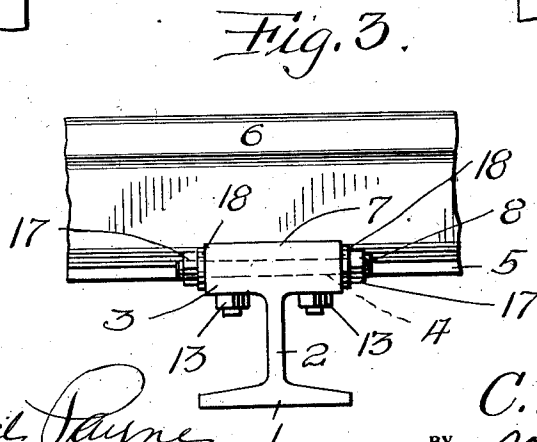
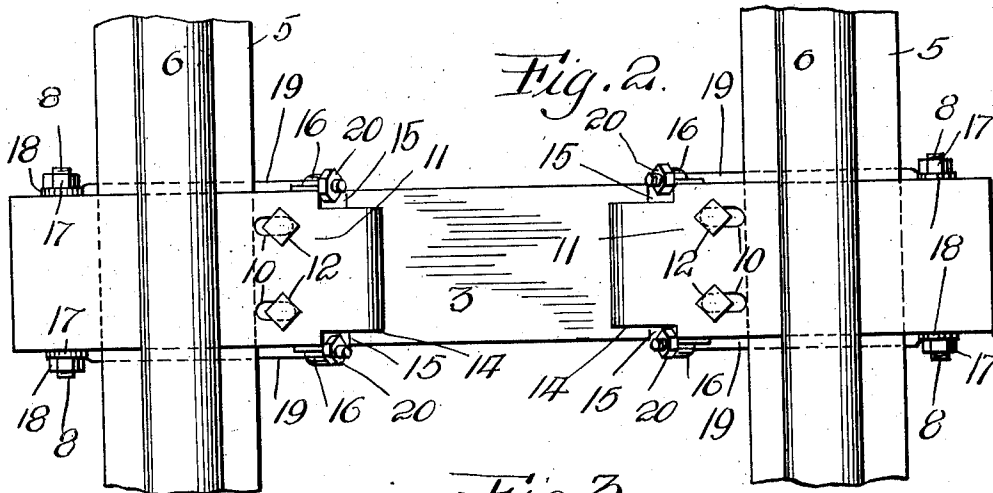
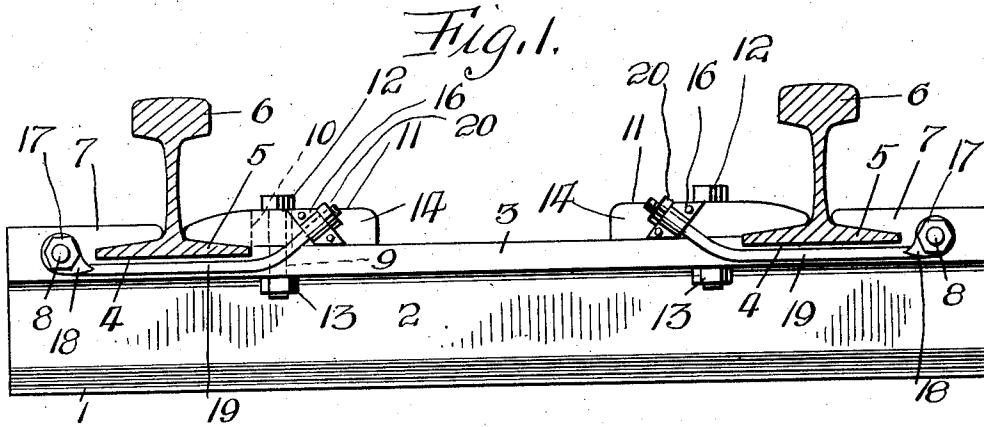


C. MALÝ.
METALLIC TIE AND RAIL FASTENER.
APPLICATION FILED FEB. 23, 1912.

1,025,704.

Patented May 7, 1912.



WITNESSES

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CHARLES MALÝ, OF BRACEVILLE, ILLINOIS.

METALLIC TIE AND RAIL-FASTENER.

1,025,704.

Specification of Letters Patent.

Patented May 7, 1912.

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To all whom it may concern:

Be it known that I, CHARLES MALÝ, a subject of the Emperor of Austria-Hungary, residing at Braceville, in the county of Grundy and State of Illinois, have invented certain new and useful Improvements in Metallic Ties and Rail-Fasteners, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to ties and rail fasteners, and the objects of my invention are to provide a strong and durable metallic tie for supporting rails, and to furnish the tie with rail fasteners that can be repeatedly adjusted to compensate for wear and thereby firmly hold the rails upon the ties.

Further objects of my invention are to provide a metallic tie with rail fasteners that will preserve the alinement of rails and prevent vertical and lateral displacement of the same, and to accomplish the above results by a mechanical construction that is inexpensive to manufacture, easy to install by unskilled labor, and highly efficient for the purposes for which it is intended.

With the above and other objects in view, the invention resides in the novel construction, combination and arrangement of parts to be hereinafter specifically described and then claimed.

Reference will now be had to the drawing, wherein like numerals denote corresponding parts throughout the several views, in which:—

Figure 1 is a side elevation of a tie and rail fastener in accordance with this invention, Fig. 2 is a plan of the same, and Fig. 3 is an end view of the tie.

A tie in accordance with this invention is of the I-beam construction, comprising base flanges 1, a web 2, and a head 3. The head 3 is of a greater thickness than the base flanges 1 of the tie, and said head, adjacent to the ends thereof, is provided with seats 4 for the base flanges 5 of rails 6. The head 3, at the ends thereof, is provided with integral overhanging outer rail fasteners 7 for engaging the outer base flanges 5 of the rails. Extending through the outer rail fasteners 7 are transverse bolts 8. The head 3 of the tie, at the inner edge of the seats 4 are provided with openings 9 and registering with said openings are slots 10 in inner rail fasteners 11. The inner rail fasteners

extend on to the inner base flanges 5 of the rails 6, and extending through the slots 10 and the openings 9 are bolts 12 having the lower ends thereof provided with nuts 13. The inner fasteners 11 have the sides thereof cut away, as at 14 to provide angularly disposed shoulders 15. Secured to the sides of the inner fasteners 11, at the edges of the shoulders 15, are straps 16.

Mounted upon the ends of the bolts 8 and retained thereon by nuts 17 are the eyelet ends 18 of tie rods 19 that extend under the base flanges 5 of the rails 6. The inner ends of the tie rods 19 are bent upwardly to extend through the straps 16 and are provided with nuts 20. After the rails 6 have been correctly positioned, the inner fasteners 14 can be placed in position and adjusted by rotating the nuts 20. After the inner fasteners have been adjusted to firmly clamp the rails, the nuts 13 are tightened to hold the fasteners 11 in their adjusted position. Even though the nuts 13 should become loose, the inner fasteners cannot become accidentally displaced as the tie rods 19 firmly hold said fasteners.

It is to be understood that the mechanical construction above referred to is susceptible to such changes as fall within the scope of the appended claims.

What I claim is:—

1. In a metallic tie and rail fastener, the combination with rails, and a tie of the I-beam construction having the ends thereof provided with seats adapted to support said rails, of integral outer rail fasteners at the ends of said tie and engaging the outer base flanges of said rails, bolts arranged transversely of said outer rail fasteners, inner rail fasteners positioned upon said tie and engaging the inner base flanges of said rails, straps carried by the sides of said inner fasteners, tie rods held by said bolts and extending under said rails and through said straps, nuts screwed upon said tie rods for clamping said inner fasteners in engagement with said rails, and means extending through said inner fasteners and adapted to hold said inner fasteners relatively to the top of said tie after having been adjusted by said tie rods.

2. In a metallic tie and rail fastener, the combination with rails, a tie of the I-beam construction adapted to support said rails, and outer rail fasteners formed integral with the ends of said tie and adapted to en-

gage the outer base flanges of said rails, of
inner rail fasteners arranged upon said tie
and engaging the inner base flanges of said
rails, straps carried by the sides of said
5 inner rail fasteners, tie rods having the
ends thereof secured to the sides of said
outer rail fasteners and extending through
said straps, nuts screwed upon said tie rods
for moving said inner rail fasteners into
10 engagement with said rails, bolts extending

through said inner rail fasteners and the
head of said tie, and nuts screwed upon said
bolts for locking said inner rail fasteners
relatively to said tie.

In testimony whereof I affix my signature 15
in the presence of two witnesses.

CHARLES MALÝ.

Witnesses:

A. C. JEFFREY,
ANTON CINOTTS.

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