

(No Model.)

F. W. WILSON.
INSULATING RAILS.

No. 549,416.

Patented Nov. 5, 1895.

Fig. 1.

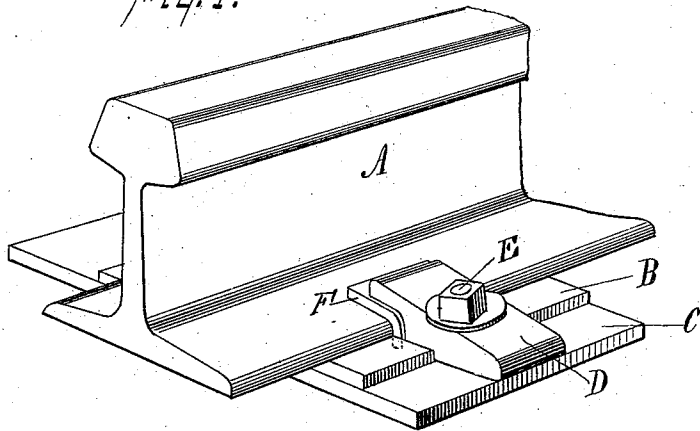


Fig. 2.

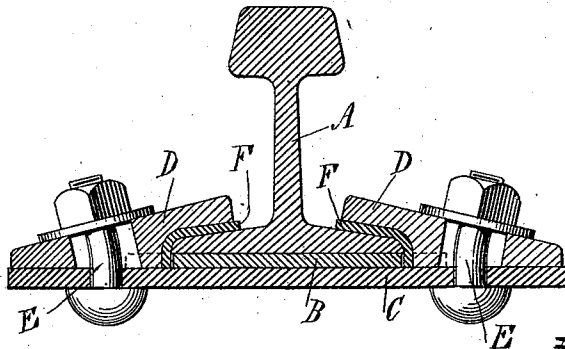


Fig. 3.

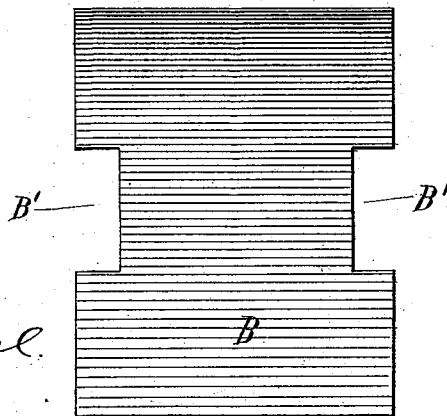


Fig. 4.

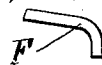


Fig. 5.



WITNESSES:

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INSULATING RAILS.

SPECIFICATION forming part of Letters Patent No. 549,416, dated November 5, 1895.

Application filed June 22, 1895. Serial No. 553,688. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS W. WILSON, of New York city, in the county and State of New York, have invented new and useful Improvements in Insulating Rails, of which the following is a full, clear, and exact description.

This invention relates to means for insulating rails, and has for its object to provide insulating devices of an extremely simple yet very efficient construction and thereby reduce the cost of insulating rails.

The invention consists in the novel construction and arrangement of parts, which will be hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a perspective view of a rail insulated according to my invention. Fig. 2 is a transverse section thereof. Fig. 3 is a detail plan of the insulating base-plate or supporting-plate upon which the rail is placed. Fig. 4 is a similar detail view of one of the insulating-pieces which are employed in connection with the said insulating base-plate, and Fig. 5 is a plan view of the same.

As illustrated in the drawings, the rail A is supported directly upon a base-plate B, which rests on a cross-tie C or any other suitable support. The said base-plate B is made of insulating material and is provided at or near the middle of two of its sides with two openings or notches B', preferably located at opposite sides of the base-plate. The said notches are made of a width just sufficient to receive the metal clips D, which are secured to the support C in the usual manner by means of bolts E. The said notches also receive the lower ends of the insulating side pieces F, which are of substantially the same width as the metal clips D and preferably are of such a length as to reach down upon the support or tie C and up beyond or at least flush with the end of the clips D. It will thus be seen that neither the tie C nor the clips D are in metallic contact with the rail and that the rail therefore is perfectly insulated.

The insulating base-plate B is at its nar-

rowest point between the notches just equal to the width of the rail-base and on each side of said notches is wider than the rail-base and projects beyond the same on each side of it. This plate B, with pieces F, forms a complete insulating-bed for the rail capable of separate manufacture and sale.

It will further be seen that the clips D, by engaging the sides of the openings or notches B', effectually prevent any movement of the base-plate B in a direction lengthwise of or parallel to the rail and the insulating side pieces F by completely filling the space between the inner edges of the openings B', and the inner edges of the clips D, (see Fig. 2) prevent any movement of the base-plate B transversely of the rail. The side pieces F also extend down through the openings B' in the base-plate to contact with the tie or plate C and are thus locked against movement longitudinally of the rail, so that said side pieces cannot slip laterally from beneath the clips D. Thus the rail is not only effectually insulated, but firmly held to its supporting-base, and the insulating devices cannot move either longitudinally or transversely of the rail.

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

1. An insulating bed for railroad rails comprising a non-conducting or insulating base plate of greater width than the rail base and having at its opposite sides openings extending inwardly to the line of the rail base, and insulating side pieces equal in width to that of the openings in the base plate constructed as described to extend downwardly into said openings and upwardly and inwardly over the rail base substantially as and for the purpose described.

2. The combination of an insulating base plate of greater width than the rail base having openings on its side extending inwardly to the line of the rail base, insulating side pieces equal in width to that of the openings in the said base plate and extending down into the same and over the rail base, and a locking device seated in the openings in the base plate and overlapping the side piece substantially as and for the purpose described.

3. The combination of the rail, the insulating base plate having openings at opposite sides, the clip extending over the base flange of the rail and also having an integral portion extending downward into the openings of the base plate, insulating side pieces interposed between the clips and the upper surface of the rail base and fastening devices for the said clips, substantially as described.

10 4. The herein described means for insulating rails, comprising an insulating base plate of greater width than the rail base and having openings in its sides extending inwardly to the line of the rail base, insulating side pieces equal in width to that of the openings in the said base plate and extending down into the same so as to lock as against lateral displacement and extending also over the rail base, a clip fitting in said openings and extending over the said side pieces to hold the latter against upward and outward movement

and means for securing said clips substantially as shown and described.

5. The combination with the rail having a flanged base; of an insulating base plate of greater width than the rail base and having openings in its sides extending inwardly to the line of the rail base, insulating side pieces equal in width to that of the openings in the said base plate and extending down into the same so as to lock against lateral displacement and extending also over the rail base a perforated clip fitting in said openings and extending over the said side pieces to hold the latter against upward and outward movement and a bolt for fastening said clip substantially as shown and described.

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Witnesses:

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