

No. 861,998.

PATENTED JULY 30, 1907.

J. MAROLD.
RAIL JOINT.

APPLICATION FILED OCT. 13, 1906.

Fig. 1.

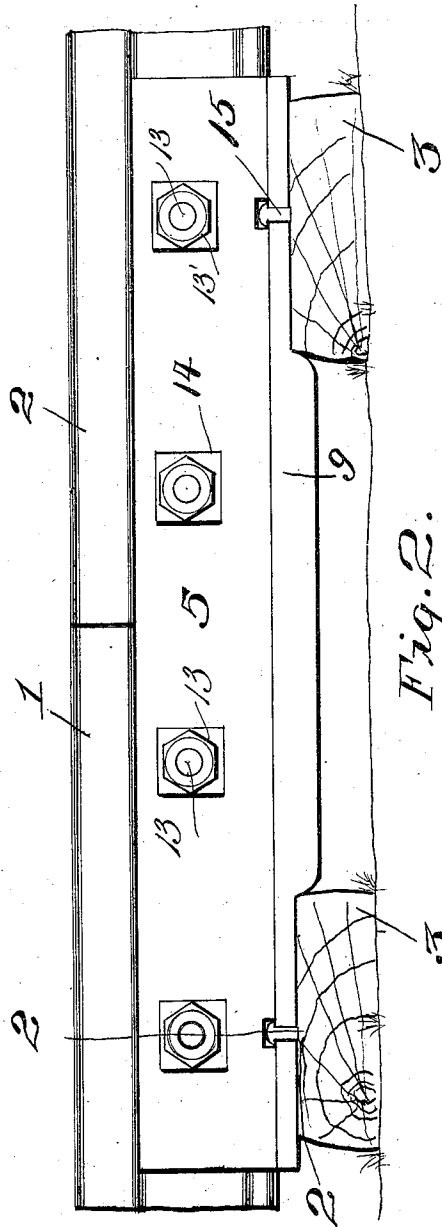
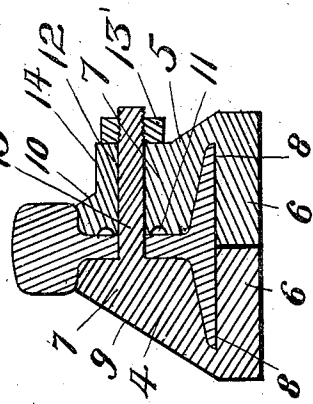


Fig. 2.



Witnesses

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JOHN MAROLD, OF EAST ST. LOUIS, ILLINOIS.

RAIL-JOINT.

No. 861,998.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOHN MAROLD, a citizen of the United States of America, residing at East St. Louis, in the county of St. Clair and State of Illinois, have
5 invented new and useful Improvements in Rail-Joints, of which the following is a specification.

This invention relates to improvements in rail joints, and particularly to rail supports and fastenings of the chair type, the object of the invention being to
10 provide a construction of chair whereby the use of fish plates will be obviated and the rails united and supported against strain in a safe and effective manner, a further object being to provide a construction which will admit of conducting or bond wires being held in
15 operative position and in contact with the rails by the chair.

In the accompanying drawing,—Figure 1 is a side elevation showing the application of the invention to the meeting ends of adjoining rails. Fig. 2 is a vertical
20 transverse section on line 2—2 of Fig. 1.

Referring to the drawings, 1 and 2 designate the meeting ends of adjoining rails and 3 the supporting ties thereof. The rail chair constituting my invention comprises sections 4 and 5, each embodying a base
25 6 and a vertical body portion 7. The bases 6 of the two sections extend under the bases of the rails to form a seat support therefor, and the portions 7 are arranged on opposite sides of the rails and bear against and correspond to the contour of the rail webs and lower surfaces of the heads thereof to properly support and
30 brace the same. The members have receiving recesses 8 corresponding to the contour and adapted for the reception of the base flanges of the rails, and their outer surfaces are inclined or beveled from the upper to
35 the lower ends of the portions 7 to secure an ornamental structure, reduce weight and provide for the effective support of the rail heads. Each member 4 and 5 is formed with a truss flange or projection 9 extending down between and arranged to terminally bear upon
40 the adjacent sides of the ties, on opposite sides of the joint to prevent any possibility of creeping or longitudinal shifting of the rails and chair and undue strain in such direction on the fastening connections.

The member 5 is provided upon the inner face of its
45 portion 7 with grooves 11 adapted for the passage of conducting or bond wires designed to be held thereby into contact with the rails, the wires thus passing through the chair and being securely held by the same in operative position. In the member 7 are also formed

transverse openings 12 for the passage of bolts 13 formed
50 integrally on the portion 7 of the member 4 and also extending through the usual bolt receiving openings in the rails. Nuts 13' engage the projecting threaded ends of the bolts and hold the parts in assembled relation. These nuts bear against bosses 14 formed on the
55 beveled face of the member 5, against which they obtain an effective bearing. The outer portions of the base members of both portions of the chair are notched for the reception of the heads of spikes 15 securing the same to the ties. 60

It will be observed that the construction described dispenses with the use of the ordinary fish plates and provides a chair which not only extends under and supports the rails against depression but securely ties the same against lateral movement, the integrality of the
65 bolts 13 insuring the production of a stronger chair and firmer connection between the chair sections. The chair sections are preferably castings of Bassett steel, and are consequently strong and tough and comparatively inexpensive. The chair or support may be of
70 any size and length and straight or curved for use at different portions of a trackway and adds material strength and durability to rail structures.

Having thus described the invention, what is claimed as new, is:— 75

1. In combination with rails, a chair comprising sections having base portions abutting beneath the rails, each of said sections being provided with a body portion bearing against the webs and heads of the rails, said body portions having outer beveled faces, one of said sections being
80 formed upon its beveled face with bosses whose outer surfaces extend parallel with the inner face of said section, bolts upon the other section extending through the body portion, webs of the rails and bosses, and nuts upon said bolts engaging the outer plain faces of said bosses to clamp
85 the sections against the rail.

2. A rail chair comprising sections, each having a base portion to extend beneath the rail and body portion to bear against the base, web and head of the rail, the base portions having abutting edges, one of said sections being provided on the outer face of its body portion with bosses and formed with transverse openings extending through said bosses, and integral bolts upon the body portion of the other section extending through the web of the rail and
90 said openings and provided with securing nuts bearing against the bosses. 95

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

JOHN MAROLD.

Witnesses:

XAVIER WAGNER,
T. J. RUNKEL.