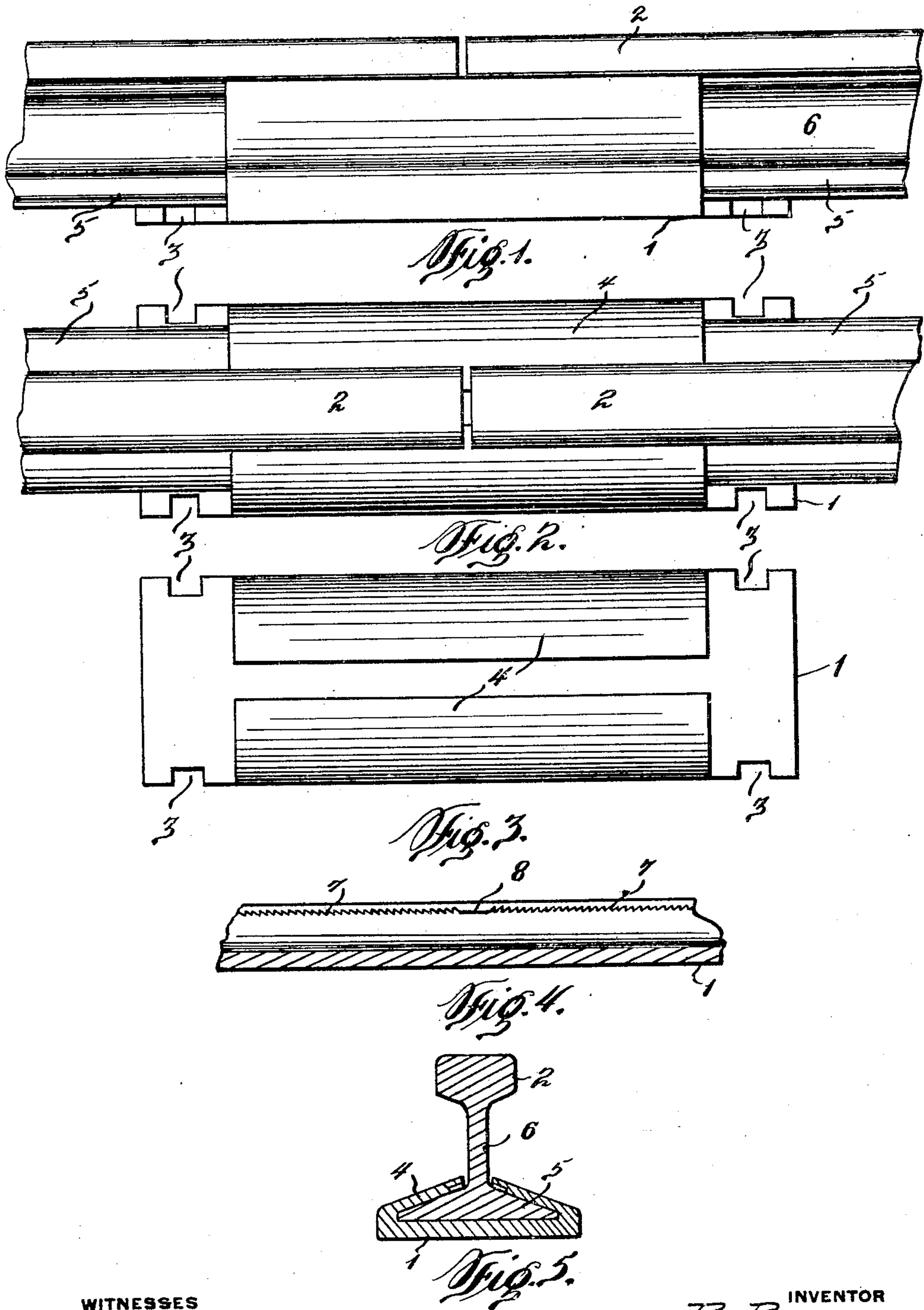


R. BURGUNDER.  
RAIL JOINT.

APPLICATION FILED APR. 21, 1910.

962,813.

Patented June 28, 1910.



WITNESSES

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# UNITED STATES PATENT OFFICE.

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## RAIL-JOINT.

962,813.

Specification of Letters Patent.

Patented June 28, 1910.

Application filed April 21, 1910. Serial No. 556,721.

*To all whom it may concern:*

Be it known that I, RICHARD BURGUNDER, a citizen of the United States of America, residing at McKees Rocks, 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.

10 This invention relates to rail joints and fasteners, and the objects of my invention are, first, to provide positive and reliable means for connecting the confronting ends of two rails; second, to obviate the necessity of using bolts and nuts for securing splice bars to the confronting ends of rails; third, to provide a novel rail chair for supporting the confronting ends of rails and prevent lateral and vertical displacement; fourth, to provide a rail fastener that will allow for the expansion and contraction of the rails, and fifth, to provide a rail joint that is simple in construction, durable, easy to install, and highly efficient for the purposes 25 for which it is intended.

I attain the above objects by a mechanical construction that will be hereinafter considered in detail and then claimed, and reference will now be had to the drawing forming a part of this specification, wherein—

Figure 1 is a side elevation of the rail joint, Fig. 2 is a plan of the same, Fig. 3 is a similar view of the rail chair, Fig. 4 is a longitudinal sectional view of a portion of the same, and Fig. 5 is a cross sectional view of the same, showing a rail positioned thereon.

In the accompanying drawing the reference numeral 1 denotes a plate rectangular in plan and adapted to be supported by one or more ties, said plate being of a greater width than the base flanges of the rail, whereby one or more rails can be supported 45 upon said plate. The plate has the longitudinal edges thereof, adjacent to the ends of said plate provided with spike notches 3 adapted to receive spikes (not shown) or other fastening means employed for securing the plate upon one or more ties. The longitudinal edges of the plate 1 are provided with inwardly projecting and overhanging flanges 4, these flanges being disposed at an acute angle to the upper surface of the plate

1, whereby they will overhang and engage 55 the upper surfaces of the base flanges 5 of said rails. The inner confronting edges of the flanges 4 extend in proximity to the webs 6 of said rails, and these edges of the flanges upon their under side are serrated or toothed, 60 as at 7, preferably toothed with the teeth at one end of each flange projecting toward the center of the flange and in an opposite direction to the teeth at the opposite end of the flange, as best shown in Fig. 4 of the drawing. The serrations or teeth extend from 65 the ends of the flanges inwardly to the center of the flanges, where a small portion of the flanges is left smooth or blank, as at 8, owing to the fact that when two rails are mounted 70 upon the plate a small space is left between the confronting ends to compensate for the expansion and contraction of the rails, and it is not necessary to provide teeth at this space. With two rails mounted upon the 75 plate, the teeth 7 positively hold the rails and prevent a separate and outward movement of said rails, this being accomplished by the inclination or pitch of the teeth.

The inwardly projecting flanges 4 can be 80 carried upwardly to embrace the sides of the webs 6 and assist in supporting the heads of the rails, as shown in Fig. 1, the plate 1 and the flanges 4 in this instance forming a chair that embraces the rails and firmly supports 85 the same. In either instance, it is necessary that the ends of the rails be moved into the ends of the chair until they are correctly positioned, and then the spikes or fastening means can be placed in position to not only 90 hold the plate 1, but to engage the base flanges of the rails and assist in retaining the same in position.

The rail joint or chair is made of strong and durable metal and can be made of various sizes to accommodate various sizes and weights of rails. 95

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

In a rail joint, the combination with rails 100 adapted to have their ends in proximity to each other, of a plate rectangular in plan and adapted to support the confronting ends of said rails, said plate having the longitudinal edges thereof adjacent to the ends provided with spike notches, whereby said plate 105 can be secured to ties, and inwardly projecting flanges carried by the longitudinal

edges of said plate and disposed at an acute  
angle to the surface of said plate, said  
flanges being adapted to overhang and en-  
gage the base flanges of said rails, and said  
5 flanges having the inner under edges thereof  
provided with serrations or teeth, with the  
teeth at the ends of said flanges projecting  
inwardly and providing a smooth or blank  
portion intermediate the ends of said flanges,

substantially as, and for the purpose herein 10  
described.

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

RICHARD BURGUNDER.

Witnesses:

MAX H. SROLOVITZ,  
K. H. BUTLER.