

H. ELLIOT.
RAIL CHAIR.

APPLICATION FILED APR. 22, 1911.

1,024,883.

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Fig. 1.

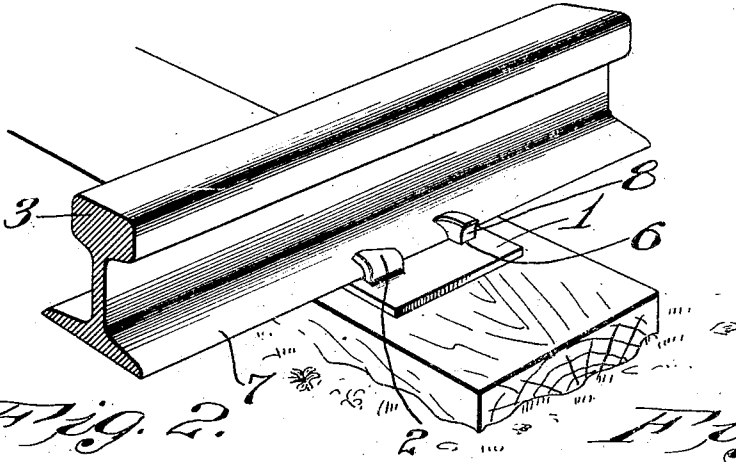


Fig. 2.

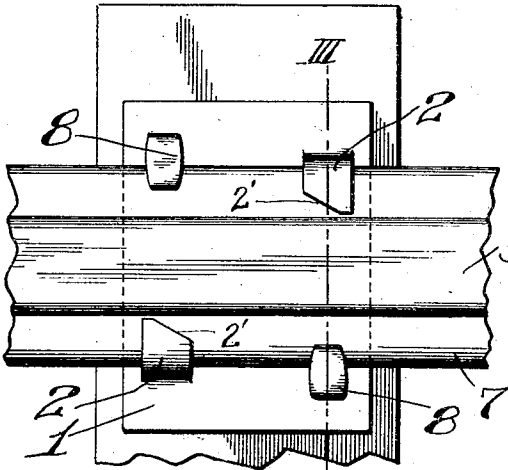


Fig. 3.

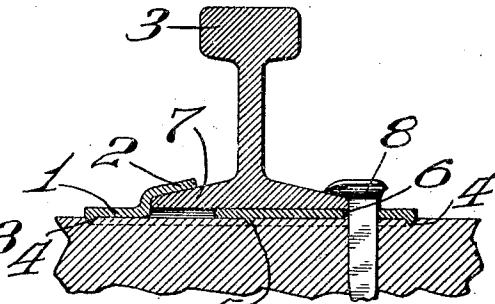


Fig. 5.

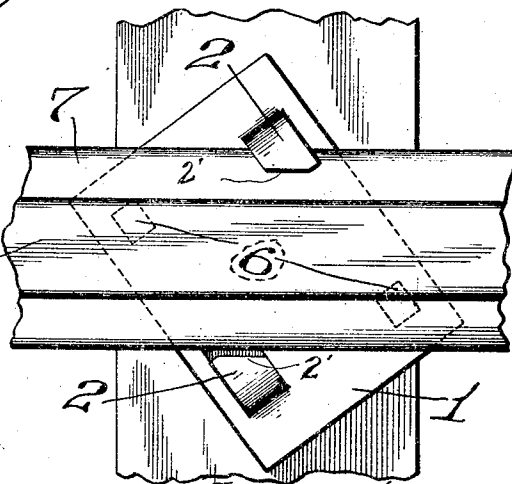
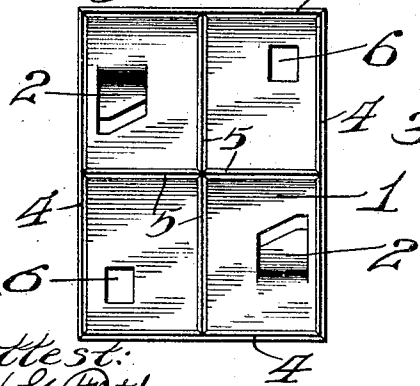


Fig. 4. III 4



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UNITED STATES PATENT OFFICE.

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RAIL-CHAIR.

1,024,883.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, HENRY ELLIOT, a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Rail-Chairs, of which the following is a specification.

This invention relates to rail chairs and has for its primary object to provide an improved device of this character which can be simply and economically made, which will be durable and efficient in operation, and which can be easily introduced into position and removed therefrom.

One of the objects of the present invention is to provide an improved integral construction which is adapted to be inserted into position under a rail and by a simple adjusting movement made to positively grip the base flange of the rail.

Another object is to provide an improved base plate design for rail chairs whereby they are adapted to be seated securely upon the railroad ties and whereby the process of manufacture is greatly facilitated.

Other and further objects will appear in the specification and be specifically pointed out in the appended claim, reference being had to the accompanying drawings exemplifying the invention, and in which,

Figure 1 is a fragmentary perspective view showing my improved device in operation. Fig. 2 is a top plan view of the same. Fig. 3 is a section on the line III—III, Fig. 2. Fig. 4 is a bottom plan view of the rail chair detached. Fig. 5 is a fragmentary top plan view of the device illustrating the relative positions of the parts for removing or installing the chair.

Referring more particularly to the drawings, the rail chair comprises in an integral piece, a base plate 1 constructed in the manner to be presently pointed out and provided with a pair of claws or hooks 2 spaced from each other both laterally and longitudinally of the rail 3. The base plate 1 of the rail chair is preferably constructed rectangular and has its under surface provided with projecting ribs 4 of wedge-shaped cross

section extending around its perimetral edges and other intermediate wedge-shaped ribs 5 extending longitudinally and transversely of the base plate and intersecting at the center. In this way, four open plane surfaces are provided which facilitates the stamping work whereby the spike openings 6 and the claws 2 are produced. As shown in Fig. 3, the claws 2 are formed to snugly engage the base flange 7 of the rail, and when the rail is in position in the chair, the lateral gripping walls of the claws 2 are just the right distance apart to snugly grip the rail. At the same time, the spike openings 6 are arranged so that the spikes 8 which are driven therethrough impinge upon the lateral edges of the base flange 7 and thus serve to lock the rail in position by the employment of only one spike on either side of the rail in each tie. In order to make it possible to introduce the rail chair into position under the rail, the diagonally opposite claws 2 are cut away on the bias at 2', these inclined edges being parallel to each other and spaced apart a distance less than the width of the base flange 7. By means of this construction, the rail chair, as shown in Fig. 5, can be shoved under the rail so as to cause one of the claws 2 to engage one edge of the base flange, after which said base flange may be leveled and the chair moved around into position, shown in Figs. 1 and 2, in which position the base flange is securely clamped by the claws 2. The spikes 8 are then driven through the openings 6 into the tie, said openings 6 being preferably elongated somewhat to provide clearance way beneath the flange of the rail to permit the spikes 8 to be driven so as to clamp the rail flange 7.

What I claim is:

A rail chair comprising a base plate provided with projecting ribs extending around the perimetral edge thereof and longitudinal and transverse central ribs extending across said base plate between said perimetral ribs to divide said base plate into four sections, a pair of clamping claws stamped from the base plate in diagonally opposite sections of

said base plate, said claws being provided with parallel clamping walls and having the outer edges thereof cut on an inclination to said clamping walls at a distance from each other slightly less than the width of said base flange, whereby said chair is adapted to hang from the rail flange at any angle and to be shifted into clamping relation with said base flange.

HENRY ELLIOT.

In the presence of—
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