C. M. CULP.

RAILWAY RAIL BED.

APPLICATION FILED SEPT. 3, 1908.

926,547. Patented June 29, 1909.

Fig. 2.

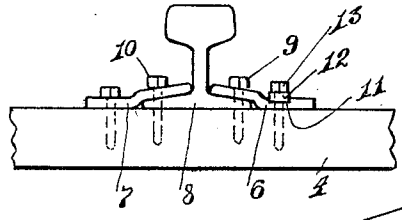
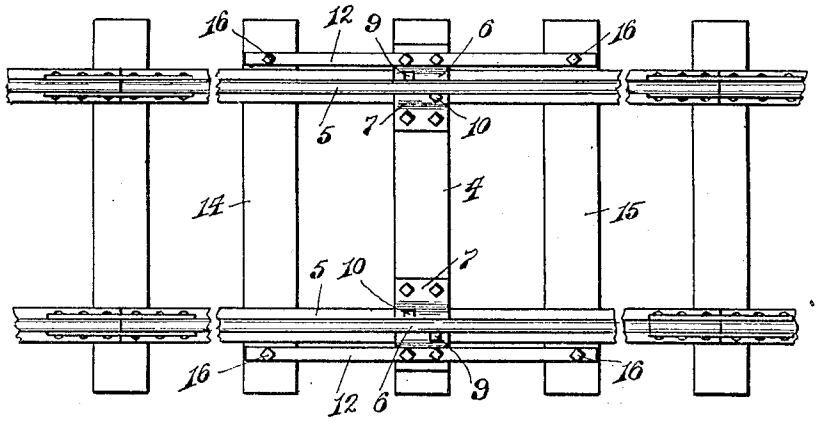


Fig. 1.

Fig. 3.



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UNITED STATES PATENT OFFICE.

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RAILWAY-RAIL BED.

No. 926,547. Specification of Letters Patent. Patented June 29, 1909.

Application filed September 3, 1908. Serial No. 451,560.

To all whom it may concern:

Be it known that I, CHARLES M. CULP, a citizen of the United States, residing at South Bend, in the county of St. Joseph and State of Indiana, have invented certain new and useful Improvements in Railway-Rail Beds, of which the following is a specification.

This invention relates to a railway rail bed.

One object of the invention is to provide a structure adapted to prevent creeping or spreading of the rails and also admit of free expansion and contraction thereof.

Another object of the invention resides in the provision of stringers secured intermediate their ends to an anchor tie and connected at their free ends to adjacent ordinary ties, there being means provided whereby the stringers are held against lateral displacement.

A still further object of the invention is to provide stringers adjacent the rails intermediate the ends of the latter to prevent creeping and consequent spreading of the rails thereby insuring a firm mounting of the rails upon the rail bed.

With the above and other objects in view, the invention consists in the combination and arrangement of parts hereinafter more fully described, illustrated in the accompanying drawings and particularly pointed out in the appended claims, it being understood that changes may be made in the form, proportion, size and minor details without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings:—Figure 1 is a perspective view of a portion of a rail illustrating my invention. Fig. 2 is an end view. Fig. 3 is a top plan view.

Referring now more particularly to the accompanying drawings, the reference character 4 indicates the main or anchor sleeper or tie disposed preferably intermediate the ends of the rails 5.

Disposed upon the upper face of the sleeper or tie 4 at each end thereof are pairs of plates 6 and 7, both of which latter are arranged in alinement with each other and which overlap opposite sides of the base flange 8 of the corresponding rails 5. Each plate 6 and 7 is secured to the base flange 8 of the rails 5 by means of suitable bolts 9 and 10, respectively, said bolts passing through the plates 6 and 7, the base flange 8 and into the tie 4, as shown. The bolts are arranged preferably out of alinement to prevent weakening of the rail by having the bolt holes in the base flange of the rail in close proximity to each other, that is oppositely arranged, as will be understood.

The upper face of the outer plate of each pair of plates 6 and 7 is provided with a transverse groove 11 to receive the corresponding stringers 12, which latter are fitted in said grooves intermediate their ends and secured therein by means of one or more bolts 13 passing therethrough and also through the plates and into the anchor tie 4. The stringers 12 extend over the ties 14 and 15 on both sides of the anchor tie 4 and are secured to said adjacent ties 14 and 15 by means of suitable bolts 16, as shown.

From the foregoing, when taken in connection with the accompanying drawings, it will be seen that the rails are secured firmly intermediate their ends to the anchor tie 4 and that the stringers are anchored intermediate their ends in a firm manner to the plates 6 and 7 and that obviously the rails are thus permitted to expand and contract in both directions from their centers to prevent creeping and a consequent spreading of the rails as a result of the creeping. It will also be seen that the invention is very simple, easily and inexpensively produced.

Having thus described the invention, what is claimed as new is;—

1. In a railway rail bed, an anchor tie, ties upon opposite sides of the anchor tie, rails on all of said ties, a pair of plates disposed upon the anchor tie near each end of the latter and intermediate the ends of the rails and overlapping the base flange of the latter, one of each pair of plates having a groove, and a stringer disposed in each of said grooves and secured at its free ends to the second mentioned ties.

2. In a railway rail bed, an anchor tie, ties upon opposite sides of the anchor tie, rails on all of said ties, a pair of plates disposed upon the anchor tie near each end of the latter and intermediate the ends of the rails and overlapping the base flange of the latter, one of each pair of plates having a groove, a stringer disposed in each of said grooves and secured at its free ends to the second mentioned ties, and means connecting the stringers and corresponding plates to the anchor tie.

3. In a railway rail bed, an anchor tie, ties upon the opposite sides of the anchor tie, rails crossing all of the ties, a pair of plates disposed upon the anchor tie near each end

of the latter and intermediate the ends of the rails and overlapping the base flange of the latter, one of each pair of plates having a groove, a stringer disposed in each of said grooves and secured at its free ends to the second mentioned ties, bolts passing through the stringers and the groove and into the anchor tie, and a bolt passed through the plates of each pair and also through the base flange of the corresponding rails and into the anchor tie.

4. In a railway rail bed, an anchor tie, ties upon the opposite sides of the anchor tie, rails crossing all of the ties, a pair of plates disposed upon the anchor tie near each end of the latter and intermediate the ends of the rails and overlapping the base flange of the latter, one of each pair of plates having a groove, a stringer disposed in each of said grooves and secured at its free ends to the second mentioned ties, bolts passing through the stringers and the groove and into the anchor tie, and a bolt passed through the plates of each pair and also through the base flange of the corresponding rails and into the anchor tie, said last mentioned bolts of each pair of plates being disposed out of alinement.

5. In a railway rail bed, an anchor tie, ties upon opposite sides of the anchor tie, rails on the tie, a pair of plates disposed upon the anchor tie near each end of the latter and overlapping the base flange of the rails, a stringer disposed adjacent the outer edge of each rail and crossing the outermost plate of each pair and secured thereto, and means for securing each pair of plates to the base flange of the corresponding rail.

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

CHARLES M. CULP.

Witnesses:

GEORGE OLTSCH,

KATHARYN TORREY.