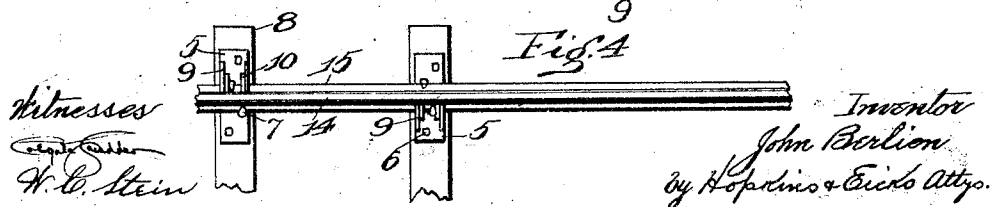
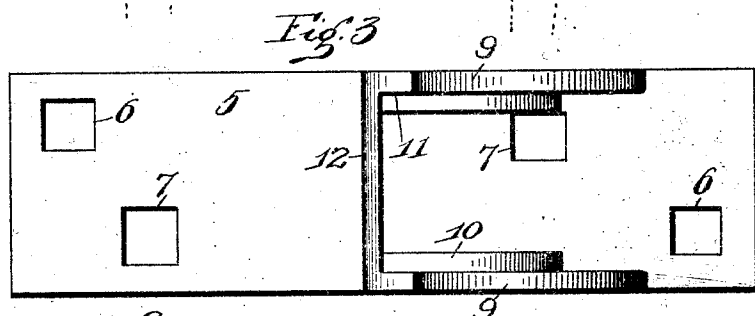
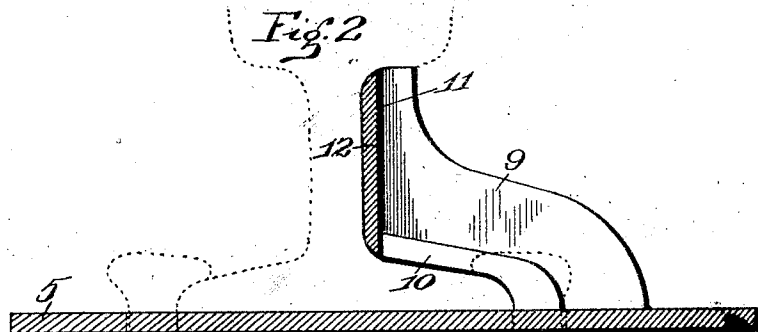
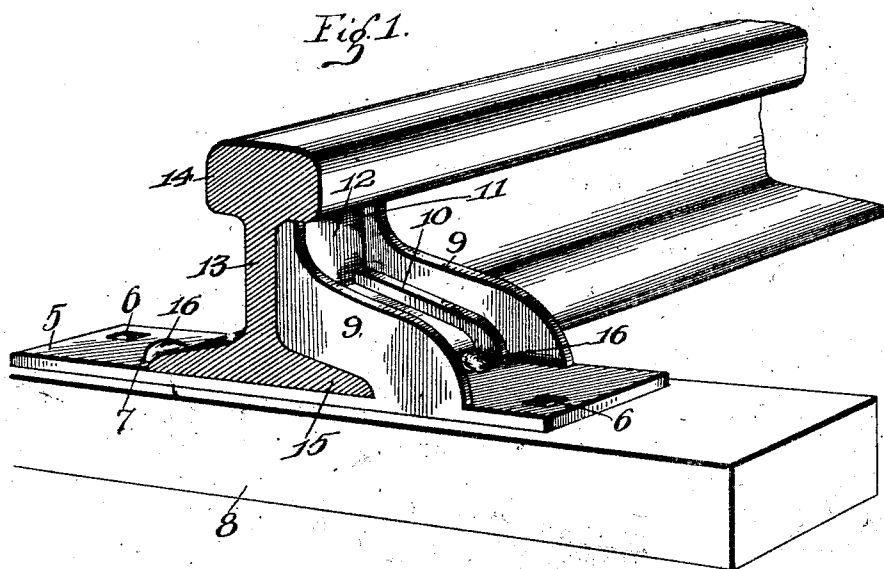


No. 846,181.

PATENTED MAR. 5, 1907.

J. BERLIEN.
RAIL BRACE.

APPLICATION FILED OCT. 23, 1906.



UNITED STATES PATENT OFFICE.

JOHN BERLIEN, OF ST. LOUIS, MISSOURI.

RAIL-BRACE.

No. 846,181.

Specification of Letters Patent.

Patented March 5, 1907.

Application filed October 23, 1906. Serial No. 340,220.

To all whom it may concern:

Be it known that I, JOHN BERLIEN, a citizen of the United States, and a resident of St. Louis, Missouri, have invented certain new and useful Improvements in Rail-Braces, of which the following is a specification.

This invention relates to improvements in a rail-brace, and consists in the novel arrangement of a casting to be placed against a railway-rail to support the same.

In the drawings, Figure 1 is a perspective view of my complete invention shown in position against a rail. Fig. 2 is a central vertical sectional view of the same. Fig. 3 is a top plan view. Fig. 4 is a top plan view of a section of the rail and ties, showing the manner in which my invention is applied to the rail.

Referring to the drawings in detail, I provide a casting composed of a horizontal base-section 5, which is provided with a plurality of openings 6 and 7, through which the ordinary railway-spike is passed for supporting the device to the tie 8.

Formed integral with the base-plate are a pair of upwardly-projecting arms 9, each being provided on its inner surface with a strengthening-rib 10. The ends 11 of the arms 9 are provided with a web 12, which is arranged to come in contact with the web 13 of the rail. The upper end of the web 12 and arms 9 are formed to closely contact with the under surface of the tread 14 of the rail. The under surface of the web 12 and the arms 9 are formed to closely contact with the upper surface of the flange 15 of the rail. By this construction of casting the rail is prevented

from tilting or rising from the tie, as the web portion 12 will prevent the tilting of the rail while the under surface of the arms 9 will prevent the rising.

After the device has been placed in position against the rail, as shown in Figs. 1 and 2, the ordinary railway-spikes 16 are driven through the openings 6 and 7 into the tie, supporting the brace thereon. At the same time the spikes driven through the opening 7 come in contact with the edges of the flange 15 of the rail, preventing the same from moving laterally upon the base-plate.

In equipping a railway-track with these rail-braces they are placed against the rail in staggered position, or, in other words, one on one side and one on the other, as shown in Fig. 4.

Having fully described my invention, what I claim is—

A device of the class described, comprising a base-plate provided with spike-openings, upwardly-projecting arms formed integral with said base-plate, the ends of said arms connected by a web, and a strengthening-rib whereby said arms are reinforced, said arms so arranged as to communicate with the web and flange of the rail substantially as specified.

In testimony whereof I have signed my name to this specification in presence of two subscribing witnesses.

JOHN BERLIEN.

Witnesses:

ALFRED A. EICKS,
COLGATE SCUDDER.