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TRACK BRACE.

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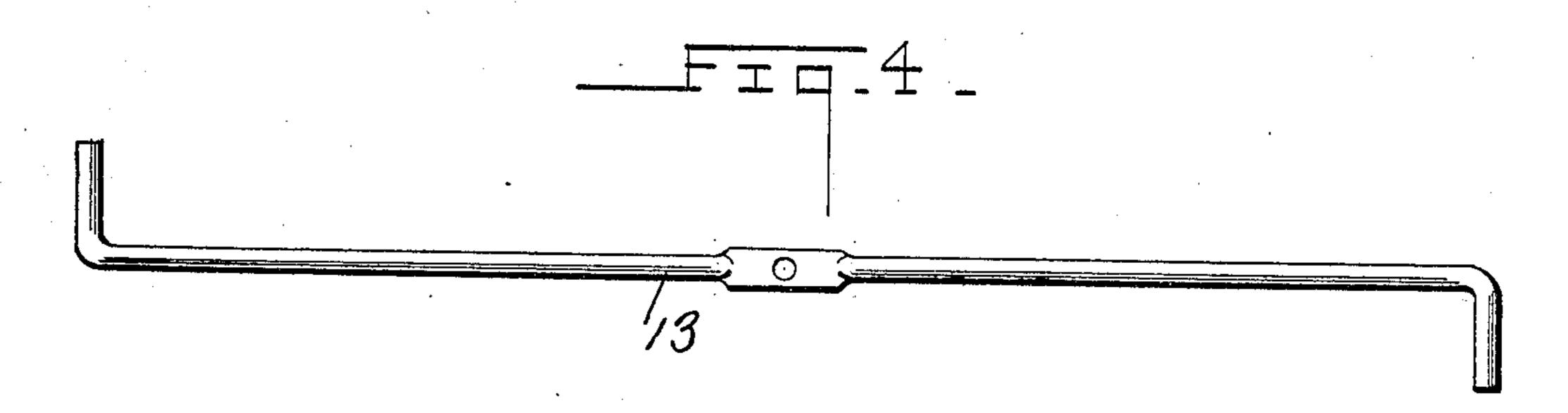
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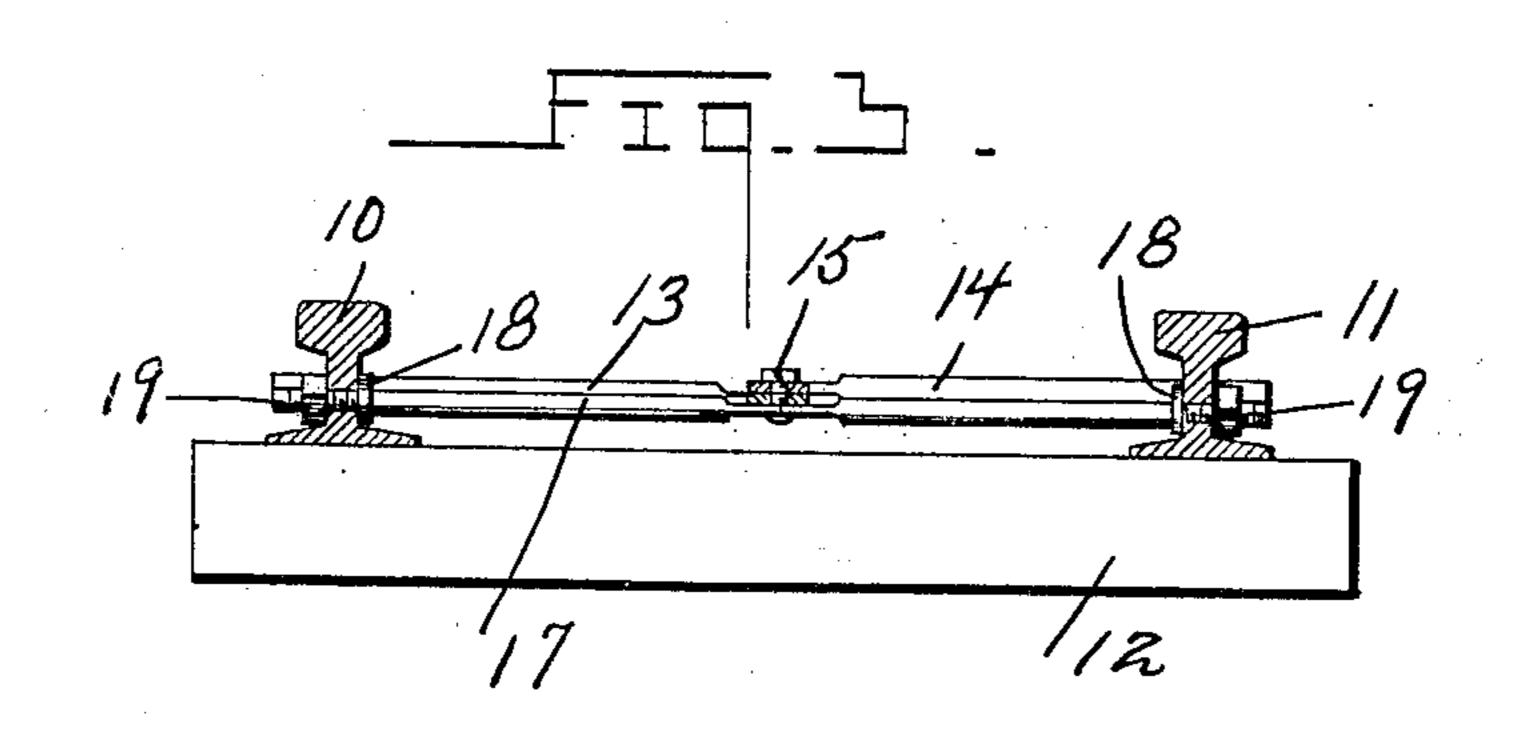
APPLICATION FILED SEPT. 17, 1908.

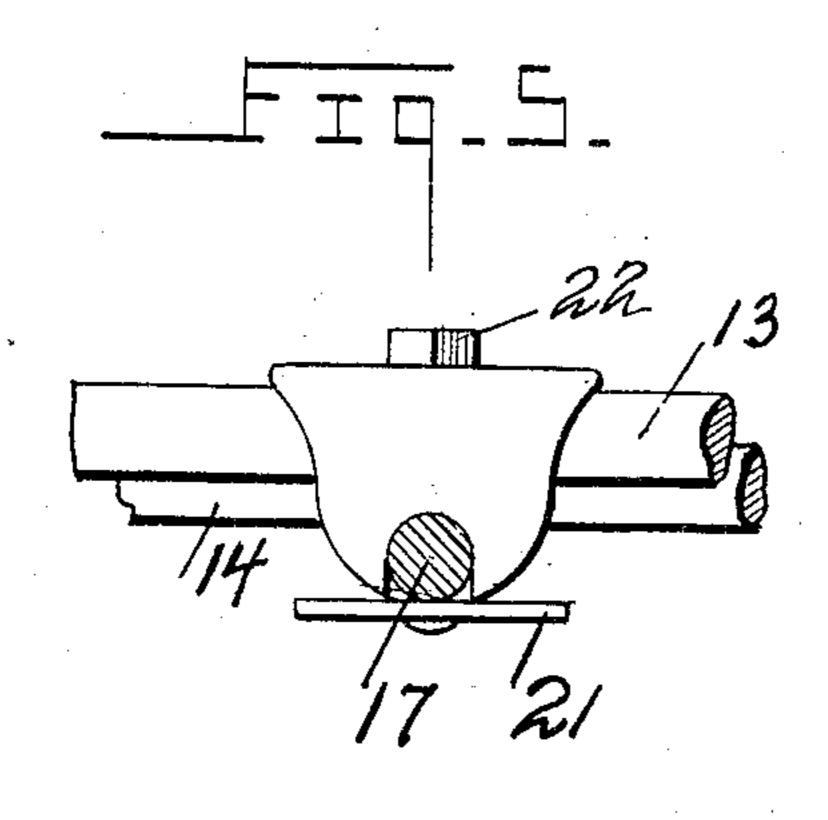
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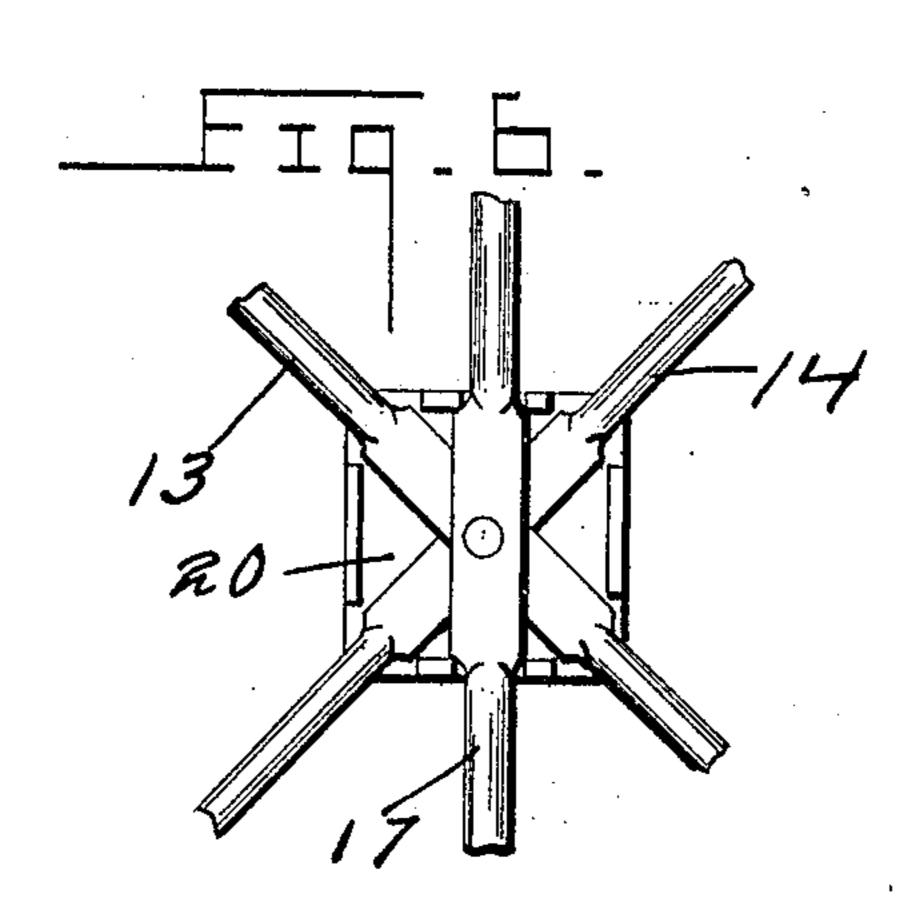
Patented June 22, 1909.

2 SHEETS-SHEET 2.









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UNITED STATES PATENT OFFICE.

MICHAEL P. BARDON, OF GUERNSEY, CALIFORNIA.

TRACK-BRACE.

No. 925,981.

Specification of Letters Patent.

Patented June 22, 1909.

Application filed September 17, 1908. Serial No. 453,422.

To all whom it may concern:

Be it known that I, MICHAEL P. BARDON, a citizen of the United States, residing at Guernsey, in the county of Kings and State of California, have invented certain new and useful Improvements in Track-Braces, of which the following is a specification.

This invention relates to railroad tracks and has special reference to a device for

10 bracing the same.

An object of this invention is the construction of a device that will prevent the creeping of one rail past another causing the ties which support the rail to twist and to weaken the rails if not to loosen them altogether from the ties.

The invention further designs a brace for railway tracks which is of simple construction, and can be readily applied and is very

20 economical to manufacture.

Other objects and advantages will be apparent from the following description and it will be understood that changes in the specific structure shown and described may be made within the scope of the claims without departing from the spirit of the invention.

In the drawings forming a portion of this description and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a top plan view of a section of track having the brace applied thereto. Fig. 2 is a longitudinal vertical section of the same. Fig. 3 is a transverse section on the line 3—3 of Fig. 1. Fig. 4 is a top plan view of one of the rods detached. Fig. 5 is a fragmentary view of the brace showing a modification of the fastening means for the several rods. Fig. 6 is a bottom plan view of the same, the lower

plate being removed. Referring now to the drawings 10 and 11 designate the rails of a railroad track which are mounted upon the ties 12. Disposed 45 longitudinally between the rails 10 and 11 are rods 13 and 14 which are diagonally positioned and which engage across one another at their intermediate portions for the purpose of bracing the rails 10 and 11. The 50 rods 13 and 14 are flattened at their intermediate portions to form engaging surfaces through which is passed a locking bolt 15 or any other suitable means for securing the same. The rods 13 and 14 are curved 55 outwardly at obtuse angles at their extremities where they are passed through aper-

tures formed in the webs of the rails 10 and 11 and upon the outer extremities of which are secured duts 16 to rigidly hold the extremities of the rods in engagement with 60 the rails. This engagement will prevent the creeping of the rails past each other and in order to prevent the possible spreading of the rails 10 and 11 a cross brace 17 is employed which comprises a rod 17 which 65 is flattened at its intermediate portion to engage against the flattened surfaces of the rods 13 and 14 and which is held across the same by the bolt 15. The rod 17 is provided with shoulders 18 formed upon its opposite 70 extremities to engage the inner surfaces of the webs to the rails 10 and 11 and which has its outer extremities threaded to receive the nuts 19 which hold the rails 10 and 11 securely to the rod 17. In the modification 75 shown in Fig. 5 two metallic plates 20 and 21 are employed which are positioned one above the intersection of the rods and the other beneath the same through which is passed the clamping bolt 22 for the purpose 80 of holding the brace in a rigid position. The plate 20 is provided with depending flanges at the edges thereof which engage between the several rods for the purpose of aiding in the securing of the same in their 85 relative positions. The lower plate 21 is employed as a clamping plate against which the lower edges of the flanges of the plate 20 impinge.

From the above description it is apparent 90 that the brace is employed by inserting the extremities of the rods 13 and 14 through apertures formed in the webs of the rails 10 and 11 and that the cross rod 17 is likewise secured. The rods are held in their several 95 positions by the nuts 16 and 19 respectively which prevent the rails from creeping past one another or to spread. A device of this character adds to the life of the track and prevents the possibility of accidents which 100

occur from these disadvantages.

What is claimed is:

1. A device of the character described comprising two diagonally disposed rods, a transverse rod disposed across the intermediate portions of said rods and a bolt secured through the intermediate portions of all of said rods for the purpose of holding the same in rigid position.

2. A device of the character described 110 comprising two diagonally disposed cross rods, flattened portions intermediately dis-

posed above said rods, the extremities of said rods being turned outwardly at right angles to the rails, a transverse rod intermediately disposed across said diagonal rods, a shoulder formed above the extremities of said transverse rod and nuts secured upon the extremities of all of said rods for the purpose of holding the same in position.

3. In a device of the character described the combination with two rails and ties for supporting the same of two rods diagonally disposed between said rails, said rods intersecting at their intermediate portions, a transverse rod disposed across said intermediate portions, a bolt secured through the intermediate portions of said rods and nuts carried at the extremities of said rods for the purpose of securing the same to said rails.

4. In a device of the character described the combination with two rails and ties for supporting the same of two diagonal cross rods disposed between said rails, the outer

extremities of said rods being bent outwardly at right angles to the rails and passed through the rails, a transverse rod disposed 25 across the intermediate intersecting portions of said rods, shoulders formed upon the ends of said transverse rod for abutting against the webs of said rails and nuts secured upon the extremities of all of said rods for the 30 purpose of securing the same to said rails.

5. A fastening means for the brace of the character described comprising an upper metallic plate, a lower metallic plate, a depending flange from said upper plate cut 35 away in sections for the purpose of spacing the rods of said brace and a bolt secured through said plates and said brace.

In testimony whereof I affix my signature,

in presence of two witnesses.

MICHAEL P. BARDON.

Witnesses:

CHARLES E. MOFFITT, G. H. READ.