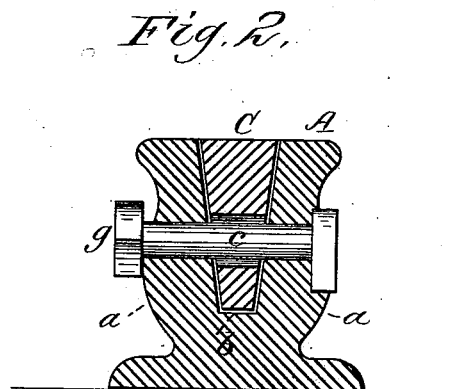
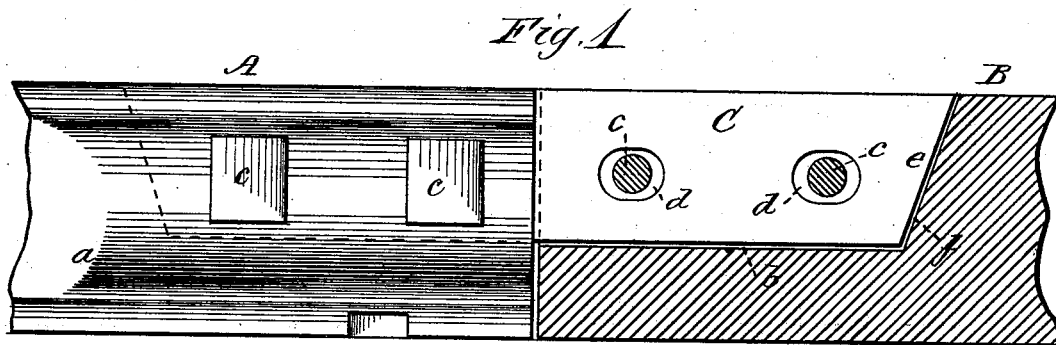


E. P. HYATT.  
Rail-Joint.

No. 215,819.

Patented May 27, 1879.



WITNESSES

Nat. E. Oliphant  
Geo. R. Porter,

INVENTOR

Edmund P. Hyatt,

per

Chas. W. Fowler,  
Attorney.

# UNITED STATES PATENT OFFICE.

EDMUN P. HYATT, OF WILTON, CONNECTICUT, ASSIGNOR OF ONE-HALF HIS RIGHT TO GEORGE QUICK AND ORVIL BROWN, OF SAME PLACE.

## IMPROVEMENT IN RAIL-JOINTS.

Specification forming part of Letters Patent No. **215,819**, dated May 27, 1879; application filed April 16, 1879.

*To all whom it may concern:*

Be it known that I, EDMUN PERRY HYATT, of Wilton, in the county of Fairfield and State of Connecticut, have invented a new and valuable Improvement in Rail-Joints; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a side elevation of my invention, partly in section. Fig. 2 is a sectional end view of the same.

This invention has relation to improved means for connecting together the ends of railroad-rails; and the object thereof is to dispense with the necessity of using fish-plates heretofore employed for forming the rail-joint, and therefore consists in the peculiar construction of the ends of the rail in connection with a coupling-wedge, as will be hereinafter described, and subsequently pointed out in the claims.

In the accompanying drawings, A B represent the two rails, formed at their ends with swell *a*, to increase the strength of the rails at that point and admit of their being cast with recesses *b*. A wedge, C, fits snugly in the recess when the ends of the rails are brought together, and is held therein by bolts *c*, passing through the rails and through the wedge C, said wedge having elongated openings *d*, to allow of the contraction and expansion of the metal. The coupling-wedge C is formed with inclined ends *e*, which fit correspondingly-inclined shoulders *f* in the recess *b*, making a very firm and rigid connection for the rails.

The recess *b*, it will be noticed, is inclined to correspond with the inclined sides of the wedge

C, and as it is of great importance to obtain as much strength as possible at the ends of the rails where they join each other, and at the same time have the recess of sufficient depth and width to receive a wedge of the required strength, the ends of the rails at their sides are cast with the swell *a*.

The recess *b* having the sides thereof inclined in a direction toward the center of the rail, as illustrated in Fig. 2 of the drawings, more strength is obtained at the base of the rail.

The coupling-wedge, it will be understood, is separate and independent of the rails, and can be put in place after the ends of the rails are brought together, and be securely fastened by the bolts *c* and the nuts *g*, two bolts being used for each end of the rails.

The rails joined together as above described, and the swell upon the sides thereof, make a strong joint and save the wear and tear of the rails, and insure the smooth running of the train over the joint or at that point where the rails are connected.

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

1. The rails A B, formed with swell *a* and recess *b*, in combination with the independent coupling-wedge C, substantially as and for the purpose set forth.

2. The rails A B, formed with swell *a* and inclined recess *b*, in combination with the coupling-wedge C, and bolts and nuts *c g*, substantially as and for the purpose described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

EDMUN PERRY HYATT.

Witnesses:

ABRAM B. HYATT,  
HERMAN H. BARBOUR.