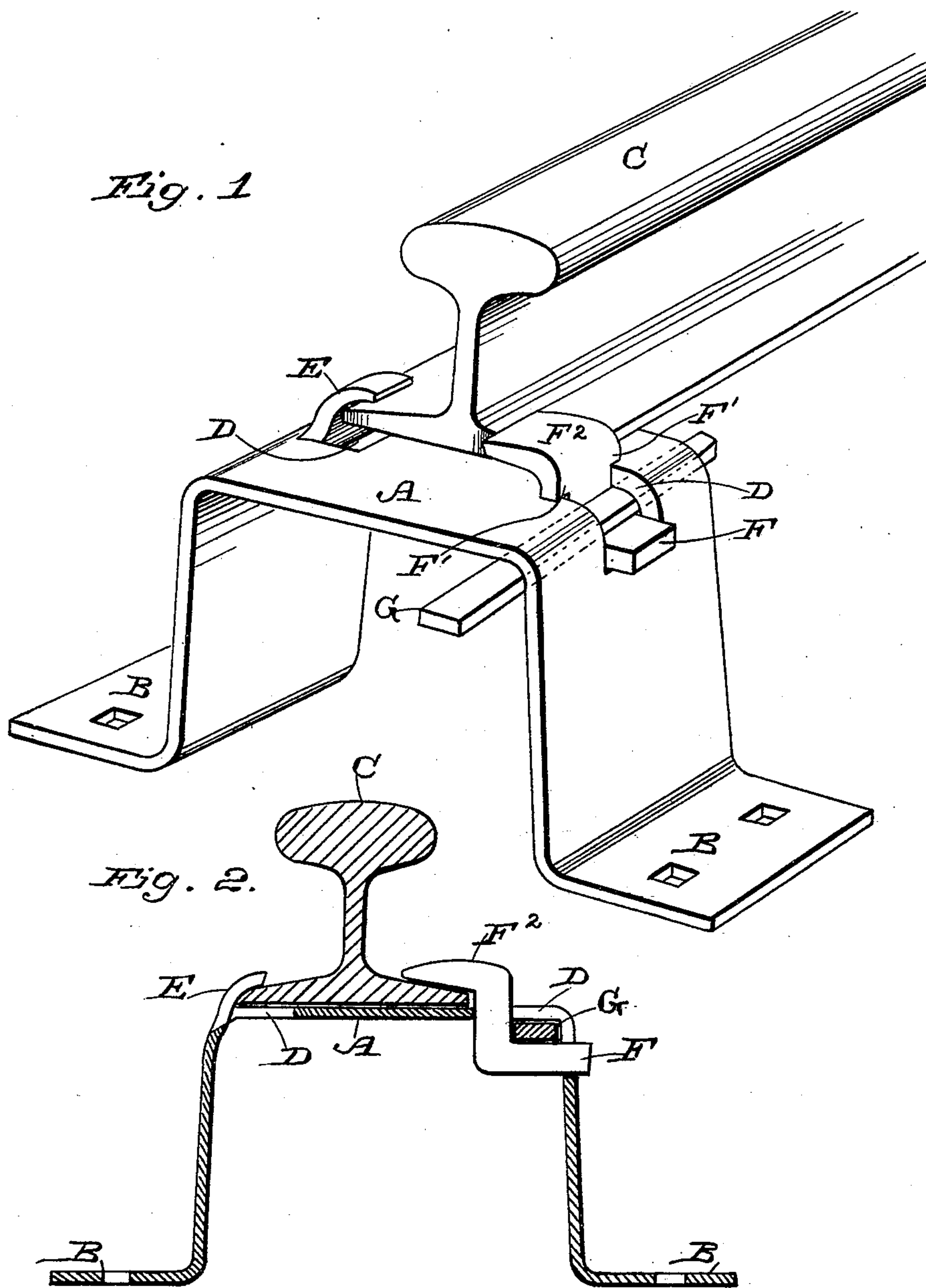


(No Model.)

B. JENNINGS.  
RAILWAY RAIL CHAIR.

No. 481,032.

Patented Aug. 16, 1892.



Witnesses,  
G. House  
J. A. Bayless

Inventor,  
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# UNITED STATES PATENT OFFICE.

BYRON JENNINGS, OF SAN JOSÉ, ASSIGNOR OF ONE-HALF TO JAMES BRUSIE, OF OAKLAND, CALIFORNIA.

## RAILWAY-RAIL CHAIR.

SPECIFICATION forming part of Letters Patent No. 481,032, dated August 16, 1892.

Application filed November 16, 1891. Serial No. 412,088. (No model.)

*To all whom it may concern:*

Be it known that I, BYRON JENNINGS, a citizen of the United States, residing at San José, Santa Clara county, State of California, have invented an Improvement in Railway-Rail Chairs; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to a novel railway-rail chair and means for securing rails thereto.

It consists in certain details of construction, which will be more fully explained by reference to the accompanying drawings, in which—

Figure 1 is a perspective view of my invention. Fig. 2 is a transverse section of the same.

The object of my invention is to provide a chair which is fixed to the cross-ties of a railway for the purpose of supporting the rail at a suitable height above the tie to allow the proper filling and paving between the rails and above the surface of the ties; and the improvement consists, essentially, in a novel means for securing the rails to these chairs.

A is the chair, which is made of iron bent into the form shown and having flanges B at the bottom, through which it is securely bolted or spiked to the tie. These chairs are spiked upon the ties in such a position that the rails C rest upon the chairs and are supported by them. A slot D is made in the chair, extending part way across the top and part way down one side, and a tongue E is formed at one side upon the top of the chair by bending up a portion of the material, which is cut away in making the slot. This tongue E fits over one flange of the rail and thus holds it securely in place without any other fastening.

F is an angle-iron piece bent so as to fit into the slot which is made upon the top and the side of the chair opposite to that which is provided with the tongue E. The bend of this angle-iron piece is opposite to that of the upper corner of the chair itself—that is, the angle-iron F makes a concave bend, while the chair makes a convex bend—and when this angle-iron piece is in place it leaves a rectangular space between its inner angle and the inner angle of the chair, through which a key G may be driven inside of the angle of the

chair, as shown. The angle-iron F extends upward through the top of the slot and is there made wider, so that it has shoulders F', which rest upon each side of the channel made in the top of the chair, and it is then bent so as to form a hook or clamp head F<sup>2</sup>, which presses upon the bottom of the rail upon the opposite side from the fixed tongue E, which holds the other flange of the rail, as previously described. The shank of F is also pressed against the web which is not cut away in the top of the chair, and the rail is thus relieved from the direct pressure of the clamp when the latter is locked in place. In fastening these rails they are placed upon the chairs and the flange upon one side is pushed under the fixed tongues E of the chairs. The angle-iron clamp F is then put in place in the slot on the opposite side and the keys G are driven in, thus drawing them down firmly and locking the rail in place. The shoulders F' being drawn down upon the top of the chair at the sides of the slot and the shank forced inward against the web, it will be manifest that the clamp is firmly locked to the chair and is not locked one end to the chair and one end to the rail, as would be the case if these shoulders were not provided. In consequence of this it will be manifest that the rail will be free to elongate or contract by changes of temperature without loosening the clamp or its key, as these parts are all locked upon the chair, while the projecting head has sufficient pressure upon the rail-flange to hold it securely in place.

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

1. A railway-rail chair consisting of the angular metal plate adapted to be secured to the tie, having a slot extending part way across the top and down upon one side, a fixed tongue projecting upward from one side of the chair, adapted to clasp and hold one flange of the rail, a bent yoke having a hook-shaped head which presses upon the opposite flange of the rail, and a key introduced between the angle of the yoke and the inner angle of the chair, substantially as herein described.

2. A railway-chair consisting of the bent



angular plate having a means by which it is  
secured to the tie, a slot extending part way  
across the top and part way down one side of  
the chair, a fixed hook-shaped clamp upon  
5 one side, beneath which one flange of the rail  
is secured, an angular piece F, bent to fit into  
the open slot and against the web upon the  
opposite side, having the hook-shaped head  
extending over the flange of the rail, the  
10 shoulders F', resting upon the top of the chair  
at each side of the slot, and a locking-key

passing inside of the angle of the chair and  
exterior to the angle of the locking-piece F,  
whereby the latter is locked securely to the  
chair, substantially as herein described. 15

In witness whereof I have hereunto set my  
hand.

BYRON JENNINGS.

Witnesses:

S. H. NOURSE,  
J. A. BAYLESS.