(No Model.)

J. N. AKARMAN.

SECTIONAL RAILWAY CHAIR.

No. 458,209. Patented Aug. 25, 1891.

Fig. 1.

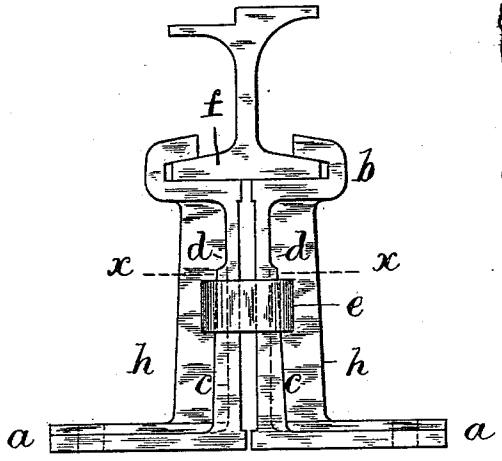


Fig. 2.

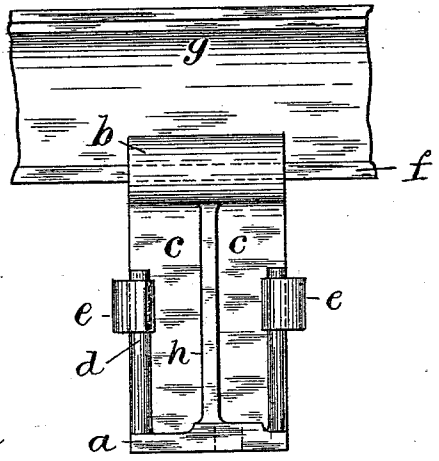
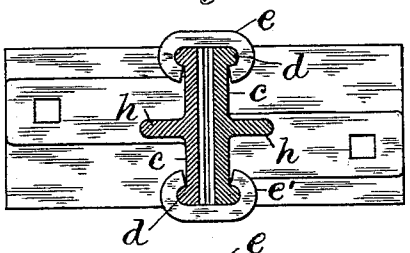


Fig. 3.



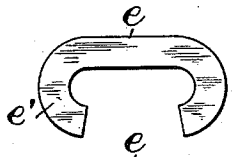


Fig. 4.

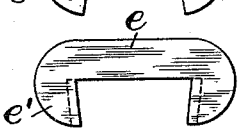
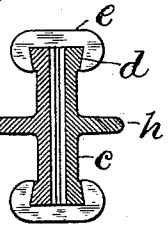


Fig. 5.

Fig. 7.



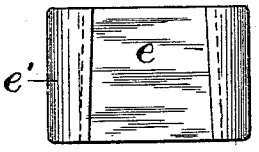


Fig. 6.

Attest:
L. Lee.
J. Van Vleet Jr.

Inventor.
John N. Akarman.
per Crane & Miller, Attys.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOHN N. AKARMAN, OF NEWARK, NEW JERSEY.

SECTIONAL RAILWAY-CHAIR.

SPECIFICATION forming part of Letters Patent No. 458,209, dated August 25, 1891.

Application filed May 26, 1891. Serial No. 394,105. (No model.)

To all whom it may concern:

Be it known that I, JOHN N. AKARMAN, a citizen of the United States, residing at Newark, Essex county, New Jersey, have invented certain new and useful Improvements in Sectional Railway-Chairs, fully described and represented in the following specification and the accompanying drawings, forming a part of the same.

The object of this invention is to furnish a cheap and effective means of clamping two sections of a railway-chair upon the rail-flange; and the invention consists in the combination, with the vertical edges of the two sections, of tapering seats formed upon the same and clips applied over the tapering seats to draw the sections together. In chairs of this class it has been common sometimes to form each section of the chair with a foot-plate at the bottom and a hooked rail-bearing at the top, and to form the two sections with vertical ribs, having interlocking parts adapted to engage one another when the sections are placed in their operative position. With such construction the parts adapted to interlock are unavoidably "undercut" or projected from the vertical ribs of the chair at such an angle that the pattern for such chairs cannot be made in a solid piece; but in my construction no such interlocking parts are provided and no projections are required upon the chair-sections, which cannot be readily drawn from the sand in molding a solid pattern.

The invention will be understood by reference to the annexed drawings, in which—

Figure 1 is a section of the rail with the chair applied thereto. Fig. 2 is an edge view of the chair with a portion of the rail clamped therein. Fig. 3 is a plan of the chair, partly in section, on line $x\,x$ in Fig 1. Fig. 4 is an end view of the hollowed clip. Fig. 5 is an end view of the dovetailed clip; Fig. 6, a view of the inner side of the clip, and Fig. 7 a section of the vertical ribs with dovetailed seats and clips applied thereto.

Each section of the chair is provided with a foot a, rail-bearing b, and vertical rib c, which is commonly extended to the edge of the foot, as shown in Fig. 2.

d are the tapering seats formed upon the edges of the ribs c upon both sides of the same, and e the clips provided at opposite ends with tapered or inclined hooks e', adapted to fit over the seats d. The clips are applied to the seats upon both edges of the sections, as shown in Fig. 3, and operate when moved downward to draw the opposite sections of the chair together, and thus clamp it firmly upon the bottom flange f of the rail g. The seats d are expanded toward the bottom, and the clip therefore operates to grasp the same more firmly as it is jarred downward by the vibration of wheels passing over the rails, and the tendency of such vibrations, which in other devices is liable to loosen the connection between the chair and the rail, operates directly in my invention to clamp the chair to the rail more firmly. To prevent the displacement of the clip, the seats are preferably rounded externally, and the clip is formed with hollows or inclined grooves to fit the same, as shown in Figs. 3 and 4.

Instead of rounding the seats, they may be beveled or dovetailed backward, as shown in Fig. 7, and the inclined hooks upon the clip dovetailed in like manner, as in Fig. 5, to fit them.

The accidental removal of the clip from the seats by either construction is rendered impossible, while the clip may be readily detached by driving it upward until it is clear from the seats, which are terminated a suitable distance below the rail-bearing b to permit the application or removal of the clip.

Vertical flanges h are shown between the foot a and rail-bearing b, as is common in such constructions, and the seats d project from the vertical ribs c in the same direction as the flanges h, and it is evident that the pattern for the chair-section may be made entirely solid, as such seats will draw out of the mold as readily as the flanges h.

The construction of chair shown in the drawings is adapted to be formed of cast metal; but it is evident that chairs constructed of wrought metal, bent and stamped into suitable form, may be provided with my invention by forming the seats d thereon. In such case the sections of the chair would not be provided with the flanges h. It is therefore immaterial how the sections of the chair be shaped or of what material they are made, provided they are formed with the tapering

seats *d* and the clips applied to such seats, for the purpose described herein.

Having thus set forth my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination, with the chair constructed in separate sections, as described, of tapering seats *d*, formed upon the sections, and the clips formed with tapered hooks adapted to engage such seats, as and for the purpose set forth.

2. The combination, with the chair constructed in separate sections, as described, of the tapering seats *d*, with rounded faces formed upon the opposite edges of the sections, and the clips *e*, having the inclined hooks *e'* hollowed to fit the rounded ribs, as and for the purpose set forth.

JOHN N. AKARMAN.

In presence of—
JNO. F. COURTNEY,
THOMAS S. CRANE.