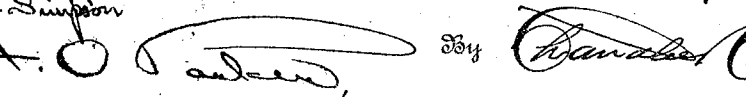
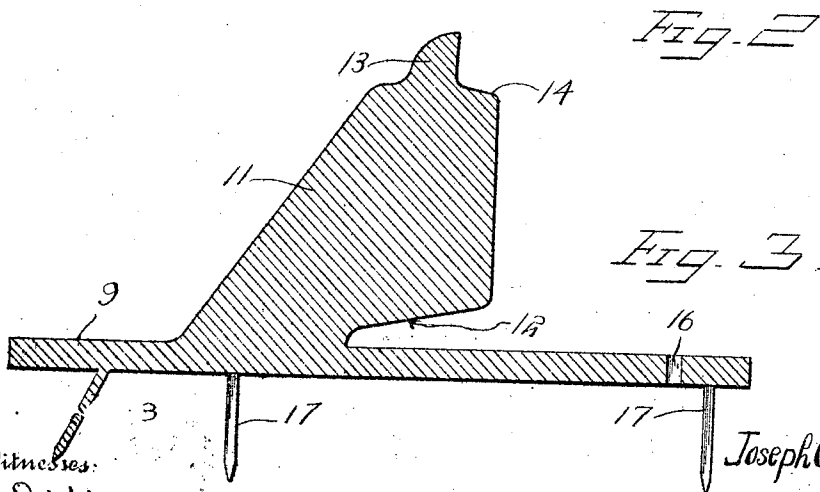
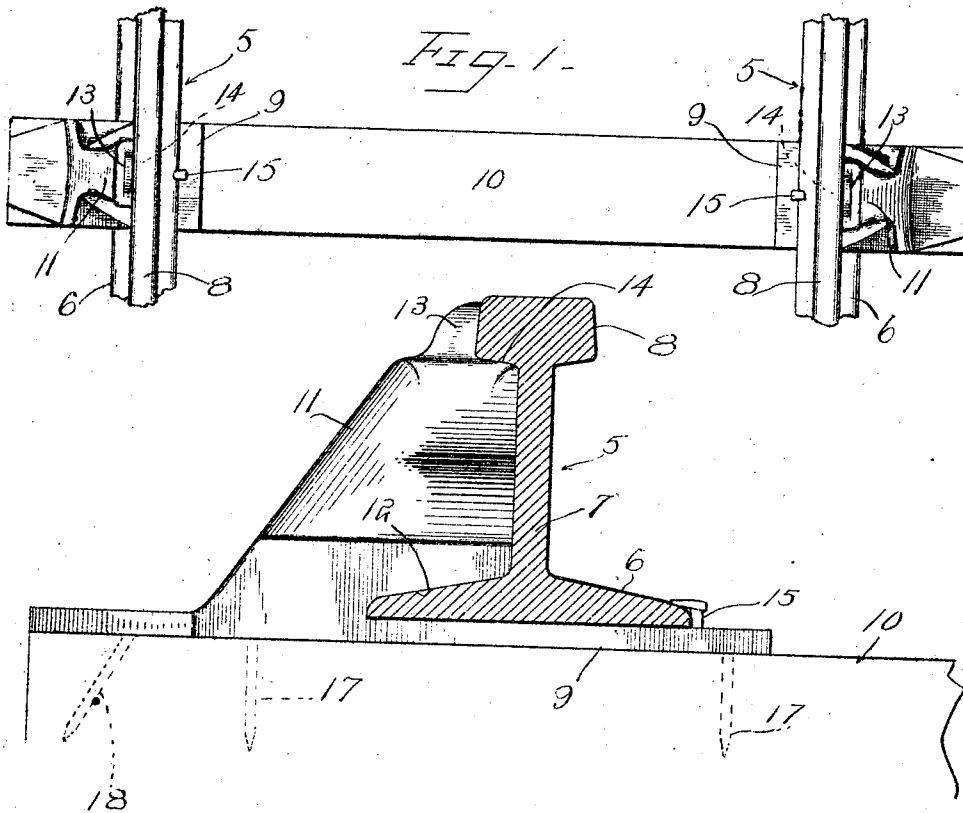


J. CHAMBERS, JR.  
 RAIL TIE AND BRACE.  
 APPLICATION FILED AUG. 5, 1909.

1,000,780.

Patented Aug. 15, 1911.



Witnesses:  
 J. C. Simpson

Inventor:  
 Joseph Chambers, Jr.

H. O. Paulsen,

By Chambers, Chambers,

Attorney

# UNITED STATES PATENT OFFICE.

JOSEPH CHAMBERS, JR., OF HILLMAN, MAINE.

RAIL TIE AND BRACE.

1,000,780.

Specification of Letters Patent. Patented Aug. 15, 1911.

Application filed August 5, 1909. Serial No. 511,444.

To all whom it may concern:

Be it known that I, JOSEPH CHAMBERS, JR., a citizen of the United States, residing at Hillman, in the county of Aroostook, State of Maine, have invented certain new and useful Improvements in Rail Ties and 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.

The invention relates to a rail brace and tie.

The primary object of the invention is the provision of a device of this class in which railway rails will be securely supported along a track bed and prevented against displacement and spreading.

Another object of the invention is the provision of a rail brace and tie in which the railway rails will be properly supported throughout a track bed and the treads of which will be reinforced at intervals so as to overcome the possibility of the same splitting while in use.

A still further object of the invention is the provision of a device of this character which is simple in construction, thoroughly reliable and efficient in operation and inexpensive in the manufacture.

With these and other objects in view the invention consists in the construction, combination, and arrangement of parts as will be hereinafter more fully described, illustrated in the accompanying drawings, which disclose the preferred form of embodiment of the invention, and as pointed out in the claim hereunto appended.

In the drawings:—Figure 1 is a top plan view of a rail brace and tie constructed in accordance with the invention showing rails supported thereby. Fig. 2 is a fragmentary side elevation. Fig. 3 is a vertical longitudinal sectional view.

Similar reference characters indicate corresponding parts throughout the several views in the drawings.

In the drawings, the numeral 5 designates railway rails of the ordinary construction having bases 6, web portions 7, and treads 8, and the bases of these rails are mounted upon a metallic plate 9, which may be disposed directly upon the track bed although in this instance it is shown superimposed

upon a wooden cross tie 10, which is of the usual construction. The plate 9, near opposite ends thereof has rising therefrom brace blocks 11, the same being formed integral with said plate. Each of said brace blocks is formed with a recess 12, in its inner face to receive the outside portion of the base 6, of the rail and to permit the brace block to lie contiguous to the web portion of the rail.

At the top of the brace blocks 11, are lugs 13, which are disposed a distance removed from the inner faces of the blocks to form seats 14 for the outermost edges of the treads 8 of the rail. These bearing seats 14, of the blocks receive the outside portion of the tread 8, to prevent the same from splitting when excessively loaded cars travel on the rails.

The plate 9 is formed near its outer end with a downwardly and outwardly inclined projection 18 which is driven into the tie on which the plate is placed and acts not only to secure the plate on the tie but to also brace the plate and prevent it from being moved outwardly under the stress of passing trains. Securing spikes 17 are also employed to secure the plate on the tie, as shown.

The rails 5 are prevented from outward spreading by the brace blocks 11, and the treads of said rails are reinforced and prevented from splitting by the lugs 13, formed at the tops of the brace blocks.

What is claimed is:—

The herein described brace comprising a plate having a brace-block extending upwardly therefrom, the inner face of which conforms to the rail below the ball thereof, a lug forming an integral part of the brace-block and contacting with the ball of the rail, said block having a bearing portion extending beyond the rail bearing portion of said plate, an inclined spike forming an integral part of the plate adjacent to the outer end thereof and beyond the said brace-block, and additional spikes also forming a part of the plate and arranged perpendicular to the latter.

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

JOSEPH CHAMBERS, JR.

Witnesses:

LESTER F. TARBELL,  
PERLEY H. TARBELL.