

S. W. JOYAL.

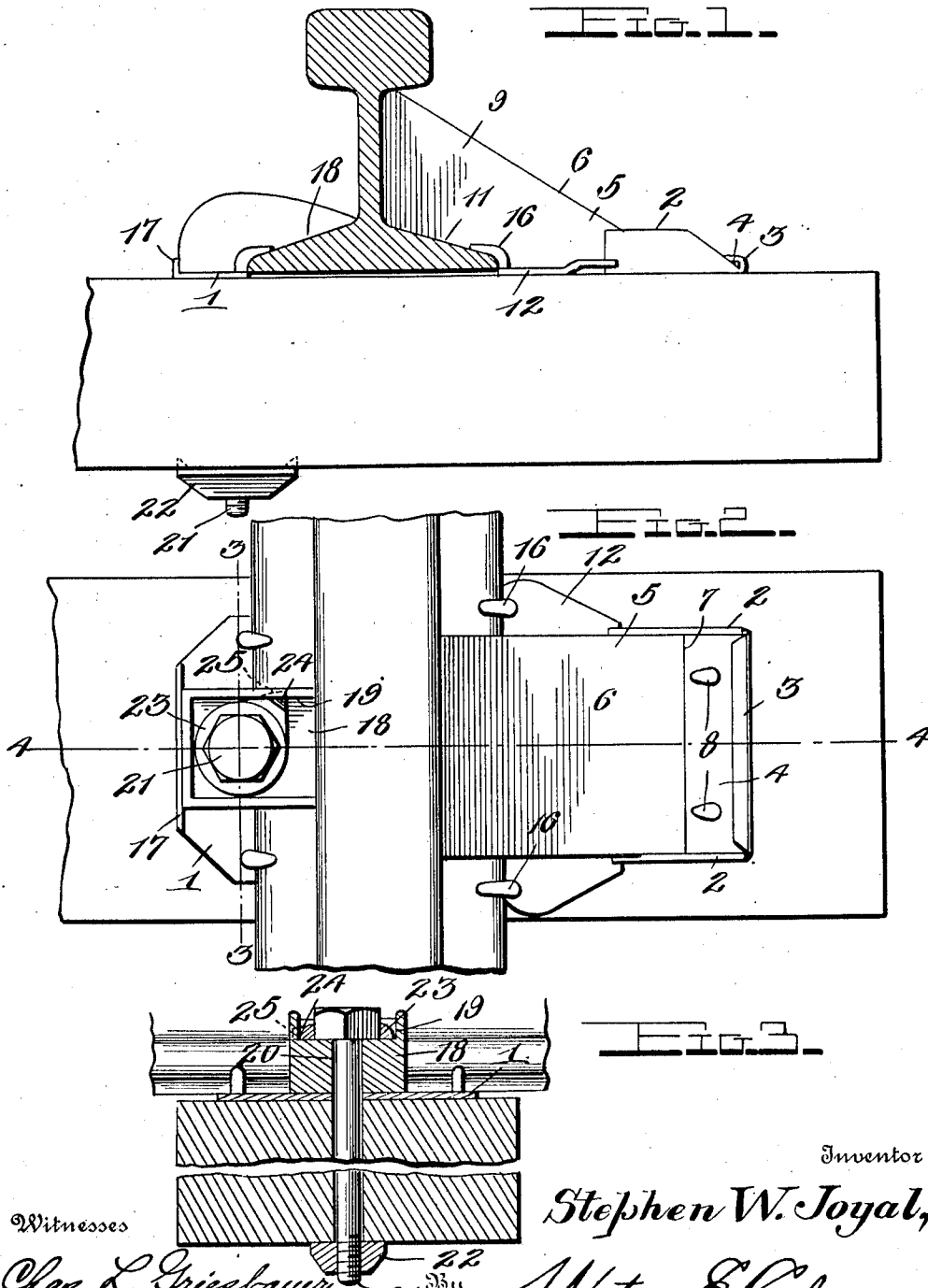
RAIL BRACE.

APPLICATION FILED NOV. 22, 1911.

1,026,807.

Patented May 21, 1912.

2 SHEETS—SHEET 1.



Inventor

Stephen W. Joyal,

Witnesses

Chas. L. Griesbaur.
L. H. Ellis.

By

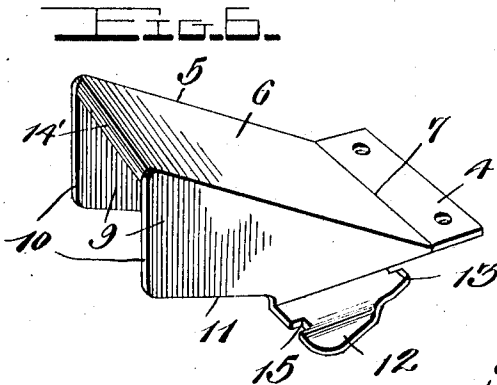
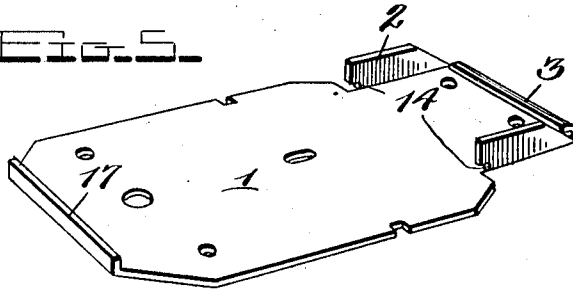
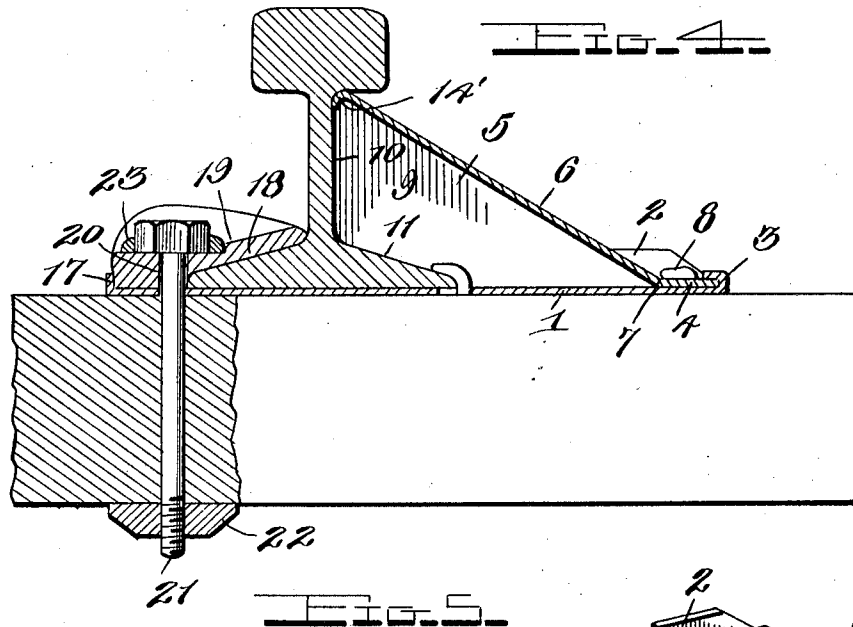
Watson E. Coleman,
Attorney

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UNITED STATES PATENT OFFICE.

STEPHEN W. JOYAL, OF CAVENDISH, VERMONT.

RAIL-BRACE.

1,026,807.

Specification of Letters Patent.

Patented May 21, 1912.

Application filed November 22, 1911. Serial No. 661,686.

To all whom it may concern:

Be it known that I, STEPHEN W. JOYAL, a citizen of the United States, residing at Cavendish, in the county of Windsor and State of Vermont, have invented certain new and useful Improvements in Rail-Braces, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to new and useful improvements in rail braces and has for its object to provide a brace composed of sections comprising a base plate, a brace member and a rail clip to be placed on the inner side of the flange of the rail.

Another object of my invention is to provide a rail brace which will possess advantages in points of efficiency and durability, is inexpensive of manufacture and at the same time is extremely simple in construction.

With the above and other objects in view the invention consists in the novel features of construction and the combination and arrangement of parts hereinafter described, pointed out in the claims and shown in the accompanying drawings in which,

Figure 1 is a side elevation of my improved rail brace, Fig. 2 is a top plan view, Fig. 3 is a sectional view on the line 3—3 of Fig. 2. Fig. 4 is a sectional view on the line 4—4 of Fig. 2. Fig. 5 is a detail perspective view of the base plate, and Fig. 6 is a detail perspective view of the brace member.

Referring more particularly to the drawings 1 indicates the base plate stamped from heavy sheet metal or other suitable material, having vertically disposed flanges 2 struck up from its edges at one end thereof and the end of said plate being bent upon itself to form a channel 3 adapted to receive the lower end 4 of the brace member 5, the lower end 4 of the inclined outer face 6 of the brace member being bent at 7 so as to lie flat upon the base plate and spikes 8 are driven through the end 4 and the base plate into the tie to hold said brace member.

The brace member 5 is formed of heavy sheet metal or other suitable material the same as the base plate and is provided with inclined side portions 9 having their upper ends provided with a vertical surface 10 adapted to abut against the web of the rail, said side portions being formed on their lower edges coincident with the flange of

the rail as shown at 11 so as to abut tightly thereagainst. Horizontally disposed tapering flanges 12 are formed integral with the side portions 9, having a slot 13 formed in the small end thereof and a similar slot 14 is formed in each of the flanges 2 whereby these flanges will be interlocked to prevent any lateral movement of the brace member 5. The upper edge of the incline portion 6 of the brace is bent at 14' so as to fit snugly under the tread of the rail.

A recess 15 is formed in the enlarged end of each of the flanges 12 to receive the spikes 16 the heads of which will engage over the flange of the rail. The end of the base opposite the channel 3 is bent upwardly to form the vertically disposed flange 17. A rail fastener is disposed between the flange of the rail and the vertical flange 17 on the base plate, said fastener extending inwardly and formed coincident with the flange of the rail as shown at 18 and adapted to fit tightly thereon, said fastener being provided with a recess 19 formed in the top side thereof and an opening 20 is formed therein in which is disposed a bolt 21 which is provided with a hexagon shaped head, said bolt passing through an opening in the base plate and the tie and a locking nut 22 threaded on the lower end. A hexagon shaped locking member 23 is provided adapted to fit over the head of the bolt 21 and having an extension 24 formed integral therewith and disposed in the groove formed in the walls of the recess 19 to hold said bolt against movement.

From the foregoing it will be seen that I have provided a simple and inexpensive rail brace which can be quickly and easily applied to a rail or removed therefrom.

While I have shown and described the preferred form of my invention it will be obvious that various changes in the details of construction and in the proportions may be resorted to for successfully carrying my invention into practice without sacrificing any of the novel features or departing from the scope thereof.

What I claim is:—

1. A rail brace comprising a base plate, vertically disposed flanges struck up from the edges of said base plate at one end thereof, having notches formed therein, a brace member mounted on said base plate, and means carried by said brace member adapted to engage with said vertical flanges to

prevent any lateral movement of the brace member.

2. A rail brace comprising a base plate, a brace member formed of heavy sheet metal, having an inclined outer face, the upper edge of said outer face being bent to fit snugly under the tread of the rail at the junction of the web and the tread of the rail, and means for interlocking said base plate and brace member to prevent any lateral movement of the latter.

3. A rail brace comprising a base plate, vertically disposed flanges struck up from the edges of said base plate at one end thereof, having slots formed therein, a brace member mounted on said base plate, horizontally disposed flanges formed integral with said brace member and arranged on each side thereof, and having slots formed therein to register with the slots in the flanges on the base plate whereby said flanges are interlocked to prevent any lateral movement of the brace member.

4. A rail brace comprising a base plate, having one end bent to form a channel, vertically disposed flanges struck up from the edges of said base plate at one end thereof, having slots formed therein, a brace member formed of heavy sheet metal, having an inclined outer face, the lower end of which is bent to lie flat on the base plate and the outer edge disposed in the channel on the base plate, horizontally disposed flanges

formed integral with said brace member and arranged on each side thereof, and having slots formed therein to register with the slots in the flanges on the base plate, whereby said flanges will be interlocked to prevent any lateral movement of the brace member.

5. A rail brace comprising a base plate, a brace member interlocked therewith and adapted to fit snugly up against the web of the rail on one side thereof, a vertical flange formed on the end of the base plate opposite the brace member, a rail fastener disposed between the flange of the rail and said vertical flange, said fastener extending inwardly and formed to overlie the flange of the rail and adapted to fit snugly thereon, said fastener having a recess formed in the top side thereof, and an opening formed therein, a bolt passing through said opening, said bolt passing through an opening in the base plate and the tie, a nut threaded on the lower end thereof, and means for engaging the head of the bolt and coacting with one of the side walls of the recess to hold said bolt against movement.

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

STEPHEN W. JOYAL.

Witnesses:

MARION C. WHITE,
ELLIOTT G. WHITE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."