

J. W. BLOWER.
RAILWAY TRACK CONSTRUCTION.
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971,590.

Patented Oct. 4, 1910

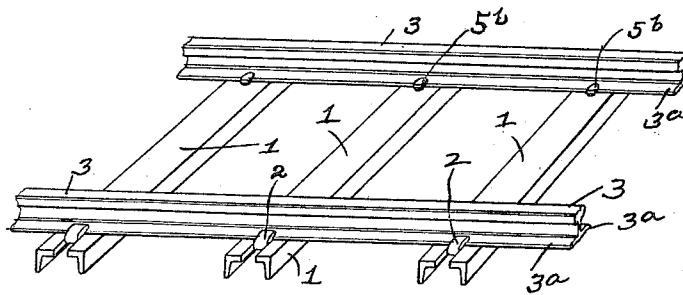


Fig. 1

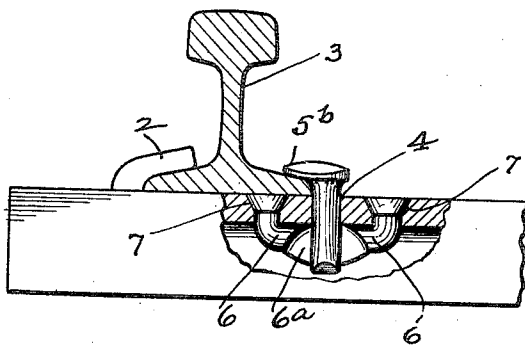


Fig. 2.

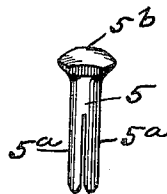


Fig. 3.



Fig. 5.

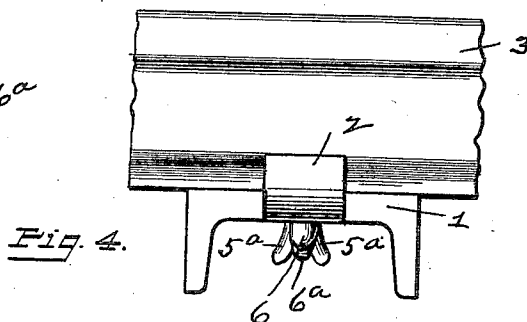


Fig. 4.

Witnesses

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RAILWAY-TRACK CONSTRUCTION.

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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 has for its object the production of a strong, durable structure of this class in which the track rails will be at all times retained in their proper relative positions; to provide an improved tie construction and improved means for uniting the ties and track rails and to produce other improvements the details of which will be more fully pointed out hereinafter. 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 an enlarged transverse section of one of the track rails showing a portion of the tie broken away for the sake of clearness in illustration, Fig. 3 is a detail view in elevation of one of the rail locking pins which I employ in the manner hereinafter described, Fig. 4 is an end view of one of the ties, showing a portion of one of the track rails mounted thereon, and, Fig. 5 is a central vertical section through a pin spreading and engaging device which I employ in the manner hereinafter described.

Similar numerals refer to similar parts throughout the several views.

In carrying out my invention, I employ a plurality of transversely arranged ties 1, each of which is in the nature of a metallic channel bar or beam, the closed face of which is upward. Each of these channeled ties has each end of its upper closed member formed with parallel longitudinal cuts, resulting in the production of a tongue 2, the tongues of each tie being bent upward and thence inward toward each other, as indicated more clearly in Fig. 1 of the drawing. As shown, the tongues 2 are adapted to engage the upper sides of the outer base flanges 3^a of the track rails 3, said tongues thus not only serving to assist in holding the track rails in proper contact with the upper faces of the ties, but to prevent any tendency of said rails to move outward or spread.

On the inner sides of the track rails and through each of the ties 1, I form a pin hole 4 and into this pin hole is adapted to be driven the vertical stem portion of a locking pin 5, the latter being split centrally from its lower end upward to form longitudinally separated members 5^a. The pin 5 has its enlarged head portion formed with an extension 5^b on one side, which extension is adapted to engage the upper side of the inner base flange of the adjacent track rail.

Extending in the direction of the length of the tie and beneath each of the openings 4, is the horizontal portion of a substantially yoke-shaped pin spreading and engaging member 6, the central portion of said spreading member having its sides flattened and having imparted thereto a substantially wedge shape in cross section as indicated at 6^a. The terminal members of the otherwise rounded body of the spreading device, extend upwardly through flaring mouthed openings 7 which are formed in the upper horizontal member of the tie. These upturned terminal members of the spreading device, are spread or riveted into the enlarged mouths of the openings 7, to prevent their withdrawal therefrom. When the locking pin 5 is driven downward through the opening 4 of the tie, the rounded or beveled ends of the pin members 5^a, come into engagement with the comparatively sharp upper edge of the central portion 6^a of the spreading member 6, with the result that said pin members 5^a are forced outward or spread apart on opposite sides of said spreading member 6^a. In this manner the pins 5 are locked against withdrawal through the openings 4.

From the construction and operation which I have described, it will be seen that a comparatively simple railway track construction is provided, in which all of the parts thereof are metal and in which simple and inexpensive although positive means are provided for locking the track rails in connection with the ties, in such manner as to insure their retention in their proper relative positions.

It will be readily understood, that the channel form of the ties will facilitate their engagement with the railway bed or track rail and admit of the ties being anchored firmly in connection with said track bed.

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 claim.

10 What I claim, is—

In a railway track construction, the combination with a longitudinally channeled tie of substantially inverted U-shape, of a fixed engaging member bent from said tie and adapted to engage the base flange of a track rail, a fixed pin spreading device on the underside of said tie comprising a U-shaped member which extends longitudi-

nally along the underside of the tie, and which has its upturned ends passing through the top of the tie and secured therein, a wedge-shaped central portion upon said pin spreading device, and a split locking pin having an enlarged head for engaging the other base flange of the track rail, there being an opening formed through said tie for the passage of said locking pin in alinement with the wedge portion of the pin spreading device, substantially as shown and described.

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

JOSEPH W. BLOWER.

Witnesses:

A. L. PHELPS,
E. B. MAURER.