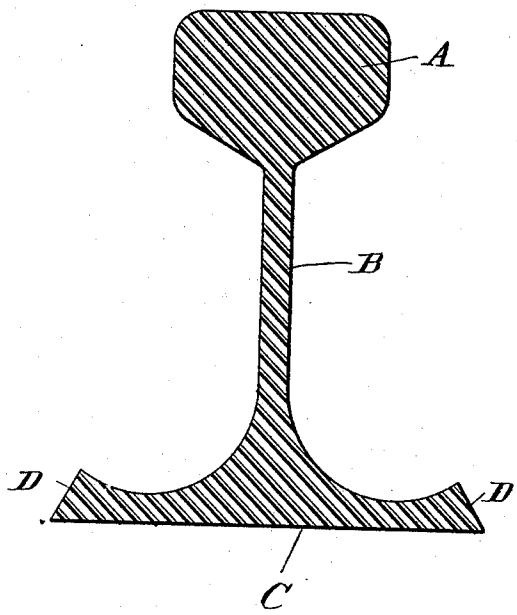
(No Model.)

S. A. ROAKE & F. G. SMITH.

RAILROAD RAIL.

No. 518,679. Patented Apr. 24, 1894.



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THE NATIONAL LITHOGRAPHING COMPANY,
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UNITED STATES PATENT OFFICE.

STEPHEN A. ROAKE, OF PEEKSKILL, AND FRANK G. SMITH, OF WILLIAMS BRIDGE, NEW YORK.

RAILROAD-RAIL.

SPECIFICATION forming part of Letters Patent No. 518,679, dated April 24, 1894.

Application filed August 15, 1893. Serial No. 483,169. (No model.)

To all whom it may concern:

Be it known that we, STEPHEN A. ROAKE, residing at Peekskill, and FRANK G. SMITH, residing at Williams Bridge, Westchester county, State of New York, have invented an Improvement in Railroad-Rails, of which the following is a specification.

Our present invention relates to railroad rails and has for its object to produce a rail which may be readily and firmly attached to the ties. This rail is adapted for use with ties which have means for gripping the base of the rail and more especially with the tie and rail-brace for which we made application for Letters Patent on June 23, 1893, Serial No. 478,573. We attain this object by the device illustrated in the accompanying drawing which shows a cross section of our improved rail.

In the drawing A designates the head of our improved rail, B the web, and C the base or flange. The head A forms the tread of the rail, which rests on the ties upon its base or flange C. The sides of the flange are beveled as at D for a purpose hereinafter described.

In using a rail with a tie having recesses for the reception of the flange, unless the rail is properly braced, it is liable to roll. One means for accomplishing this bracing is by having the sides of the recess in which the rail rests grip the rail firmly. An efficient method of gripping the rail is to form the recesses of the tie with inclined sides, and to use a rail with beveled flange. One or both of the sides of the recess in the tie may be made movable, in order to clamp the rail. In addition to the movable side of the recess, shims may be driven beneath the rail to pillow it in the tie. In this case, as the shims are compressed by traffic, and the rail consequently becomes loose in its fastenings, the sides of the incline may be forced nearer together to grip the rail and wedge it firmly down upon the shims. The conformation of the inclined sides makes our improved rail particularly applicable to this use, as it allows of a great range of vertical adjustment, by shiming or otherwise, of the rail in the recess.

What we claim, and desire to secure by Letters Patent, is—

In a rail, the combination with a head A, and web B, of a flange C having inclined sides D, substantially as described.

STEPHEN A. ROAKE.
FRANK G. SMITH.

Witnesses:
HARRY M. TURK,
GEO. E. MORSE.