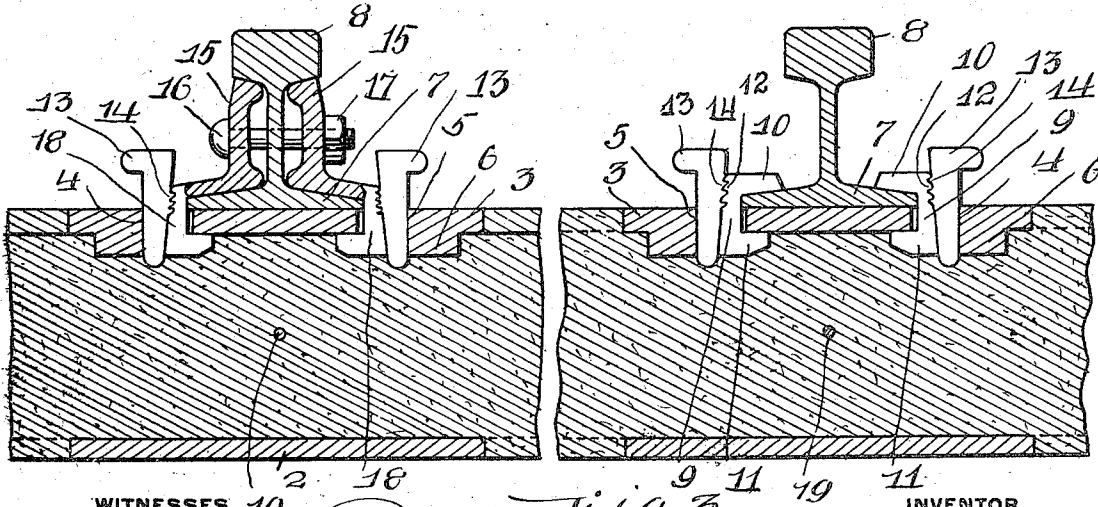
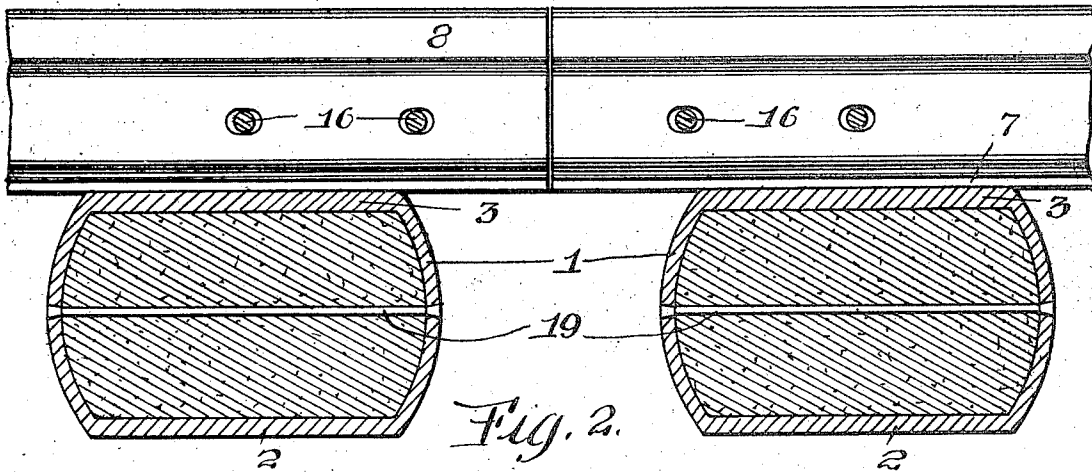
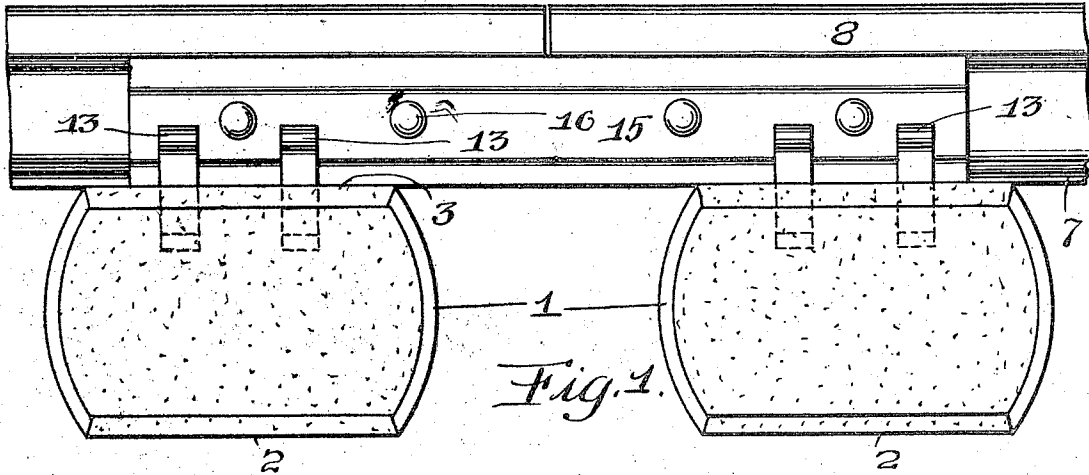


1,045,050.

Patented Nov. 19, 1912.

2 SHEETS—SHEET 1.



WITNESSES

Samuel Payne
John S. Saphary.

INVENTOR

F. L. Magee.

by *W. C. Ewert & Co.*
Attorneys.

1,045,050.

Patented Nov. 19, 1912.

2 SHEETS—SHEET 2.

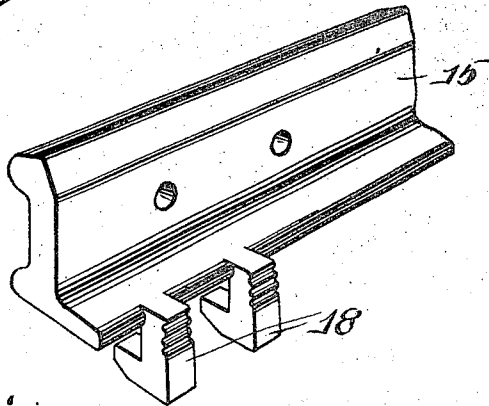
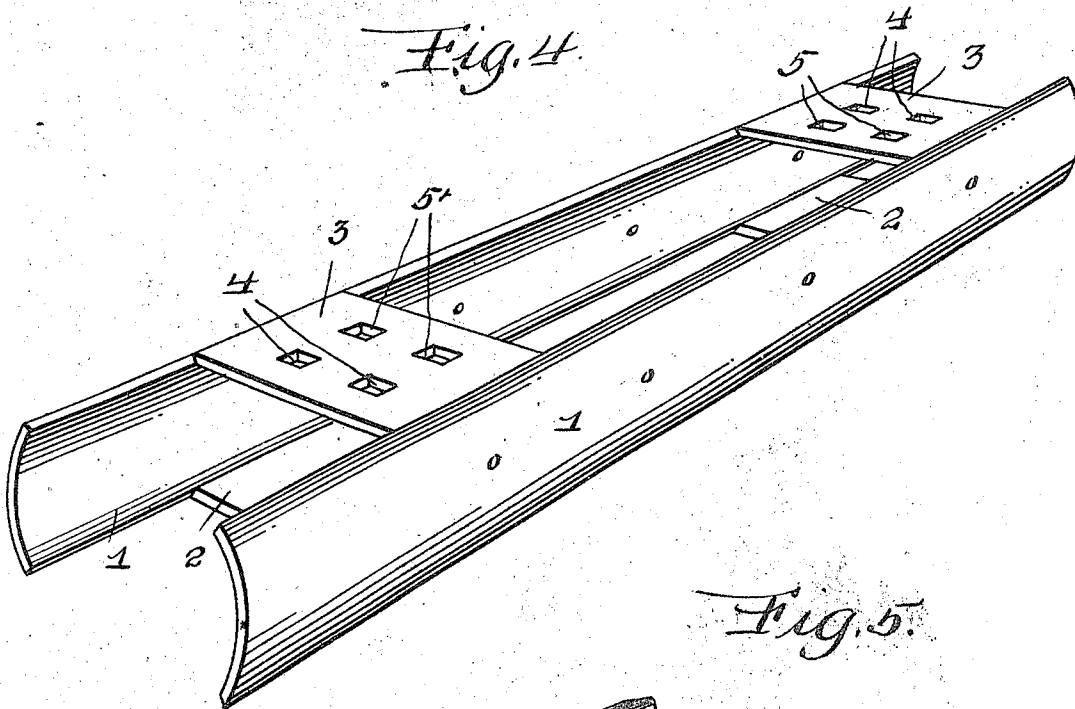


Fig. 6.

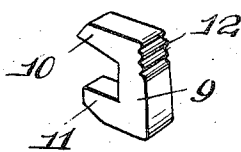
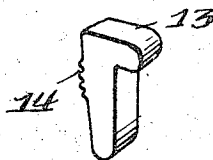


Fig. 7.



WITNESSES

Samuel Payne
John L. Stephens

INVENTOR

F. L. Magee.

A. C. Everett & Co.
Attorneys.

UNITED STATES PATENT OFFICE.

FRANCIS L. MAGEE, OF SOUTH BROWNSVILLE, PENNSYLVANIA, ASSIGNOR OF ONE-EIGHTH TO ISAAC F. PEIRSOL, ONE-EIGHTH TO GEORGE L. MOORE, ONE-EIGHTH TO WILLIAM N. PARSON, AND ONE-EIGHTH TO JOHN A. GIBSON, ALL OF SOUTH BROWNSVILLE, PENNSYLVANIA.

METALLIC TIE.

1,045,050.

Specification of Letters Patent.

Patented Nov. 19, 1912.

Application filed March 20, 1911. Serial No. 615,734.

To all whom it may concern:

Be it known that I, FRANCIS L. MAGEE, a citizen of the United States of America, residing at South Brownsville, in the county of Fayette and State of Pennsylvania, have invented certain new and useful Improvements in Metallic Ties, 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 the objects of the invention are to combine concrete and metal to provide a strong and durable metallic tie for supporting the rails of a track, and to furnish a tie with a novel rail fastener for positively retaining rails thereon, whereby the rails cannot become laterally or vertically displaced.

Other objects of the invention are to provide a rail fastener that can be advantageously used either in connection with a rail joint or a single rail, and to provide a tie with a fastener that can be easily and quickly installed without the use of skilled labor.

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 like numerals of reference designate corresponding parts throughout the several views, in which:—

Figure 1 is an end view of ties constructed in accordance with this invention, Fig. 2 is a cross sectional view of the same, Fig. 3 is a longitudinal sectional view of the tie partly broken away, showing a rail joint at one end thereof and a single rail at the opposite end thereof, Fig. 4 is a perspective view of a tie shell, Fig. 5 is a perspective view of a splice bar in accordance with this invention, Fig. 6 is a perspective view of a clamping member, and Fig. 7 is a similar view of a fastening member.

A tie in accordance with this invention comprises a shell having convexo-concave side walls 1, said walls having the upper and lower edges thereof, adjacent to the ends, connected by bottom plates 2 and top plates

3, the plates 3 being arranged directly above and in parallelism with the plates 2 and the plates 3 provided with sets of rectangular openings 4 and 5.

The top plates 3 are provided with depending enlargements 6, said enlargements being arranged at the outer edges of the openings 4 and at the inner edges of the openings 5, for a purpose that will presently appear. The top plates 3 are adapted to support the base flanges 7 of a rail 8, said base flanges corresponding in width to the distance between the openings 4 and 5. In the openings 4 and 5 are placed clamping members 9 having the upper ends thereof provided with extensions 10 adapted to engage over the base flanges 7 and the lower ends thereof with extensions 11 adapted to engage under the plates 3. The outer sides of the clamping members 9 are transversely corrugated or toothed, as at 12 and adapted to engage the teeth of each member is a fastening member 13 resembling a small spike having the rear side thereof provided with teeth 14 adapted to engage the teeth 12, when said fastening member is driven into the openings 4 and 5. The fastening members 13 are slightly tapered and when driven between the enlargements 6 and the clamping members 9, said members are forced toward the inner edges of the openings 4 and 5 and the edges of the base flanges 7.

When the abutting ends of rails are to be supported by the ties, the rails are embraced by splice bars 15 connected to said rails by bolts 16 and nuts 17. The lower edges of the splice bars 15 are provided with integral clamping members 18 similar to the members 9, consequently the fastening members 13 can be employed for locking the lower edges of the splice bars relatively to the plates 3.

The shell of each tie is adapted to be filled with concrete or other plastic material and to brace the side walls of the tie shell, said walls are connected by a plurality of tie rods 19 having the ends thereof fastened in the walls 1.

What I claim is:—

A metallic tie comprising longitudinally extending convexo-concave side walls;

55

60

65

70

75

80

85

90

95

100

spaced top plates connecting said side walls together and maintaining these latter in spaced relation, spaced bottom plates connecting the side walls together and maintaining these latter in spaced relation, said top plates arranged in alinement with said bottom plates and having means whereby rail fastening devices can be coupled there-

to, and a concrete filling arranged between the side walls.

10

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

FRANCIS L. MAGEE.

Witnesses:
MAX H. SROLOVITZ,
CHRISTINA T. HOOD.