

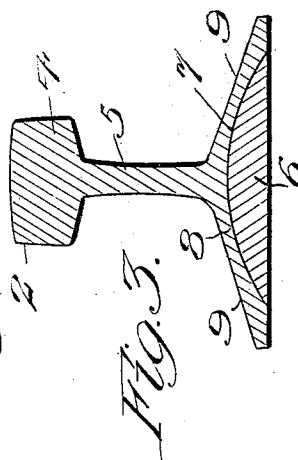
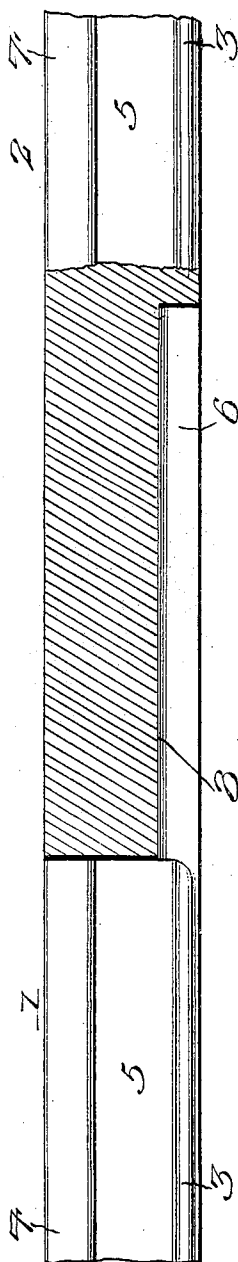
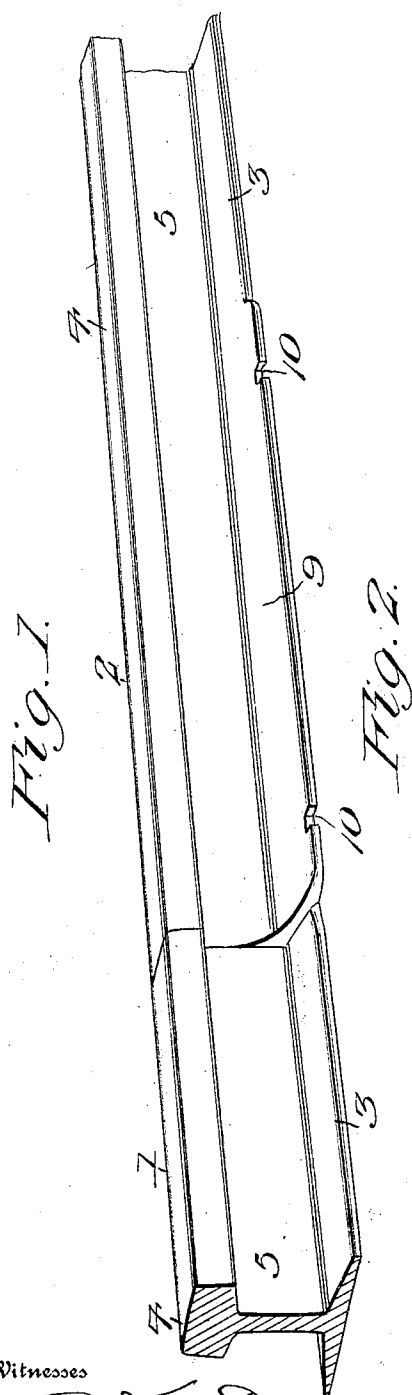
No. 813,861.

PATENTED FEB. 27, 1906.

C. E. CHRISTIAN.

RAIL JOINT.

APPLICATION FILED MAY 26, 1905.



Witnesses

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# UNITED STATES PATENT OFFICE.

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## RAIL-JOINT.

No. 813,861.

Specification of Letters Patent.

Patented Feb. 27, 1906.

Application filed May 26, 1905. Serial No. 262,386.

*To all whom it may concern:*

Be it known that I, CHARLES E. CHRISTIAN, a citizen of the United States, residing at Thurmond, in the county of Fayette and State of West Virginia, have invented new and useful Improvements in Rail-Joints, of which the following is a specification.

This invention relates to certain new and useful improvements in rail-joints, the object of the invention being to provide a simple and reliable construction of joint which will securely hold the abutting ends of rails connected without the use of bolts or like fastenings.

The preferred embodiment of the invention is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the meeting ends of rails connected by the improved joint. Fig. 2 is a side elevation of the same, one of the rail ends being partially broken away to show the construction of the joint; and Fig. 3 is a cross-section through the joined rails.

Referring now more particularly to the drawings, the numerals 1 and 2 represent adjoining rails, which in general are of ordinary construction, each rail comprising a base 3, a head 4, and a connecting-web 5. The rail 1 is provided at its abutting end with a basal prolongation in the form of an integral tongue or splice-bar 6, which is formed with a transversely-curved or convex upper face 7. This tongue or bar is adapted to fit within a cavity or recess 8, formed in the under side of the base portion of the abutting end of the rail 2, said cavity or recess being coextensive in length with the tongue and shaped to conform to the contour thereof.

The tongue or bar 6 is coextensive in width with the base of the rail 1 and also with the base of the body of the rail 2 to afford a firm seat bearing on the tie or sleeper; but as the cavity or recess must have a corresponding width the rail 2 is widened and increased in thickness at its base by the provision of attaching-flanges 9, which merge into the upper

portion of the web 5 and are of increased depth or thickness with respect to the flanges of the base 3, to which they are joined, to reinforce the corresponding end of rail 2 and overlie or overlap the side edges of the tongue or bar 6. By this construction the rail 2 is made of the requisite strength notwithstanding the formation of the recess 8.

The flanges 9 are formed in their side edges with notches 10 for the passage of ordinary spikes to secure the rail 2 to a tie or sleeper. These spikes will hold the rail 2 from vertical or lateral movement, and as the tongue 6 is fitted tightly in the recess 8 said tongue will also hold the rail 1 from vertical or lateral movement. The weight of the rails will also be sufficient to hold the rail 1 from outward endwise movement except to the extent required for expansion and contraction; but, if desired, the parts of the joint may be provided with dowel connections to limit the outward movement of the tongue 6.

The construction of the joint will, it is thought, be readily understood from the foregoing description and its advantages appreciated.

Having thus particularly described the invention, what I claim as new is—

A rail-joint comprising two members one of said members having an integral basal splice-tongue coextensive in width with the base thereof and formed with a transversely-convexed upper face, and the other member a basal recess to receive said tongue, said recess being substantially coextensive in length and width with said tongue and formed with a curved wall to rest upon the curved face of the tongue, the latter-named member also being provided with thickened attaching-flanges overlying the sides of the tongue and formed with spike-notches.

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

CHARLEY E. CHRISTIAN.

Witnesses:

P. H. MALONE,  
WM. PYLES.