed with an upstanding lip and a rail resting on the tie plate with one base flange spaced from the lip, fastening elements driven through the tie plate and taking over the base flange, and a cheek-piece abutting

against the web of the rail and bearing 25 against such base flange and the heads of the fastening elements, the cheek-piece being formed with a relatively narrow foot portion fitting between the fastening elements and the lip. 30

3. The combination with a tie plate formed with an upstanding lip having an under-cut wall, a rail resting on the tie plate with its proximate base flange spaced from the lip, a cheek-piece taking over said base flange of 35 the rail and formed with a foot portion interposed between the base flange and the lip, the foot portion having a beveled wall engaging with the under-cut wall of the lip, and a key for securing the cheek-piece 40 against sliding movement.

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

JOHN A. KERCHEVEAL. [L. S.]

Witnesses:

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