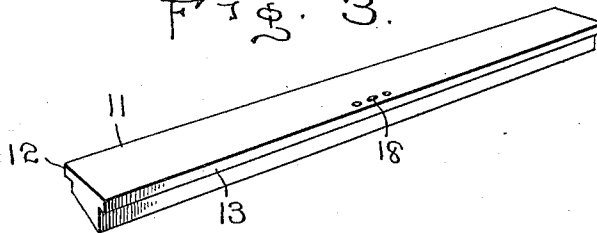
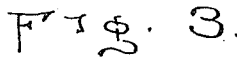
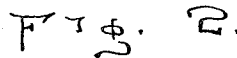


**RAILROAD RAILS AND MEANS FOR SECURING THE MEETING ENDS THEREOF TOGETHER.**  
**APPLIOATION FILED JAN. 20, 1911.**

1,023,702.

2 SHEETS-SHEET 1.



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2 SHEETS—SHEET 2.

Fig. 4.

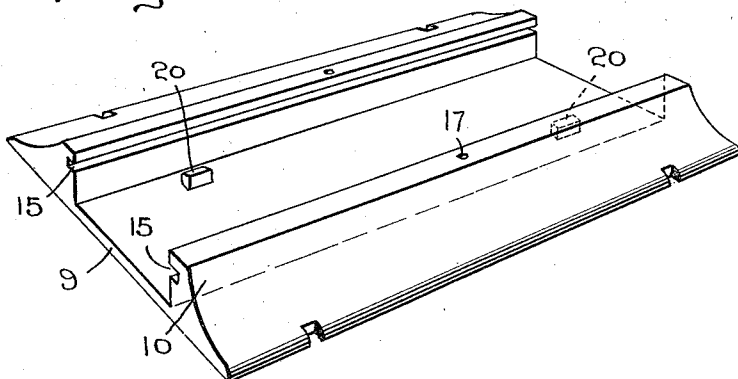


Fig. 5.

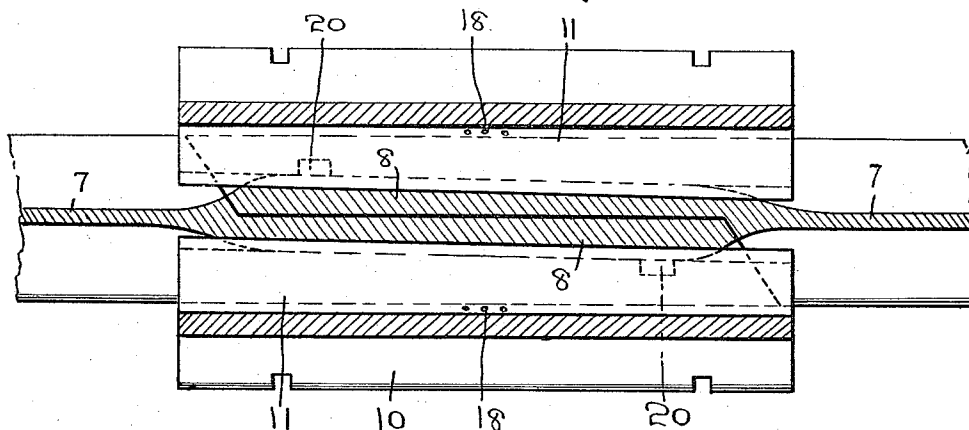
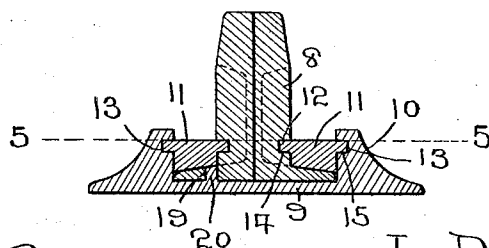


Fig. 6.



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# UNITED STATES PATENT OFFICE.

JEFFERSON D. YOUNG, OF CHATTANOOGA, OKLAHOMA.

RAILROAD-RAILS AND MEANS FOR SECURING THE MEETING ENDS THEREOF TOGETHER.

1,023,702.

Specification of Letters Patent.

Patented Apr. 16, 1912.

Application filed January 20, 1911. Serial No. 803,751.

*To all whom it may concern:*

Be it known that I, JEFFERSON D. YOUNG, a citizen of the United States, residing at Chattanooga, in the county of Comanche and State of Oklahoma, have invented certain new and useful Improvements in Railroad-Rails and Means for Securing the Meeting Ends Thereof Together; 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.

My invention relates to railway rail joints, the object of the invention being to generally improve the construction and operation of such joints, and with this object in view the invention consists in the improved construction, arrangement and combination of parts hereinafter described and afterward specifically claimed.

In the accompanying drawings forming a part of this application, Figure 1 is a perspective view of the meeting ends of a pair of rails, showing the same locked together. Fig. 2 is a perspective view of the end of one of the rails. Fig. 3 is a perspective view of one of the locking keys or wedges. Fig. 4 is a perspective view of the plate or chair removed from the rails. Fig. 5 is a horizontal sectional view as seen on line 5—5, Fig. 6, and, Fig. 6 is a vertical transverse sectional view of the rails and the securing means therefor.

Referring to the drawings, in which similar reference numerals designate corresponding parts throughout the several views, 1 and 2 indicate the rails, the meeting ends of which are provided with extensions 3 and 4, respectively, which are substantially one-half the width of the rails and overlap each other when the ends of the rails are secured together, thus providing a substantially continuous rail surface.

To render the joints less liable to create a jar the ends of the extensions and the cooperating end portions of the rails are disposed at an angle, as shown at 5 and 6, so that although the rails may be slightly separated by contraction, yet in view of the angle of the ends, the car wheels will travel thereover without causing a jar or pounding action.

As the width of the head of the rail is reduced one-half to form the extensions,

the web 7 is thickened, as shown at 8, between the base and head of the rail the length of the extensions, thereby rendering the extensions substantially as strong as the other parts of the rail.

In order to hold the ends of the rails locked together a plate or chair 9 is introduced below the meeting ends of the rails, said chair being of sufficient length to have its ends project beyond the ends of the extensions, the edges of the chair having upwardly extending ribs 10 on its sides, between which the bases of the rails rest.

The ends of the rails are clamped into engagement with each other by introducing wedges 11 between the ribs 10 and the thickened portions 8 of the extensions, there being one wedge on each side of the rails, which wedges are preferably tapered in opposition to each other and are entered between the rails and ribs from opposite directions. The opposite edges of the wedges are provided with longitudinal tongues 12 and 13, respectively, which enter longitudinal grooves 14 and 15 in the thickened portion 8 and the ribs 10, respectively, which tongues and grooves prevent the wedges from moving vertically when placed in position, the wedges being held against longitudinal movement by introducing pins 16 through openings 17 in the ribs and through registering openings 18 in the tongues 13.

When the wedges are properly applied the ends of the rails will be held against lateral movement independently of the chair, while the rails are further held against longitudinal movement of the chair by forming slots 19 in the base of the rails, through which project lugs 20 extending upwardly from the chair upon which the rails rest.

In securing the ends of the rails to the chair, said ends are elevated a sufficient distance and the chair introduced below the same, when said ends are lowered and seated between the ribs, the lugs on the chair passing through the slots in the rails. The tongues are entered into their respective grooves and in view of the width of the wedges, the ends of the rails will be securely clamped together. After the wedges have been properly seated the pins 16 are applied to use, thereby holding the wedges against longitudinal movement, and by providing a number of the openings 18 in the tongues on the wedges, various adjustments of the

wedges may be obtained to compensate for any contraction of the wedges and the rails, and by providing such construction, the wedges may be adjusted inwardly at intervals to keep the faces of the extensions in close relation to each other at all times.

It will further be seen that this device can be very cheaply constructed and quickly applied to use and that one or both of the rails may be removed or replaced in position at any time, and, it will further be seen that by constructing the rails in the manner shown, a substantially continuous tread surface will be provided and the joint will be as strong as any other portion of the rail.

What I claim is:

The combination with the ends of two rails having overlapping extensions thickened and provided in the thickened portions with longitudinal grooves in their outer

faces, of a chair having longitudinal ribs along its outer edge provided with longitudinal grooves in their inner faces, and longitudinal wedges between said rails and said ribs and provided with longitudinal flanges on each side engaging in the longitudinal grooves in the outer faces of the rail extensions and the inner faces of said ribs, said wedges being tapered and adapted to be entered from opposite ends of said chair and longitudinally adjustable therein, and means for limiting the longitudinal movement of said rails.

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

JEFFERSON D. YOUNG.

Witnesses:

A. W. PUTKAMER,  
WM. J. MURPHY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."