

J. W. BLOWER.
RAILWAY TRACK CONSTRUCTION.
APPLICATION FILED JAN. 28, 1910.

956,514.

Patented May 3, 1910.

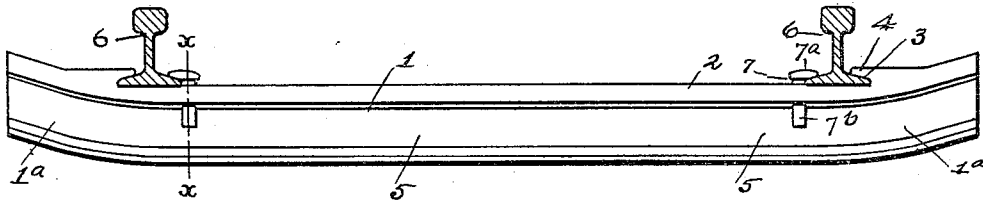


Fig. 1.

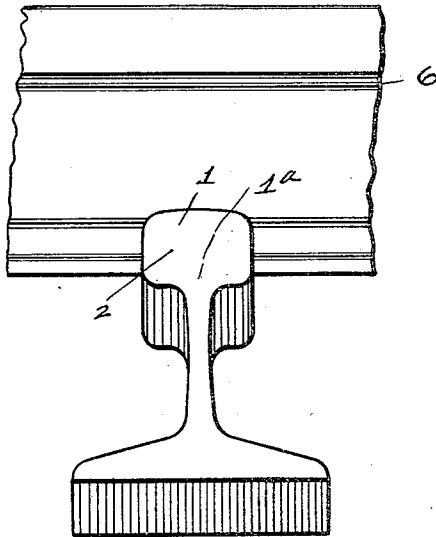


Fig. 2.

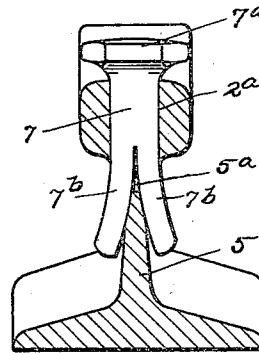


Fig. 3.

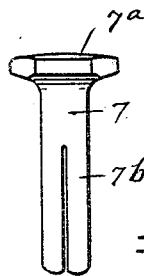


Fig. 4.

Witnesses

E. B. MAURER.
A. L. Phelps.

Inventor

Joseph W. Blower

By

C. Shepherd
Attorney

UNITED STATES PATENT OFFICE.

JOSEPH W. BLOWER, OF COLUMBUS, OHIO.

RAILWAY-TRACK CONSTRUCTION.

956,514.

Specification of Letters Patent.

Patented May 3, 1910.

Application filed January 28, 1910. Serial No. 540,576.

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 improvement of the construction set forth in my pending application for Letters Patent Serial Number 537,134, filed January 10th, 1910.

The objects of my present invention are to provide an improved railway track construction which will permit of the use of track rail sections as ties; to so form the terminal portions of the ties as to obviate a tendency of the track moving laterally and admit of the bed beneath the tie terminals being so tamped as to resist downward or outward movement of the ties; to provide improved means for producing track rail retaining projections on the ties 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 transverse section of a railway track showing one of my improved ties in elevation, Fig. 2 is an enlarged end view of one of the ties showing a portion of a track rail in elevation thereon, Fig. 3 is an enlarged sectional view on line $x-x$ of Fig. 1, with the track rail removed, and, Fig. 4 is a detail view in elevation of one of the locking pins which I employ.

Similar numerals refer to similar parts throughout the several views.

1 represents one of my improved track rail supporting ties, which is a section of an ordinary T-track rail of the desired length. The tie thus formed has its end portions bent upward, the upturned terminal members being indicated at 1^a. In order to provide for the retention of the track rails upon the ties, I produce in the ball or tread portion 2 of the tie rail toward each end of the latter, a tapering recess 3, which results in the production of an inwardly projecting bracket tongue 4, the under face of which is inclined. The recess 3 is produced by a suitable tool which is forced or driven into the body of the rail

ball. At a proper distance on the inner side of each of the tongues 4, I form through the ball of the tie rail a vertical opening 2^a which at its lower end communicates with an opening 5^a in the web 5 of the tie rail.

6 represent the track rails which are of the usual T-form in cross section. These rails are designed to be so laid and supported upon the tie rails as to cause the recesses 3 in the balls of said tie rails, to receive the outer base flanges of the track rails, as shown more clearly in Fig. 1 of the drawing. The inner base flanges of the track rails have their upper sides engaged by the inwardly projecting heads 7^a of locking pins 7 one of which is inserted through each of the holes 2^a. Each of these pins has its stem or body portion split centrally from its lower end to a point near the center of its length, with the result that when the members 7^b of the pin come into contact with the web 5 of the tie rail at the bottom of the opening 5^a, said members will be spread outward on opposite sides of the web, thus locking the pin against withdrawal.

In my said former application, I have shown and described ties formed of sections of track rails, in which the ends of the ball of the tie rail are split longitudinally and turned upward and inward to form track rail engaging tongues of the character shown at 4 in my present invention. It is obvious that by forming said tongues by the bending operation described, the metal is stretched and therefore slightly weakened. By the method herein described of forming the tongues, it is obvious that the strength of the latter is in no way weakened or impaired. It will also be observed that owing to the fact that I have bent the ends of the ties upward producing the inclined terminal members 1^a, space is provided beneath the tie ends which may be filled with gravel or other material forming the road bed and such filling tamped to form a hard and substantial bearing for the upturned terminal members of the ties. By thus filling and tamping the material beneath these upturned tie ends, it is obvious that the supporting bed of the road will offer a resistance to the track which will tend to prevent any undesirable lateral movement of the track in its bed.

From the foregoing description, it will be seen that simple and efficient means are herein provided for accomplishing the ob-

jects 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—

10 1. In a railway track construction, the combination with ties formed of sections of track rails, the ball of each of said tie rails having formed therein on each side of the center of the length of the tie a horizontal
15 recess, of track rails mounted upon said ties and having their outwardly projecting base portions engaging said tie recesses, and means for locking the inner base flanges of the track rails in connection with the tie.

2. In a railway track construction, the combination with ties each comprising a body formed of a section of track rail, the terminal members of which are inclined upward and the upper side of which is formed on each side of the center of its length, with a horizontal recess as described, of track rails mounted upon said ties, the outer flanges of said rails engaging said tie recesses, and means for locking the inner flanges of said rails in connection with said ties.

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

JOSEPH W. BLOWER.

Witnesses:

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