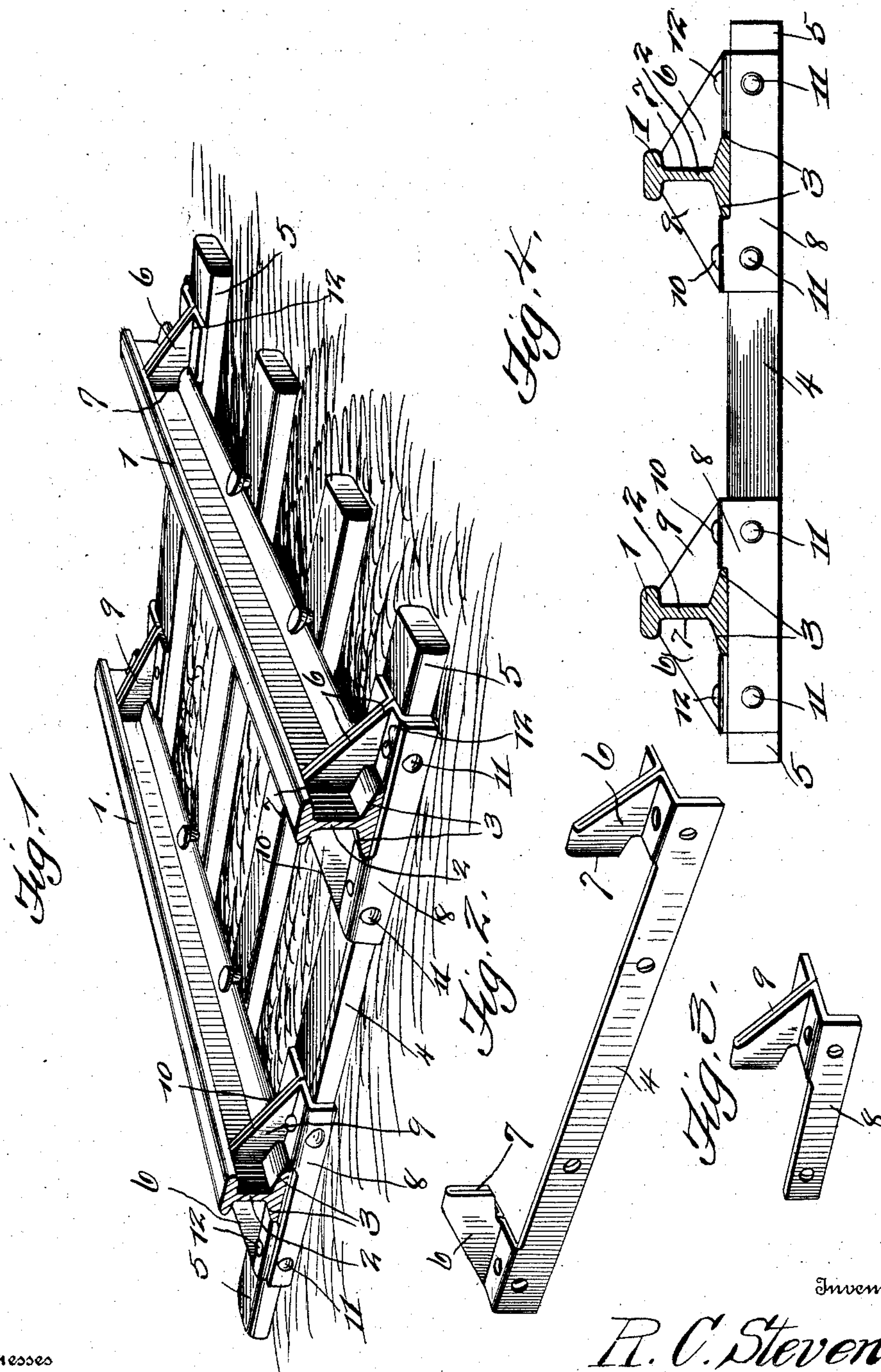


No. 854,252.

PATENTED MAY 21, 1907.

R. C. STEVENS.
RAIL BRACE.

APPLICATION FILED OCT. 25, 1906.



Witnesses

A. A. Bowler,
M. A. Bond.

Inventor

R. C. Stevens.

By

Alfred T. Gage.

Attorney

UNITED STATES PATENT OFFICE.

RICHARD C. STEVENS, OF HEFLIN, ALABAMA, ASSIGNOR OF ONE-HALF TO
RICHARD D. STEVENS, OF HEFLIN, ALABAMA.

RAIL-BRACE.

No. 854,252.

Specification of Letters Patent.

Patented May 21, 1907.

Application filed October 25, 1906. Serial No. 340,555.

To all whom it may concern:

Be it known that I, RICHARD C. STEVENS, a citizen of the United States, residing at Heflin, in the county of Cleburne and State of Alabama, have invented certain new and useful Improvements in Rail-Braces, of which the following is a specification.

This invention relates to a rail brace and particularly to a connecting bar extending between the bases of the opposite rails.

The invention has for an object to provide a gage bar having opposite end flanges to engage the outer faces of the rails to hold the same against spreading, in connection with a clamping plate mounted upon this bar and having a rail engaging flange to prevent inward movement of the rails toward each other, while the flanges carried by the bar retain the rail against vertical play or lateral tilting or turning thereof.

Other and further objects and advantages of the invention will be hereinafter set forth and the novel features thereof defined by the appended claims.

In the drawing—Figure 1 is a perspective of the invention applied; Fig. 2 a detail perspective of the gage bar; Fig. 3 a similar view of the clamping plate; and Fig. 4 is an end view of the rails showing the application of the bar and plates thereto.

Like numerals of reference indicate like parts in the several views of the drawing.

The numeral 1 designates the rails which may be of any desired configuration and having the web 2 and opposite base flanges 3. Connecting these rails is a gage bar 4, preferably formed flat and applied to the vertical face of a tie 5, or other rail supporting member. The opposite ends of this bar are bent at an angle thereto and provided with vertical flanges 6, preferably formed by bending the bar upward upon itself so as to secure rigidity and strength in construction. These flanges rest upon the upper face of the outer flange of the rail base and are formed with an inner face 7 to contact with the rail web 2 and with the under face of the tread thereof. This supports the rail against springing or vertical movement and also against any tilting or lateral turning thereof, particularly upon curves or where a side strain is placed on the rail. The flanges also form an accurate gage and prevent spreading of the rails which are securely seated and held therein.

To retain the rails against inward movement the clamping plates 8 are applied and each may be formed with an angularly disposed flange 9, similar to the flange 6 before described. This plate flange securely seats upon the inner face of the rail and is held against vertical movement on the tie 5 by means of any suitable fastening, for instance, spikes 10. Both the bar and plates are held in position upon the vertical face of the tie by means of spikes 11 as when properly positioned the apertures therein are brought into alinement so that only one set of securing devices are necessary to hold both members in fixed relation to the tie. If found desirable, the flanges of the bar may also be secured to the upper face of the tie by means of spikes 12 extended through the horizontal faces thereof.

It will be observed that when this brace is applied the rails are securely held against spreading and also against any movement toward each other, while the flanges upon the bar and plates firmly grasp and support the rail so that it is held against a vertical play or lateral tilting. The innerface of the flange which contacts with the web and tread of the rail materially strengthens these parts and imparts rigidity to both the rail and the brace connection therewith. The invention therefore presents a simple and very efficient device, adapted to be formed from a single blank, for accurately gaging the rails and securely retaining them against any accidental displacement or movement.

Having described my invention and set forth its merits what I claim and desire to secure by Letters Patent is:—

1. A rail brace comprising a gage bar adapted to engage the side face of a tie and angularly disposed portions at its opposite ends to engage the upper face thereof, and means extended upward from the end portions to engage the outer rail faces.

2. A rail brace comprising a gage bar adapted to engage the side face of a tie and angularly disposed portions at its opposite ends to engage the upper face thereof, means extended upward from the end portions to engage the outer rail faces, and a clamping plate having an angularly disposed portion to rest upon the upper face of the tie and means to engage the inner face of the rails.

3. A rail brace comprising a vertically dis

posed gage bar adapted to engage the side face of a tie and having at its opposite ends flanges each bent upon itself to lie in a parallel plane to the bar and upon the outer rail flanges, and means mounted upon said bar to engage the inner flanges of the rails.

4. A rail brace comprising a bar having end flanges bent at an angle thereto and each flange bent upon itself to form a flange at an angle to the end flange disposed parallel with the body of the bar and having a face to engage the rail web.

5. A rail brace comprising a gage bar

adapted for application to the side of a tie and having end flanges disposed to engage the top thereof, and a clamping plate mounted upon said bar and having a flange disposed to engage the top of the tie.

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

RICHARD C. ^{his} X STEVENS.
ma

Witnesses:

A. E. CARRUTH,
M. B. REESE.