

D. HAYES.
METALLIC TIE AND RAIL FASTENER.
APPLICATION FILED AUG. 12, 1912.

1,060,253.

Patented Apr. 29, 1913.

FIG. 1

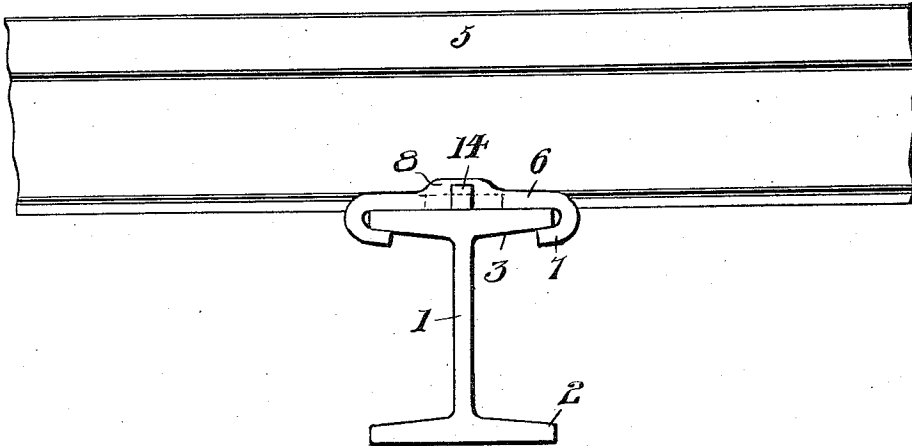


FIG. 2

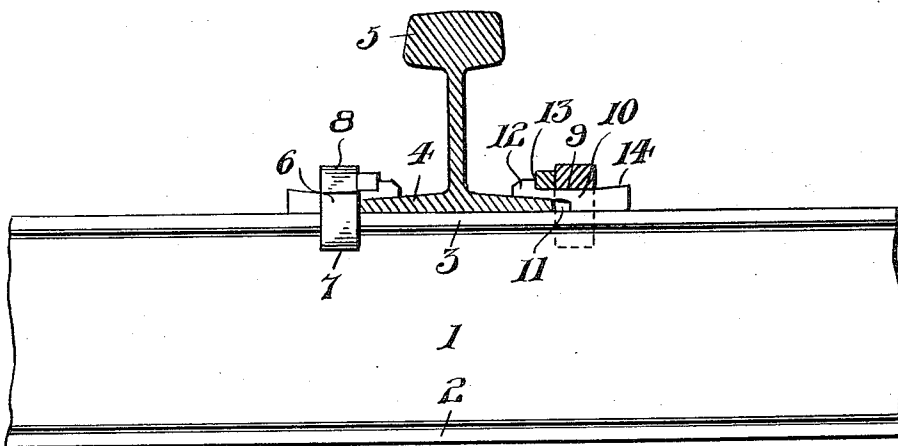
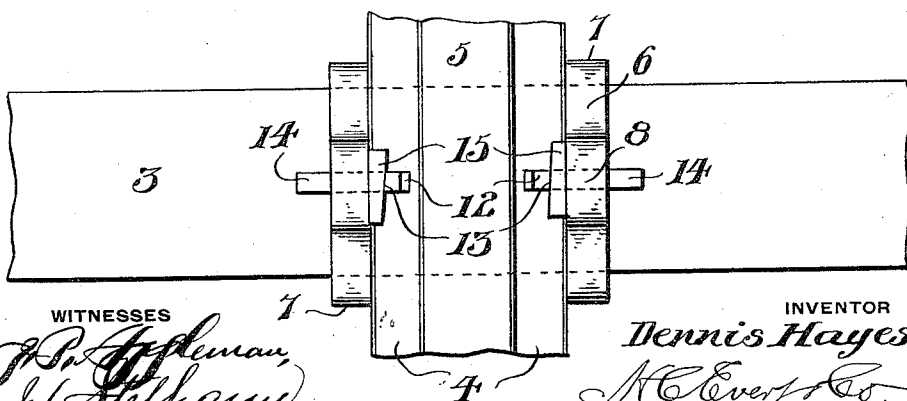


FIG. 3



WITNESSES

J. P. Appleman,
J. L. Stephens

INVENTOR

Dennis Hayes
M. C. Everett & Co.

ATTORNEYS

UNITED STATES PATENT OFFICE.

DENNIS HAYES, OF VANPORT, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO ROBERT P. KEENEY, OF BELLEVUE, PENNSYLVANIA.

METALLIC TIE AND RAIL-FASTENER.

1,060,253.

Specification of Letters Patent.

Patented Apr. 29, 1913.

Application filed August 12, 1912. Serial No. 714,634.

To all whom it may concern:

Be it known that I, DENNIS HAYES, citizen of the United States of America, residing at Vanport, in the county of Beaver and State of Pennsylvania, 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 a metallic tie and rail fastener, and the objects of my invention are to provide a strong and durable tie of the I-beam construction, and to furnish the tie with fasteners for positively retaining a rail upon a tie.

Further objects of my invention are to obviate the necessity of using bolts and nuts for securing the fasteners to a metallic tie, and to provide fasteners that can be repeatedly adjusted to compensate for wear.

Further objects of my invention are to provide simple and inexpensive rail fasteners that can be easily clamped on a rail, and to accomplish the above results by a mechanical construction that is 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:—

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

1 denotes a metallic tie of the I-beam construction having lateral base flanges 2 and lateral top flanges 3 for supporting the base flanges 4 of a rail 5.

6 denotes straps arranged transversely of the top flanges 3 and having hook-shaped ends 7 to engage under the edges of the top flanges 3 of the tie. The straps 6 have central enlarged portions 8 and the underneath side of each enlarged portion has a groove 9 to receive a rail fastener 10 that has the underneath side thereof, cut away, as at 11 whereby the fastener can extend onto the base flange 4 of the rail. The inner end of the fastener has a head 12 presenting a shoulder 13 and the outer end of the fastener

is enlarged to provide a beveled upper surface 14. After a fastener 10 has been placed in position a wedge or key 15 is driven between the shoulder 13 and the inner side of the enlarged portion 8 of the strap 6.

In assembling the rail fasteners, the straps 6 are placed in engagement with the tie by placing the same thereon at one end and shifting the straps into position. The straps are placed against the edges of the base flanges 4, the fasteners 10 placed in position by driving the same inwardly toward the rail, thereby causing the beveled surfaces 14 of the fasteners to clamp the straps in engagement with the top flanges 3. The wedges or keys 15 are then driven into position, thereby locking the fasteners relatively to the straps 6 and further clamping said straps through the medium of the fasteners.

From the foregoing it will be observed that the tie is of that construction that can be rolled and the fasteners can be manufactured at a minimum cost and easily installed without the use of skilled labor.

It is to be understood that my invention is susceptible of such changes as fall within the scope of the appended claims.

What I claim is:—

1. In a rail fastener, the combination with a tie of the I-beam construction and a rail mounted upon said tie, of straps arranged transversely of said tie and having hook-shaped ends engaging under the top flanges of said tie, fasteners extending under said straps onto the base flanges of said rail and having the outer ends thereof beveled to engage said straps and clamp said straps to said tie, heads carried by the inner ends of said fasteners and presenting shoulders, and wedges driven between the shoulders of said heads and said straps.

2. In a rail fastener, the combination with a tie of the I-beam construction, and a rail supported thereby, of straps arranged transversely of said tie at the base flanges of said rail and having hook-shaped ends engaging under the top flanges of said tie, said straps having central enlarged portions, fasteners, extending under the enlarged portions of said straps onto the base flanges of said rails, said fasteners having the outer ends thereof enlarged and beveled to engage said straps

and clamp said straps to said tie, heads carried by the inner ends of said fasteners and presenting shoulders confronting said straps, and wedges driven between the
5 shoulders of said heads and said straps for locking said fasteners in engagement with said rail and said straps.

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

DENNIS HAYES.

Witnesses:

MAX H. SROLOVITZ,
KATHERINE ERRETT.

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