L. DEER & F. SMITH.

RAIL JOINT.

APPLICATION FILED MAY 28, 1909.

943,394. Patented Dec. 14, 1909.

Fig. 1.

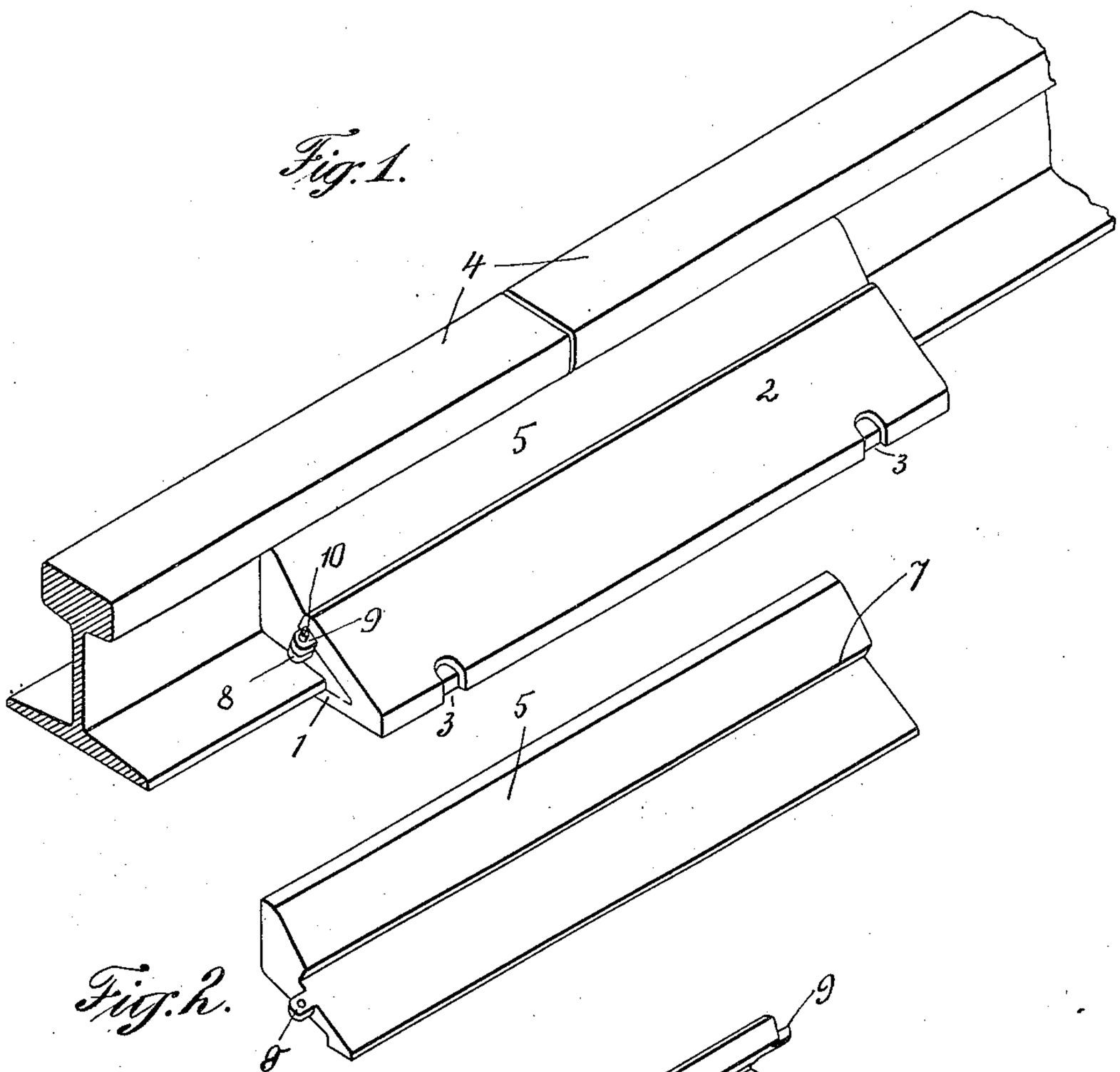


Fig. 2.

Fig. 3.

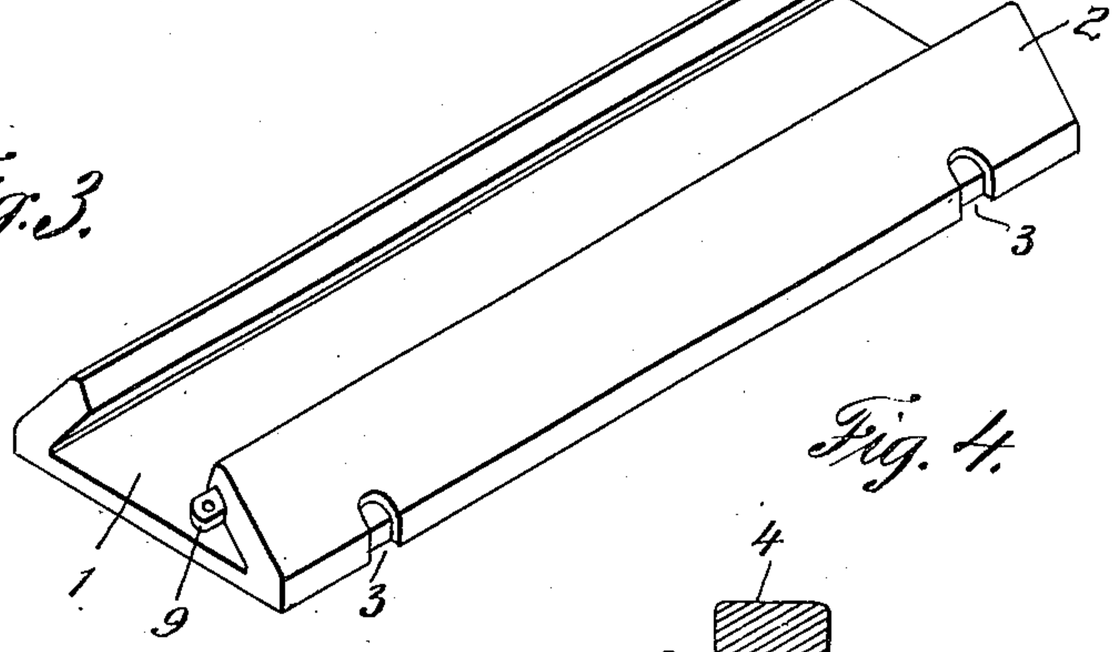
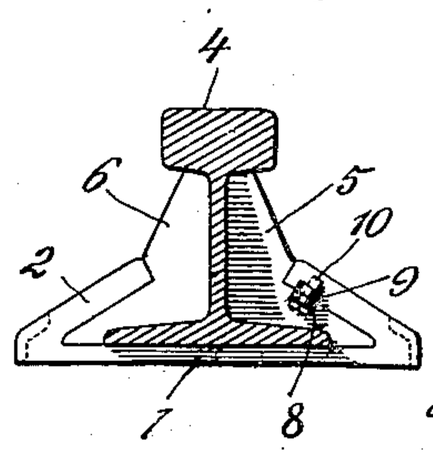


Fig. 4.



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UNITED STATES PATENT OFFICE.

LAFAYETTE DEER AND FRENCH SMITH, OF ETNA, PENNSYLVANIA.

RAIL-JOINT.

943,394. Specification of Letters Patent. Patented Dec. 14, 1909.

Application filed May 28, 1909. Serial No. 498,992.

To all whom it may concern:

Be it known that we, LAFAYETTE DEER and FRENCH SMITH, citizens of the United States of America, residing at Etna, in the county of Allegheny 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.

This invention relates to a rail joint, and the objects of our invention are, first, to provide a simple and inexpensive rail joint; second, to obviate the necessity of using nuts and bolts for connecting the confronting ends of two rails; third, to provide a rail joint that will be strong, durable and highly efficient for holding two rails and preventing lateral and vertical displacement of the same.

We attain the above objects by a structure that will be presently described and then specifically pointed out in the appended claim.

Referring to the drawings forming a part of this specification, Figure 1 is a perspective view of my rail joint. Fig. 2 is a perspective view of one of the splice bars thereof. Fig 3 is a similar view of the chair forming part of the joint, and Fig. 4 is an end view of the joint.

To put our invention into practice, we provide a chair comprising a base plate 1 having upwardly extended angular flanges 2, the lower side edges of said flanges and the plate 1 being notched as at 3, whereby said chair can be secured to ties or sleepers (not shown). Rails 4 are adapted to rest upon the plate 1, and to retain said rails thereon, we use splice bars 5 and 6. These splice bars fit snugly over the base flanges of the rails, brace the webs and heads of said rails, and engage the flanges 2. The splice bars 5 and 6 are provided with longitudinal shoulders 7 to bear against the upper edges of the flanges 2, whereby a rigid structure is provided and further lateral and vertical displacement of the rails are prevented. To retain the splice bars 5 and 6 in position, the bar 5 is provided at one end with a pierced lug 8 and the bar 6 with a similar lug. These lugs are adapted to register with pierced lugs 9 carried by opposing ends of the flanges 2. A cotter pin, bolt and nut, rivet or seal 10 can be used for connecting the lugs 8 and 9.

It is thought that our invention will be fully understood from the foregoing description, and we reserve the right to make such structural changes as are permissible by the appended claim.

Having now described our invention what we claim as new, is:—

In a rail joint, a chair for supporting the rails and embodying a base plate and upwardly and inwardly extending inclined flanges formed integral with the longitudinal edges of the plate, said base plate of greater width than the width of a base of a rail and positioned to project from each longitudinal edge of the base of the rail, the splice bars engaging the webs and bases of the rails and provided with a shouldered extension engaging the longitudinal edges of the rail bases and the portions of the base plate which project beyond the edges of the rail bases, each of said splice bars formed on its periphery with a longitudinally extending shoulder against which abuts the free edges of said flanges, said flanges inclosing the lower portion of the splice bars, an apertured lug projecting from each of said flanges and arranged at a point in proximity to the free edge of its respective flange, said lugs oppositely disposed with respect to each other, an apertured lug formed integral with each of the splice bars and arranged in proximity to the shoulder of its respective splice bar, the lugs of the bars being oppositely disposed with respect to each other and arranged below the lugs of the flanges, and means extending through the lugs for connecting the splice bars to the flanges.

In testimony whereof we affix our signatures in the presence of two witnesses.

LAFAYETTE DEER.
FRENCH SMITH.

Witnesses:
MAX H. SROLOVITZ,
A. J. TRIGG.