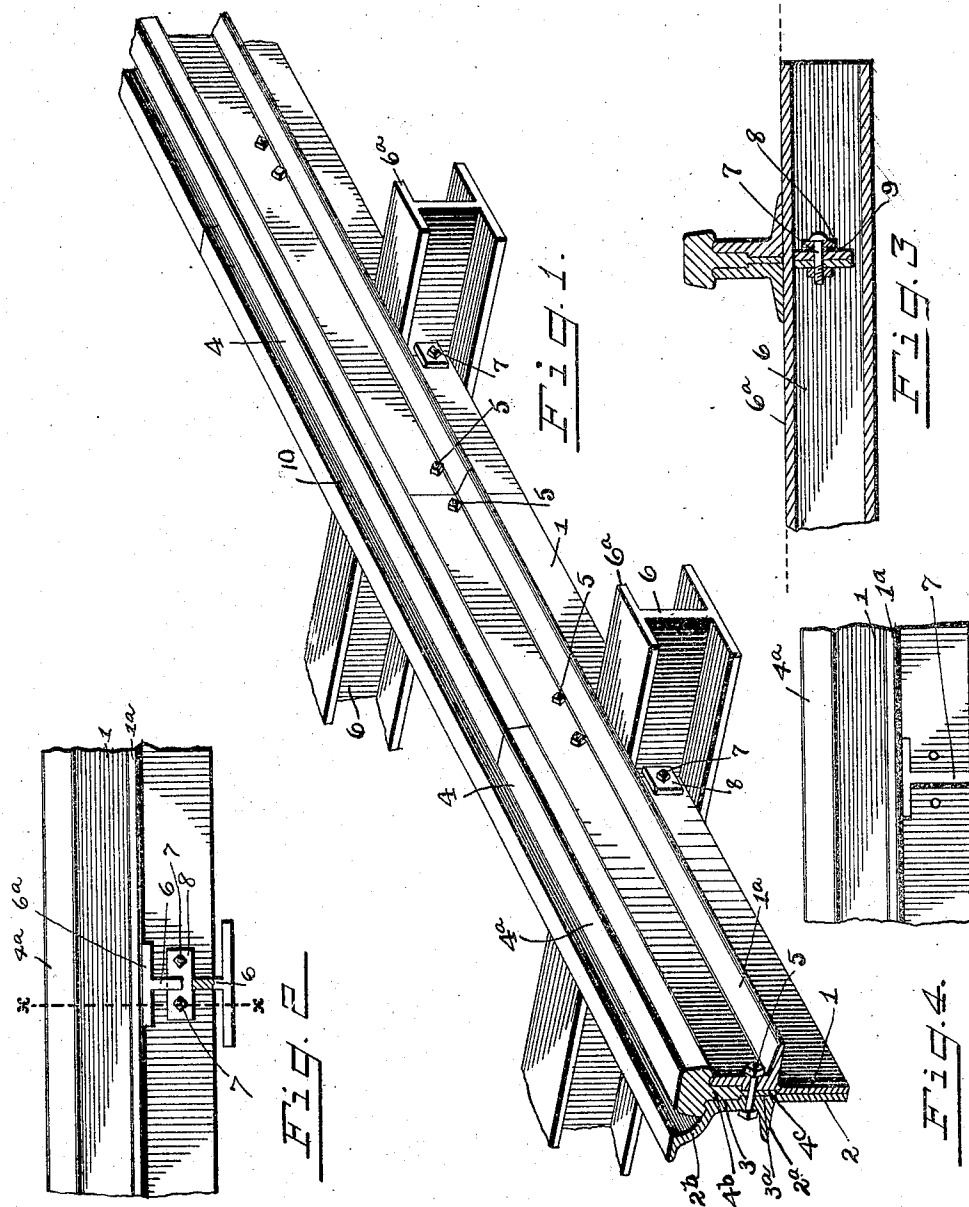


S. J. SCOTT.
RAILWAY TRACK CONSTRUCTION.
APPLICATION FILED FEB. 19, 1909.

939,336.

Patented Nov. 9, 1909.



Samuel J. Scott ^{Inventor}

Witnesses

Jno. A. McDowell.
Carl Stoughton

By

C. C. Shepherd
Attorney

UNITED STATES PATENT OFFICE.

SAMUEL J. SCOTT, OF COLUMBUS, OHIO, ASSIGNOR OF ONE-THIRD TO JOHN A. McDOWELL, OF COLUMBUS, OHIO.

RAILWAY-TRACK CONSTRUCTION.

939,336.

Specification of Letters Patent.

Patented Nov. 9, 1909.

Application filed February 19, 1909. Serial No. 478,886.

To all whom it may concern:

Be it known that I, SAMUEL J. SCOTT, 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 a track construction wherein is embodied improved means for detachably supporting track rail sections; to provide improved means for uniting said track rail sections and retaining the same at uniform levels; to provide in conjunction with my improved track construction, a car wheel flange receiving groove, and to otherwise provide a strong, durable and effective railway track, the rails of which may be readily removed, detached and reversed when desired. 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 having my improved construction, Fig. 2 is a side elevation of a portion of the track, a part of the web of one of the metal ties being removed for the sake of clearness in illustration, Fig. 3 is a transverse section on line *w-w* of Fig. 2, and, Fig. 4 is a side elevation of a portion of the track, with the tie removed.

Similar numerals refer to similar parts throughout the several views.

In carrying out my invention, I employ opposing and parallel track rail engaging or supporting plates 1 and 2, which from points near the centers of their heights downward, are in direct contact one with the other and which are united in the manner hereinafter described. The inner sides of the upper portions of the clamping or supporting members 1 and 2, are recessed to form between said upper plate portions, a channel 3, this channel having a downward extension of reduced width as indicated at 3^a, said reduced channel extension terminating immediately above the point where the inner surfaces of the plates 1 and 2 are united. Opposite the channel extension 3^a, I provide the plates 1 and 2 with outwardly projecting bearing shoulders or flanges 1^a and 2^a. The upper edges of the vertical plate members 1 and 2 are prefer-

ably rounded as shown in Fig. 1 of the drawing, and from the outer side of the rounded edge portion of the plate 2, I may form with said plate an outwardly and upwardly extending curved wing 2^b.

4 represents the track rail sections, each of which is of a substantially T-form in cross section and comprises a wheel bearing head 4^a, from the underside of which extends downwardly a narrower web 4^b, said web having a downward extension 4^c of reduced width or thickness.

Track sections formed as described, are designed as shown in Fig. 1 of the drawing, to have their web or tongue portions 4^b and 4^c inserted respectively within the channel 3 and the extension 3^a thereof, while the underside of the head 4^a is grooved adjacent to its web 4^b to receive the rounded upper edges of the bodies of the plate members 1 and 2. As will be understood, the plates 1 and 2 are each formed in desired lengths or sections and the rail web receiving channels may be continued to indefinite lengths by causing the end plates of these sections to abut one against the other. As shown in the drawing, the plates 1 and 2 and the intermediate reduced web portions 3^a of the track rail sections are united to form a substantially integral track body, by means of bolts 5 which extend transversely through said parts at desirable intervals. This track rail construction is preferably employed in connection with metallic railway ties and in the present instance, I have shown these ties which are indicated at 6, as being of the double channeled or I-beam forms.

In order to unite the rail supporting members 1 and 2 with ties of this character, I provide the lower portions of the plates 1 and 2, below the shoulders 1^a and 2^a at proper intervals with T-shaped openings, one of which is indicated more clearly at 7 in Fig. 4 of the drawing. These openings are adapted to receive the T-shaped portions of the I-beams 6 above the horizontal bases thereof, the lateral flanges or shoulders of the plates 1 and 2 thus being provided with bearing contacts with the upper sides of the ties. It is obvious, however, that the usual flanged heads 6^a of the ties might be omitted, thus necessitating the formation in the members 1 and 2 of vertical openings to receive the vertical webs of the ties and obviating

the necessity of forming the horizontal openings at the heads of said vertical openings. The ties thus being embraced by the united plate members 1 and 2, said ties are united with said plate members, by bolts 7 which pass through the plates and through binding plates 8 which bear against one or more washers 9, which in turn are in contact with the outer surface of the plate 1. One of the binding plates 8 passes transversely through the web of each of the ties 6, said ties being thus securely locked in connection with the track rail supporting plates. It will be observed that in arranging the sections of the plates 1 and 2 and uniting the sections of the track rails 4, said plate sections are so united as to break joints with the opposing plates and with the track rail sections, thereby insuring greater strength in construction.

20 In the construction of street railway tracks, it is sometimes preferable to employ what is known as the grooved rail or a track rail having at one side of its bearing surface, a groove such as that indicated at 10, for the reception of track wheel flanges. As will be observed, this groove is readily provided in my construction, by forming the inner plate 2 with the curved wing-like extension 2^b, although it is obvious that this extension might be omitted in the construction of steam-railway tracks or in other tracks where the flange groove is not desired or deemed essential.

From the construction which I have described, it will readily be seen that an exceedingly strong and durable railway track is formed wherein means are provided for so supporting the track rail sections, as to insure the surfaces thereof being flush one with the other. It will also be observed that by my construction, one or more of said track rail sections, may be readily removed from their supports between the plates 1 and 2, by removing the bolts 5, thus permitting

of a section or sections of the track rail being withdrawn from their supporting members, reversed and again inserted and secured between the plates 1 and 2. By this operation, it will readily be seen that a track rail which has become worn on its inner side, may be so reversed as to bring its worn inner side on the outer side of the track, thereby extending the life of the rail.

What I claim, is:

1. In a railway track construction, the combination with opposing inner and outer plates having a channel space between their upper portions and provided with lateral bearing flanges between their upper and lower edge portions, of a track rail section having its web portion adapted to seat within the channel space between said plates and its head adapted to bear upon the upper edges of said plates, bolts detachably connecting said plates and track section web, and means for rigidly connecting said plates with transverse ties.

2. In a railway track construction, the combination with opposing inner and outer plates having a channel space between their upper portions and provided with lateral bearing flanges between their upper and lower edge portions, of a track rail section having its track web portion adapted to seat within the channel space between said plates, means for detachably connecting said plates and track section web and transverse metallic ties having T shaped upper portions which pass through transverse T shaped slots formed in those portions of the inner and outer plates that lie below the lateral bearing flanges.

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

SAMUEL J. SCOTT.

Witnesses:

C. C. SHEPHERD,

L. CARL STOUGHTON.