

J. H. WALES & H. S. CUSHMAN.
Railway Rails.

No. 142,182.

Patented August 26, 1873.

Fig. 1.



Fig. 2.

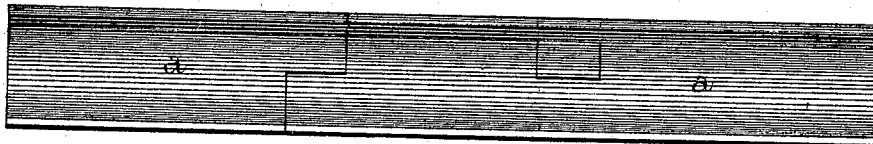
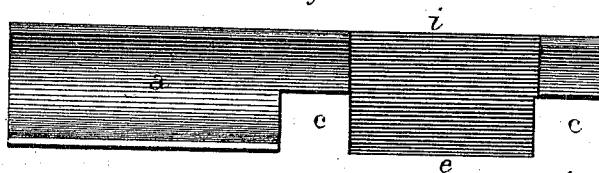


Fig. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN H. WALES, OF MARLBOROUGH, AND HENRY S. CUSHMAN, OF MILFORD, MASSACHUSETTS.

IMPROVEMENT IN RAILWAY-RAILS.

Specification forming part of Letters Patent No. 142,182, dated August 26, 1873; application filed July 16, 1873.

To all whom it may concern:

Be it known that we, JNO. H. WALES, of Marlborough, in the county of Middlesex, and HENRY S. CUSHMAN, of Milford, in the county of Worcester, and State of Massachusetts, have invented certain new and useful Improvements in Railroad-Rails; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

The nature of our invention relates to an improvement in railroad-rails; and it consists in forming the ends of the rail in such a manner that they will overlap and interlock so as to form one continuous rail, and dispense with chairs, fish-plates, and all other fastening devices, as will be more fully set forth hereafter.

The accompanying drawings represent our invention.

a represents two rails, each of which has, either on its top or bottom, two pieces or parts cut away, so as to form the recesses or openings *c*, one of which is made just at the end of the rail, and the other at any suitable distance from it, the two being separated by the solid portion *e*. Cut in the side of each rail is a recess, *i*, which will be about as long as the distance between the two openings *c*, and

which, when the two rails are brought together, prevent any endwise movement on the part of either.

The rails are formed just alike, with the exception that one-half are cut from above and half from below, so that when brought together they will overlap and interlock, as shown, forming one continuous rail. When united in this manner the ends are protected from battering, wear and tear upon the trucks is prevented, and all need of chairs, fish-plates, and other fastenings is avoided.

By forming the ends all alike this improvement is equally applicable to the reversible and common rails, and the ends can be separated by raising one of them vertically, or moving either or both laterally.

Having thus described our invention, we claim—

The rails *a*, having the recesses *c i* formed in their ends and provided with corresponding projections, so as to overlap and interlock and form a continuous rail, substantially as set forth.

In testimony that we claim the foregoing we have hereunto set our hands and seals.

JOHN H. WALES.

HENRY S. CUSHMAN.

[L. S.]

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Witnesses:

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