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J. H. LONGWORTH.

RAIL BRACE.

APPLICATION FILED DEC. 30, 1904.

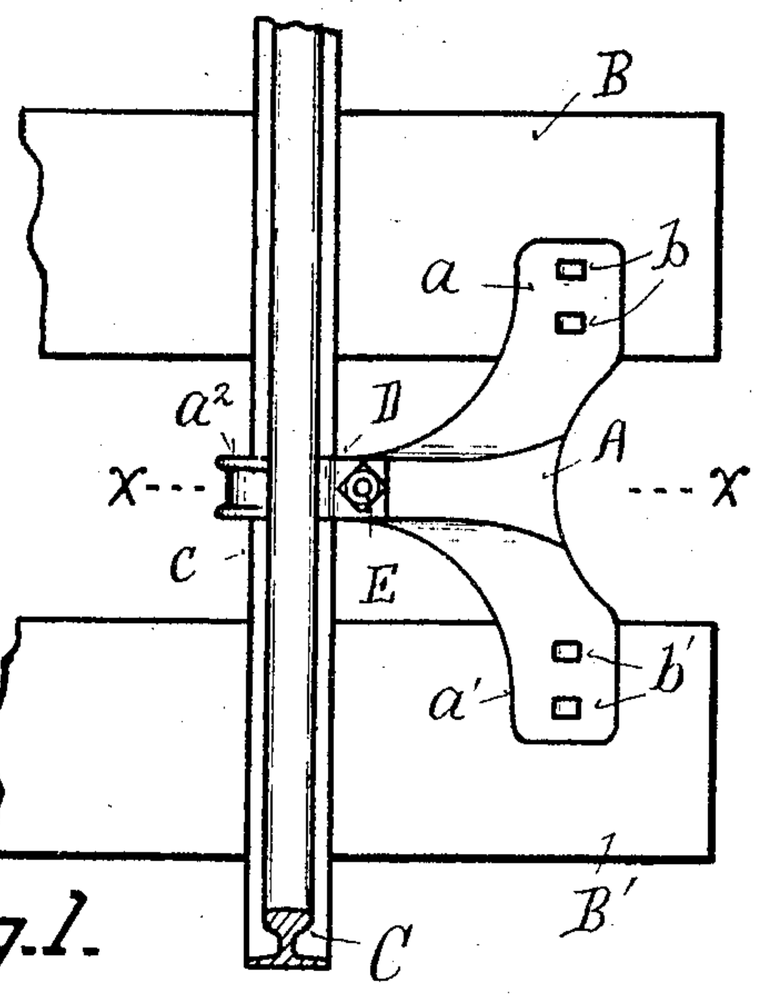

Fig. 1.

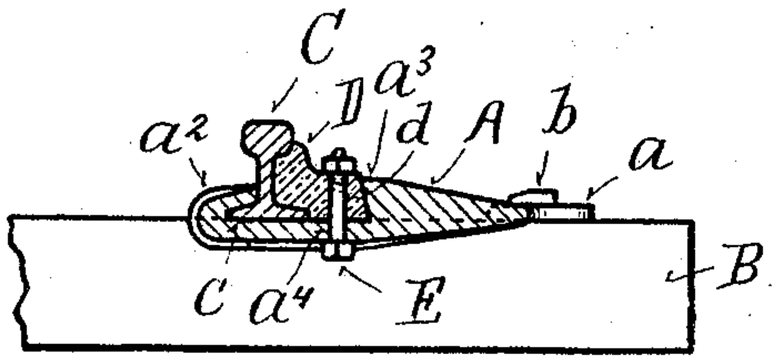

Fig. 2.

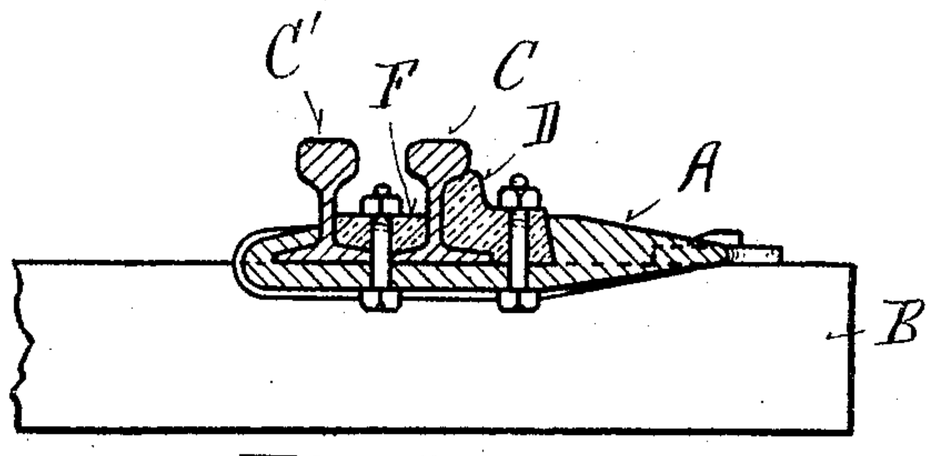

Fig. 3.

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JOHN HENRY LONGWORTH, OF GRAHAM, VIRGINIA.

RAIL-BRACE.

No. 796,438. Specification of Letters Patent. Patented Aug. 8, 1905.

Application filed December 30, 1904. Serial No. 238,890.

To all whom it may concern:

Be it known that I, JOHN HENRY LONGWORTH, a citizen of the United States of America, and a resident of Graham, county of Tazewell, State of Virginia, have invented certain new and useful Improvements in Rail-Braces, of which the following is a specification.

The object of my invention is a brace for railway-rails which will keep them vertical in gage and prevent their creeping and the spreading of the track. This object is attained by the means described in the specification and illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of a rail-brace embodying my invention. Fig. 2 is a sectional view of the same upon line x x of Fig. 1. Fig. 3 is a view similar to Fig. 2, showing the same applied to a guard-rail.

Referring to the parts, plate A has lateral arms a a', having holes therein to receive spikes b b' to secure them to the ends of ties B B'. Plate A extends beneath rail C between the ties and has at its end an upturned flange a^2 to engage the inner edge of the flange c of the rail. Plate A has a beveled shoulder a^3 upon the outside of the rail. Between shoulder a^3 and the rail is forced a wedge D, which has a hole d to register when in place with a hole a^4 in plate A. A bolt E is passed down through holes d and a^4 to hold the parts locked in position.

In the form illustrated in Fig. 3 a block F is placed between rail C and guard-rail C', wedge D bears against rail C, and flange a^2 is made to engage the inner edge of the flange of the guard-rail C'.

It is seen the plate A, being spiked to two adjacent ties, is held firmly in place; that the rail is held vertically, and thus prevents the spreading of the track; that the brace holds the rails firmly against creeping without impairing the action of ties to assist in the same function. These functions of my brace, being placed as it is between ties, are performed without lessening the action of the spiking of the rail to the tie to help in these functions, while in the case where the plate is placed between the tie and the rail the action of the rail and the tie to assist in the functions is much impaired.

What I claim is—

1. A rail-brace consisting of a plate adapted to be secured to ties to project beneath the rail between ties, and having a member to engage the flange of the rail and a shoulder upon the other side of the rail, in combination with a wedge to fit between the shoulder and the rail.

2. A rail-brace consisting of a plate having lateral arms to be secured to the ends of adjacent ties and adapted to project forward between the ties beneath the rail and having an upturned flange to engage the inner flange of the rail and upon the outside of the rail a beveled shoulder, in combination with a wedge to fit between the rail and the shoulder.

3. A rail and guard-rail brace consisting of a plate having lateral arms to be secured to two adjacent ties, adapted to project forward beneath the rails having an upturned flange to engage the inner rail and a shoulder upon the outside of the outer rail, a block to stand between the rails and a wedge to fit between the outer rail and the shoulder.

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