

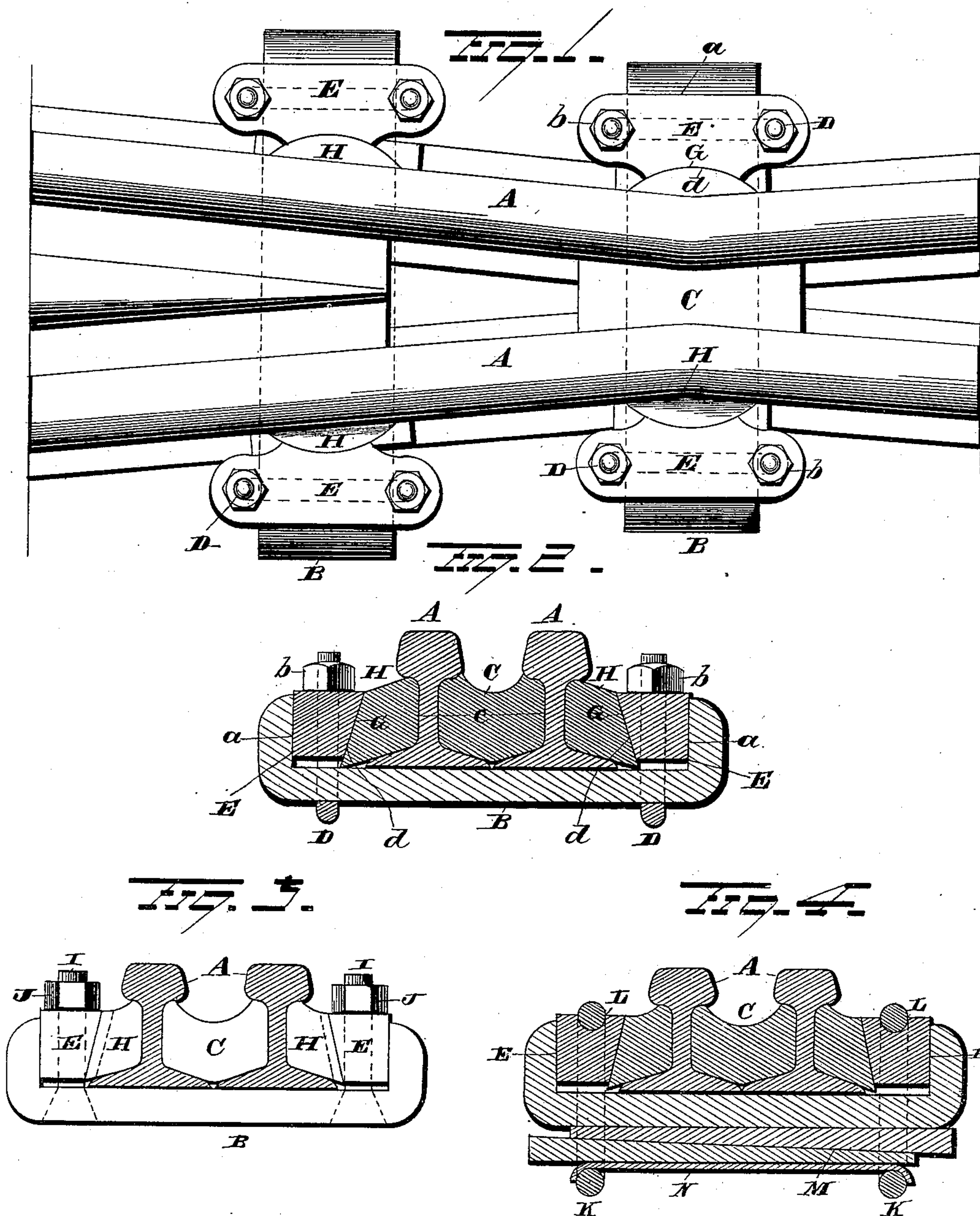
(No Model.)

E. H. BRYANT & H. N. HOPKINS.

RAILROAD CHAIR.

No. 308,054.

Patented Nov. 18, 1884.



WITNESSES  
*E. J. Nottingham,*  
*George Cook.*

INVENTOR  
*E. H. Bryant,*  
*H. N. Hopkins.*  
By *H. A. Symmons* ATTORNEY



# UNITED STATES PATENT OFFICE.

EMERY H. BRYANT, OF NEW BEDFORD, AND HENRY N. HOPKINS, OF  
TAUNTON, MASSACHUSETTS.

## RAILROAD-CHAIR.

SPECIFICATION forming part of Letters Patent No. 308,054, dated November 18, 1884.

Application filed May 16, 1884. (No model.)

*To all whom it may concern:*

Be it known that we, EMERY H. BRYANT and HENRY N. HOPKINS, of New Bedford and Taunton, respectively, in the county of Bristol and State of Massachusetts, have invented certain new and useful Improvements in Railroad-Chairs; and we 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.

Our invention relates to an improvement in railroad-chairs, and more particularly chairs to be used in connection with frogs, the object being to provide a chair adapted to adjust itself to the rails regardless of the angle at which they are placed, and thus avoid the necessity of providing special chairs for different locations; and with this end in view our invention consists in certain novel features of construction and combinations of parts, as will be hereinafter fully described, and pointed out in the claims.

In the drawings, Figure 1 shows a top plan view of a frog with our improvement secured thereto. Fig. 2 is a sectional view thereof. Figs. 3 and 4 are views of modifications.

A A are the rails of the frog, placed at an angle with each other, beneath which rails are located, at suitable distances apart, the clamps B, the inner edge of the upturned ends of which are straight, as shown at *a*, and between the rails are located the distance-pieces C, so constructed as to fit the rails snugly.

D are staples fitting beneath the clamps B, near each end thereof, the ends of which extend upwardly and pass through holes formed in the ends of the block or cross-piece E, the outer face of which is straight and bears against the inner face, *a*, of the end of the clamp. The upper ends of the staples D are screw-threaded, on which fit the nuts *b*. The inner faces of these pieces E are beveled, and provided with recesses G in the form of an arc of a circle. Between these pieces E and the rails A fit the wedges H, one face, *c*, of which is straight, and the opposite face, *d*, is convex and beveled, and adapted to fit in the recesses G, formed in the pieces E. It will now be seen that if, when the parts are in their adjustment, the

nuts are turned down on the staples D it will force the pieces E down on the wedges H, and thus force the rails together and prevent all lateral movement, the staples at the same time holding the clamps tight against the bottoms of the rails. By rounding the recess G the convex faces of the wedge are adapted to adjust themselves therein without regard to the angle of the rails, and allow the opposite face of the wedges to fit squarely against the webs of the rails, and the outer faces of the pieces E to fit squarely against the pieces *a* of the ends of the clamp. It will now be seen that one pattern will fit at any point of the frog. By simply removing the nuts *b* the wedges H may be taken out and the staples slipped off over the ends of the clamp and replaced without removing the frog from the track.

In Fig. 3 we show other means for securing the cross-piece E in position. Instead of using staples we pass bolts I through the clamps and pieces E, and on the upper ends thereof screw the nuts J, which latter on being screwed down force the pieces E down and the wedges H up tightly against the tracks. Again, loops K might be employed, as shown in Fig. 4. The pieces E are provided on their upper faces with a groove, L, adapted to receive the loops and hold them in position, said loops passing around the clamp B, and held in position by a metal plate, N, having its ends bent down, thereby preventing the loops from separating. Between the loops K and the plates N are located the wedges M, with their inclined faces bearing against each other. By driving the wedges inwardly the loops force the pieces E downwardly, and thereby tightening the wedge against the rails.

Our invention is exceedingly simple in construction, is efficient in use, holding the rails tightly in position, and can be manufactured at a small initial cost.

Having fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a clamp, two or more rails, a block or blocks located between the rails, and wedges seated against the outer faces of the outer rails, of a vertically-mov-

able block for locking the rails and blocks and wedges to the clamp.

2. The combination, with a clamp consisting, essentially, of a metallic plate having upwardly-bent ends, rails resting on said clamp, a block or blocks located between the rails, and wedges bearing against the outer faces of the rails, of the vertically-movable blocks, each having a beveled face, and devices for locking the movable blocks to the clamp.

3. The combination, with the clamp having upwardly-turned ends, two or more rails, a block or blocks located between the rails, and the wedges having convex outer faces and plane inner faces, of the vertically-movable blocks having concave inner faces, and devices for locking the rails, blocks, and wedges to the clamp, substantially as set forth.

4. The combination, with the clamp B, adapted to receive the rails of a frog, of a distance-

piece located between the rails, wedges one face of each of which rests against a rail, the opposite face being convex, pieces E, located between the ends of the clamps and wedges, and staples fitting beneath the clamp and passing through the pieces E, adapted to hold the parts in their proper relative positions, substantially as set forth.

5. The combination of the clamp B, rails A, distance-piece C, wedges H, pieces E, and staples D, all of the above parts combined and adapted to operate substantially as set forth.

In testimony whereof we have signed this specification in the presence of two subscribing witnesses.

EMERY H. BRYANT.  
HENRY N. HOPKINS.

Witnesses:

E. D. GODFREY,  
J. B. ROBINSON.