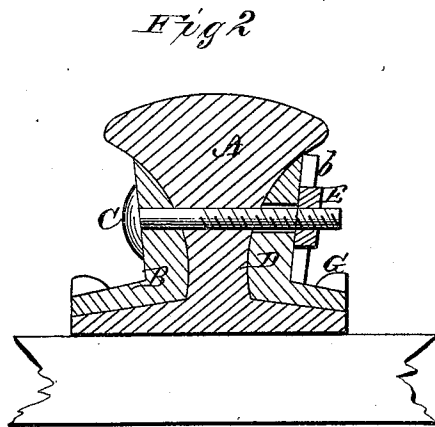
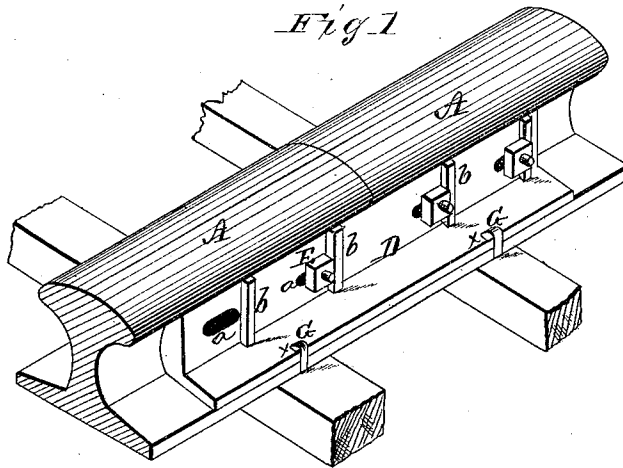


J. D. SMITH.
RAIL JOINTS.

No. 179,363.

Patented June 27, 1876.



WITNESSES

Frank L. Curaud
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INVENTOR

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UNITED STATES PATENT OFFICE.

JOSEPH D. SMITH, OF ROCKFORD, ILLINOIS.

IMPROVEMENT IN RAIL-JOINTS.

Specification forming part of Letters Patent No. **179,363**, dated June 27, 1876; application filed June 2, 1876.

To all whom it may concern:

Be it known that I, JOSEPH D. SMITH, of Rockford, in the county of Winnebago and State of Illinois, have invented certain new and useful Improvements in Railroad-Joint Fastening; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

My invention relates to railroad-joint fastenings; and it consists in a fish-bar provided with elongated bolt-holes and exterior ribs, so as to be moved laterally to bring the ribs against the nuts and lock them, and the fish-bar then held by keys passing through notches in the fish-bar and foot of rail, as will be hereinafter more fully set forth.

In the annexed drawing, Figure 1 is a perspective view of my invention. Fig. 2 is a transverse vertical section of the same.

A A represent the two ends of two adjoining railroad-rails, with an ordinary fish-bar, B, on one side. C C are the bolts passing through this fish-bar and the rails. On the opposite side of the rails is a fish-bar, D, having elongated bolt-holes or slots *a a*, through which the ends of the bolts C project. E E are the nuts screwed on the ends of the bolts C. On the outer surface of the fish-bar D are formed ribs *b b*, which may be either vertical, as shown, or at any other desired angle.

After the nuts E have been screwed up the fish-bar D is moved laterally until the ribs *b* come against the nuts E and prevent their turning. When in this position one or more notches, *x*, in the bottom flange of the fish-bar will coincide with similar notches in the foot of the rails, and keys or spikes G are driven through the same into the ties underneath. The nuts are thus securely locked in position, and cannot be turned until the keys G are first removed, and then the fish-bar D moved laterally to bring the ribs *b* away from the nuts.

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

1. The fish-bar D, provided with elongated bolt-holes *a* and ribs *b*, in combination with the rails A, bolts C, and nuts E, substantially as and for the purposes herein set forth.

2. The combination of the rails A, bolts C, nuts E, fish-bar D, with elongated bolt-holes *a* and ribs *b*, and the keys G, all substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

JOSEPH D. SMITH.

Witnesses:

F. GRAHAM, Jr.,
BYRON GRAHAM.