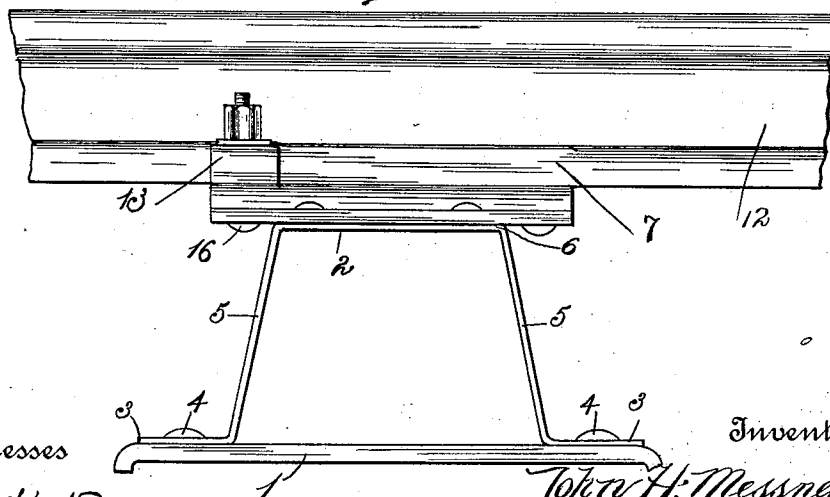
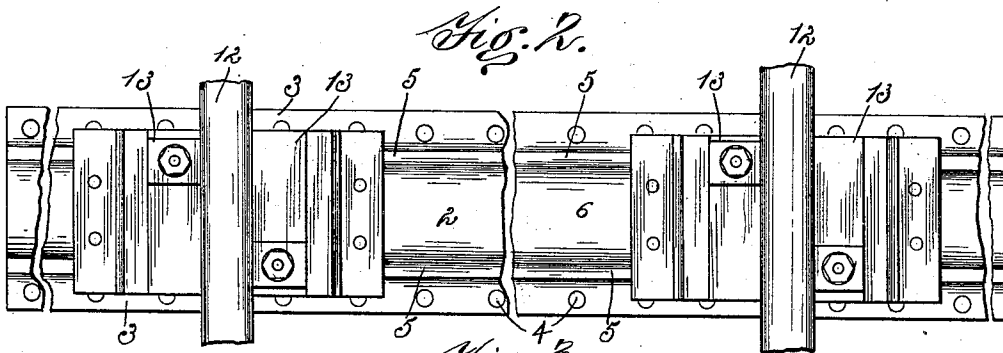
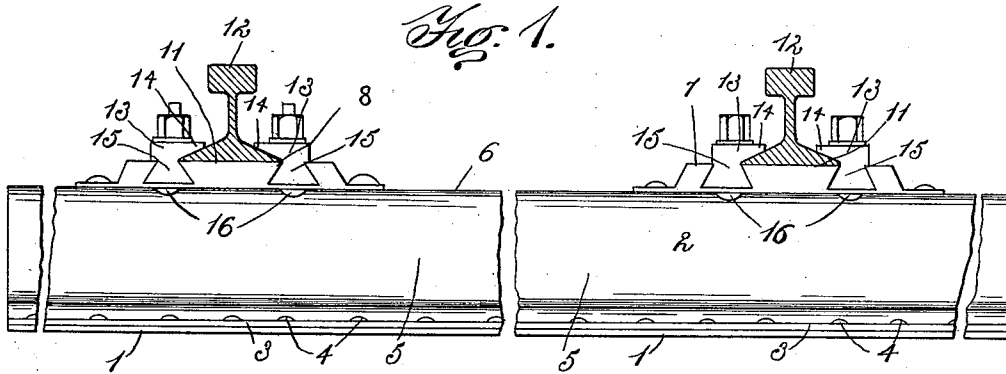


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 COMBINED METALLIC RAILROAD TIE AND RAIL SEAT.
 APPLICATION FILED MAR. 28, 1911.

1,058,012.

Patented Apr. 1, 1913.

2 SHEETS—SHEET 1.



Witnesses

C. E. Stimpert
R. M. Sweetser

Inventor

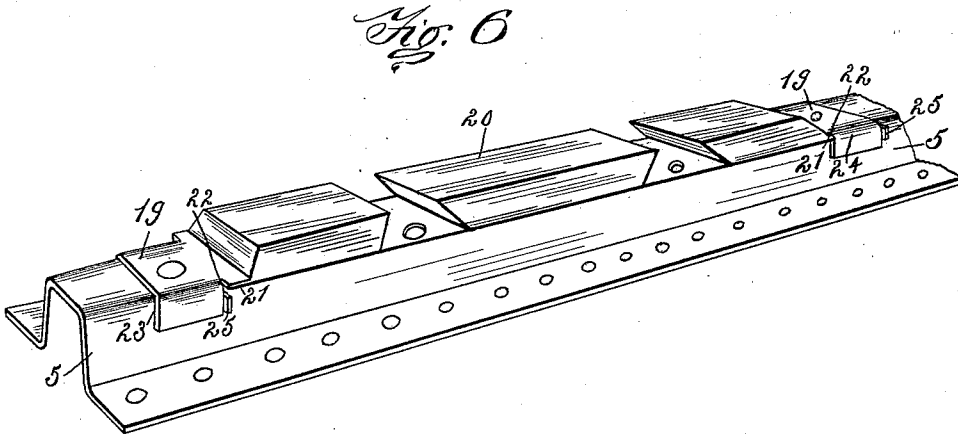
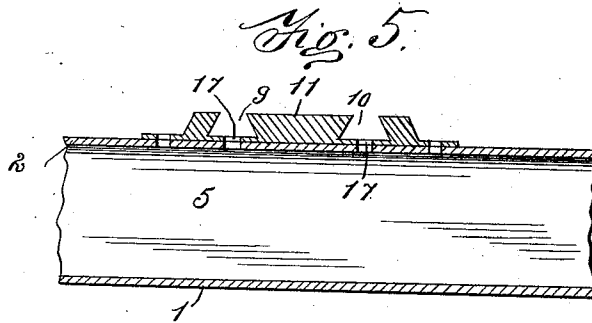
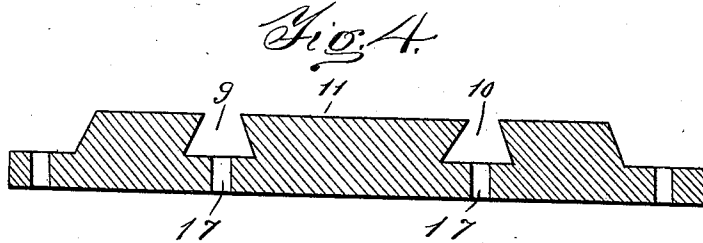
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 Attorney

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2 SHEETS—SHEET 2.



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN HENRY MESSNER, OF PITTSBURGH, PENNSYLVANIA.

COMBINED METALLIC RAILROAD-TIE AND RAIL-SEAT.

1,058,012.

Specification of Letters Patent.

Patented Apr. 1, 1913.

Application filed March 28, 1911. Serial No. 617,337.

To all whom it may concern:

Be it known that I, JOHN HENRY MESSNER, citizen of the United States, residing at Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Combined Metallic Railroad-Ties and Rail-Seats, of which the following is a specification.

This invention relates to improvements in a combination metallic railroad tie and a rail seat and has for its object to provide a steel tie and seat which may be stamped from sheet metal and so constructed that sufficient elasticity will be had.

With the above and other objects in view I have invented the device illustrated in the accompanying drawings in which,

Figure 1 is a side elevation of my improved tie and seat, Fig. 2 is a top plan view thereof, Fig. 3 is an enlarged end elevation thereof, Fig. 4 is an enlarged detail view of the rail seat, Fig. 5 is a longitudinal vertical sectional view through the tie and seat, and Fig. 6 is a perspective view of a modified form of tie and seat.

Referring to the drawings 1 is a base upon which is seated or mounted a trough shaped tie 2 which is provided with horizontal flanges 3, by means of which the tie is riveted to its base 1 by the rivets 4. The sides 5 of the members 2 flare outwardly toward the bottom in order to stiffen the tie. Riveted to the upper surface 6 of the tie, near its two opposing ends are rail seats 7 and 8 which are provided with dove tail grooves 9 and 10 therein and rail seats 11, upon which the rails 12 rest. The members 13 provided with flanges 14 adapted to engage the rails have dovetail bases 15 which slide into the grooves 9 and 10 and are held therein by means of the bolts 16 which pass through the openings 17 in the grooves 9 and 10 and through the members 13 to the outside of the tie member. The rivets secure the seat to the tie 2.

This tie is so constructed that it may be made of very thin sheet metal and still have sufficient strength for all purposes. Being without support under the central portion thereof gives the necessary resiliency thereto.

In Fig. 6 is shown a modification of the invention in which the ends 19 of the seats

20 are cut at 21 and turned down against the sides 5 to hold the seat in its place. Portions 25 of the tie are struck up to abut the portions 23 and 24 to prevent any tendency toward longitudinal movement of the seat members.

I claim and desire to secure by Letters Patent,

1. In combination, a tie consisting of a base having an inverted trough with horizontal flanges bolted thereto and rail seats thereon having their ends projecting beyond said trough and rail engaging members on said projecting ends.

2. In combination, a tie consisting of a base having an inverted trough with horizontal flanges bolted thereto and rail seats thereon having their ends projecting beyond said trough, rail engaging members on said projecting ends, vertically disposed bolts adapted to fixedly hold said members on said seats.

3. In combination, a tie consisting of a base having an inverted trough with horizontal flanges bolted thereto and rail seats thereon having their ends projecting beyond said trough, rail engaging members on said projecting ends, vertically disposed bolts adapted to fixedly hold said members on said seats, said seats having dove-tailed slots in which said members are seated.

4. A tie consisting of an inverted trough shaped member having horizontal flanges thereon, a base member riveted to said flanges, the side walls of said trough shaped member being flared outwardly to form a bracing means therefor in combination with a seat adapted to hold said rail to said tie, said seat extending beyond both sides of said tie and having longitudinal dovetail slots thereon, members adapted to secure a rail to said seat being slidably positioned in said grooves and means for holding them in fixed positions, said means consisting of bolts passing through said members and said seat.

5. A tie consisting of an inverted trough shaped member having horizontal flanges thereon, a base member riveted to said flanges, the side walls of said trough shaped member being flared outwardly to form a bracing means therefor in combination with a seat adapted to hold said rail to said tie, said seat extending beyond both sides of said tie and having longitudinal dovetail

slots thereon, members adapted to secure a rail to said seat being slidably connected in said grooves and means for holding them in fixed positions, said means consisting of
5 bolts passing through said members and said seat and at the ends of said seat centrally of said tie.

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

JOHN HENRY MESSNER.

Witnesses:

W. M. McMILLIN,
ETTA B. GREEN.

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