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RAIL BRACE AND FASTENER.

APPLICATION FILED JULY 19, 1916.

1,303,824. Patented May 13, 1919.

Fig. 1.

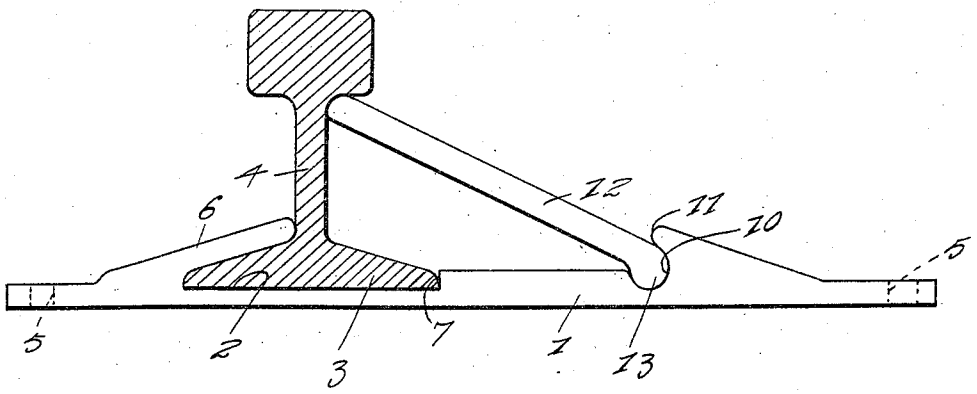
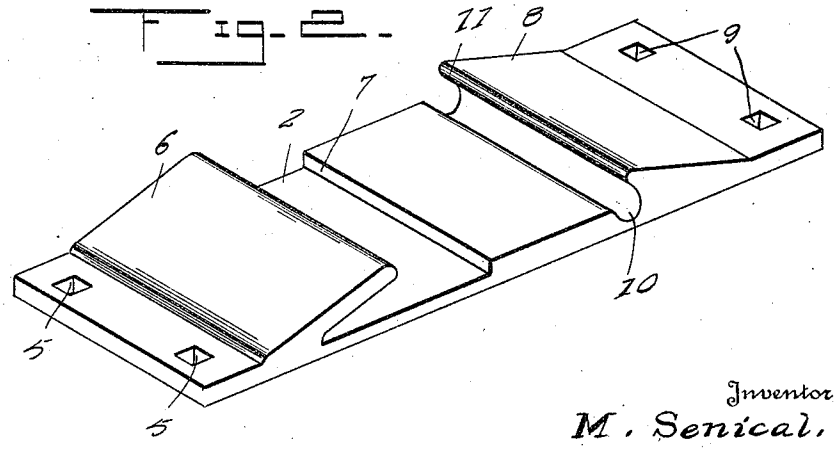


Fig. 2.



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UNITED STATES PATENT OFFICE.

MEDRICK SENICAL, OF NEGAUNEE, MICHIGAN.

RAIL BRACE AND FASTENER.

1,303,824. Specification of Letters Patent. Patented May 13, 1919.

Application filed July 19, 1916. Serial No. 110,126.

To all whom it may concern:

Be it known that I, MEDRICK SENICAL, a citizen of the United States, residing at Negaunee, in the county of Marquette and State of Michigan, have invented certain new and useful Improvements in Rail Braces and Fasteners; 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.

This invention relates to a rail brace and fastener, especially adapted to be associated with the rails at a curve, and of such construction that it can be conveniently applied in operative position, and will be durable and efficient in operation.

Other objects will appear and be better understood from that embodiment of my invention of which the following is a specification, reference being had to the accompanying drawing forming a part thereof, in which:

Figure 1 is a side elevation of the improved brace and fastener, showing the same in operative position on a rail.

Fig. 2 is a perspective view of the fastening member removed from operative position.

Referring to the drawing in detail, the numeral 1 designates a plate adapted to be positioned on a rail tie, not shown, and provided at one end with a recessed portion 2, adapted to form a seat for the base flange 3 of a rail 4. The plate 1 has that end adjacent the recess 2 provided with a pair of spaced openings 5 for the reception of suitable fastening elements for securing the plate to the tie, and located at a point spaced inwardly from the openings 5 is a diagonally disposed flange 6 adapted to engage over the adjacent longitudinal edge of the base flange 3 of the rail 4 and to overlie the flange. By recessing the plate 1, to provide a seat 2 for the rail, a shoulder 7 is defined, which engages the adjacent longitudinal edge of the base flange 3 of a rail and coöperates with the flange 6 in holding the rail against lateral movement on the plate 1. Formed on the upper surface of the plate 1 and located adjacent the end opposite the one having the flange 6 formed thereon, is a raised portion 8. The upper surface of the raised portion 8 inclines downwardly toward the adjacent end of the plate, and the said end of the plate is provided, at a point spaced from the raised portion 8, with a pair of openings 9, adapted to receive suitable fastening elements for coöperating with the element to be passed through the openings 5, to hold the plate 1 in position on the tie. The plate 1 is provided, at a point in close proximity to the inner edge of the raised portion 8 with a transverse groove 10, which opens into the upper surface of the plate and the opposite longitudinal edges of the plate, and the inner edge of the raised portion 8 is undercut to provide the overhanging ledge 11 and the under surface of the ledge 11 gradually merges, as shown in the drawing, into the wall of the groove 10.

Detachably associated with the plate 1 is a bracing element 12. This bracing element 12 is of rectangular shape in configuration, and, as shown in Fig. 1 of the drawing, lies in a diagonal plane and has one edge engaging under the ball of the rail and the opposite edge provided with a depending lip 13, which is rounded, as shown in Fig. 1 of the drawing, and fits within the groove 10, when the brace 12 is in operative position. In positioning the brace 12 on the plate 1, the brace 12 is positioned in a diagonal plane and the upper end thereof engaged beneath the ball of the rail, and the lip 13 alined with the groove 10. The brace is then moved transversely of the plate 1 to the position shown in Fig. 1 of the drawings.

Having thus described my invention, what I claim as new, is:

The combination with a railroad rail, of a rail brace and fastener comprising a flat plate having a transversely extending recess formed therein to receive the rail base flanges, a flange formed on the plate near one end thereof and arranged to overlie the recess and engage one of the base flanges of the rail, said plate being provided at a point spaced outwardly from said recess with a transversely extending groove, an inclined brace having its lower end enlarged and bent downwardly and positioned in said

groove and having its upper end positioned in engagement with the underside of the head of the rail, and an upwardly extending inclined ledge formed on the plate adjacent to the groove for engagement with the upper side of the brace to prevent its lower end from moving accidentally out of the groove.

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

MEDRICK SENICAL.

Witnesses:
M. J. KENNEDY,
G. M. BELHUMEN.

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