W. C. BOPP.

RAIL CONNECTION.

APPLICATION FILED SEPT. 30, 1907.

940,954 Patented Nov. 23, 1909.

Fig. 1.

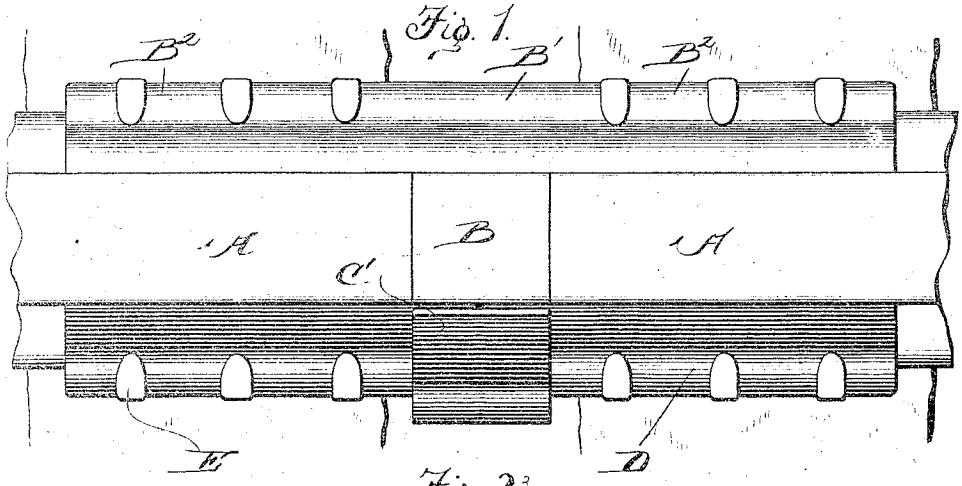


Fig. 2.

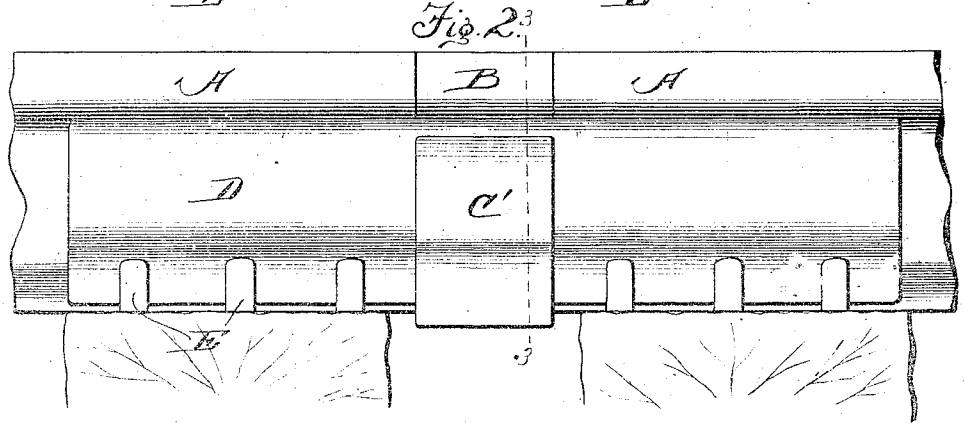


Fig. 3.

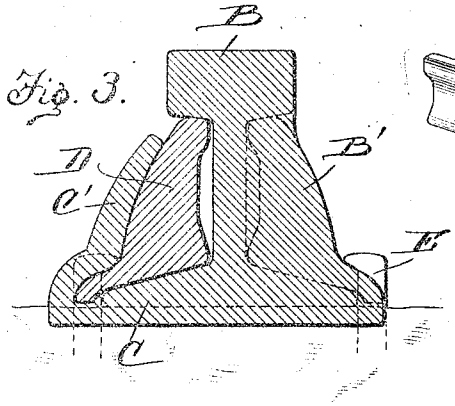
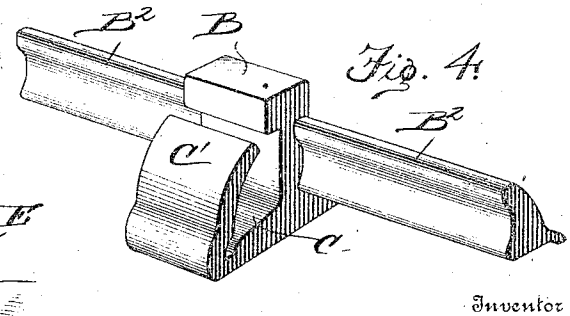


Fig. 4.



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UNITED STATES PATENT OFFICE.

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RAIL CONNECTION.

940,954. Specification of Letters Patent. Patented Nov. 23, 1909.

Application filed September 30, 1907. Serial No. 395,228.

To all whom it may concern:

Be it known that I, WILLIAM C. BOPP, a citizen of the United States, residing at Arcadia, in the county of Iron and State of Missouri, have invented a new and useful Improvement in Rail Connections, of which the following is a specification.

This invention consists in a device for connecting track rails and the object of the invention is a connector for rails with which bolts are not required and in which the tread portion of the rail is strengthened at the point where the car wheels leave one rail and pass upon another.

My invention consists in the novel features of construction hereinafter described, pointed out in the claim and shown in the accompanying drawings, in which:

Figure 1 is a plan view showing the device in position. Fig. 2 is a side elevation. Fig. 3 is a section upon the line 3—3 of Fig. 2. Fig. 4 is a detail perspective view of my device removed from the track.

In these drawings A represents end portions of the usual track rails and instead of bringing these rails together at their ends in the usual manner they are spaced apart by a short tread section preferably between two and three inches in length and shown at B. This section has the form of the ordinary rail with exception that upon one side the web is greatly thickened as shown at B′, curving outwardly and downwardly instead of being under cut in the usual manner. From this thickened web portion there projects wings B^2 which extend from opposite ends of the supplemental tread portion B and over lap sides of the rails A. Upon the opposite side of the tread section B is a chair formed of the usual rail flange C bent upwardly and inwardly as shown at C′. It will be understood that the supplemental section B, wings B^2 and the chair formed by these flanges are all in one piece. After this supplemental section has been placed in position between the ends of the rails A, a tie plate D is slipped into the chair formed by the flanges C and C′ and overlaps the sides of the rails lying opposite to the wings B^2 and for the same distance. The wings B^2 and the tie plate D are held in position by spikes E. It will be obvious that the supplemental tread portion B, by thickening of the web is much heavier per foot length than the track rails with which it is used thus giving additional strength and weight of metal to that portion of the track where connection is made between two of the track rails. The joint is not only strengthened by thickening the portion B′ but the wings B^2 are hollowed out on their inner faces and curved upwardly toward the rail web on their outer faces, the tie plate D being shaped in the same manner, so that on both sides of the joint the web is braced by upwardly slanting braces, inclining toward the rail from opposite sides, so that the rail is effectually braced against those lateral thrusts peculiar to the heavy, six drive wheel engines now in common use, and due to unequal distribution of weight in the drive wheels.

What I claim is:

A rail connection comprising a short, thickened rail portion on one side, wings extending in opposite directions from said thickened portion, said wings being upwardly and inwardly curved on their outer faces and hollowed out on their inner faces and bearing against the under faces of the ball of adjacent rails, a chair carried by the short rail portion and a tie plate corresponding in cross section to the wings, said wings and tie plate forming oppositely inclined braces for the rail tread.

WILLIAM C. BOPP.

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