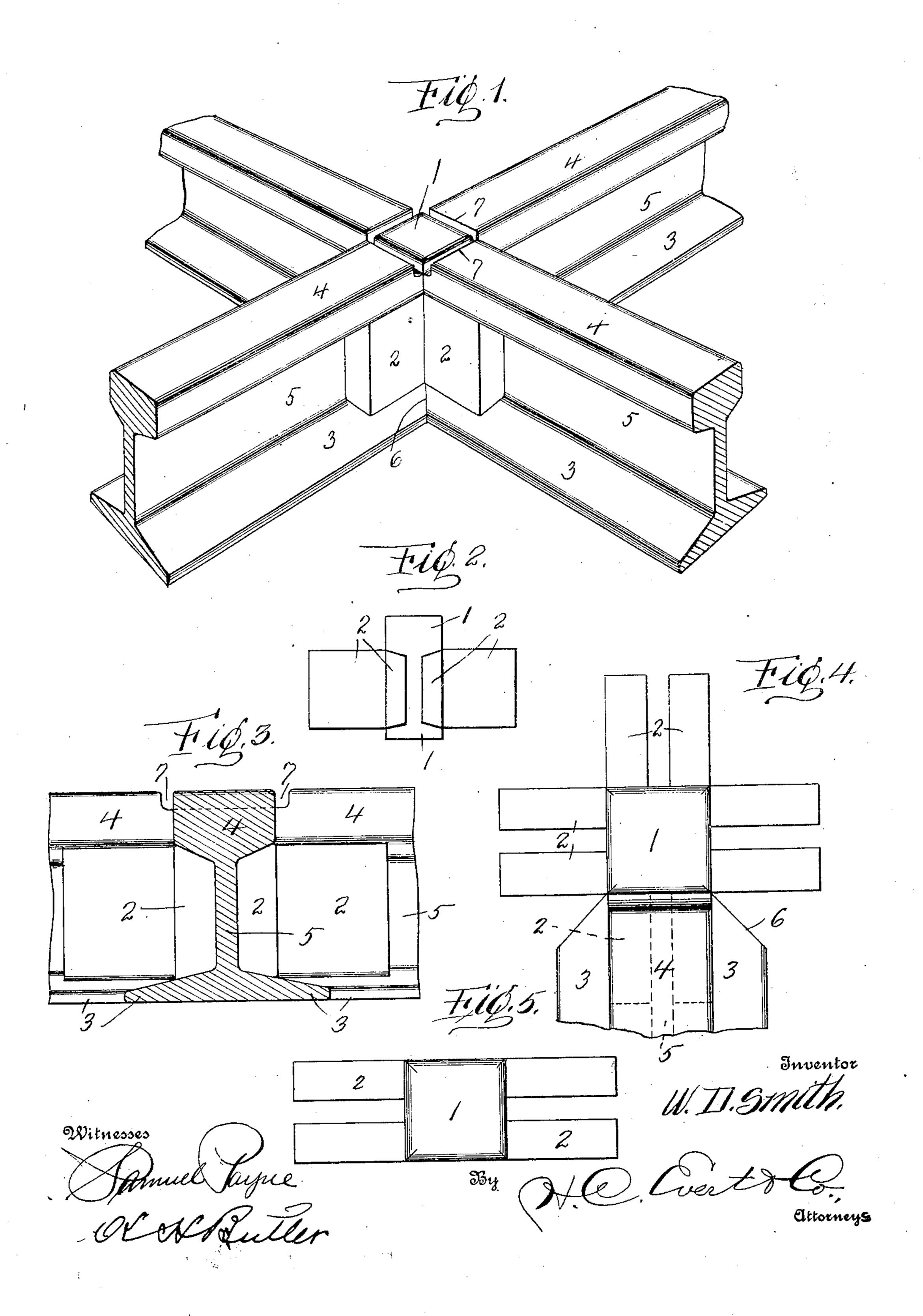
W. D. SMITH.
CROSSING OR CONNECTION FOR RAILS.
APPLICATION FILED MAY 23, 1908.



UNITED STATES PATENT OFFICE.

WILLIAM D. SMITH, OF FLOREFFE, PENNSYLVANIA.

CROSSING OR CONNECTION FOR RAILS.

No. 897,169.

Specification of Letters Patent.

Patented Aug. 25, 1908.

Application filed May 23, 1908. Serial No. 434,509.

To all whom it may concern:

Be it known that I, William D. Smith, a citizen of the United States of America, residing at Floresse, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Crossings or Connections for Rails, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to crossings or connections for rails, and the primary object of my invention is to provide a novel crossing or connection that will positively hold the confronting ends of rails, preventing lateral and vertical displacement of said rails.

A further object of this invention is to provide strong and durable means for maintaining a continuous tread for the rolling stock of a railroad, thereby eliminating the jarring and bumping experienced when passing over a crossing or rail joint.

With the above and other objects in view which will more readily appear as the invention is better understood, the same consists in the novel construction, combination and arrangement of parts to be presently described and then specifically pointed out in the appended claims.

view of my improvement in connection with a crossing, Fig. 2 is an elevation of my improvement, Fig. 3 is a similar view illustrating the rails in position, Fig. 4 is a plan of one rail in position, and Fig. 5 is plan of my improvement as designed for a rail joint.

In the accompanying drawings, 1 designates a connecting member corresponding in height to an ordinary rail, said member in 40 cross section or plan being rectangular. When the member 1 is used at the adjacent ends of four rails constituting a crossing, said member is provided with four pairs of braces or splice bars 2, said pairs being ar-45 ranged at right angles to receive the ends of rails constituting the crossing. The splice bars 2 of each pair are of a depth corresponding to the distance between the base flanges 3 of said rails and the under side of 50 the heads 4 thereof, and said splice bars are spaced a sufficient distance apart to receive the web portions 5 of said rails.

To form a crossing as shown in Fig. 1 of the drawings, it is necessary that the base flanges

3 of the rails be cut at an angle, as at 6, 55 whereby the base flanges of one rail can adjoin the base flanges 3 arranged at right angles thereto.

To provide clearance for the peripheral flanges of the wheels of a rolling stock, I cut 60 away the edges of the heads 4 of the rails confronting the member 1, as indicated at 7 to allow rolling stock to pass over the rails in either direction.

When my improved connection is used 65 with a rail joint and the confronting ends of the two rails, two pairs of splice bars are dispensed with, as illustrated in Fig. 5 and the member 1 is adapted to provide a continuous tread between the confronting ends of two 70 rails.

It will of course be understood that spikes or suitable fastening means (not shown) are employed for securing the rails upon ties or similar supports, and it is obvious that one 75 rail can not become vertically or laterally displaced with relation to the adjoining rail, when secured to ties.

Having now described my invention what I claim as new, is:—

1. The combination with rails having their base flanges cut at an angle and their heads cut away to provide clearance for wheel flanges, of a rectangular member interposed between the confronting ends of said rails 85 and corresponding in height to said rails, pairs of splice bars carried by said member and adapted to embrace the web portions of said rails, said splice bars corresponding in depth to the distance between said base 90 flanges, and the under sides of the heads of said rails, substantially as described.

2. The combination with rails, of a member interposed between said rails and corresponding in height to said rails, pairs of splice 95 bars carried by said member for embracing the web portions of said rails between the base flanges thereof and the heads of said rails, the said member being of the same width and length throughout with its side 100 edges flush throughout their length with the outer faces of the splice bars.

In testimony whereof I affix my signature in the presence of two witnesses.

WILLIAM D. SMITH.

Witnesses:

JENNIE MICKEY, D. W. SMITH.