

E. E. & H. F. WIESE.
RAIL SUPPORT.
APPLICATION FILED APR. 14, 1913.

1,064,801.

Patented June 17, 1913.

Fig. 1.

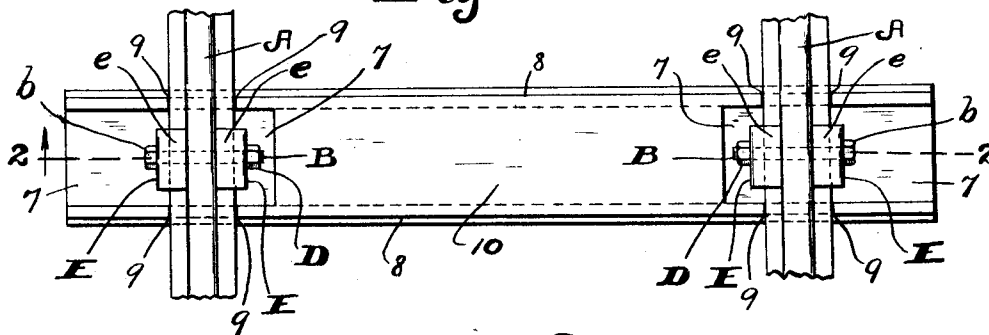


Fig. 2.

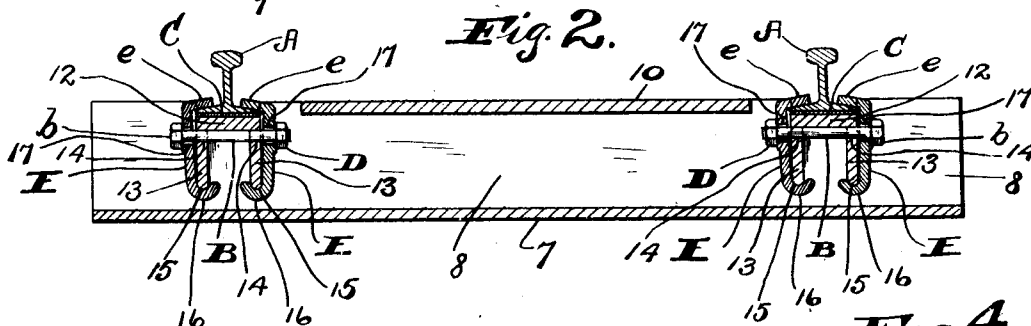


Fig. 4.

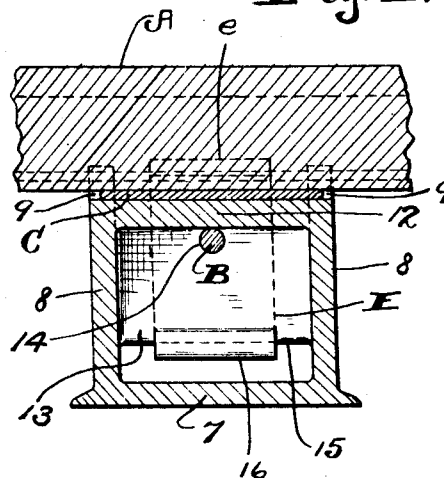
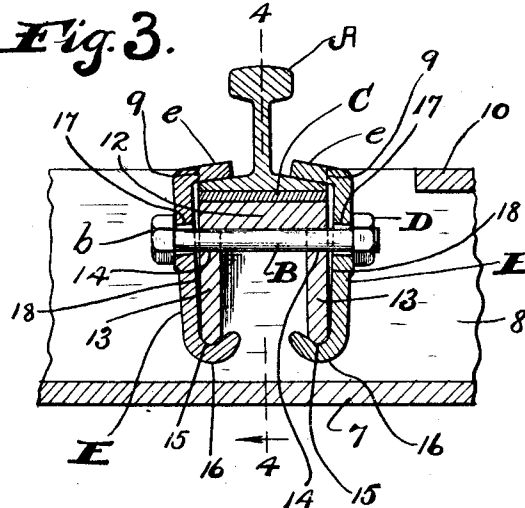


Fig. 3.



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UNITED STATES PATENT OFFICE.

ERNEST E. WIESE AND HENRY F. WIESE, OF BRECKSVILLE, OHIO.

RAIL-SUPPORT.

1,064,801.

Specification of Letters Patent.

Patented June 17, 1913.

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To all whom it may concern:

Be it known that we, ERNEST E. WIESE and HENRY F. WIESE, citizens of the United States of America, residing at Brecksville, in the county of Cuyahoga, State of Ohio, have invented certain new and useful Improvements in Rail-Supports; and we 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 pertains to make and use the same.

This invention relates to improvements in rail-supports, and pertains more especially to a rail-support comprising a metal tie provided with means for clamping rails to the tie.

One object of this invention is to effect the reduction to a minimum of the number of parts required to effectively hold a rail to said tie.

Another object is to render said tie remarkably simple but strong and durable in construction and well adapted for use in connection with clamps employed in securing rails to the tie.

With these objects in view, and to the end of attaining any other advantage hereinafter appearing, this invention consists in certain features of construction, and combinations and arrangement of parts, hereinafter described, pointed out in the claims, and illustrated in the accompanying drawings.

In said drawings, Figure 1 is a top plan of a rail-support embodying our invention, and shows a pair of rails mounted on said rail-support. Fig. 2 is a vertical section on line 2-2, Fig. 1. Fig. 3 shows a portion of Fig. 2 on a larger scale. Fig. 4 is a transverse vertical section on line 4-4, Fig. 3.

Our improved rail-support comprises a metal tie having a substantially horizontally arranged bottom 7 extending from end to end of the tie and two vertically arranged laterally spaced sides 8 and 8 which are connected together at the top thereof by a substantially horizontally arranged web 10 which extends along the central portion of the tie. The bottom 7, sides 8 and web 10 are shown integral.

Our improved tie is provided internally of each end-portion thereof with an inverted-U-shaped brace arranged transversely of the tie and extending between and at a right angle to and shown integral with

the sides 8 of the tie, which brace has its top or central member 12 arranged substantially horizontally and has its side portions or members 13 parallel and arranged substantially vertically and extending into suitable proximity to the bottom 7 of the tie. Said brace is arranged between the web 10 and the adjacent end of the tie and spaced from said end and from said web. Said brace has its top portion or central member 12 arranged somewhat below the top edges of the adjacent portions of the sides 8 of the tie, and said sides are recessed, as at 9, at the ends of said member of the brace to accommodate mounting or seating upon said member of the brace of a rail A which extends transversely of the tie. A layer C of paper or other cushion-forming material, is preferably interposed between the base of the rail and the seat-forming brace-member 12. Each side member 13 of said brace is provided next below the top portion or central member 12 of the brace with a bolt-hole 14 which extends laterally through said side member of the brace and is arranged in line endwise with a corresponding bolt-hole formed in the opposite side member of the brace. A horizontally arranged bolt has its shank B extending through said bolt-holes and beyond the outer sides of the side members 13 of said brace, which bolt is supported from said members of the brace and arranged next below the top portion or central member 12 of said brace. The bolt-shank B also extends through two clamps E which are arranged at the outer side of opposite side members 13 respectively of said brace, and each clamp terminates at its upper end in a clamping jaw or member e which is shown overlapping the top of the adjacent portion of and tightly gripping the base of the rail seated on said brace. The bolt has its head b arranged at the outer side of one of said clamps, and a nut D is screwed onto the shank of the bolt at the outer side of the other of said clamps. Each side member 13 of said brace has its bottom edge rounded, as at 15, in cross-section, and the clamp arranged at the outer side of said side-member terminates at its lower end in a curved member 16 shown embracing and tightly gripping said edge of said side member and having bearing on said edge. Adequate spacing of the web 10 from the inverted-U-shaped braces, as illustrated, affords con-

venient access to the nuts D from the top of the tie. The bolt-receiving hole 17 in each clamp E extends somewhat above and below the bolt extending through said clamp, and the two clamps penetrated by said bolt diverge at their inner sides from the rounded bottom edges of the side members of the brace with which said clamps are connected to the rail-overlapping members of the clamps.

What we claim is:—

1. In a rail-support, the combination, with a hollow metal tie having two sides spaced transversely of the tie, said tie being provided internally of each end-portion thereof with an inverted-U-shaped brace extending between and being rigid with said sides, which brace has its side members extending into proximity to the bottom of the tie, each side member of said brace being provided with a bolt-hole which extends laterally through said side member and is arranged in line endwise with the corresponding bolt-hole in the other side member of the brace, said side members of said brace having the bottom edges thereof rounded in cross-section, of two clamps arranged at the outer side of the opposite side members respectively of said brace, each clamp terminating at its lower end in a member contoured to embrace and grip the rounded bottom edge of the adjacent side member of the brace, said clamp terminating at its upper end in a member arranged to overlap the top of the adjacent portion of the base of the rail to be seated on said brace; a bolt extending through the aforesaid bolt-holes and loosely through the clamps, which bolt has a head arranged at the outer side of one clamp, and a nut screwed onto the bolt at the outer side of the other clamp.

2. In a rail-support, the combination, with a hollow metal tie having two sides spaced transversely of the tie, said tie being provided internally of each end-portion of the tie with an inverted-U-shaped brace extending between and being rigid with the aforesaid sides, which brace has each side member thereof provided with a bolt-hole which extends laterally through said side member and is arranged in line endwise with the corresponding bolt-hole in the other side member of the brace, of two clamps arranged at the outer side of the opposite side members respectively of said brace, each clamp terminating at its lower end in a

curved member arranged to embrace and grip the bottom edge of the adjacent side member of the brace, said clamp terminating at its upper end in a member arranged to overlap the top of the adjacent portion of the base of the rail to be seated on said brace, the clamps diverging at their inner sides from the bottom edges of the side members of the brace to the rail-overlapping members of the clamps; a bolt extending through the aforesaid bolt-holes and loosely through the clamps, which bolt has a head arranged at the outer side of one clamp, and a nut screwed onto the bolt at the outer side of the other clamp, the bolt-holes in the clamps extending somewhat above and below the bolt.

3. The combination, with a hollow metal tie having two sides spaced transversely of the tie, said tie being provided internally of each end-portion of the tie with an inverted-U-shaped brace extending between and being rigid with the aforesaid sides, and the rail resting on said brace, each side member of said brace being provided next below the top portion or central member of the brace with a bolt-hole which extends laterally through said side member and is arranged in line endwise with the corresponding bolt-hole in the other side member of the brace, of two clamps arranged at the outer side of the opposite side members respectively of said brace, each clamp terminating at its lower end in a curved member gripping the bottom edge of the adjacent side member of the brace, and said clamp terminating at its upper end in a member overlapping the top of the adjacent portion of the base of the aforesaid rail and gripping said base, the clamps diverging at their inner sides from the bottom edges of the side members of the brace to the rail-overlapping members of the clamps; a bolt extending through the aforesaid bolt-holes and loosely through the clamps, which bolt has a head arranged at the outer side of one clamp, and a nut screwed onto the bolt at the outer side of the other clamp.

Signed by us at Cleveland, Ohio, this 7th day of April, 1913.

ERNEST E. WIESE.
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Witnesses:

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