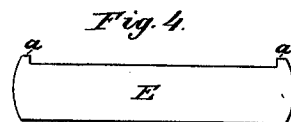
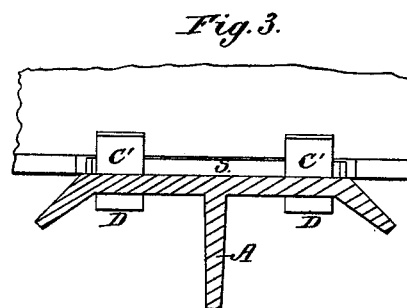
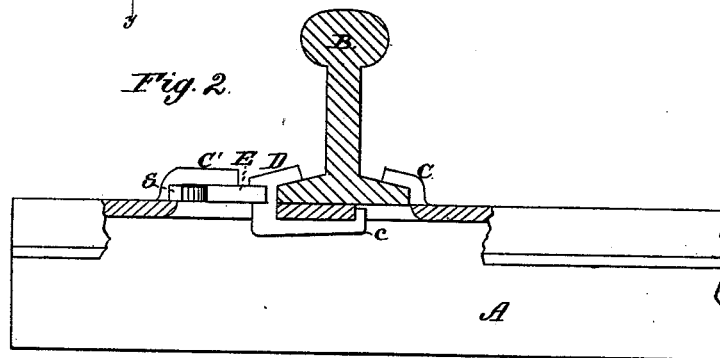
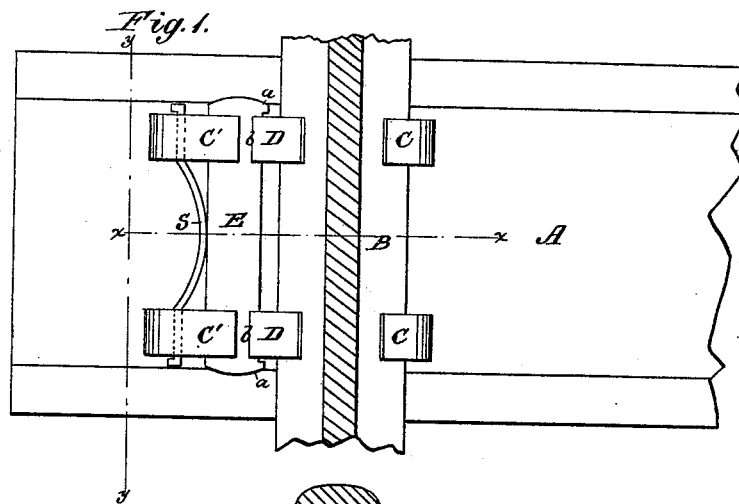


H. REESE.
Railway-Tie.

No. 214,192.

Patented April 8, 1879.



WITNESSES:
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UNITED STATES PATENT OFFICE.

HENRY REESE, OF BALTIMORE, MARYLAND.

IMPROVEMENT IN RAILWAY-TIES.

Specification forming part of Letters Patent No. **214,192**, dated April 8, 1879; application filed October 12, 1878.

To all whom it may concern:

Be it known that I, HENRY REESE, of Baltimore city, State of Maryland, have invented a new and Improved Railway-Tie; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a plan view; Fig. 2, a section through *xx* of Fig. 1; Fig. 3, a transverse section through *yy*, Fig. 1; Figs. 4 and 5, details of the notched bar and clamp.

My invention relates to an improvement upon the railway-tie for which Letters Patent were granted me May 11, 1875, in which I employed a T-shaped wrought-iron tie, and secured the rail thereto by means of upturned lugs cut from the horizontal plate, which, in connection with a clamp and key, firmly embraced and held the base of the rail.

My present improvements comprise means for preventing accidental displacement or separation of the parts, the features of which consist, first, in locating a spring at the back of a bar, which latter takes the place of the key, and is notched where it binds against the clamps; and, secondly, in forming a spur or toe on the end of the clamp beneath the tie, which toe projects up into the slot formed by the turning up of the lugs, all as hereinafter more fully described.

In the drawings, A represents the T-shaped wrought-iron cross-tie, the outer edges of the upper plate of which are bent downwardly. B is the rail; C C', the lugs, which are turned up from the body of the tie; and D, a hook-shaped clamp, which serves, in connection with the lugs and a key, as used in my prior patent, to secure the rail. Instead of using a key, however, to hold the clamp to its place, which key is liable to jar loose, I dispense with the same and substitute a notched bar, E, the projections *a* at the end of which overlap the clamps. In the rear of this notched bar also,

and between the bar and the lugs C', I locate a spring, S, whose pressure upon the bar holds it against the clamp, so that the notches at the ends of the bar prevent it from moving endwise, its spring-seated character still allowing it to be unseated and withdrawn when it is desired to remove it.

In constructing the clamps D also, they are formed with a shoulder, *b*, which, when the parts are secured together, overlaps the notched bar E, and prevents any looseness in vertical direction.

If, perchance, the bar E should become dislocated, either by accident or the willful mischief of evil-disposed persons, I still provide for the retention of the clamp in its place against the base of the rail by forming the end of the clamp beneath the tie with an upturned toe, *c*, or spur, which enters the slot left by the lugs. This toe, it will be seen, will be held up by the earth or ballast into the said opening, and, by binding against the solid part of the plate, will prevent the lateral movement of the clamp away from the rail, even if the locking devices become disengaged.

In constructing and arranging my devices I may make the spring of any desired form, and may locate it, together with the notched bar, either upon the outside of the rails or between the same, as may be preferred.

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

1. The notched bar E, with spring arranged in the rear of the same, in combination with the clamps, the tie, having lugs C C', and the rail, substantially as shown and described.

2. The combination, with the slotted tie and the rail, of the clamp D, having an upwardly-projecting toe, *c*, arranged to enter the slot of the tie, substantially as and for the purpose described.

HENRY REESE.

Witnesses:

G. E. SANGSTON,
THOS. L. REESE.