

H. FOLTZ.

RAIL JOINT.

APPLICATION FILED JUNE 2, 1909.

953,660.

Patented Mar. 29, 1910.

2 SHEETS—SHEET 1.

Fig. 1.

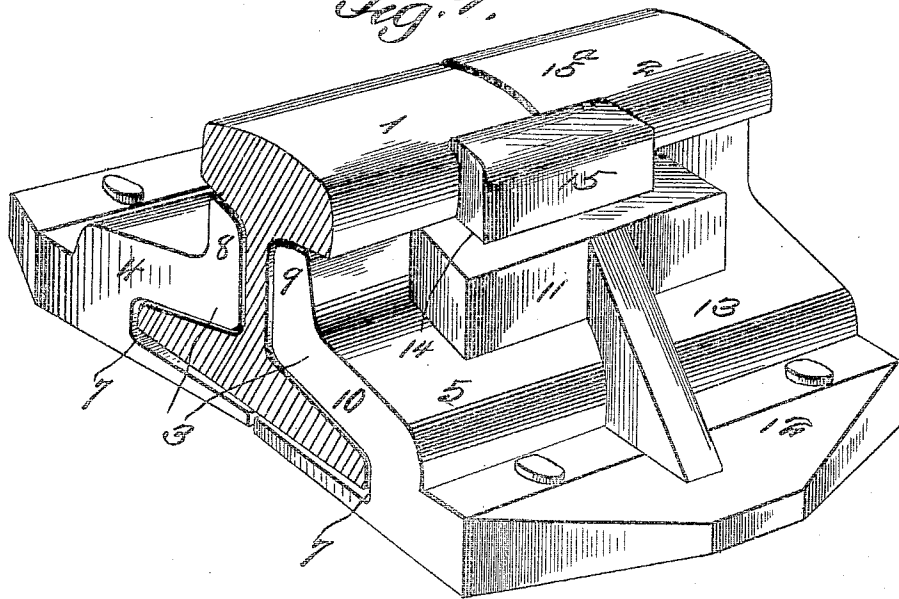
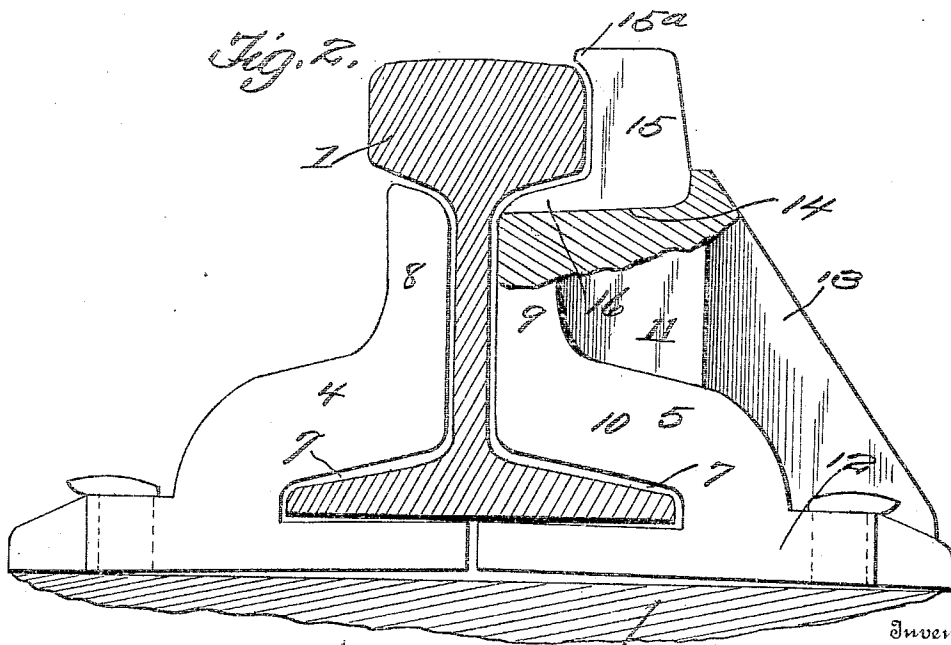


Fig. 2.



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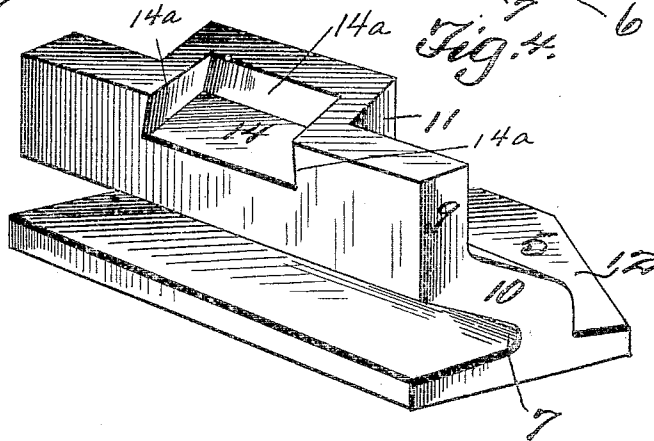
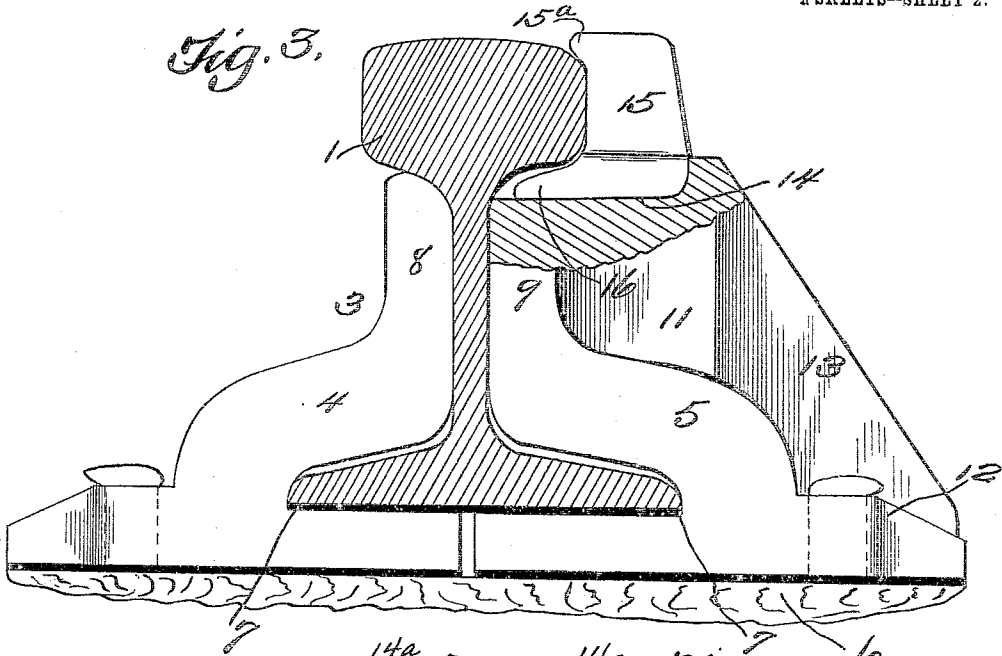
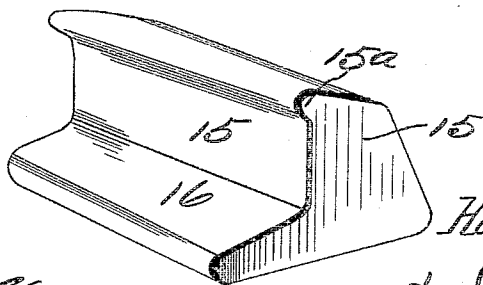


Fig. 5.



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UNITED STATES PATENT OFFICE.

HENRY FOLTZ, OF SHARON, PENNSYLVANIA.

RAIL-JOINT.

953,660.

Specification of Letters Patent. Patented Mar. 29, 1910.

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To all whom it may concern:

Be it known that I, HENRY FOLTZ, a citizen of the United States, residing at Sharon, in the county of Mercer and State of Pennsylvania, have invented a new and useful Rail-Joint; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention pertains to a new and useful combination rail joint and joint guard, and the main object of the invention is to provide means, whereby the joint of the meeting ends of the rail is preserved, which is due to the employment of a joint guard member, the upper portion of which protrudes a slight distance above the upper face or tread of the rails, say for instance approximately $\frac{1}{16}$ of an inch, in order to raise the car wheels above the joint of the rails as they pass thereover.

Another object of the invention, is to provide a device of this design, in which all bolts and nuts are dispensed with, thereby reducing the expense of the installation of such a device.

The invention has for a further object, the provision of a structure, comprising a chair consisting of two members positioned in such a manner as to firmly clamp the web and the base of the rails, when pressure is exerted upon the rails, through the medium of the car wheels. This action upon the rails is obtained by positioning the adjacent portions of said members a slight distance above the surface upon which they rest, while the outer portions of said members rest firmly upon the surface, and when pressure is exerted upon the rails the adjacent upper portions of said members are brought firmly against the web of the rails.

A further object of the invention is to so construct the joint guard member, as to allow the same to be easily and readily removed, when the same becomes worn, in order that a new one may be placed in position.

The features and elements and the arrangement thereof, for accomplishing the objects of this device or apparatus, may be changed and varied, that is to say, in an actual reduction to practice, the understanding, however, is that the said changes and variations accruing from said reduction to practice, are comprehended by the appended claims.

To obtain a full and correct understanding of the details of construction, combinations of features, elements and advantages, reference is to be had to the hereinafter set forth description and the accompanying drawings in connection therewith, wherein—

Figure 1 is a perspective view of the rail joint embodying the features of the invention. Fig. 2 is an end elevation of the rail joint chair, partly in section. Fig. 3 is a view similar to Fig. 2, showing the members of the chair contacting with the web of the rails. Fig. 4 is a perspective view of one member of the chair, clearly showing the recess for receiving the joint guard member. Fig. 5 is a perspective view of the joint guard member.

Referring to the annexed illustrations 1 and 2 designate the rails, the adjacent ends of which are held in position by means of the chair 3. This chair 3 comprises the two members 4 and 5, which are designed to be spiked or otherwise secured to the ties 6. These members are to be held securely in position, yet with sufficient clearance, in order that the adjacent portions thereof may be easily and readily brought into contact with the web by the rails.

Each member 4 and 5, is recessed, as shown at 7, to receive the base of the rails, in the manner shown clearly in Figs. 1, 2 and 3. These members are further provided with oppositely disposed upwardly extending portions 8 and 9, which are designed to be brought into contact with the web of the rails, as shown clearly in the drawings. The portion 9 and the angularly disposed portion 10 of the said member 5 is provided with an enlargement 11, which is formed integral with the said portions 9 and 10; the enlargement 11 and the base 12 of the member 5 is braced by an integral strip of metal 13, in order to insure rigidity between the portion 9, the enlargement 11 and the said base.

The enlargement 11 is provided with a recess 14, which is disposed beneath the tread of the rails, when the member 5 is in the position as shown in the Figs. 1, 2 and 3. This recess 14 is formed with bevel inner walls 14^a and receives a joint guard member 15, the lower portion of which is formed with beveled sides to fit the beveled walls 14^a and is provided with a lateral extending flange or extension 16, which is received by

that portion of the recess 14 which extends beneath the tread of the rails. By the employment of this lateral extending plan or extension 16, the joint guard member is securely held in position, as will be clearly evident from the drawings. This joint guard member is extended a slight distance above the upper surface of the rails, as shown clearly in the drawings, in order that the car wheels may leap the joint of the rails, by their engagement with the said extended portion of the joint guard member, thereby preserving the adjacent ends of the rails. Heretofore when the adjacent ends of the rails become worn, due to the wear thereon, entirely new rails had to be employed in place of the old ones, but by the employment of this novel joint guard member, it is plainly manifest that the rails can be readily preserved; and in this case it is only necessary to replace the worn joint guard member by a new one, thereby lessening the expense of repairing such joints. To install entirely new rails, a great expense is incurred, therefore the utility of this novel joint guard member is readily apparent.

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

1. In a rail joint, a chair comprising two members to embrace the adjoining rails and so disposed that when pressure is exerted upon the rails, the said members will firmly clamp the rails, one of said members having an enlargement provided with a recess having beveled inner walls, a joint guard member to fit in said recess and provided with lower beveled portions to engage the beveled inner walls of said recess, said joint guard member having its upper portion extended above the surface of said rails, in order to allow the car wheels to avoid the joint between the rails.

2. In a rail joint, a chair comprising two

members to embrace the adjoining rails and so disposed that when pressure is exerted upon the rails, the said members will firmly clamp the rails, one of said members having an enlargement provided with a recess having beveled inner walls, said enlargement having integral means for insuring rigidity between it and its member, a joint guard member to fit in said recess and provided with lower beveled portions to engage the beveled inner walls of said recess, said guard member being provided with a laterally extending flange disposed beneath the tread of the rails in order to lock the joint guard member, said joint guard member having its upper portion extended above the surface of the rails in order to allow the car wheels to avoid the joint between the rails.

3. A rail joint comprising a chair of two members, each of said members being adapted to receive the side of the base of a rail and to engage the vertical portion of the rail, one of said members being provided with an enlargement the upper face of which is disposed below the tread surface of the rail, said enlargement being provided with a recess having beveled inner walls and having a mouth facing inwardly, and a member having beveled sides adapted to be locked in the recess of the enlargement, said member being formed with a projection adapted to engage the lower part of the head of the rail and with a projection adapted to project above and inwardly of the tread surface of the rail.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HENRY FOLTZ.

Witnesses:

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