W. F. ANDREWS.

RAIL TYING MECHANISM.

APPLICATION FILED APR. 8, 1909.

928,301.

Patented July 20, 1909.

Fig. 1.

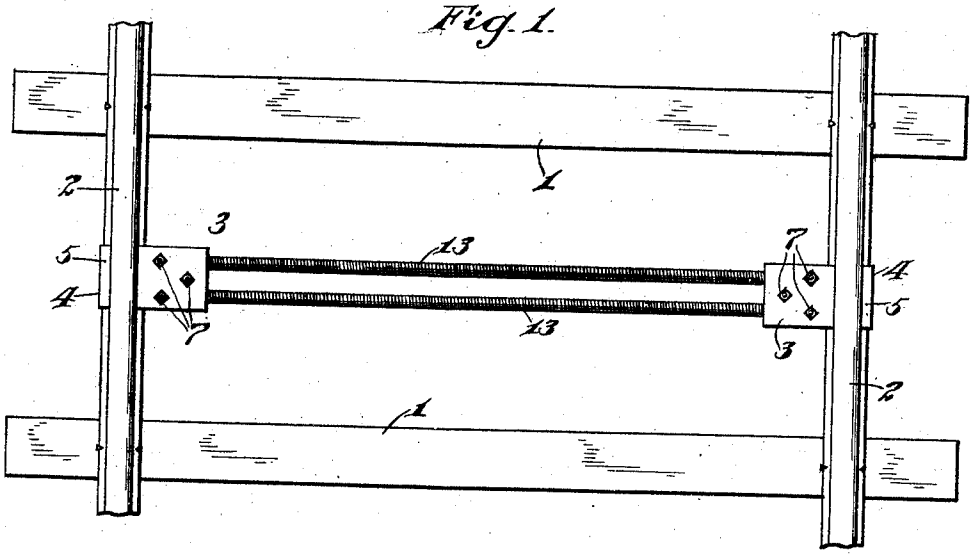


Fig. 2.

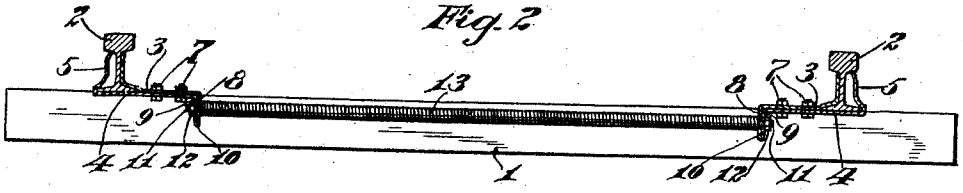
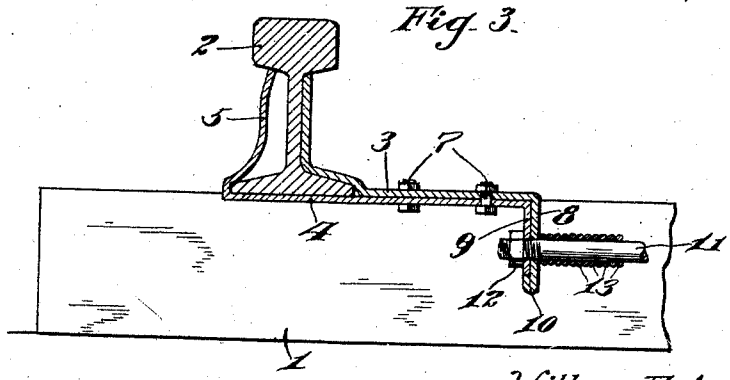


Fig. 3.



Witnesses

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RAIL-TYING MECHANISM.

No. 928,301. Specification of Letters Patent. Patented July 20, 1909.

Application filed April 8, 1909. Serial No. 488,719.

To all whom it may concern:

Be it known that I, WILBER F. ANDREWS, a citizen of the United States, residing at Atlantic City, in the county of Atlantic and State of New Jersey, have invented certain new and useful Improvements in Rail-Tying Mechanism, of which the following is a specification.

My invention relates to an improved rail tying mechanism, the object of the invention being to provide improvements of this character, which can be readily secured to the rails, and which will prevent independent movement of the rails either outwardly or inwardly.

A further object is to provide improvements of this character, which can be readily removed from the rails when desired, and which will be extremely simple in construction, strong and durable in use.

With these and other objects in view, the invention consists in certain novel features of construction, and combinations and arrangements of parts as will be more fully hereinafter described and pointed out in the claims.

In the accompanying drawings, Figure 1, is a plan view illustrating my improvements. Fig. 2, is a view in cross section of the same. Fig. 3, is an enlarged view in cross section of one end of the mechanism.

1, 1, represent railway ties, upon which the ordinary rails 2 are secured. To each of the rails 2, my improved clamping plates 3 and 4 are secured.

The clamping plate 4 extends below the rail, and is provided with an upwardly bent member 5, bearing against the head portion of the rail, while the plate 3 is bent to conform to the shape of the rail, and bears against the web portion and base flange, thus securely clamping at opposite sides of the rail, when the plates are secured by bolts 7, passed through alined openings in the plates as clearly shown in Fig. 3.

Both plates are bent at right angles at their inner ends, forming flanges 8 and 9 on plates 3 and 4 respectively. The flange 8 is preferably bent upward at its lower edge as shown, forming flange 10, between which and the horizontal portion of the plate 3, the flange 9 of plate 4 is positioned. These flanges 8 and 9 are provided with alined openings, and parallel tie rods 11 are positioned in the openings in the flanges of both sets of clamps, and are preferably screw threaded for the reception of nuts 12, to tightly clamp the rods against possibility of spreading. On these rods 11, coiled springs 13 are positioned, and bear at their ends against the flanges of the clamps. These springs exert a continual outward pressure on the rails, limited by means of the nuts 12, and are adapted to prevent any possibility of the rails moving inwardly toward each other.

It will thus be observed that my improvements, not only prevent spreading of the rails, but also prevent the rails from going inwardly toward each other.

I do not limit myself to the precise construction set forth, but consider myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of the claims.

Having thus described my invention what I claim as new and desire to secure by Letters Patent is:

1. In combination with clamping plates, upwardly bent ends on said plates, adapted to engage opposite sides of a rail, means for securing the plates together, rods connecting the clamping plates of both rails, and coiled springs on said rods exerting outward pressure on said clamps and rails.

2. A mechanism of the character described, comprising rail clamping means, rods connecting said clamping means, and coiled springs on said rods, bearing against said clamping means, and exerting outward pressure on the rails.

3. A mechanism of the character described, comprising rail clamps, each clamp consisting of two plates, one plate adapted to be positioned below a rail, an upwardly bent end on said plate adapted to engage the head of a rail, the other plate having a bent end conforming in shape to the web and base flange of the rail, bolts connecting said plates, downwardly bent flanges on said plates having alined openings therein, rods connecting the flanges of the clamps of the parallel rails, and positioned in the openings in the flanges, nuts screwed on the ends of said rods against the flanges, and coiled springs on the rods bearing against said flanges.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILBER F. ANDREWS.

Witnesses:

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