(No Model.)

M. R. PERKINS.

RAILWAY RAIL BRACE.

No. 327,013. Patented Sept. 29, 1885.

Fig. 1.

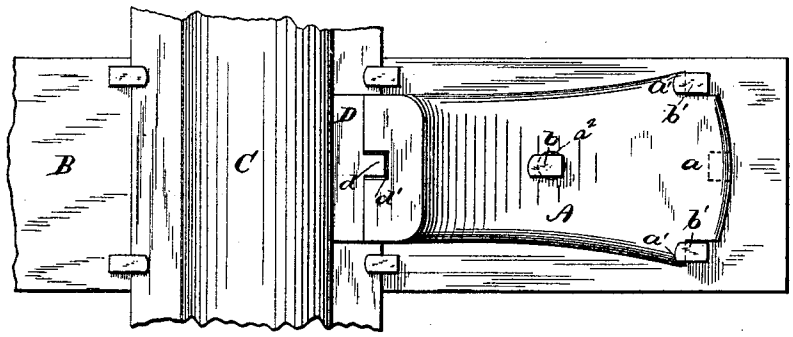
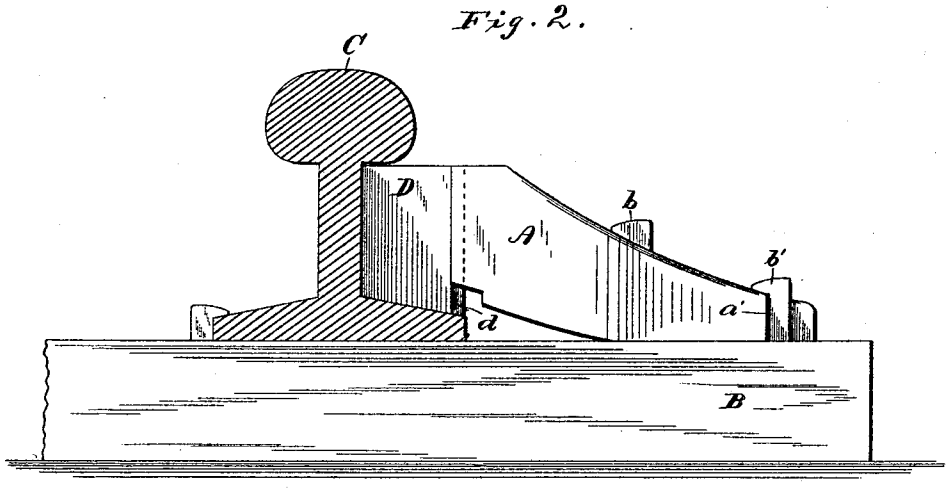


Fig. 2.



WITNESSES

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MICHAEL R. PERKINS, OF PORTSMOUTH, NEW HAMPSHIRE.

RAILWAY-RAIL BRACE.

SPECIFICATION forming part of Letters Patent No. 327,013, dated September 29, 1885.

Application filed September 16, 1884. (No model.)

To all whom it may concern:

Be it known that I, MICHAEL R. PERKINS, a citizen of the United States, residing at Portsmouth, in the county of Rockingham and State of New Hampshire, have invented certain new and useful Improvements in Railway-Rail 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.

My invention relates to certain improvements in railway-rail braces, which are secured to the tie and prevent the lateral spread of the rails, and is more particularly an improvement on Patent No. 287,573, granted to me October 30, 1883. In using the brace described in said patent it is necessary to bore or mortise a hole in the tie for the insertion of a heel before the brace could be put in place. In my present invention I dispense with the heel and hold the brace in place by spikes driven into the tie, which bear against suitable shoulders on the tongue of the brace.

The particular construction of the same I will now proceed to point out and describe, reference being had to the accompanying drawings, in which—

Figure 1 is a top plan view, and Fig. 2 a side elevation.

Referring to said drawings, A is the brace, having its tongue *a* provided with shoulders *a'* and a spike-hole, a^2. *b* and *b' b'* are spikes by means of which the brace is secured to the tie B. The spikes *b' b'*, bearing against the shoulders *a'*, prevent the brace from slipping. A shoulder may also be formed in the center of tongue, as shown in dotted lines, Fig. 1.

D is a cushion-block interposed between the rail and brace, and held in place by a tongue, *d*, formed upon the block, which tongue enters a groove, *d'*, in the brace; or the groove may be formed on the block and the tongue upon the brace. Said cushion-block D is made of wood, paper, rubber, or other suitable material possessing sufficient elasticity to act as a cushion, and is adapted to be slightly compressed as the rail is forced outward by the pound or pressure of a passing train, thus greatly relieving the strain on the spikes and causing them to retain their position in the tie much longer than when the strain is directly upon the spikes, as is the case when the brace rests immediately against the rail or an unyielding fish-plate.

My brace is readily and easily adjusted, and when from any cause it becomes loose the spikes can be withdrawn and the brace placed closer to the rail. The mode also of connecting the block to the brace permits the block which is fitted to the side of the rail to partake of such vertical movement of the rail as the latter will necessarily have in use without disturbing the fastenings of the brace.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. A railway-rail brace adapted to rest upon the upper surface of a tie and be secured thereto by suitable spikes, and having that portion of its bottom in contact with the tie plane from end to end, in combination with a cushion-block interposed between the rail and brace, substantially as shown and described.

2. The brace A having the shoulders *a'*, in combination with the spikes *b'* and block D, interposed between the rail and brace, substantially as shown and described.

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

MICHAEL R. PERKINS.

Witnesses:

HOWE CALL,

CHARLES E. BATCHELDER.