(No Model.)

H. GREER.

RAILROAD TRACK BRACE.

No. 527,489. Patented Oct. 16, 1894.

FIG. 1.

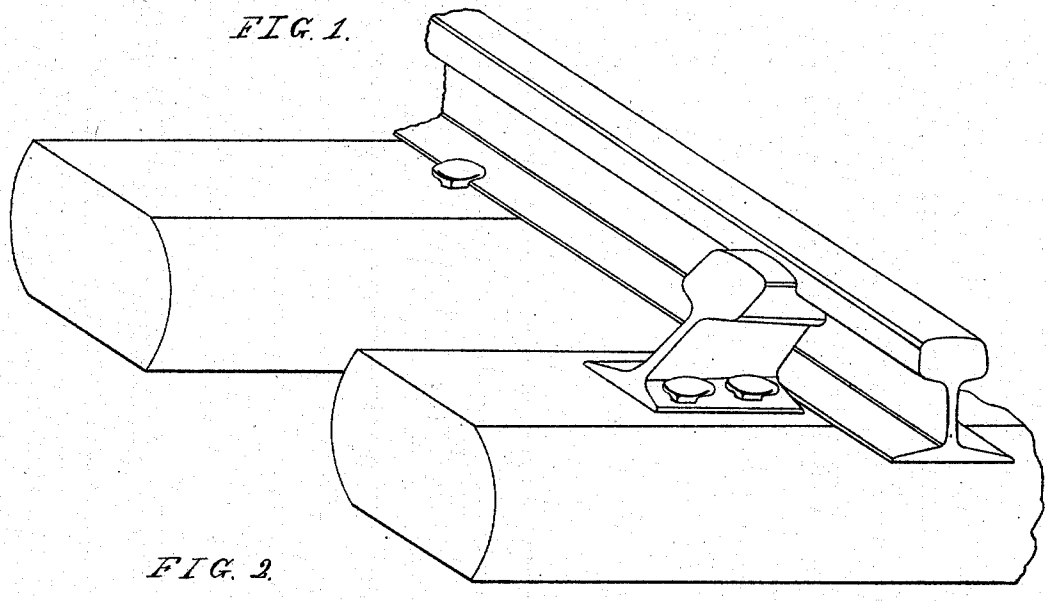


FIG. 2.

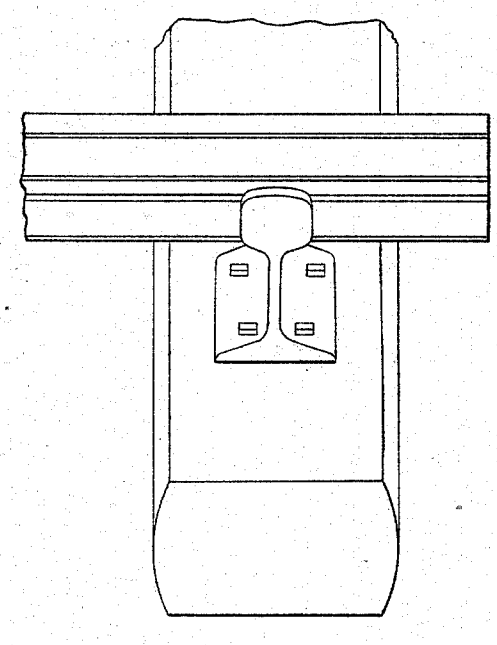


FIG. 3.

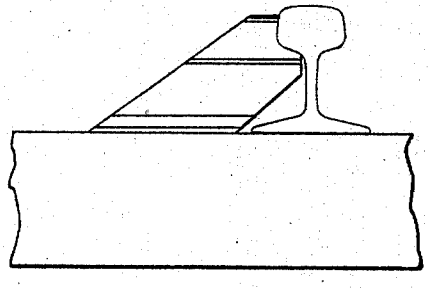
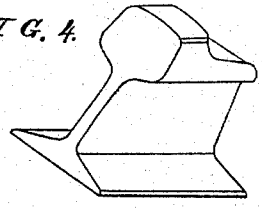


FIG. 4.



Witnesses.
Walter G. Berson
Henry A. Gephart.

Inventor.
Howard Greer

UNITED STATES PATENT OFFICE.

HOWARD GREER, OF CHICAGO, ILLINOIS.

RAILROAD-TRACK BRACE.

SPECIFICATION forming part of Letters Patent No. 527,489, dated October 16, 1894.

Application filed November 17, 1893. Serial No. 491,189. (No model.)

To all whom it may concern:

Be it known that I, HOWARD GREER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented or discovered a certain new and useful Improvement in Railroad-Track Braces, of which improvement the following is a specification.

Figure 1 is a view in perspective of a portion of rail-road track showing my improved rail brace in service. Fig. 2 is an end view of the brace, in perspective, showing its position on the rail-road ties and against the rail when in use. Fig. 3 is a side view of the improved track brace showing position in service. Fig. 4 is a detached perspective view of the improved track brace.

My present invention relates to what is known as a rail brace or track brace employed to strengthen the guard rails at frogs to prevent track spreading at curves, &c.

The distinctive features of my improvement are a broad bearing on the rail road tie and a broad solid bearing of the brace against the head of the rail to be supported with a strong upright portion or web connecting the head and flange members thereby producing the strongest brace that can be made of a given quantity of material.

To enable mechanics skilled in the art to make my improved track brace I will proceed to describe the method of making the same.

The finished braces being in cross-section similar to the railroad rails to be supported by them I form the bars from which the braces are to be cut in the same manner that railway rails are rolled. From such rolled bars I sever or cut the braces in shears or punching presses provided with dies and punches or knives having the proper shape to form the desired brace complete without any further shaping or forming after being severed from the parent bar.

It will be necessary to have the dies and punches or shear blades formed to fit the rail to be braced so that the part of the brace that comes in contact with the supported rail will have a good bearing surface.

If the material used is wrought iron or mild steel the severing from the parent bar may be done either hot or cold but if rail or hard steel is employed it will be necessary to heat the bars to a red or shearing heat.

The peculiar shape of my improved track brace presented such serious difficulties to the customary methods of making braces, *i. e.*, by hammering, swaging or pressing that I was compelled to devise a new system by which my improved brace might be manufactured economically.

The novel method of making track braces described above with the dies and other necessary machinery will form the subject of a separate application to be filed in due time.

Old iron and steel railway rails of suitable shape, size and quality when not too much worn may be cut into my improved brace; also suitable crop ends from new rails.

What I claim as new, and desire to secure by Letters Patent, is—

A rail-brace formed from a section sheared or sawed from a parent bar having the cross-section of a T-rail, one end of the brace being cut to fit the rail to be supported the opposite end being cut any convenient shape preferably a slant of such length as to give a strong head in contact with the supported rail with sufficient bearing of foot on the tie to afford ample room for holding down bolts or spikes substantially as described and set forth

HOWARD GREER.

Witnesses:
F. S. WEIGLER,
A. L. WOODWARD.