

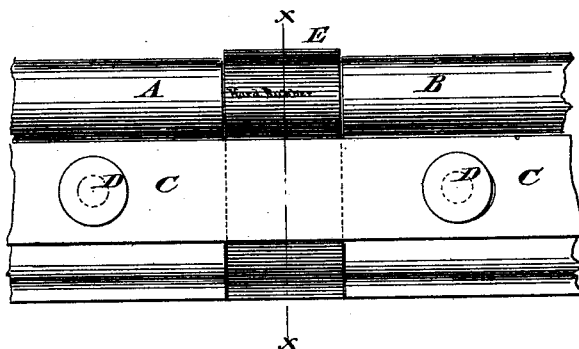
C. PALM & J. FITZGERALD.

RAILROAD JOINT.

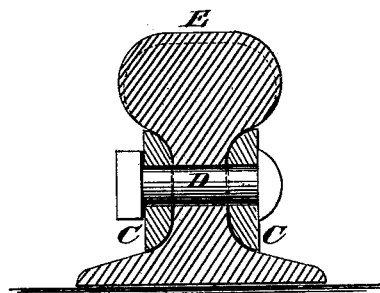
No. 189,381.

Patented April 10, 1877.

*Fig. 1.*



*Fig. 2.*



WITNESSES:

*J. H. Scarborough.*  
*A. F. Terry*

INVENTOR'S

*C. Palm.*  
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ATTORNEYS.

# UNITED STATES PATENT OFFICE.

CHARLES PALM AND JOHN FITZGERALD, OF CERRO GORDO, ILLINOIS.

## IMPROVEMENT IN RAILROAD-JOINTS.

Specification forming part of Letters Patent No. **189,381**, dated April 10, 1877; application filed March 12, 1877.

*To all whom it may concern:*

Be it known that we, CHARLES PALM and JOHN FITZGERALD, of Cerro Gordo, in the county of Piatt and State of Illinois, have invented a new and useful Improvement in Railroad-Rail Joint, of which the following is a specification:

Figure 1 is a side view of the adjacent ends of two rails to which our improvement has been applied. Fig. 2 is a cross-section of the same, taken through the line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish a rail-joint which shall be so formed as to prevent the wheels of the trains of cars from hammering, wearing, and splintering the ends of the rails, and to prevent noise when the wheels pass over the joints.

The invention consists in the hard-rubber block, made in the form of a short section of a rail, interposed between the adjacent ends of two rails, and kept in place by the fish-plates, as hereinafter fully described.

A and B represent the ends of two rails, forming a joint. C are the fish-plates, which

are attached to the rails A B by bolts D, in the usual way. E is a block of hard rubber, made in the form of a short section of rail, and which is interposed between the ends of the rails A B, where it is kept in place by the fish-plates C.

The block E is made a quarter of an inch, more or less, higher than the rails A B, and will yield when struck by a wheel, so as to carry the wheel over the joint, and prevent it from striking the corner of the next rail, thus preventing the hammering of the ends of the rails, and the consequent wear and noise.

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

The hard-rubber block E, made in the form of a short section of a rail, interposed between the adjacent ends of two rails, and kept in place by the fish-plates, substantially as herein shown and described.

CHARLES PALM.  
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Witnesses:

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