

C. A. & W. R. CHAMBERS.
RAIL JOINT.
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1,059,831.

Patented Apr. 22, 1913.

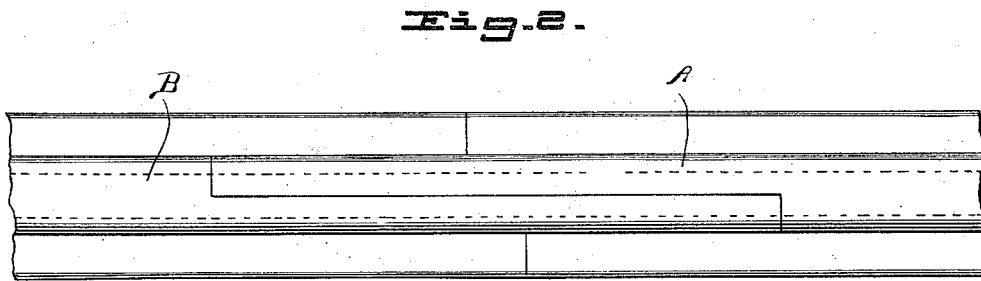
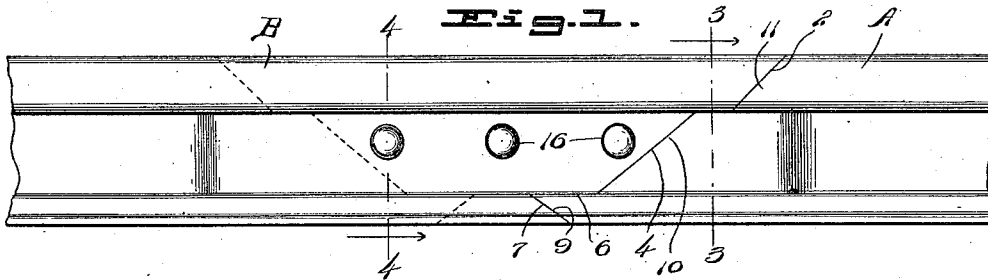


Fig. 3.

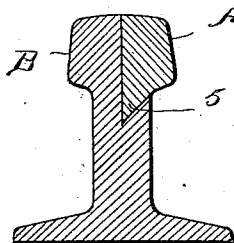
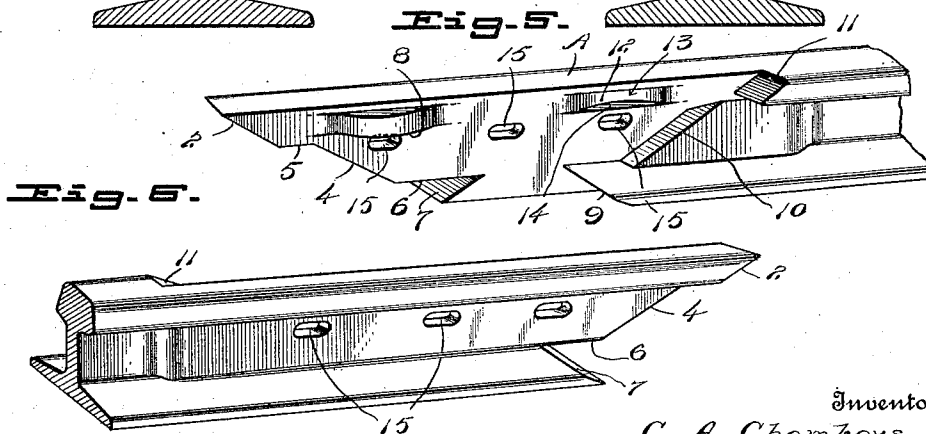
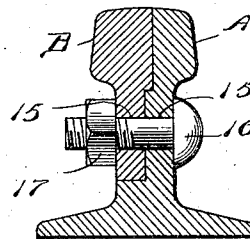


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

CHARLES A. CHAMBERS AND WALTER R. CHAMBERS, OF PEASE, MISSOURI.

RAIL-JOINT.

1,059,831.

Specification of Letters Patent.

Patented Apr. 22, 1913.

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To all whom it may concern:

Be it known that we, CHARLES A. CHAMBERS and WALTER R. CHAMBERS, citizens of the United States, residing at Pease, in the county of Laclede and State of Missouri, have invented new and useful Improvements in Rail-Joints, of which the following is a specification.

The present invention relates to improvements in joints for rail ends, and resides in the construction, combination, and operative arrangement of parts hereinafter fully described and claimed.

In the drawing, Figure 1 is a side elevation of a rail joint constructed in accordance with the present invention. Fig. 2 is a top plan view of the same. Fig. 3 is a sectional view upon the line 3—3 of Fig. 1. Fig. 4 is a similar sectional view upon the line 4—4 of Fig. 1. Fig. 5 is a perspective view of one of the rail ends. Fig. 6 is a similar view of the co-acting rail end.

In carrying out our invention it is our purpose to so shape and arrange the meeting ends of adjacent rails that the same may be readily slid into interlocking engagement, one with the other, and wherein the employment of fish plates, rail chairs and similar devices may be dispensed with.

It is also our endeavor to construct a rail joint embodying a pair of rail ends which so interlock as to prevent either a lateral or a downward sagging movement of the rails at the joint incident to the rolling stock passing thereover.

Referring now to the drawings in detail, A and B designate a pair of ordinary railway rails, each of which has its web enlarged upon both of its faces adjacent its end. The enlarged webs, as well as the heads and base flanges of each of the rails are centrally cut away at their ends, the heads terminating in inwardly inclined faces 2, and the webs terminating at an inclination, substantially similar to the inclined portions 2, as designated by the numeral 4. The portions of the under face of the rail between the terminal of the web and the lower portion of its inclined face 2 is formed with a down turned angular edge 5. The lower end of the projecting portion of the web terminates in a flat horizontally arranged rearwardly extending base portion 6 which is disposed in a plane with the upper or face portion of the rail base. The extending portion of the rail base has its

extremity inclined outwardly as at 7, so as to partly underlie the lower wall or edge 6 of the web extension. The reduced head portion of each of the rails adjacent the inclined end 4 of the web extension is bulged outwardly toward the inner face of the said web extension, to provide a horizontally arranged shoulder 8. The base proper terminates a suitable distance from the web extension, and the said terminal embodies a rearwardly inclined wall or face 9, which is beveled in an opposite direction from the end 7 of the web extension, and which, of course, is arranged upon the opposite face of the rail to that provided with the extension. The enlarged portion of the web, upon this side of the rail has its end inclined or beveled upwardly from its connection with the base flange to a point which is arranged in a plane with the under face of the head, as designated by the numeral 10. The head proper has its end beveled downwardly as designated by the numeral 11, and the upper longitudinal edge of the head, beyond the said portion 11 of the head is beveled inwardly to provide a pocket 12. The end of the second rail, B, is formed substantially similar to that just described.

In assembling the rail ends, the face 2 of one of the reduced head extensions engages the beveled portion 11 of the co-acting rail, while the lugs 5 are received within the pockets 12 of both of the rails; the inclined end 4 of one of the rail ends abuts with the beveled portion 10 of the co-acting rail end, while the oppositely beveled portions 7 and 9 of the co-acting rails are brought into interlocking engagement with each other. The reduced extensions of both of the rails have their webs provided with registering openings 15 through which pass headed bolts 16 that are provided with securing nuts 17.

From the above description, taken in connection with the accompanying drawings, the method of assembling the rail ends, as well as the advantages of the device, will, it is thought, be perfectly apparent to those skilled in the art to which such inventions appertain without further detailed description.

Having thus described the invention, what we claim is:—

In a rail joint, two rails having co-acting ends, each provided with an extension arranged laterally of the rail, each of said

extensions having the terminal of its head portion beveled inwardly, the terminal of its web portion also beveled inwardly and the terminal of its base portion beveled outwardly, the inner wall of the lateral extension of one of the rail ends being provided with spaced horizontally disposed shoulders below its tread surface, the inner face of the co-acting rail extension being provided with pockets to receive the said shoulders when the rails are assembled, the heads of the rails at their juncture with the lateral extensions being beveled outwardly, the webs of said rails being also beveled outwardly, and the base flange terminals of said rails being beveled inwardly to provide inclined walls which conform to and engage with the inclined ends of the rail extensions when the rail ends are assembled, and securing means for the rail extensions.

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

CHARLES A. CHAMBERS.
WALTER R. CHAMBERS.

Witnesses:
W. W. WELLMANN,
T. J. HOLT.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."