

D. C. WADDELL & J. F. FINGER.

RAILROAD RAIL JOINTS.

No. 180,969.

Patented Aug. 8, 1876.

Fig. 3.

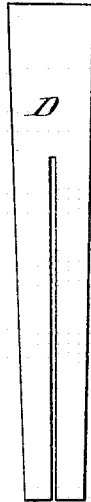


Fig. 1.

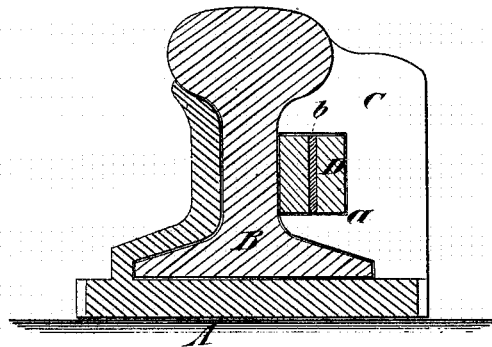


Fig. 4.

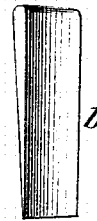
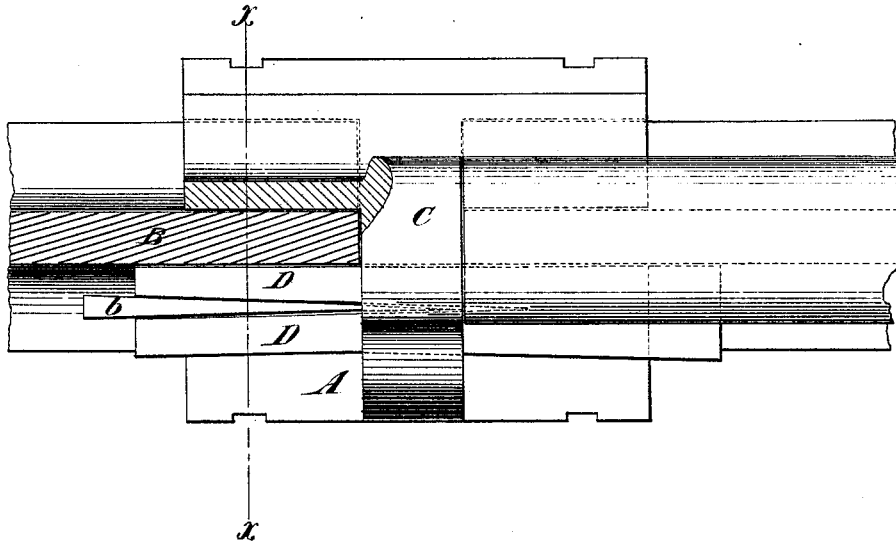


Fig. 2.



WITNESSES:  
*John Goethals*  
*Alex. F. Roberts*

INVENTOR:  
*D. C. Waddell*  
BY *J. F. Finger*  
*M. H. [Signature]*  
ATTORNEYS.

# UNITED STATES PATENT OFFICE.

DUNCAN C. WADDELL AND JOHN F. FINGER, OF MARION, SOUTH CAROLINA.

## IMPROVEMENT IN RAILROAD-RAIL JOINTS.

Specification forming part of Letters Patent No. **180,969**, dated August 8, 1876; application filed July 11, 1876.

*To all whom it may concern:*

Be it known that we, DUNCAN C. WADDELL and JOHN F. FINGER, of Marion, Marion county, South Carolina, have invented a new and Improved Railroad-Joint, of which the following is a specification:

Figure 1 is a transverse section on line *x x*, Fig. 2. Fig. 2 is a top view. Figs. 3 and 4 are detail views of parts of the fastening device.

Similar letters of reference indicate corresponding parts.

Our invention relates to joints or fastenings for the ends of railway-rails; and it consists of a chair that embraces the bottom and inner side of the rail, and is provided with a central standard or bearing-piece, which comes between the ends of the rails when they are placed in the chair, and extends beyond the outer side of the rail, where it is mortised to receive a split key, that bears against the web, the said key being retained by a wedge driven in the split.

A is a chair that embraces the bottom and inner side of the rail B, fitting the web and under side of the tread. C is a bearing-piece that is cast with the chair, and has the same form at its inner side and top as a section of the rail; but on the outer side it projects suf-

ficiently to receive a split key, D, in a mortise, *a*. The key D, when driven into the mortise *a*, bears against the web of the rails, holding the ends firmly in the chair. The key D is held in place and prevented from jarring out by the wedge or key *b*, which is driven into the split in the key.

The device above described forms a rigid support for the ends of the rails. It may either be placed on the cross-ties or between them. The bearing-piece between the ends of the rails permits the wheels to pass over the joint without jarring or injuring the end of the rail.

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

A railroad-joint consisting of a chair having a central bearing-piece between the rails and a split key, which is driven through a mortise in the bearing-piece, and clamps the end of the rails against the side of the chair, said key being held in place by a wedge driven in the split, substantially as specified.

DUNCAN C. WADDELL.  
JOHN F. FINGER.

Witnesses:

WM. H. CARY,  
J. THOS. DU BOIS.