

R. W. EDWARDS.
 COMBINED TIE PLATE, BRACE, AND GUARD RAIL.
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1,006,999.

Patented Oct. 24, 1911.

Fig. 1.

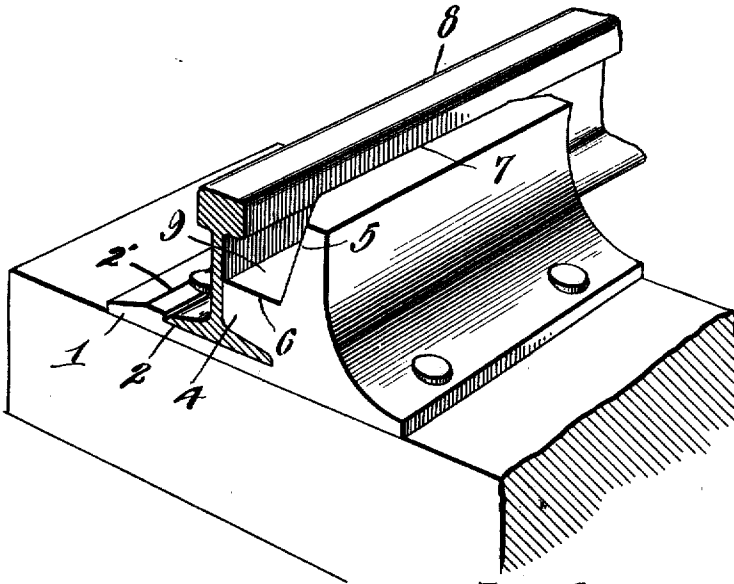
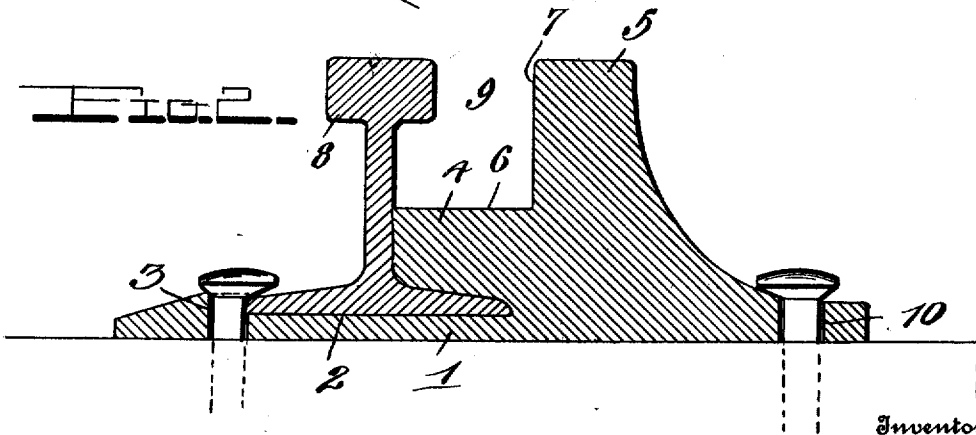


Fig. 2.



Witnesses

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REUBIN WILLIAM EDWARDS, OF BULLARDS, GEORGIA.

COMBINED TIE-PLATE, BRACE, AND GUARD-RAIL.

1,006,999.

Specification of Letters Patent.

Patented Oct. 24, 1911.

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To all whom it may concern:

Be it known that I, REUBIN W. EDWARDS, a citizen of the United States, residing at Bullards, in the county of Twiggs and State of Georgia, have invented certain new and useful Improvements in Combined Tie-Plates, Braces, and Guard-Rails, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to new and useful improvements in fastening devices, and more particularly to a combined rail-plate, brace and guard, and my object is to provide a device which will securely retain a rail in position on a tie, prevent the same from turning, and further provided with means thereon to prevent the wheel from leaving the tread of the rail.

A still further object is to provide a device with these features integral, and of such simple construction as will be cheaply manufactured, and extremely efficient in operation.

With these and other objects in view, my invention consists in the novel features of construction, combination and arrangement of parts, as will be hereinafter referred to and more particularly pointed out in the specification and claims.

In the accompanying drawing forming a part of this application, Figure 1 is a perspective view of my improved device applied to use; and Fig. 2 is a transverse section through the same.

In carrying out my invention, I shall refer to the drawing, in which similar reference characters designate corresponding parts throughout the several views, and in which—

1 indicates a tie-plate provided adjacent one side edge thereof with a seat 2, adapted to receive the base of a rail, which seat is formed by the provision of a longitudinal projection 2' on one side and an additional projection on the other side hereinafter mentioned, and said projection 2' is provided adjacent the seat with the spike-receiving openings 3, whereby the spikes used to secure the plate to the tie are also adapted to retain the rail within the seat. The opposite side of plate 1 is increased in thickness and provided with the projections 4 and 5, said projections extending substantially at right angles to one another. The projection 4 is extended in substantially a horizontal position, and has the under face

thereof curved compoundly coincident to the curvature of the base and web of the rail which is adapted to be inserted in the seat 2. This projection, therefore, forms a brace for the rail, as well as a means for retaining the same securely in its seat, as a rail base must be introduced beneath said projection to become properly seated.

As stated, the projection 5 of this device is substantially at right angles to the projection 4, and the adjacent walls 6 and 7, respectively, thereof are flattened so that when the rail 8 has been positioned within its seat, as disclosed in Fig. 1 of the drawing, a channel 9 will be formed between the projection 5 and the rail. As this device is to be positioned so that the projection 5 is on the inside of the rail, said channel 9 will be adapted to receive the flange of the car wheel and said projection will form a guard therefor.

This device is particularly adapted for use around curves wherein the wheels are most apt to jump the rail, and it will be seen that with the use of such a device as disclosed and described, such jumping will be prevented.

That portion of the plate beyond the projection 5 and opposite that containing the seat 2 is provided with additional openings 10, adapted to receive spikes, whereby the same may be secured to the tie at this side as well as the opposite side.

From the foregoing, it will be seen that I have provided a device which will secure a rail to the tie, brace said rail, and at the same time provide means to prevent the wheels from jumping the rail. It will still further be seen that by providing a device which is integrally formed, the same will be durable and effective in operation, and cheaply manufactured.

What I claim is:

1. In a device of the character described, the combination with a rail; of a plate having spaced longitudinal projections thereon to form a seat for the base of said rail, one of said projections being extended over the seat to form a rail brace, the other of said projections being provided with spike-receiving openings contiguous with said seat, and an additional projection formed integral with the brace and forming a rail guard.

2. In a device of the character described, the combination with a rail; of a plate hav-

ing spaced longitudinal projections thereon to form a seat for the base of said rail, one of said projections being extended over the seat to form a rail brace, the other of said
5 projections being provided with spike-receiving openings contiguous with said seat, an additional projection integral with the base and forming a guard rail, and means
10 also adapted to prevent the longitudinal movement of the rail.

3. In a device of the class described, the combination with a rail; of a plate having spaced longitudinal projections thereon to
15 form a seat for the base of said rail, said seat being substantially equal in width to the width of the rail base, an extension on

one of said projections disposed over said seat to form a brace for the rail, the other of said projections being provided with
20 spike-receiving openings, said openings having the inner walls thereof in alinement with the outer wall of said seat, means entering said openings to simultaneously secure the
25 plate and the rail in position, and an additional projection integral with the brace and forming a rail guard.

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

REUBIN WILLIAM EDWARDS.

Witnesses:

REESE RAMEY,
FRANK HARRELL.

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