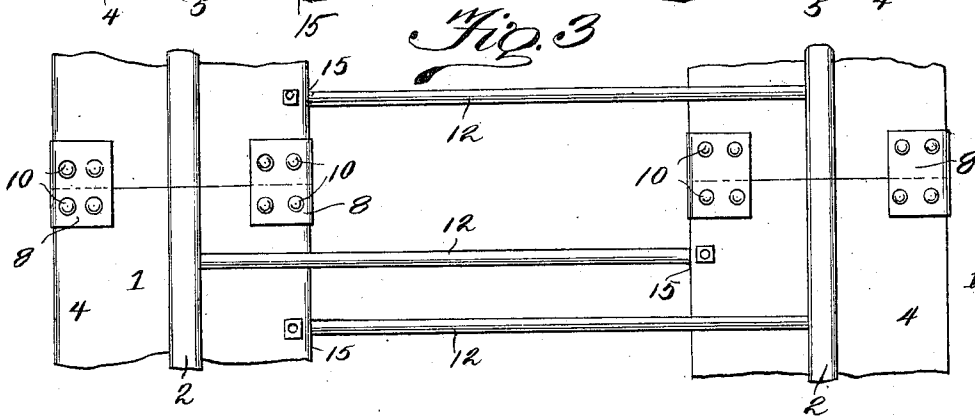
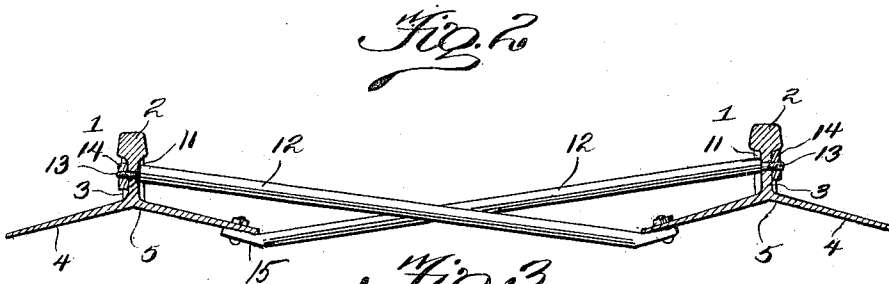
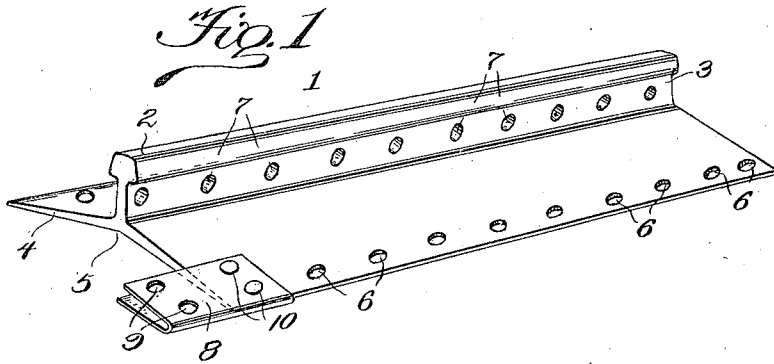


F. J. REDDICK:
RAILROAD TRACK STRUCTURE.
APPLICATION FILED SEPT. 1, 1910.

981,472.

Patented Jan. 10, 1911.

2 SHEETS—SHEET 1.



Inventor
Frank J. Reddick.

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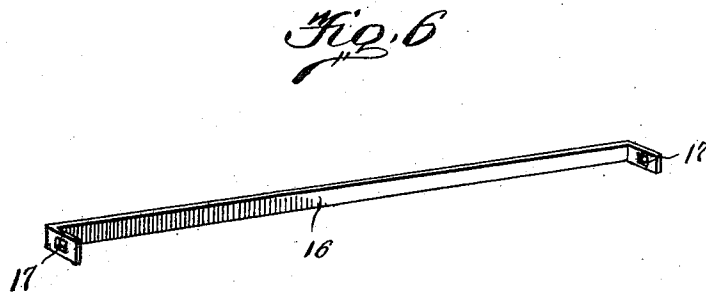
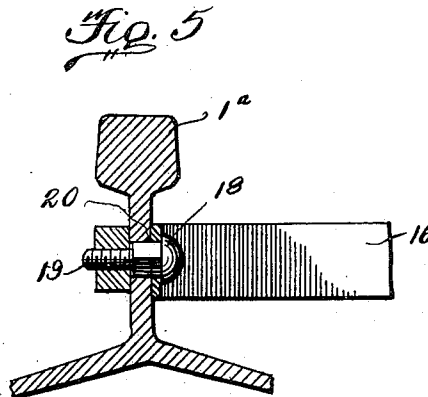
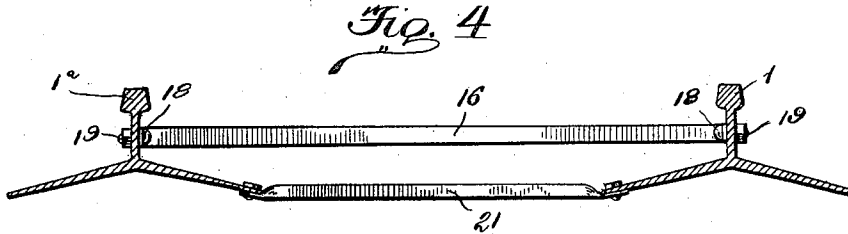
Witnesses
W. S. McDowell
James D. Welch

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2 SHEETS—SHEET 2.



Witnesses
W. & M. Dorell
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UNITED STATES PATENT OFFICE.

FRANK J. REDDICK, OF NEWBERRY, SOUTH CAROLINA.

RAILROAD-TRACK STRUCTURE.

981,472.

Specification of Letters Patent.

Patented Jan. 10, 1911.

Application filed September 1, 1910. Serial No. 579,990.

To all whom it may concern:

Be it known that I, FRANK J. REDDICK, a citizen of the United States of America, residing at Newberry, in the county of Newberry and State of South Carolina, have invented new and useful Improvements in Railroad-Track Structures, of which the following is a specification.

This invention relates to railroad track structures, the object of the invention being to provide new and improved rails which are designed to be laid along the road without the provision of the usual supporting ties.

Another object of the invention is to provide tie or brace rods which connect the rails with each other so as to hold them against spreading and to hold them operatively spaced from each other.

In the drawing, forming a portion of this specification and in which like numerals of reference indicate similar parts in the several views:—Figure 1 is a detail perspective view of one of the rails. Fig. 2 is a transverse section through the track structure. Fig. 3 is a detail top plan view of a portion of the track structure. Fig. 4 is a view similar to Fig. 2 showing a slightly modified form of my invention. Fig. 5 is a detail vertical section through a portion of one of the rails showing the manner of attaching the web brace thereto. Fig. 6 is a detail perspective view of the web brace.

My improved track structure consists of identically constructed rails 1 each having a ball portion 2 of usual construction and a web portion 3 of usual construction. From the web portion of each rail extends the downwardly inclined base flanges 4, the construction of the said base flanges forming on the underside of each rail a longitudinally extending concavity 5. By constructing the base flanges as just described, the rail will be found very springy and it may be used without resorting to the use of the well known supporting ties.

Each base flange is identically constructed, and as shown, each is formed with a longitudinally extending series of passages 6. The web 3 of each rail is formed with a longitudinal series of passages 7. The passages 7 are arranged in close proximity with each other, likewise the passages 6 in the base flanges for a purpose to be hereinafter described. At the joints of the

rail ends are arranged tie plates 8. These tie plates overlap the base flanges of the rail ends and each plate is formed with a plurality of pairs of elongated passages 9 which register with similar passages in the base flanges of the rail ends. These passages receive clamping bolts 10. At the joints, the rail ends are connected by the usual fish plates 11.

To hold the rails operatively associated with each other and to prevent them from spreading and to provide in the construction herein contemplated means obviating the use of well known supporting ties, I provide identically formed tie rods 12. These tie rods extend across each other and their outer ends are formed to provide threaded shanks 13 which extend through the passages in the webs 3 of the rail ends. Clamping nuts 14 are employed for holding the outer ends of the tie rods 12 engaged in the webs 3. The inner ends of the tie rods are flattened and, they are apertured to register with the apertures in the base flanges of the rail ends so as to receive the clamping bolts or other such equivalent fastening devices 15.

By constructing the rails as described, the tie rods may be associated therewith and arranged at such intervals as may be found most efficient for the purpose.

In the form of my invention illustrated in Figs. 4 to 6 inclusive, the web portions of the rails 1^a are connected with each other by a tie rod or brace member 16, the ends of the said member being provided with apertured flanges 17 which fit against the said web portions of the rails. The apertures in the flanges 17 are square to receive the corresponding portions 18 of bolts 19. The bolts 19 also have their portions 18 fitted in corresponding openings 20 in the webs of the rails. Tie rods or braces 21 are arranged in parallel relation with the member 16 and their ends are connected by suitable fastening devices with the base flanges of the rails, as shown.

I claim:

1. In a track structure, identically formed sectional rails having apertured base flanges, tie plates connecting the rail sections with each other at the joints thereof and secured to the base flanges of the rail sections, and brace rods connecting the base flanges and web portions respectively of the said rail sections.

2. In a track structure, identically formed rails having apertured base flange portions and apertured vertical web portions, tie rods each having their outer portions extending
5 through the passages in the vertical webs and having apertured inner ends alining with the passages in the base flanges, and fastening devices extending through the ap-

ertures in the base flanges and through the said inner portions of the tie rods. 10

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

FRANK J. REDDICK.

Witnesses:

J. P. WILSON,
W. A. McSWAIN.