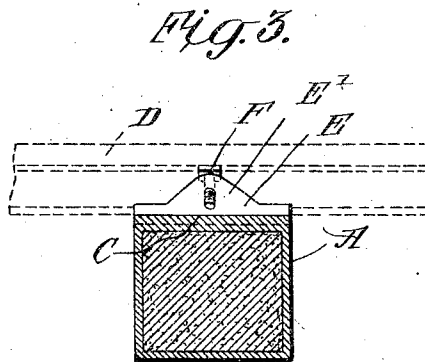
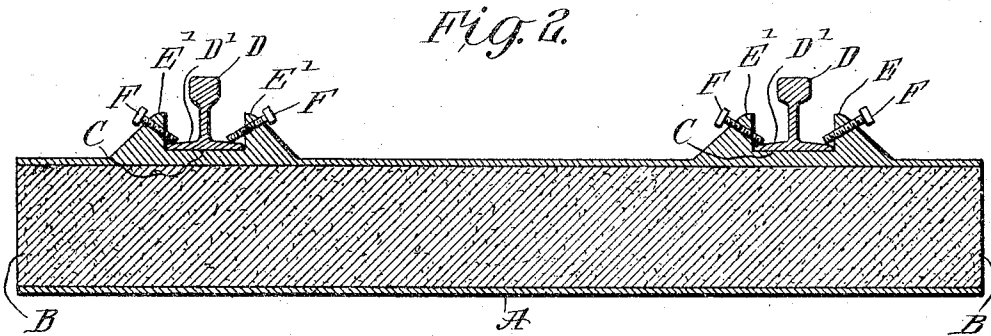
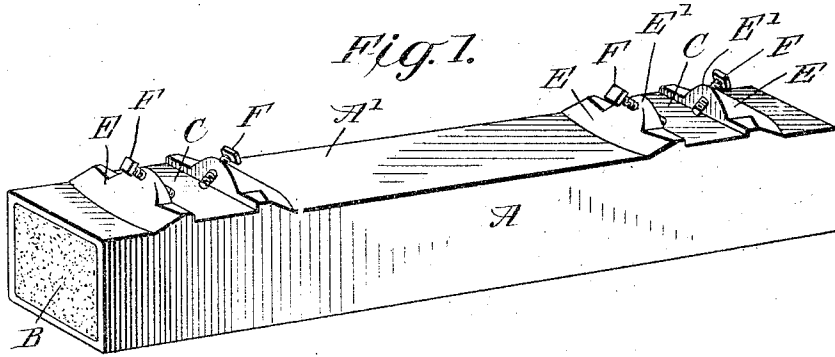


928,827.

Patented July 20, 1909.



WITNESSES

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UNITED STATES PATENT OFFICE.

GEORGE WHITAKER, OF TEMPLE, TEXAS.

RAILROAD-TIE.

No. 928,827.

Specification of Letters Patent.

Patented July 20, 1909.

Application filed April 23, 1909. Serial No. 491,678.

To all whom it may concern:

Be it known that I, GEORGE WHITAKER, a citizen of the United States, and a resident of Temple, in the county of Bell and State of Texas, have made certain new and useful Improvements in Railroad-Ties, of which the following is a specification.

This invention is an improvement in railroad ties and fastening and has for an object to provide a simple, novel tie that can be used in connection with the ordinary wooden ties, and can be used on any ordinary ballast, will form in itself a track gage and will facilitate the fastening and releasing of the rails as may be desired; and the invention consists in certain novel constructions, and combinations of parts as will be hereinafter described and claimed.

In the drawing Figure 1 is a perspective view of a tie embodying my invention. Fig. 2 is a vertical longitudinal section thereof, the rails being in place, and Fig. 3 is a cross section of the tie shown in Fig. 1, a rail being indicated in dotted lines.

In carrying out my invention I construct the body A of a tie of any suitable metal, usually steel, and make the tie hollow from end to end and insert therein a filling B of concrete. By this construction the hollow tie is strengthened and solidified thus greatly increasing its durability and strength in resisting the strain to which it will be subjected in operation.

The tie is preferably rectangular in cross section as shown in Figs. 1 and 3, affording a flat top A' on which at suitable points I provide the slightly elevated rail seats C, the metal being thickened at this point to better stand the pounding on the rails D, and on the opposite sides of the rail seats I form the lugs E extending transversely across the top of the tie and having the intermediate portions E' extended upwardly to a point considerably above the base D' of the rails so the screws F may be threaded through the said lugs at an incline to the vertical as shown in the drawing, and be caused to bear at their points upon the rail base D' and on opposite sides of the rail in order to securely bind the

rail to its seat as best shown in Fig. 2 of the drawing.

Manifestly, the tie may be made in any suitable size or weight according to the work for which it is intended, and it will be noticed that in use each tie forms of itself a perfect track gage and will operate to prevent spreading of the rails, the lugs E being thickened laterally to afford a resistance to any spreading tendency of the rails.

In operation, the ties may be used in conjunction with the ordinary wooden ties, and as the ordinary wooden ties rot they may be removed and replaced by the improved ties, the latter being strong and durable as referred to hereinbefore.

Manifestly, the tie being in form substantially like the ordinary tie can be used on any variety of ballast.

I claim—

1. A railroad tie of metal, hollow from end to end, and provided at its upper side with thickened portions forming rail seats, and with upwardly projecting lugs on opposite sides of said seats and extending upwardly to a point above the rail base and provided in said lugs above the plane of the rail base with threaded openings inclining downwardly toward the inner face of the lugs, rails mounted on said seats and having their base portions below the threaded openings of the said lugs, and bolts threaded in said openings and bearing at their points upon the rail base, and a filling of concrete in the hollow tie, substantially as set forth.

2. A tie of metal having at its upper side thickened portions forming rail seats and provided on opposite sides thereof with upwardly projecting lugs extending to a point above the plane of the rail base, and provided above said plane with threaded openings which incline downwardly toward their inner end, and bolts threaded in said openings and adapted to bear at their points upon a rail base, substantially as set forth.

GEORGE WHITAKER.

Witnesses:

W. T. LEMLY,
J. A. WILKERSON.