

J. W. BLOWER.
RAILWAY TRACK CONSTRUCTION.
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969,152.

Patented Sept. 6, 1910.

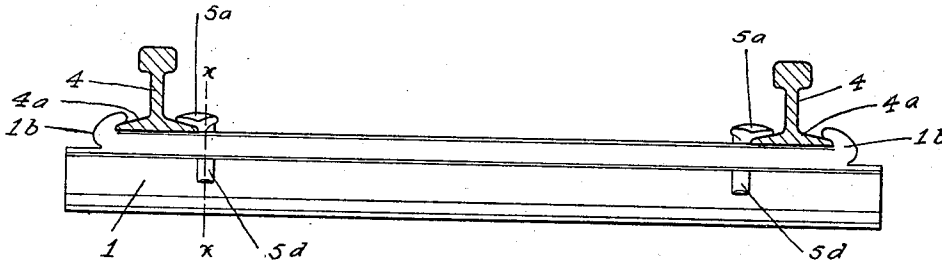


Fig. 1.

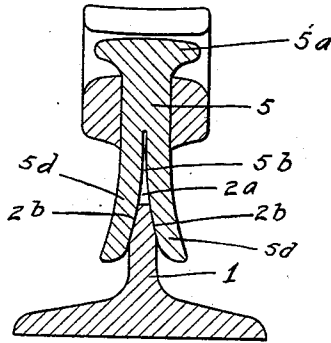


Fig. 2.

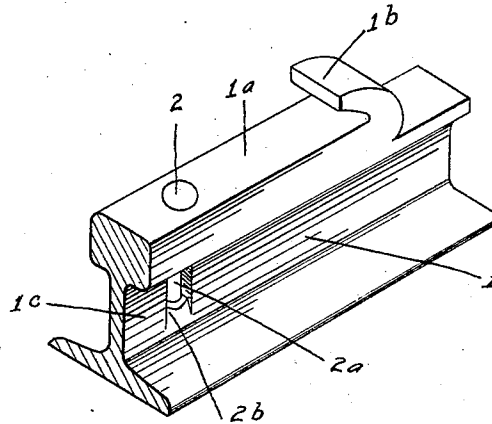


Fig. 4.

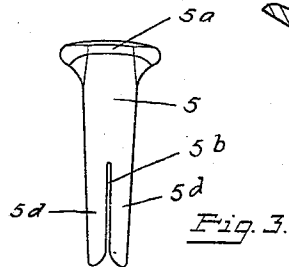


Fig. 3.

Witnesses

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RAILWAY-TRACK CONSTRUCTION.

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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 particular relation to the construction of tracks for use in mines and similar places where it is desirable that a track may be constructed rapidly and in an inexpensive manner.

The objects of my invention are to provide a comparatively simple track construction and to embody therein improved means for producing a durable and effective connection between the ties and track rails; to so construct my improved track as to admit of the parts thereof being readily separated when desired and to admit of the use of sections of ordinary track rails as ties. These objects I accomplish in the manner illustrated in the accompanying drawing, in which—

Figure 1 is a transverse section of a railway track having my improved construction, Fig. 2 is an enlarged vertical section on line $x-x$ of Fig. 1, with the track rail removed, Fig. 3 is a view in elevation of one of the locking pins which I employ in the manner hereinafter described, and, Fig. 4 is a detail view in perspective of the end portion of one of the ties.

Similar numerals refer to similar parts throughout the several views.

In carrying out my invention, I employ transverse ties 1 which are preferably formed of track rails of the usual T-form. In preparing each of these tie members for use as supports for track rails, I split the end portion of each of the heads or tread members 1^a of the tie rail horizontally and bend the upper member 1^b thus formed upward and inward to the hook form shown more clearly in Fig. 4 of the drawing. At a point a suitable distance on the inner side of each of the hook members 1^b and in the center of the width of the tie, I form a vertical pin receiving opening 2 which is continued downward into the web 1^c of the tie rail in the form of a slotted opening 2^a. As indicated at 2^b, I decrease the thickness of

that portion of the web which forms the lower end of the opening 2^a by cutting away or beveling the opposing faces of the web.

4 represent the track rails which are of the usual T-form in cross section. These rail sections are laid in the usual manner transversely upon the upper sides of the ties, each of the rails being so seated upon the tie as to cause its outer base flange 4^a to extend beneath the inturned hook members 1^b of the ties. In order to further lock the track rail in its position on the tie and in engagement with the hook member 1^b, I employ a locking pin 5 which as shown in the drawing, is formed in its upper and larger end with a spike head or projection 5^a. The lower and slightly tapering portion of the locking pin is split centrally from its lower end upward to a point near the center of the length of the pin, this split being indicated at 5^b. The mouth of the split 5^b is enlarged as shown, by beveling the adjoining surfaces of the lower end of the pin on opposite sides of the split or recess. The rail having been placed as heretofore described upon the tie and in engagement with the hook member 1^b, one of the pins 5 is driven downward through the opening 2, with the result that when the flaring mouth portion of the split or recess 5^b comes into contact with the comparatively thin portion of the web which is at the bottom of the slot 2^a, those portions of the pin which I have indicated at 5^a and which are on opposite sides of the split or recess 5^b, spread outward away from each other and on opposite sides of the lower portion of the tie web 1^c after the manner of the spreading of the members of an ordinary cotter pin. It will be understood that the pin is thus driven downward until its inturned head 5^a is in engagement with the upper side of that base flange of the track rail which is opposite the flange 4^a.

By this operation, it will readily be understood that the track rail is held in firm engagement with the tie, said rail being secured upon one side by the hook members 1^b of the tie and upon the opposite side by the heads of the locking pins 5. It will also be observed that the spreading of the locking pin in its downward movement will serve to obviate any tendency of said pin working loose and moving upward in the opening 2.

It will readily be understood that the

operation of constructing a track by the means described, will be comparatively simple and inexpensive and that such construction may be carried on without the aid of
5 skilled labor and by the use of ordinary track rail sections for both the ties and track rails. It is also obvious that a track constructed as described, will be exceedingly rigid, thus preventing spreading of the rails
10 and insuring the retention of the proper gage. It will also be noted that the use of bolts or nuts or similar fastening devices is entirely obviated.

From the foregoing description, it will be
15 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
20 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.

What I claim, is—

In a railway track construction, the combination with a tie, formed of a section of track rail, the tread portion of said rail being horizontally split longitudinally for a short distance from each end thereof, said
30 split portions being turned back to form hoop portions, openings formed vertically through the said tread portion, said openings being longitudinally spaced a suitable distance from said hoop portions, that por-
35 tion of the web of the rail at the base of each of said openings being beveled, and split spikes adapted to pass through the said tread portion and to have their lower portions spread by contact with said beveled
40 portions of the web, substantially as shown and described.

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

JOSEPH W. BLOWER.

Witnesses:

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