

J. W. BLOWER.
RAILWAY TRACK CONSTRUCTION.
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957,407.

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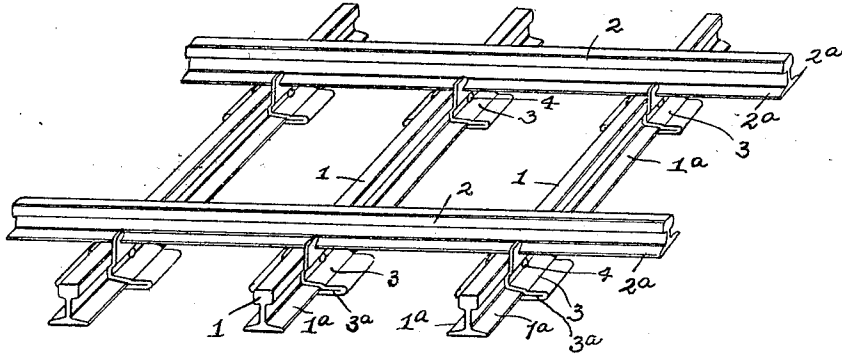


Fig. 1.

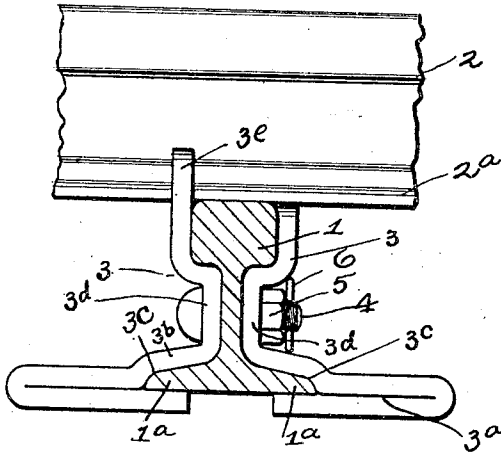


Fig. 2.

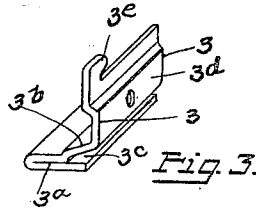


Fig. 3.

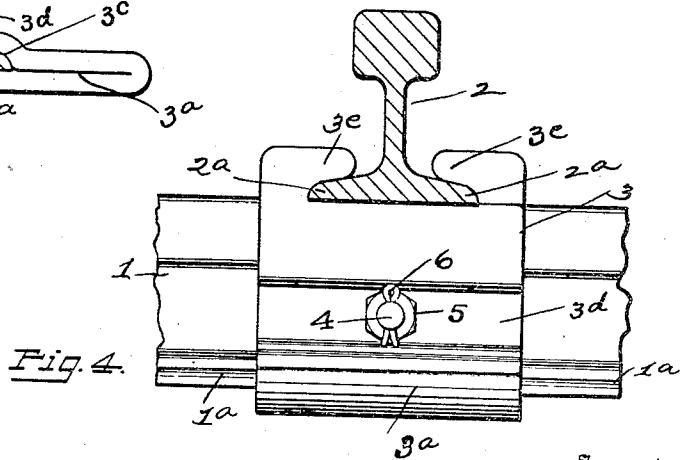


Fig. 4.

Witnesses
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UNITED STATES PATENT OFFICE.

JOSEPH W. BLOWER, OF COLUMBUS, OHIO.

RAILWAY-TRACK CONSTRUCTION.

957,407.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOSEPH W. BLOWER, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Railway-Track Construction, of which the following is a specification.

My invention relates to the improvement of railway track construction and the objects of my invention are to provide improved means for uniting the track rails with metal ties; to so construct the connecting means as to facilitate the employment of sections of railway track rails as ties; to so unite the rails and ties as to insure the retention of the proper gage between the track rails throughout the length of the track; to so construct my improved track and tie connecting members as to provide a desirable increase in the width of the tie bases, and to obviate the necessity of employing the usual rail retaining spikes. These objects I accomplish in the manner illustrated in the accompanying drawing, in which—

Figure 1 is a view in perspective of a section of railway track in which my improved construction is employed, Fig. 2 is a transverse section through one of the ties, Fig. 3 is a detail view in perspective of one of the clamping or connecting plates, and Fig. 4 is a transverse section through one of the track rails.

Similar numerals refer to similar parts throughout the several views.

In carrying out my invention, I preferably employ ties 1 formed of sections of railway track rails of the usual T-form, these sections being laid upon the trackway parallel one with the other after the manner of laying the wooden ties. The track rails which are indicated at 2 are arranged in their usual parallel positions upon the upper or tread portions of the tie members 1. In order to connect the rails and ties thus arranged, I provide the connecting or clamping plates 3, one of which is shown more clearly in Fig. 3 of the drawing. Each of these connecting devices is in the nature of a substantially angular metallic plate and comprises a horizontal or base member 3^a which is doubled upon itself. The upper base member at a point a short distance from the inner edge of the base, is inclined upwardly from the base as indicated at 3^b, thus resulting in the formation between the

inner portion of the lower member of the base and the upwardly bent upper member 3^b, of a recess 3^c.

Above the inner edge of the lower member of the base 3, the plate is continued vertically upward to a desirable height and is thence bent slightly outward and upward forming throughout the length of the plate 3 a projecting or longitudinal channel portion 3^d. Above this projecting portion 3^d, the plate is extended vertically upward for a short distance, said upwardly projecting terminal member having one end thereof elevated beyond the body of the plate, said elevated portion being in the nature of an upwardly projecting and inwardly turned tongue 3^e which extends in the direction of the length of the plate. The angular connecting member thus provided and which may be stamped, molded or otherwise produced of metal, is adapted to have its recess 3^c receive one of the laterally extending base flanges 1^a of a tie, while the tongue 3^e of the connecting plate engages the adjacent laterally extending base flange 2^a of the track rail. It will be understood that when in this position, the horizontal projection 3^d of the connecting plate, is within the longitudinal side channel of the tie body and that the plate is secured in this position by means of a bolt 4 which passes through an opening in the portion 3^d of the plate, thence through the registering opening in the web or comparatively thin central portion of the tie, the outer threaded end of the bolt likewise passing through the opening in the opposing clamping plate 3 which is in a similar manner arranged in engagement with the opposite side of the tie. The two clamping plates thus connected by the bolt are held in connection with each other and with the tie through the medium of a nut 5 on the outer side of which the bolt is pierced by a cotter pin 6.

It will be understood that the plates 3 are duplicates one of the other and that in arranging the same on opposite sides of the tie, the tongue projections 3^e thereof engage opposite base flanges 2^a of the rails.

By the means described, it will be observed that the necessity of spiking the track rails to the ties, is obviated and that owing to the fact that the uniting plate members are arranged to engage opposite sides of the track rails, said rails will be held firmly against inward or outward move-

ment, thus insuring retention of the proper track gage.

It will also be understood that by the construction described, the connection of the track rail and tie is effected by the employment of but one bolt and that the connecting members are so formed as to admit of the same being used interchangeably.

It will also be observed that the doubled base 3^a of each of the plates extends outward from the side of the base flange with which it is connected, these plate bases thus serving to form lateral ground bearing extensions of the tie bases which will insure a desirable support of the ties and facilitate the use of ties formed of track rail sections.

From the foregoing description, it will be seen that simple and efficient means are herein provided for accomplishing the objects of the invention, but while the elements shown and described are well adapted to serve the purposes for which they are intended, it is to be understood that the invention is not limited to the precise construction set forth, but includes within its purview such changes as may be made within the scope of the appended claims.

What I claim, is—

1. In a railway track construction, the combination with metal tie bars and track rails supported thereon, of connecting members each comprising an angular plate having a recess in the inner side of its base portion adapted to engage a base flange of the

tie body, the upright portion of each of said connecting members being formed at one end with an upwardly extending and inwardly projecting tongue adapted to engage the adjacent base flange of a track rail, and means for securing said connecting members to opposite sides of a tie.

2. In a railway track construction, the combination with metal tie bars, each having the form of a railway track section and track rails mounted on said ties, of connecting members each consisting of an angular plate having its laterally extending horizontal base portion doubled and provided with an inner side recess adapted to receive the laterally projecting base flange of one of said tie bars, the upright portion of each of said connecting members comprising an inwardly projecting central portion adapted to engage the longitudinal side channel of the tie bar and an upper portion having an integrally formed upwardly and inwardly projecting tongue, each of said connecting members having a bolt hole formed there-through, and a bolt by means of which two of said connecting plates may be secured to opposing sides of the tie bar.

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

JOSEPH W. BLOWER.

Witnesses:

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A. L. PHELPS.