No. 853,149. PATENTED MAY 7, 1907.

E. S. BARTON.

RAILWAY RAIL BRACE.

APPLICATION FILED JULY 26, 1906.

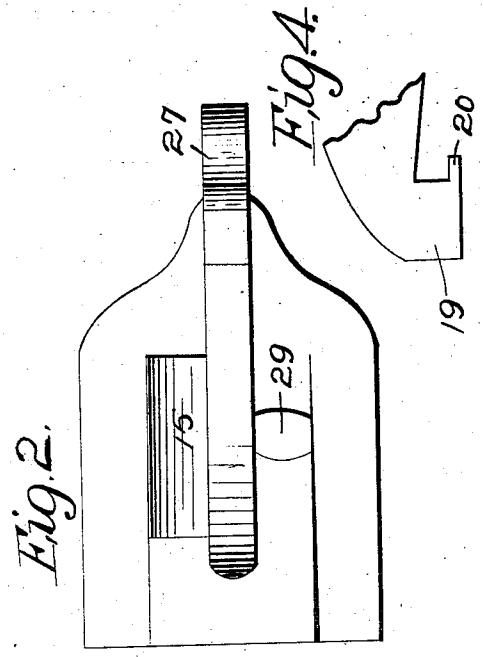

Fig. 2.

Fig. 4.

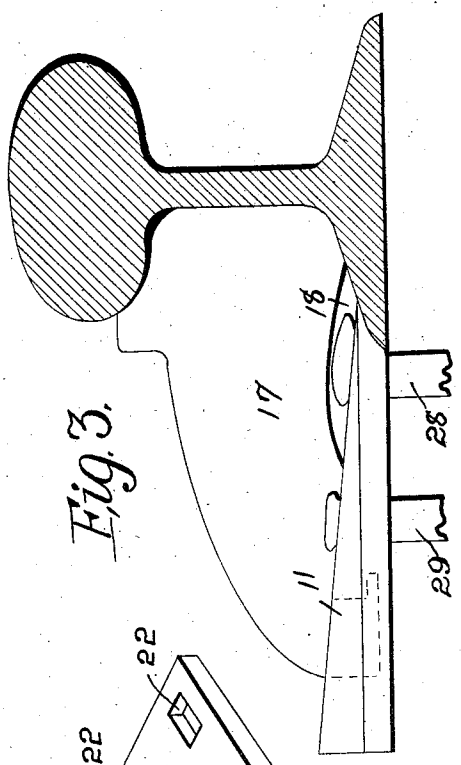

Fig. 3.

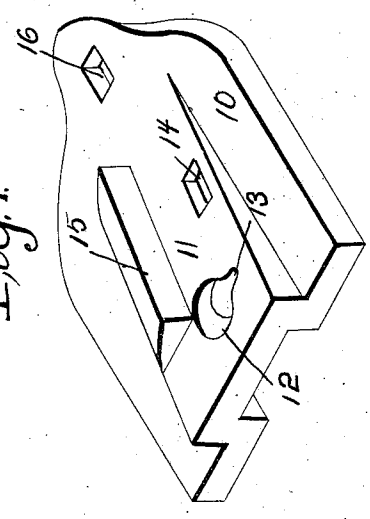

Fig. 1.

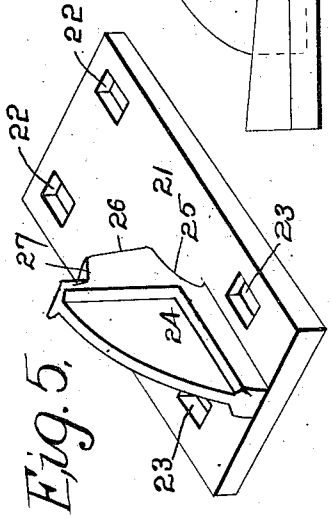

Fig. 5.

Witnesses
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RAILWAY-RAIL BRACE.

No. 853,149. Specification of Letters Patent. Patented May 7, 1907.

Application filed July 26, 1906. Serial No. 327,966.

To all whom it may concern:

Be it known that I, EARL S. BARTON, a citizen of the United States, residing at Newton, in the county of Jasper and State of Iowa, have invented a certain new and useful Railway-Rail Brace, of which the following is a specification.

The object of my invention is to provide a railway rail brace of simple, durable and inexpensive construction designed to be placed in position against a rail after the rail has been spiked to the ties to firmly engage the rail and hold it against spreading movement, and further to provide a brace of this kind that when once placed in position will not be loosened or forced out of position by any ordinary pressure applied to the rail.

My invention consists in the construction, arrangement and combination of the various parts of the device, whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claims and illustrated in the accompanying drawings, in which—

Figure 1 shows a perspective view of the base of railway rail brace embodying my invention. Fig. 2 shows a top or plan view of the complete brace in position for use. Fig. 3 shows a sectional view of a railway rail with my improved brace applied thereto as in practical use. Fig. 4 shows a detail side view of the outer end of the brace member detached, and Fig. 5 shows a perspective view of a modified form of brace.

Referring to the accompanying drawings, the base of the railway rail brace comprises a flat body portion 10 having a raised central portion 11 inclined downwardly from its outer toward its inner end. Near the outer end of this raised portion is a circular opening 12 extended vertically through said raised portion and provided at one side with an extension 13. On one side of the longitudinal center of the part 11 is a spike opening 14 and on the other side of the center of the raised portion is a stationary shoulder 15 extending longitudinally of the base. At the inner end of the base is a spike opening 16. The brace proper comprises a body portion 17 having its inner end shaped to fit against the web of a railway rail and to engage the under side of the railway rail tread portion and also the top of the flange portion. The bottom of this brace 17 is cut away at 18, for purposes hereinafter made clear, and the rear portion of the bottom of the brace is inclined to fit the top of the raised portion 11. On the rear end of the brace is a downwardly projecting extension 19 having a lug 20, said projection 19 is designed to enter and fit into the opening 12 and the lug 20 is designed to pass through the part 13 of said opening and when turned to pass under said raised portion 11 and thus form a lock to prevent upward movement of the brace.

In the modified form shown in Fig. 5, I have shown a tapered plate 21 slightly thicker at its outer than at its inner end. Near its inner end are two spike openings 22 and at its outer end are two spike openings 23. Formed on its outer end is a brace member 24 having its inner face arranged over the center of the plate 21 and provided with a part 25 to fit against the flange of a railway rail, a part 26 to fit against the web of a rail and a part 27 to fit against the under surface of the tread portion of a rail. The flange of the rail is designed to rest upon the plate 21. This form of the invention cannot be used in connection with a rail already fixed to the ties as the plate must be put under the rail and spiked to the ties by spikes through the openings 22 and 23.

In practice with the preferred form of my invention, I first place the plate 10 upon a railway tie with its inner end adjacent to the outer rail flange. I then secure it in this position by means of a spike 28 through the opening 16. I then place the extension 19 in the opening 12 and in order to do this the brace must extend at right angles to the longitudinal axis of the plate. Then the brace is turned to position with its inner face engaging the rail and with one side engaging the lug or shoulder 15. Then a spike 29 is driven through the opening 14 with its head engaging the side of the brace opposite from the side engaged by the shoulder 15.

Having thus described my invention, what I claim and desire to secure by Letters Patent of the United States, therefor is—

1. An improved railway rail brace, comprising a base portion having two spike openings therein and also having an opening to receive a brace portion, a shoulder formed on the plate and a brace portion having a projection to enter the opening in the plate, the inner end of the brace shaped to engage the outer face of a railway rail, one of said spike openings so arranged that a spike therein will engage the brace and hold it against said shoulder.

2. An improved railway rail brace, comprising a base portion having a raised platform at its outer end tapered from its outer toward its inner end, the said platform having near its outer end a round opening with an extension in one side and also having a spike opening therein, a raised shoulder on said platform, said base portion having a spike opening near its inner end, a brace portion having its bottom shaped to fit the inclined platform and provided with a cut away portion to receive a spike in the opening at the inner opening of the base plate, the inner end of the brace shaped to fit the outer face of a railway rail, the outer end of the brace provided with a downwardly projecting extension having an inwardly projecting lug thereon and a spike in the opening in the raised platform to engage the brace.

EARL S. BARTON.

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