

W. C. KNIGHTON.
RAIL CHAIR.
APPLICATION FILED OCT. 16, 1911.

1,034,715.

Patented Aug. 6, 1912.

Fig. 1.

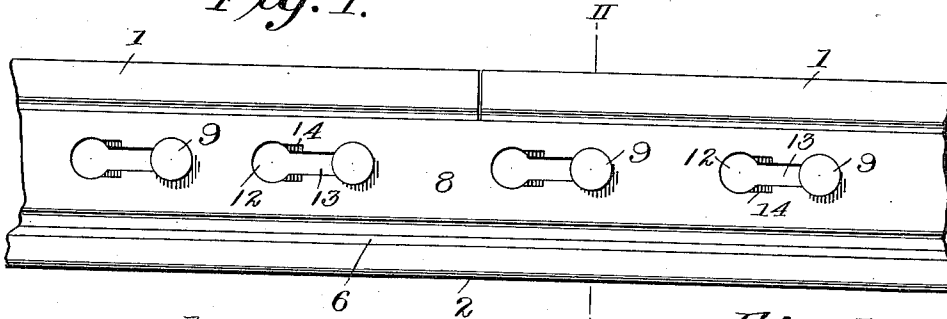


Fig. 2.

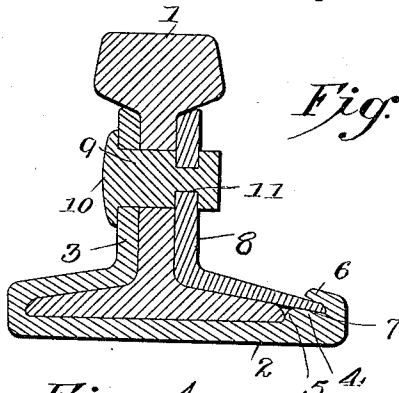


Fig. 3.

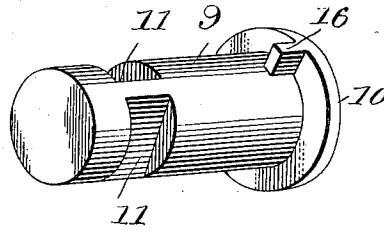


Fig. 4.

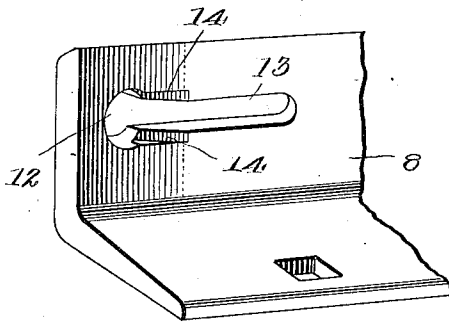
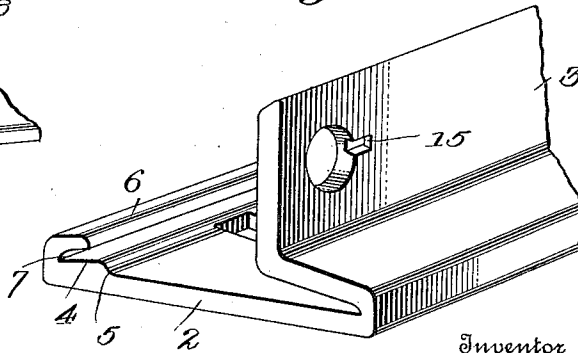


Fig. 5.



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM CULLMAN KNIGHTON, OF PIEDMONT, ALABAMA.

RAIL-CHAIR.

1,034,715.

Specification of Letters Patent.

Patented Aug. 6, 1912.

Application filed October 16, 1911. Serial No. 654,940.

To all whom it may concern:

Be it known that I, WILLIAM CULLMAN KNIGHTON, a citizen of the United States, residing at Piedmont, in the county of Calhoun and State of Alabama, have invented certain new and useful Improvements in Rail-Chairs, of which the following is a specification.

My invention relates to rail chairs, and has for its object to provide certain improvements in the construction of the same, and of the fish-plate and fastening bolts employed in connection therewith as will be hereinafter more definitely described and claimed, reference being had to the accompanying drawing, in which:—

Figure 1 is a side elevation of the abutting ends of two rails with my improved device attached thereto. Fig. 2 is an enlarged vertical transverse sectional view, taken on the line II—II, Fig. 1. Fig. 3 is an enlarged detail perspective view of one of the locking bolts. Fig. 4 is a similar view of one end of my combined fish-plate and locking-plate. Fig. 5 is a similar view of one end of my improved chair.

Similar numerals of reference denote corresponding parts in the several views.

In the said drawing the reference numerals 1 denote the usual railway rails, having their abutting ends seated in my improved rail chair, the same embodying a base 2 upon which the rail bases rest, and an integral side piece 3 extending up one side of the rails, and forming a fish-plate therefor. The opposite end of the base 2 is thickened on its upper surface at 4 to form a stop 5 for the edge of the rail base on that side, and is overturned at 6 to form a groove 7 that receives the lower edge of a combined bolt-lock and fish-plate 8 and serves to firmly retain the same in position.

The side piece 3 is apertured, as are the rail ends, to permit the passage of bolts 9, headed at 10, and provided near their other ends with parallel oppositely disposed slots 11. The plate 8 is circularly apertured at 12 to permit the passage therethrough of the bolts 9, said apertures merging at one side

into elongated slots 13, just wide enough to receive that portion of the bolts 9 lying between slots 11. Said plate 8 on its outer face and on opposite sides of slots 13 adjacent the apertures 12, is beveled or inclined at 14 for a purpose hereinafter to be described. I also notch the side piece 3 at 15 adjacent each bolt hole therein to receive the lug 16 on the underside of the bolt head 10, the object of the same being to bring the slots 11 in said bolts in alinement with the elongated slots B in plate 8.

In assembling, the rail ends are seated in the chair and the plate 8 slid into position endwise until its apertures 12 register with the bolt apertures through side piece 3 and the rail, the lower end of said plate engaging in groove 7 in the chair, thereby locking said plate against anything but an endwise removal. The bolts 9 are then inserted and adjusted so that their lugs 16 will enter slots 15, which brings their slots 11 into horizontal alinement. Upon now sliding the plate 8 to the left the elongated narrowed slots 13 therein will engage in the slots 11, and as this movement begins the inclines 14 engaging under the shoulders on the bolts 9 formed by the slots 11 will draw said bolts tightly into place, as will be readily understood. As the inclines 14 pass from beneath the shoulders on the bolts in the further movement of the plate to the left the flat outer face of said plate 8 will lie under said shoulders on said bolts, so that there will be no tendency of said plate to creep to the right to unlock the bolts.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is:—

In combination with a rail chair, rails supported thereby, a side piece on one side of said rails, and bolts passing through holes in said side plate and rails, of a plate on the opposite side of said rails apertured to receive the bolts and having elongated smaller slots running from said apertures to engage in slots in said bolts when said plate is shifted longitudinally, the outer face of said plate adjacent said apertures

being inclined to initially engage under the
shoulders on said bolts formed by said slots
therein to move said bolts endwise and lock
them in position, said incline merging into
5 the surface of said plate intermediate the
length of said elongated slots.

In testimony whereof I have hereunto set

my hand in the presence of two subscribing
witnesses.

WILLIAM CULLMAN KNIGHTON.

Witnesses:

W. V. NABORS,

J. J. NABORS.

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