

S. M. WHITMORE.

RAIL BRACE.

APPLICATION FILED OCT. 12, 1907. RENEWED MAY 3, 1909.

937,494.

Patented Oct. 19, 1909.

Fig. 1.

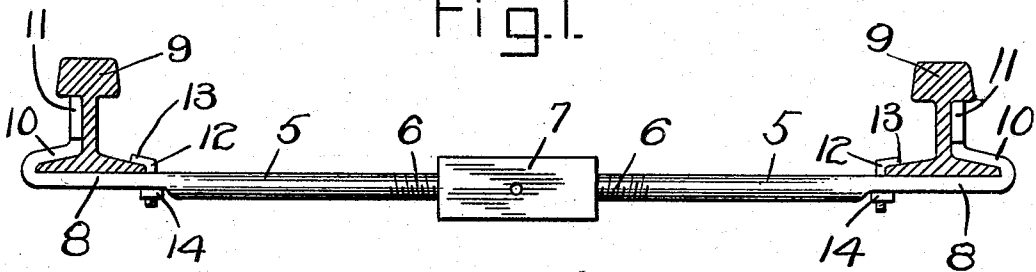


Fig. 2.

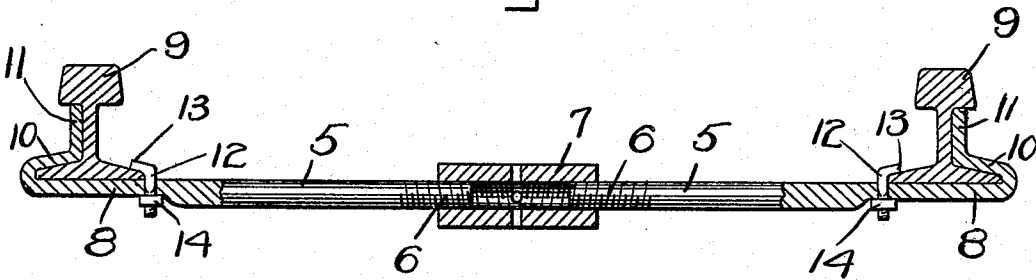
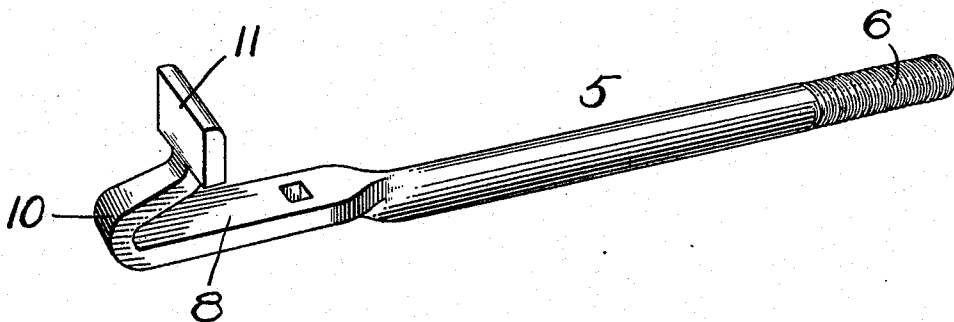


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

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RAIL-BRACE.

937,494.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, SAMUEL M. WHITMORE, a citizen of the United States, residing at Pregnall, in the county of Dorchester, State of South Carolina, have invented certain new and useful Improvements in Rail-Braces; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to rail braces and has for its object to provide a brace of this character which may be readily applied to the rails of a section of track and which will effectually prevent both spreading and approach of the rails. In other words the brace is designed to hold the rails firmly at the proper gage and the device is adjustable as to length in order to secure this result.

Broadly stated, the brace comprises a pair of members which have their opposing ends threaded and upon which ends of the members there is engaged a turn buckle, the other ends of the members being extended beneath the base flanges of the rails and being bent to engage the outer sides of the said flanges and having formed at the upper ends of their bent portions flat rail-web-engaging plates which firmly brace the rails against spreading. Threaded spike headed bolts are engaged through the members inwardly of their bent end portions and serve to securely hold the rails against approach toward each other.

In the accompanying drawings, Figure 1 is a side elevation of the device as applied to a track section, Fig. 2 is a vertical longitudinal sectional view therethrough, and, Fig. 3 is a detail perspective view of one of the members of the rail brace.

As shown in the drawings, the brace comprises a pair of members indicated by the numeral 5. These members have their inner end portions oppositely screw threaded as indicated at 6 and these threaded end portions of the said members are engaged in a turn buckle 7 which may be manipulated to adjust the brace as regards the length of the brace. The said brace members throughout the major portion of their length are cylindrical but their outer end portions are rectangular in cross section and are directed as at 8 to extend beneath the base of the

rail, these rails being indicated by the numeral 9. The said end portions of the brace members, after being extended beneath the rails, are bent as at 10 to conform to the upper face of the outer side of the respective rail base flange and these portions 10 are formed at their extreme ends with vertically directed rail web engaging plate portions 11 which are substantially rectangular and flat and which are designed to abut against the outer face of the web of the respective rail, it being understood that the rails are in this manner held against spreading. It will be noticed that these plate portions 11 are formed on the portion 8 so as to extend beyond the sides thereof and that the portion 8 has formed adjacent the portions 11 a reduced shank made by narrowing the portion 8 in its width. The object of this is to provide a spring connection between the web engaging head 11 and the bar 5 so that any inequalities of construction of either rail or brace may be taken up when the brace is tightened.

In order to prevent approach of the rails toward each other, bolts 12 are engaged through the squared portions 8 of the brace members and these bolts are provided with rail base flange engaging heads 13 which engage the inner edge of the base flange of the respective rail. The openings in the squared portions 8 through which these bolts are engaged are preferably rectangular and the major portion of the shank of each bolt is squared so that a nut 14 which is engaged upon each of the bolts may be turned to tighten the bolts to the said base flanges without likelihood of the bolt turning.

From the foregoing description of my invention it will be understood that the rails are held both against spreading and approach and it will further be understood that by reason of the fact that the openings through which the bolts 12 are engaged are rectangular and the bolt shanks are squared the rails may be quickly and securely clamped in place and that there will be no possibility of the bolts turning to cause their heads to disengage from the rail flanges. Another advantage devised by me lies in the fact that by manipulating the turn buckle 7 the rails may be spread or drawn toward each other as may be desired to bring them to the proper gage, and it will be appreciated also that a less number of ties may be em-

ployed than is usually the case inasmuch as the rails are held, after being adjusted, securely against relative movement.

What is claimed, is

- 5 A track brace comprising a pair of adjustably connected sections each consisting of a bar having one end threaded and the other end flattened to extend beneath the base flange of a rail and thence bent to en-
- 10 gage the outer top portion of said flange; a bent portion laterally tapered to form a neck, a T-head formed on said neck to en-

gage the outer side of a rail web and the under side of a rail head, said neck forming a yieldable connection between the T-head and flattened portion, and means carried by each of said sections to secure a rail on the inside base flange. 15

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

SAMUEL M. WHITMORE.

Witnesses:

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