

F. J. PROSSER.
 COMBINED CHAIR AND RAIL JOINT.
 APPLICATION FILED MAY 11, 1912.

1,042,266.

Patented Oct. 22, 1912.

2 SHEETS—SHEET 1.

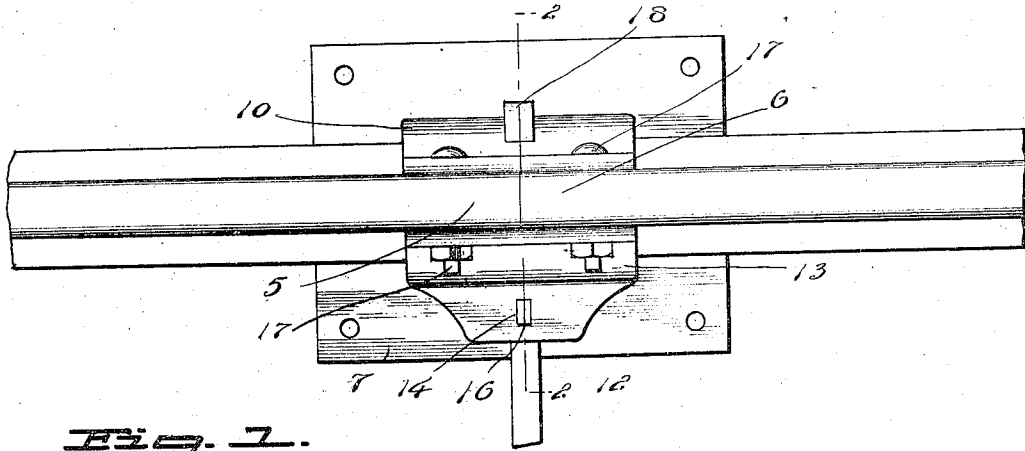


Fig. 1.

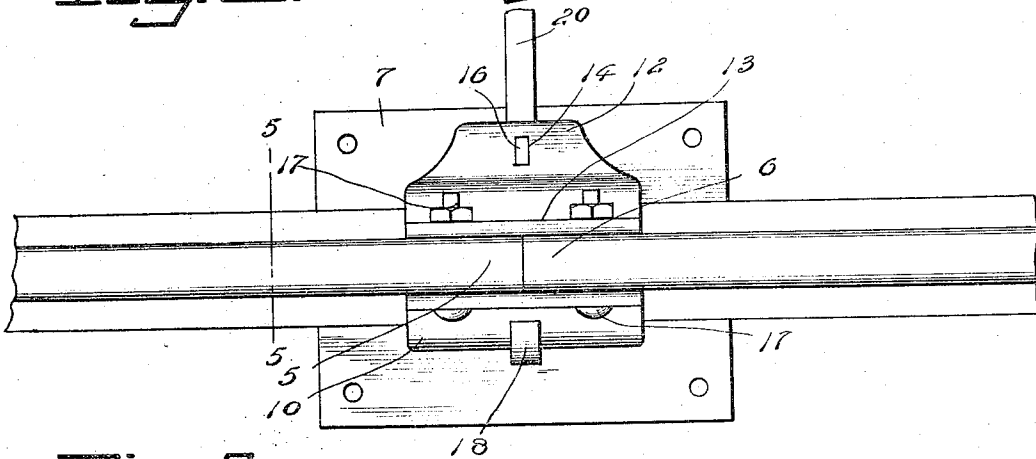
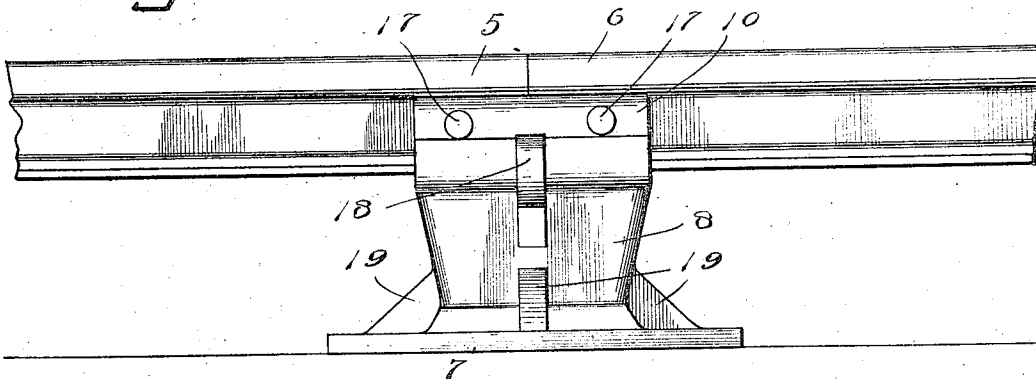


Fig. 2.



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2 SHEETS—SHEET 2.

Fig. 4

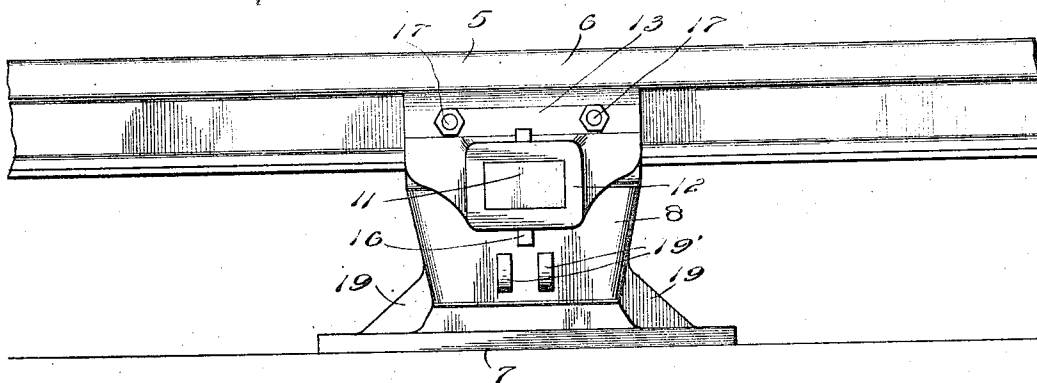


Fig. 2.

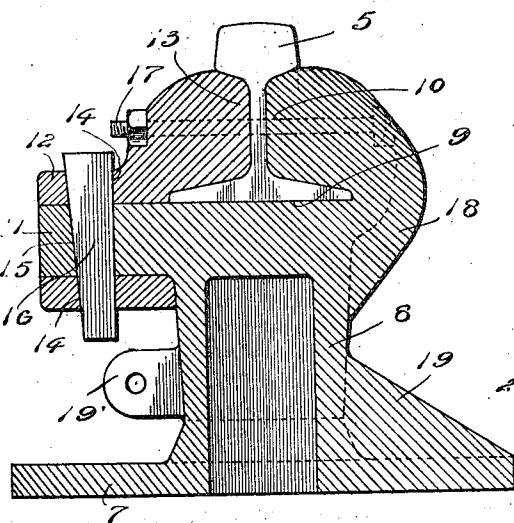
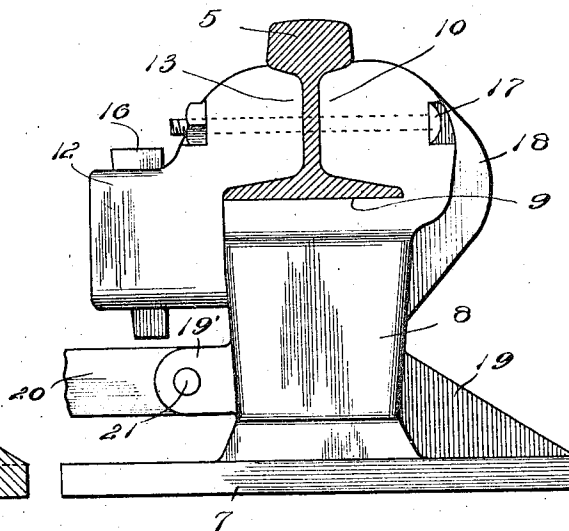


Fig. 5.



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UNITED STATES PATENT OFFICE.

FREDERICK JAMES PROSSER, OF CLEVELAND, OHIO.

COMBINED CHAIR AND RAIL-JOINT.

1,042,266.

Specification of Letters Patent.

Patented Oct. 22, 1912.

Application filed May 11, 1912. Serial No. 696,676.

To all whom it may concern:

Be it known that I, FREDERICK J. PROSSER, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented new and useful Improvements in Combined Chairs and Rail-Joints, of which the following is a specification.

The invention relates to a combined rail chair and joint, and has for its primary object to provide a structure of this nature wherein the ordinary wooden cross ties are entirely dispensed with, yet the joint will be sustained smooth and the rail firmly supported upon the road bed without liability of the spreading thereof or displacement of the meeting ends of the same.

Another object of the invention is the provision of a device of this character wherein the rail ends will be securely held so as to avoid the lowering of one with respect to the other thereby assuring a rigid and perfectly smooth joint to obviate the pounding of the car wheels when passing over the same or the uneven wearing away of one rail end, the gage of the track being sustained true, and the spreading of the rails prevented as well as minimizing vibrations incident thereto when subjected to loads.

A further object of the invention is the provision of a device of this character wherein the expansion and contraction of the rails can take place without weakening the joint or causing any irregularity or displacement of the rail, thus obviating wrecks resultant therefrom.

A still further object of the invention is the provision of a device of this character wherein the rail end may be readily and quickly mounted or dismounted therefrom, the rail ends when engaged therein being securely clamped to afford a firm and smooth joint and the rails being elevated the proper distance from the road bed without the use of ordinary cross ties.

A still further object of the invention is the provision of a device of this character which is simple in construction, thoroughly reliable and efficient in its operation, and inexpensive in manufacture.

With these and other objects in view the invention consists in the construction, combination and arrangement of parts as will be hereinafter more fully described, illustrated in the accompanying drawings, and

pointed out in the claims hereunto appended.

In the drawings:—Figure 1 is a fragmentary top plan view of a railway track showing the device and joint constructed in accordance with the invention. Fig. 2 is a sectional view on the line 2—2 of Fig. 1. Fig. 3 is a side elevation of the device. Fig. 4 is a similar view looking toward the opposite side thereof. Fig. 5 is a sectional view on the line 5—5 of Fig. 1.

Similar reference characters indicate corresponding parts throughout the several views in the drawings.

Referring to the drawings by numerals, 5 and 6 designate the meeting or abutting ends of railway rails of the ordinary well-known construction which are adapted to be supported in the combined chairs and joints hereinafter described.

Each rail chair and joint comprises a base 7 which in this instance is shown preferably of rectangular shape although it may be of any other desirable shape, and is made in this instance from metal, but any other suitable material may be employed. Rising centrally from the base 7 is an inwardly tapering vertical pedestal or upright 8, the same being integral with the said base and forming a rail seat 9 at its upper end on which rest the meeting ends 5 and 6 of the rails. Rising from the pedestal or upright 8 on one side of the rail seat 9 is a stationary rail engaging flange 10 which for the sake of clearness will be designated the outside rail engaging flange, while projecting over the inner side of the upright immediately below the seat 9 is a rightangular horn or arm 11, on which is slidably fitted the sleeve portion 12 of a movable rail engaging flange 13 which is designated as the inner rail engaging flange for the sake of clearness. The inner and outer flanges 10 and 13 clamp the meeting ends 5 and 6 of the rails when resting in the seat 9 to the pedestal or upright 8, the sleeve portion 12 of the inner rail engaging flange being provided with alining apertures 14 adapted to register with an aperture 15 formed in the horn or arm 11, these apertures being designed to receive a locking key 16 when inserted therein for the securing of the inner rail engaging flange 13 in clamping relation to the rail ends 5 and 6 for the fastening of the same upon the pedestal, it being understood of

course that the inner and outer flanges 10 and 13 firmly contact with opposite sides of the webs and bases of the rail ends in a manner similar to the ordinary fish plate 5 and passed through these flanges are the usual securing bolts 17 which are also passed through the webs of the rail ends 5 and 6 for the clamping of the same together.

Formed externally on the pedestal or upright 10 right 8 are upper and lower outwardly extending reinforcing webs 18 and 19 respectively, the said webs 19 being joined to the base 7 for materially strengthening the pedestal or upright. Formed on the pedestal 15 or upright 8 below the horn or arm 11 are spaced parallel perforated ears 19', between which is engaged one end of a tie rod or bar 20 for connecting a pair of pedestals together for supporting the inner and outer 20 rails of the track, the bar or rod 20 being connected with the ears 19' by means of a pin 21 which is passed therethrough and said bar or rod serves to prevent the lateral displacement of the pedestals or uprights 25 when joined or the spreading of the rails apart when supported therein.

From the foregoing description, taken in connection with the accompanying drawings, it is thought that the construction and operation of the invention will be clearly understood, and therefore, a more extended explanation has been omitted.

What is claimed is:—

1. A device of the class described, comprising a base, a pedestal rising therefrom 35

and having a seat for receiving the meeting ends of rails, a rail clamping flange rising from the pedestal, a horn projecting from said pedestal at right angles thereto, a movable rail engaging flange slidably engaged 40 with said horn, means for locking the rail engaging flange on the horn, means passed through the flanges and adapted to engage the web of such rails for the securing of the same together, and spaced parallel ears 45 formed on the pedestal and a tie rod pivotally connected between the ears.

2. A device of the class described, comprising a base, a pedestal rising therefrom and having a seat for receiving the meeting 50 ends of rails, a rail clamping flange rising from the pedestal, a horn projecting from said pedestal at right angles thereto, a movable rail engaging flange slidably engaged with said horn, means for locking the rail 55 engaging flange on the horn, means passed through the flanges and adapted to engage the web of such rails for the securing of the same together, spaced parallel ears formed on the pedestal and a tie rod pivotally connected between the ears, and reinforcing webs formed on opposite sides of the said pedestal, a number of said webs being integral with the base.

In testimony whereof I affix my signature 65 in presence of two witnesses.

FREDERICK JAMES PROSSER.

Witnesses:

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