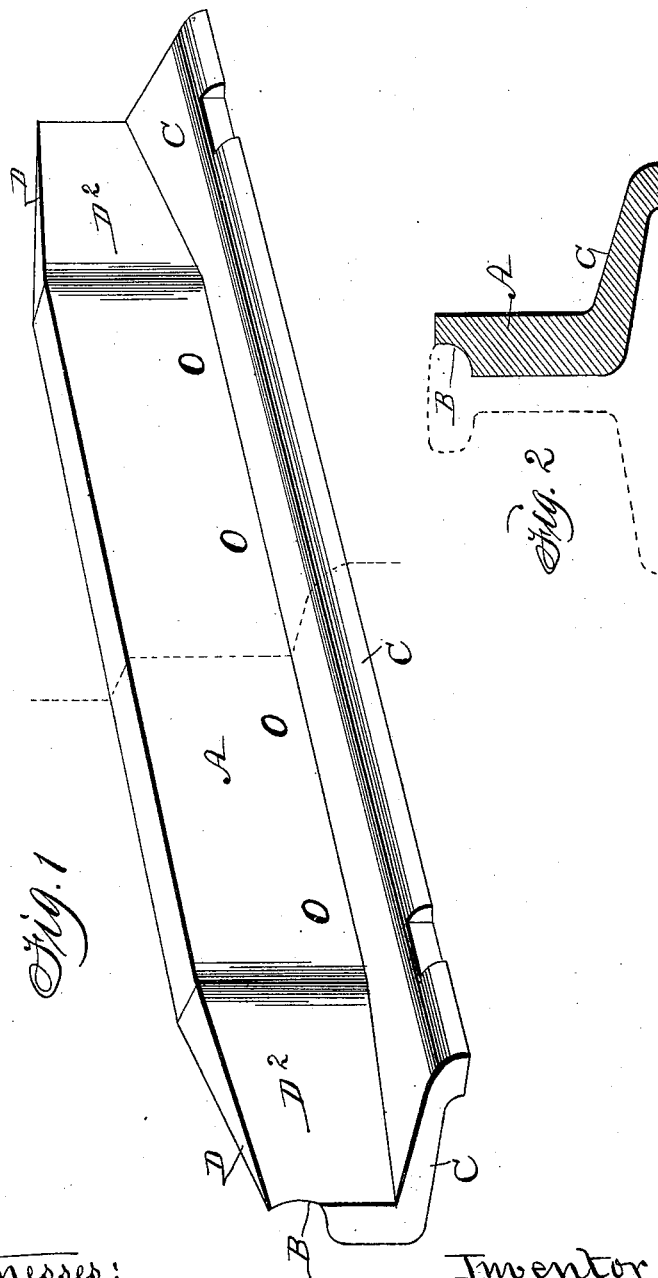


No. 648,982.

Patented May 8, 1900.

W. O. NELSON.  
RAILWAY SPLICE BAR.  
(Application filed Apr. 17, 1899.)

(No Model.)



Witnesses:  
J. C. Stuart.  
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Inventor:  
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# UNITED STATES PATENT OFFICE.

WEBSTER O. NELSON, OF CARNFORTH, IOWA.

## RAILWAY SPLICE-BAR.

SPECIFICATION forming part of Letters Patent No. 648,982, dated May 8, 1900.

Application filed April 17, 1899. Serial No. 713,285. (No model.)

*To all whom it may concern:*

Be it known that I, WEBSTER O. NELSON, a citizen of the United States, residing at Carnforth, in the county of Poweshiek and State of Iowa, have invented an Improved Splice-Bar for Railway-Joints, of which the following is a specification.

Heretofore a splice-bar has been fitted to the abutting ends of rails to overlie their flanges, webs, and portions of their heads and the end portions of the bar beveled to produce an inclined plane on the top and also the front face of each end of the bar and bolts extended through the inclined front faces and the webs of rails. Splice-bars so constructed and applied allow the flanges of car-wheels when derailed to strike the heads of the bolts and to break and displace the bolts and impair a joint.

My object is to provide splice-bars adapted to be combined with the abutting ends of rails in such a manner that the inclined planes on the vertical faces of the ends will serve as cams in contacting with the flanges of car-wheels when they are off the rails and advancing on the outside of rails.

My invention consists in the splice-bar hereinafter set forth, pointed out in my claim, and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view showing the bar complete in one solid piece. Fig. 2 is a central transverse sectional view in which dotted lines indicate the position of a rail to which the bar is designed to be fixed by means of bolts in such a manner that the heads of bolts will be protected when wheels are off the track and their flanges advancing on the outside of rails.

The letter A designates the vertical portion or web of the bar. It has a concave B extending its entire length at its inside top corner, whereby it is adapted to engage the balls of the abutting ends of rails in a track.

C is a flange extending outward at its lower edge and adapted to overlie the flanges of the rails, and its extreme outer portion is adapted

to engage a tie or chair, so that a part of the weight and pressure to which a railway-joint is subjected by the tread of locomotives and trains will be distributed over a broad base. On the top each end is tapered downward to produce inclined planes.

D and D<sup>2</sup> are inclined planes on the solid ends, that are thereby adapted to serve as cams to engage the flanges of wheels and direct them outward, so they will not contact with the heads of bolts in a joint to impair a joint.

I am aware splice-bars have had inclined planes adjustably connected with their ends by means of screw-bolts in such a manner that the flanges of car-wheels could contact with the bolts; but my manner of forming solid integral inclined planes adapted to serve as cams to direct the flanges of car-wheels relative to the bolts in a railway-rail joint is greatly advantageous in that it prevents the dangers incident to the breaking of bolts and impairing joints when car-wheels are derailed.

Having thus described my invention, its purpose, and application, its practical utility will be obvious to persons familiar with the art to which it pertains, and

What I claim as new, and desire to secure by Letters Patent, is—

A splice-bar for railway-joints complete in one piece adapted to overlie the webs and flanges of rails and also engage their heads and consisting of a vertical portion having a continuous groove on the inside of its top edge, its ends tapered downward and provided with bolt-holes above an integral flange adapted to overlie the flanges of rails and the lower edge of the flange adapted to overlie a chair or tie and provided with notches for spikes and its ends tapered and adapted to serve as cams in the manner set forth for the purposes stated.

WEBSTER O. NELSON.

Witnesses:

H. H. SHELDON,  
JAMES MULLIGAN.