

(No Model.)

J. CONLEY.

FASTENING RAILWAY RAILS TO METAL SLEEPERS.

No. 472,034.

Patented Apr. 5. 1892.

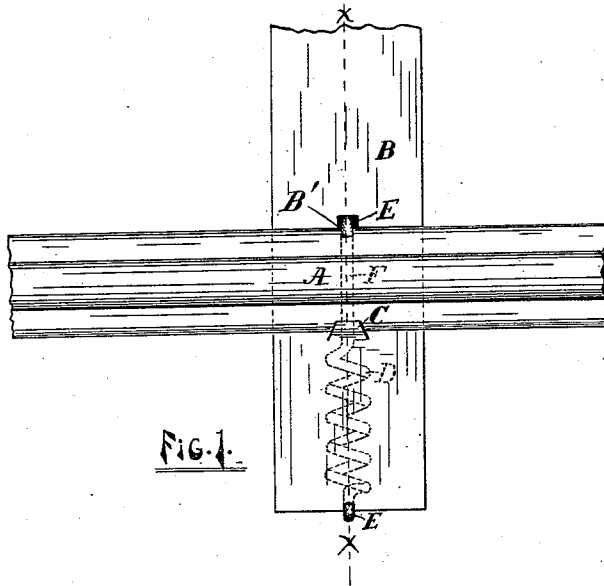


Fig. 1.

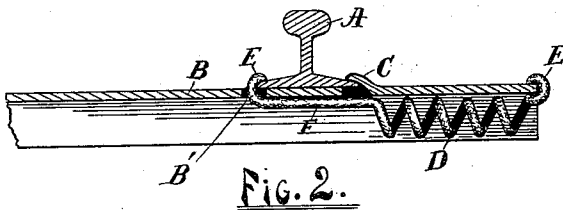


Fig. 2.

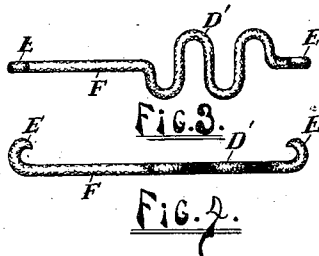


Fig. 3.

Fig. 4.

Witnesses

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FASTENING RAILWAY-RAILS TO METAL SLEEPERS.

SPECIFICATION forming part of Letters Patent No. 472,034, dated April 5, 1892.

Application filed March 9, 1891. Serial No. 384,331. (No model.)

To all whom it may concern:

Be it known that I, JOHN CONLEY, a citizen of the United States, residing at Denver, in the county of Arapahoe and State of Colorado, have invented certain new and useful Improvements in Fastening Railway-Rails to Metal Sleepers; 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 improvements in the means of fastening railway-rails to metal sleepers; and its object is to provide a simple, cheap, and durable device having certain novel and useful features hereinafter described, and particularly pointed out in the claims, reference being had to the accompanying drawings, in which—

Figure 1 is a plan view of a device embodying my invention; Fig. 2, a vertical section of the same on the line X X of Fig. 1; Fig. 3, a plan, and Fig. 4 a side view, of a modified form of my spring hook or fastener.

Like letters refer to like parts in all the figures.

A represents a portion of the railway-rail, and B a portion of an ordinary channel-iron sleeper at their point of intersection. Said sleeper has a hook or lug C struck up from its upper surface, adapted to engage the outer flange of the rail. This may be a separate piece riveted to said sleeper or any other convenient device.

B' is an opening at the opposite side from C and partially covered by the inner flange of the same.

F is the fastening proper, which consists of a bar or rod of flexible material, preferably of spring-steel, having hooks E E at each of its extremities, one of which engages the end of the sleeper, and the other, passing through the opening B', engages and secures the inner flange of the rail. Said bar is either coiled, as shown at D, or otherwise bent in serpentine form, as at D', to render it permanently contractile in the direction of its length, so that said hooks E E may be mechanically forced apart a short distance and will constantly tend to approach each other to their former position.

The operation of my device is as follows: When inserted beneath the sleeper and the

respective hooks E E are engaged with the inner flange of the rail and the end of the sleeper, the contractile action of the fastener will automatically take up all slack and wear due to the jar and shock of passing trains and will not become loosened as bolts and rivets or other practically rigid fastenings are liable to do.

Corrosion will not interfere with its ready removal, as in the case of devices having bolts; it is not destroyed by removal, as is the case with rivets, but is replaceable without change or injury, and it can be manipulated without a wrench and readily removed and replaced at pleasure and is certain to be properly tightened.

What I claim is—

1. In combination with a railway-rail and metal sleeper, a rod or bar of flexible material, having hooks at its respective ends and formed or bent between the same to cause said hooks to approach each other by means of the flexibility of said bent portion of the rod or bar, substantially as described.

2. In combination, a railway-rail, a sleeper having a lug or hook engaging the outer flange of the rail, an opening opposite the same partially covered by the opposite flange of said rail, a bar having hooks at its respective ends engaging the inner flange of the rail and the end of the sleeper, and a bent middle portion, substantially as described.

3. In combination with a railway-rail and metal sleeper, a bar or rod having hooks at its respective ends engaging the flange of said rail and the end of the sleeper and having its middle portion adapted to flexibly contract in the direction of a line drawn between said hooks, substantially as described.

4. A fastening for securing railway-rails to sleepers, consisting of a bar or rod having hooks at its respective ends adapted to engage the flange of the rail and the sleeper and having its middle portion coiled or bent or otherwise rendered contractile in the direction of a line drawn between said hooks, substantially as described.

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

JOHN CONLEY.

Witnesses:

C. HARRIS,
GEO. A. VAUGHAN.