

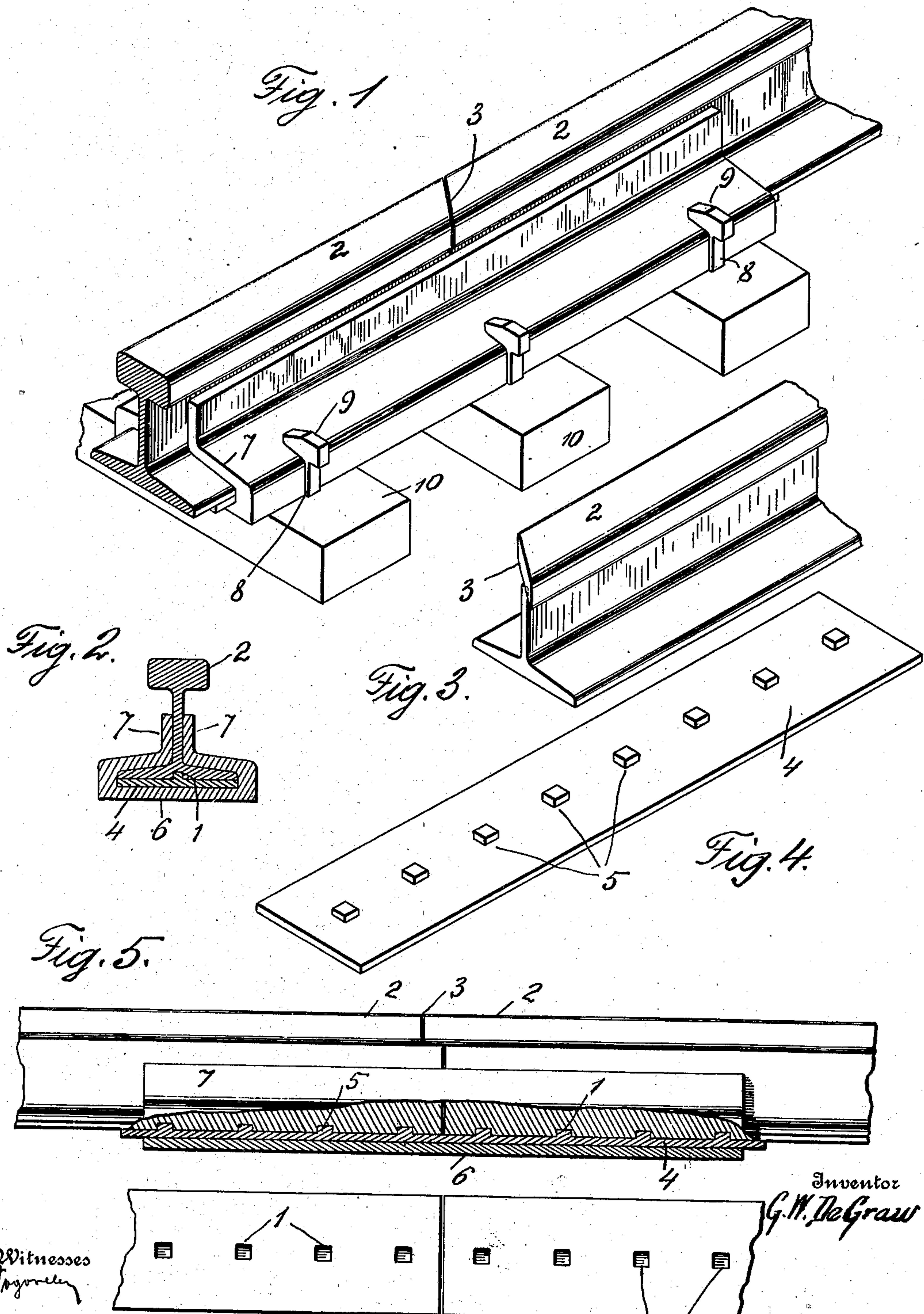
No. 894,611.

PATENTED JULY 28, 1908.

G. W. DE GRAW.

RAIL JOINT.

APPLICATION FILED MAR. 2, 1908.



Witnesses
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Fig. 6

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UNITED STATES PATENT OFFICE.

GEORGE W. DE GRAW, OF NEW BRIGHTON, PENNSYLVANIA.

RAIL-JOINT.

No. 894,611.

Specification of Letters Patent.

Patented July 28, 1908.

Application filed March 2, 1908. Serial No. 418,750.

To all whom it may concern:

Be it known that I, GEORGE W. DE GRAW, a citizen of the United States of America, residing at New Brighton, in the county of Beaver and State of Pennsylvania, have invented certain new and useful Improvements in Rail-Joints, of which the following is a specification, reference being had therein to the accompanying drawing.

10 This invention relates to a rail joint, and the primary object of my invention is a provision of positive and reliable means for preventing the longitudinal displacement of the confronting ends of two rails.

15 Another object of my invention is to provide simple and effective means for connecting the confronting ends of two rails, without the use of nuts and bolts.

20 A further object of my invention is to provide a strong and durable rail joint that can be easily installed without the use of skilled labor, the construction of the joint being such as to firmly brace rails without injuring the same.

25 A still further object of my invention is to eliminate the jarring and bumping of rolling stock when passing over a joint, by providing practically a continuous tread for the rolling stock.

30 With the above and other objects in view, the invention consists in the novel construction, combination and arrangement of parts to be presently described and then specifically pointed out in the appended claims.

35 In the drawings, Figure 1 is a perspective view of a rail joint constructed in accordance with my invention. Fig. 2 is a cross sectional view of the same. Fig. 3 is a perspective view of a rail having its head sheared in accordance with my invention. Fig. 4 is a perspective view of a connecting plate. Fig. 5 is an elevation of my rail joint partly broken away and partly in section, and Fig. 40 6 is a bottom plan of two rails constructed in accordance with my invention.

To put my invention into practice, I provide the rails to be connected together with a plurality of longitudinally alining recesses 1,

said recesses being formed in the lower faces of the bases of the adjoining rails. 50

The heads 2 of the rails are cut away and sheared at an angle, as at 3, whereby a wheel when passing over the connection will bear partly upon the end of each rail.

A connecting plate 4 is used in connection 55 with the rails, said plate having a plurality of longitudinal alining lugs or blocks 5, these lugs or blocks being located upon the face of the plate 4, to fit into recesses 1, and prevent longitudinal displacement of one rail with relation to the other. 60

Embracing the rails and the connecting plate 4 is a chair, said chair comprising a base plate 6 and integral splice bars 7, the edges of which are notched as at 8 to receive spikes 9, 65 employed for holding the chair upon ties or sleepers 10.

It is apparent from the foregoing description that it will be impossible for the rails to become displaced within the chair, and when 70 said chair is properly secured to its supports, accidents due to imperfect rail and joint construction are impossible.

Having now described my invention what I claim as new, is;— 75

In a rail joint, the combination with rails having the base-flanges thereof provided in the under face with a plurality of recesses arranged in a straight line longitudinally of the rail and disposed directly beneath the rail 80 web, a rail connecting plate of the same width as the base flange of the rails and provided on its upper face with spaced lugs to be received in the recesses in the base-flanges of said rails, and a rail chair in which said connecting-plate and the rail-ends are received, 85 said rail chair comprising a base-plate and integral splice bars, substantially as described.

In testimony whereof I affix my signature 90 in the presence of two witnesses.

GEORGE W. DE GRAW.

Witnesses:

SAML. J. WURZEL,
HARRY SAGER.