

J. E. DUCKETT.
RAIL JOINT.
APPLICATION FILED APR. 5, 1910.

982,131.

Patented Jan. 17, 1911.

Fig 1

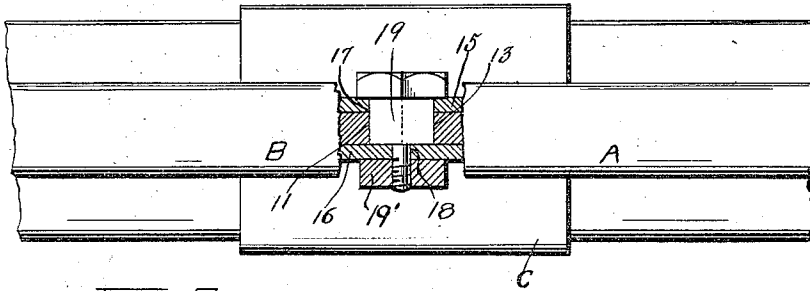


Fig 2

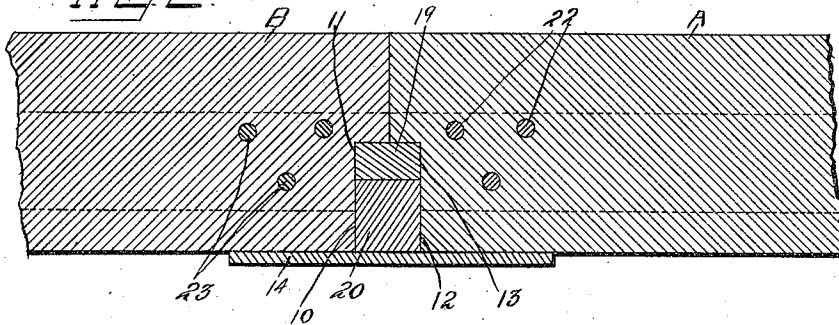


Fig 4

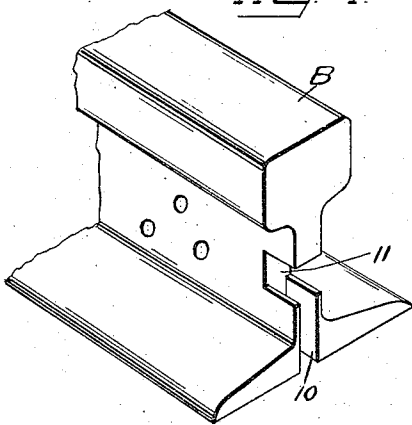
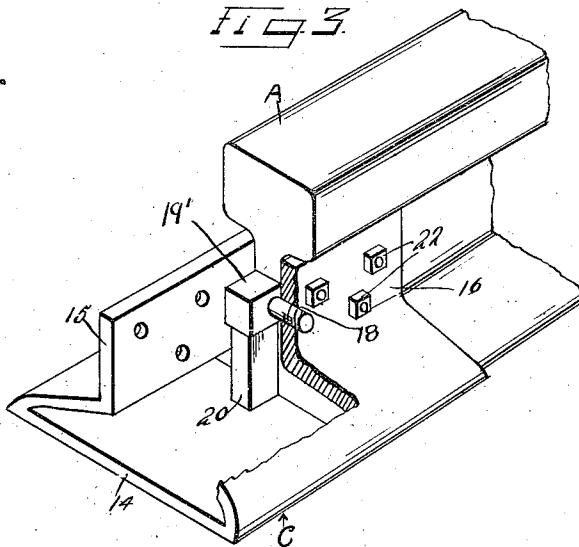


Fig 3



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JERRY E. DUCKETT, OF BEAR, ARKANSAS.

RAIL-JOINT.

982,131.

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To all whom it may concern:

Be it known that I, JERRY E. DUCKETT, a citizen of the United States, residing at Bear, in the county of Montgomery, State of Arkansas, have invented certain new and useful Improvements in Rail-Joints; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to rail joints.

The object of the invention resides in providing a rail joint which embodies an exceedingly simple construction adapted to efficiently secure the ends of two adjacent rail sections against relative movement.

With the above and other objects in view the invention consists in the details of construction and in the arrangement and combination of parts to be hereinafter more fully described and particularly pointed out in the appended claim.

In describing the invention in detail reference will be had to the accompanying drawings wherein like characters of reference denote corresponding parts in the several views and in which,

Figure 1 is a plan view of a rail joint constructed in accordance with the invention with portions of the adjacent ends of the rail sections associated therewith broken away; Fig. 2, a vertical longitudinal section of the joint; Fig. 3, a detail fragmental perspective view of the tie plate and one of the rail sections, a portion of the former being broken away to show the locking bolt and block; and, Fig. 4, a fragmental perspective view of the other rail section of the joint.

Referring to the drawings, A and B represent respectively two adjacent rail sections which have their ends provided with corresponding opposite longitudinal and transverse recesses 10 and 11, and 12 and 13 respectively; the longitudinal recesses 10 and 12 and the transverse recesses 11 and 13 mating when the rail sections A and B are disposed end to end. A tie plate C, formed of a single sheet of metal is bent so as to produce a base portion 14 and corresponding side portions 15 and 16 whereby said plate will inclose the chair and web of said rail sections when the latter are disposed

within the tie plate. The side portion 15 of the tie plate is provided with a squared aperture 17 having its cross section corresponding with the cross section of the combined transverse recesses 11 and 13 and adapted to register with said combined recesses when the rail sections A and B are disposed within the tie plate. The side portion 16 of the tie plate is provided with a circular aperture 18 the center of which is disposed in the longitudinal axis of the combined recesses 11 and 13 when the rail sections A and B are mounted in the plate C. A bolt 19 having the inner end of its shank of square formation and a cross section corresponding to the cross section of the combined recesses 11 and 13 and the aperture 17, is inserted through said aperture and the combined recesses, the outer end of the shank of said bolt being of reduced cylindrical formation for passage through the aperture 18 and externally threaded to receive the nut 19'. A block 20 is disposed in the mating longitudinal recesses 10 and 12 and serve to hold the rail sections A and B against relative transverse movement independent of the tie plate C. It will of course be understood that the squared portion of the shank of the bolt 19 disposed in the mating transverse recesses 11 and 13 serves to hold the rail sections A and B against relative vertical movement. The tie plate C is directly secured to the rail sections A and B by bolts 22 and 23 respectively, whereby said sections are held against possible longitudinal displacement from the tie plate.

What is claimed is:

In a rail joint, the combination of a pair of rail sections having their adjacent ends provided with corresponding opposed longitudinal and transverse recesses, the latter having angular cross sections, a tie plate formed of a single piece of metal bent to form a base and side members inclosing the chair and web of said rail sections, said tie plate having its sides provided with apertures in alinement with the combined transverse recesses of the rail sections, one of said apertures corresponding in cross section to the cross section of said combined transverse recesses, a bolt extending through the aperture in the side of the tie plate and the combined transverse recesses of the rail sec-

tion, said bolt having a portion of its shank
 corresponding in cross section to the cross
 section of the combined transverse recesses
 and one of the apertures of the tie plate, a
 5 block disposed in the vertical recesses of
 said rail section and means securing the tie
 plate directly to the rail section.

In testimony whereof, I affix my signa-
 ture, in presence of two witnesses.

JERRY E. DUCKETT.

Witnesses:
 J. G. SUTTON,
 A. J. GILLHAM.