

V. C. WASHABAUGH & J. S. PETERS.
TIE AND RAIL FASTENER.
APPLICATION FILED JAN. 4, 1912.

1,027,946.

Patented May 28, 1912.
2 SHEETS—SHEET 1.

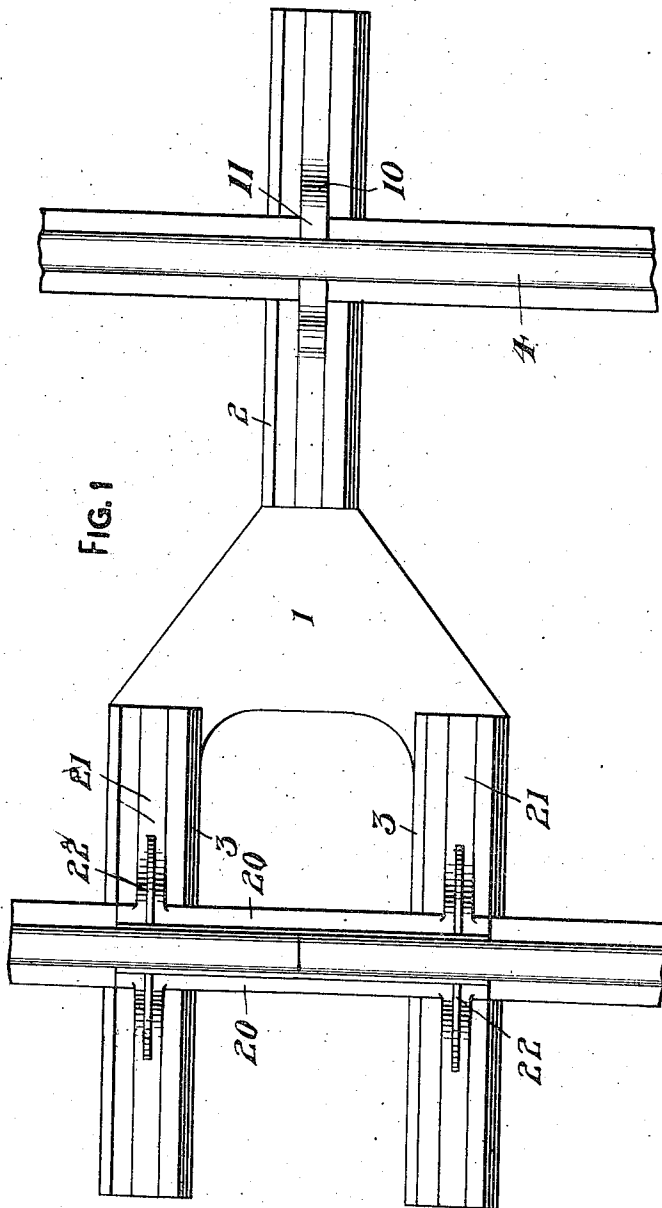


FIG. 1

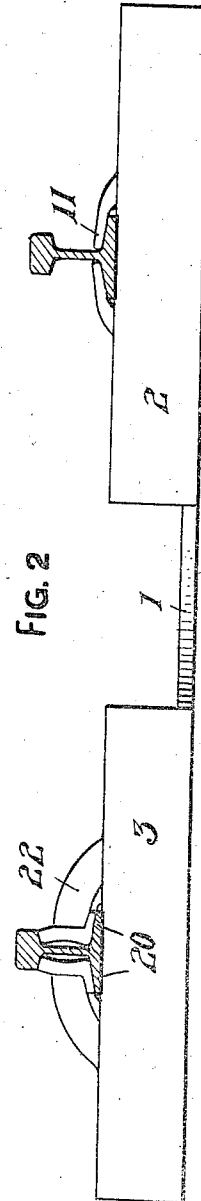


FIG. 2

WITNESSES

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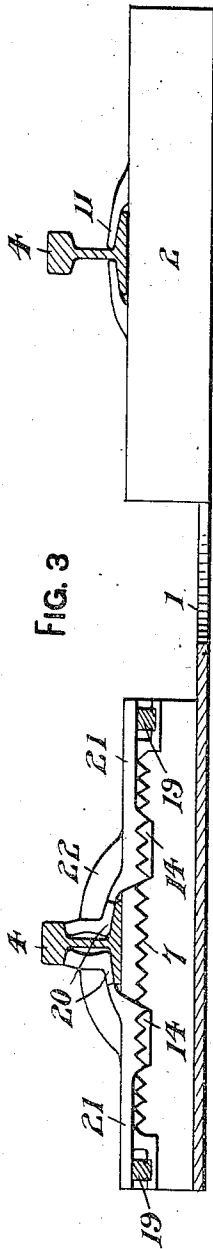


FIG. 3

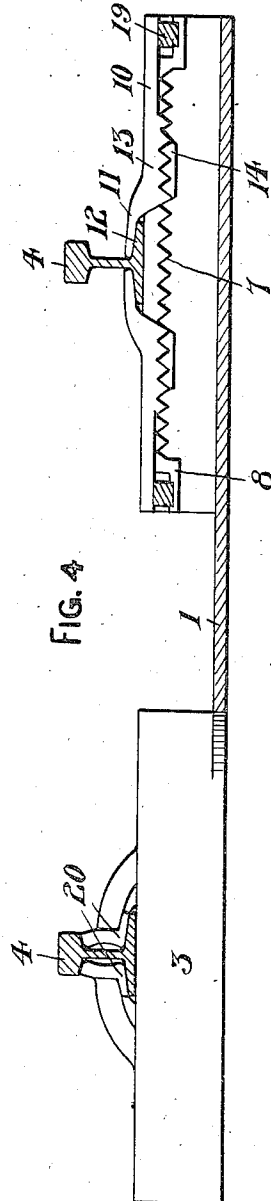


FIG. 4

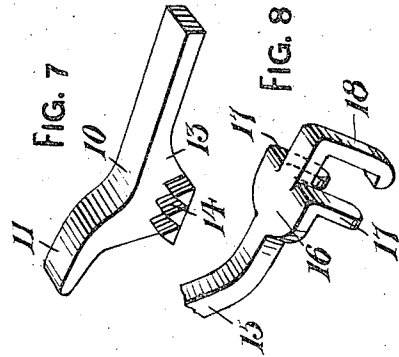


FIG. 7

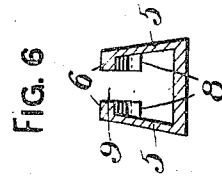


FIG. 6

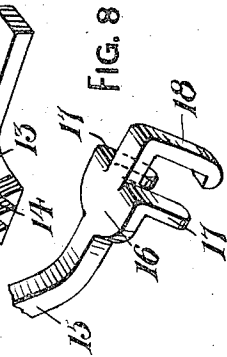


FIG. 8

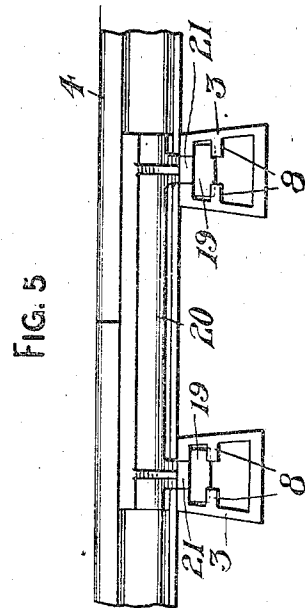


FIG. 5

WITNESSES.

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UNITED STATES PATENT OFFICE.

VERNON C. WASHABAUGH AND JOHN S. PETERS, OF SCOTTTDALE, PENNSYLVANIA.

TIE AND RAIL-FASTENER.

1,027,946.

Specification of Letters Patent.

Patented May 23, 1912.

Application filed January 4, 1912. Serial No. 669,321.

To all whom it may concern:

Be it known that we, VERNON C. WASHABAUGH and JOHN S. PETERS, citizens of the United States of America, residing at Scottsdale, in the county of Westmoreland and State of Pennsylvania, have invented certain new and useful Improvements in Ties and Rail-Fasteners, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to metallic ties and rail fasteners, and more particularly to an improvement in connection with Letters Patent granted V. C. Washabaugh, Number 732,476, granted June 30, 1903.

The primary object of our invention is to simplify the construction disclosed in the patent referred to and provide a more durable construction.

Another object of this invention is to provide a metallic tie of novel form that possesses sufficient strength and firmness to support the great weight of rolling stock, the tie having a bearing surface of sufficient area for the adequate support of rails.

A further object of this invention is to provide a tie that can be easily tamped in a roadbed by unskilled labor, the tie being extremely light, durable and inexpensive to manufacture.

A still further object of this invention is to furnish a tie with a fastener that will preserve the alinement of rails, obviate the necessity of using nuts and bolts and compensate for expansion and contraction.

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 drawings, wherein:—

Figure 1 is a plan of the tie, Fig. 2 is a side elevation of the same, Fig. 3 is a similar view of the tie showing one of the members thereof in section, Fig. 4 is a similar view of the tie showing another member thereof in section, Fig. 5 is an end view of the tie, Fig. 6 is a cross sectional view of one of the members of the tie, Fig. 7 is a perspective view of a detached fastener, and Fig. 8 is a perspective view of a portion of a tool adapted to be used in connection with the tie.

A tie in accordance with this invention is substantially Y-shaped in form and com-

prises a flat central triangular connecting plate 1 having projecting rail supports 2 and 3, the rail supports 3 being arranged in parallelism and the rail support 2 projecting in the opposite direction from the supports 3 and practically on a line drawn centrally between the supports 3. The design of the tie permits of the tie being alternated in laying on a roadbed, whereby rails 4 supporting the track will be firmly supported by said tie. The supports 2 and 3 are identical in construction, therefore I deem it only necessary to describe one of said supports, for instance, the support 2. This support has inclined side walls 5 with the upper edges thereof provided with inwardly projecting flanges 6 and the underneath side of these flanges are provided with teeth 7. The ends of the flanges 6 support brackets 8 that are integral with the side walls 5, and said flanges provide a longitudinal slot 9 in the top of the support.

Arranged in the slot 9 of the support are fastener members 10 having the inner ends 11 thereof extending on to the base flanges 12 of the rails 4. The fasteners 10 are provided with depending portions 13 and the sides of these depending portions have lateral teeth 14 for extending under the flanges 6 and engaging the teeth 7. The fasteners 10 are placed in the slot 9, the outer ends of said fasteners extending into the support with the inner ends of the fasteners resting upon the base flanges 12. An instrument shown in Fig. 8 is then employed for correctly positioning the fasteners. The instrument comprises a handle bar 15 having a head 16 provided with depending side prongs 17 and a hook 18. The prongs 17 are placed upon the top of the flanges 6 with the hook 18 extending downwardly in the slot 9 and engaging under the end of the fastener 10. When leverage is brought to bear upon the bar 15, the prongs 17 serve as a fulcrum and the hook 18 is elevated, raising the outer end of the fastener to the plane of the flanges 6. A block 19 is then placed upon the brackets transversely of the tie, the block 19 holding the outer end of the fastener in an elevated position with the inner end 11 thereof clamping the base flanges 12 of the rail 4 upon the support.

When the confronting ends of two rails are to be connected together, splice bars 20 are employed and these bars are formed integral with the inner ends of fasteners, 21

similar to the fasteners 10. The fasteners 21 are placed in position and held similar to the fasteners 10 and to brace the splice bars 20 relatively to the fasteners 21, webs or ribs 22 are employed that are formed integral with the splice bars and the fasteners.

It is apparent from the foregoing that we have devised an improved tie that has the requisite amount of elasticity for supporting rolling stock whereby the weight of the rolling stock will be uniformly distributed over the roadbed.

What we claim is:—

1. A metallic tie and rail fastener comprising a channel-shaped support having the longitudinal walls thereof formed with inwardly extending flanges at the top thereof, teeth formed on the under side of said flanges, depending brackets carried by said walls and flanges at the ends of the flanges and providing at each end of the support a slot, fasteners mounted in said supports and having the inner portions thereof engaging the rails, lateral teeth projecting from said fasteners intermediate the ends thereof and capable of engaging the teeth of said flanges, and blocks mounted in said slots and engaging under the outer ends of said fasteners for maintaining them in position.

2. A metallic tie and rail fastener comprising a channel-shaped support having

the longitudinal walls thereof provided with inwardly extending flanges at the tops thereof, the lower face of said flanges being toothed, oppositely disposed rail fasteners mounted in said support and having the inner portions thereof engaging the rail mounted upon said support, lateral teeth projecting from opposite sides of each of said fasteners and engaging in the teeth of the flanges, and means engaging with the outer portions of said flanges for maintaining them in position.

3. A metallic tie and rail fastener comprising a support having a longitudinally extending slot and further provided with a pair of toothed racks arranged below the top edges of the support, fasteners arranged in said slots and having the inner ends thereof retaining a rail upon said support, teeth carried by said fasteners and engaging in said racks, and blocks arranged in the outer ends of said support and engaging under the outer ends of said fasteners for maintaining them in position.

In testimony whereof we affix our signatures in the presence of two witnesses.

VERNON C. WASHABAUGH.
JOHN S. PETERS.

Witnesses:

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MAX H. SROLOVITZ.