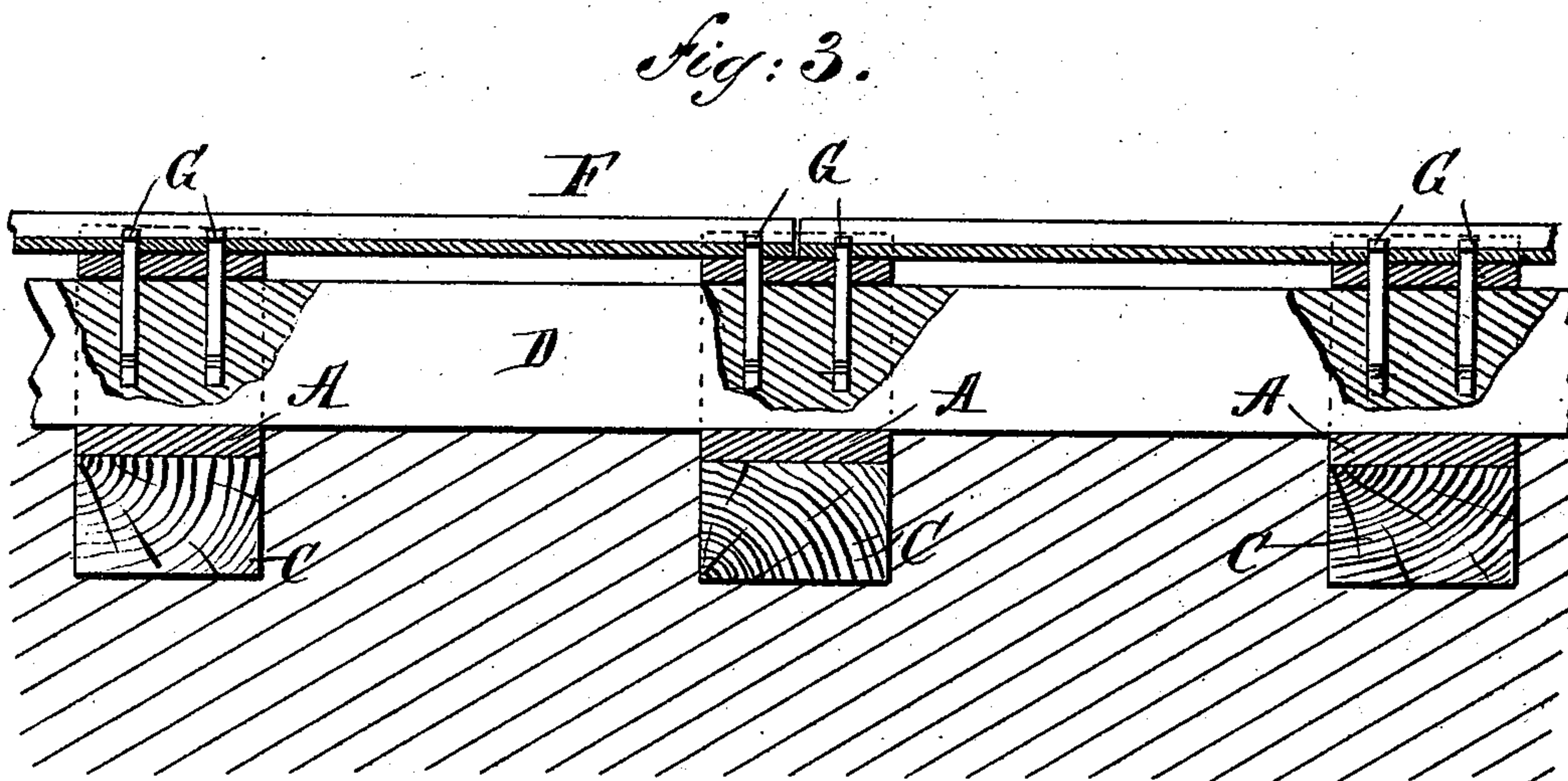
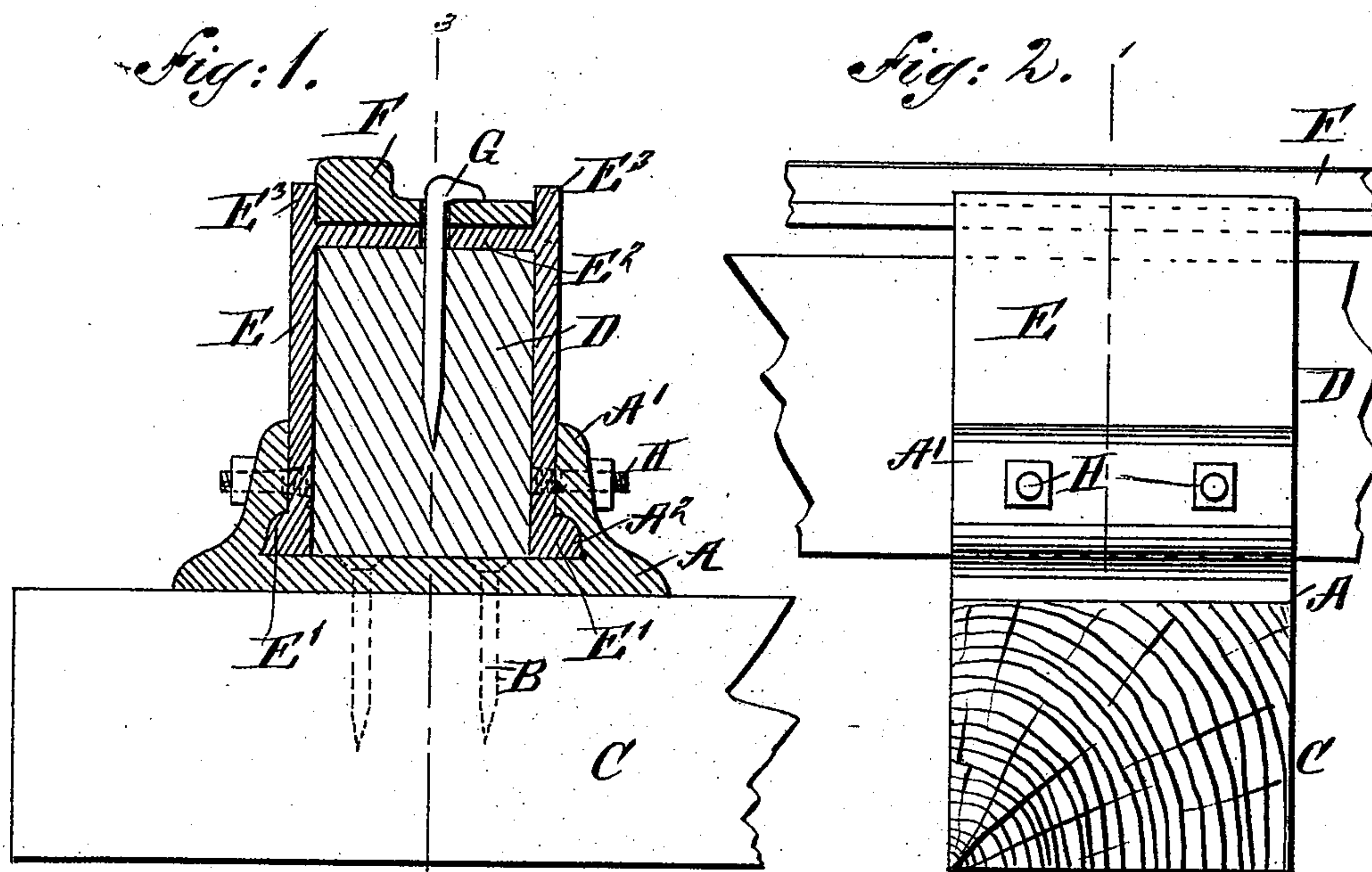


(No Model.)

W. N. MORRISON & T. P. SWIN.  
RAIL SUPPORT.

No. 498,072.

Patented May 23, 1893.



WITNESSES:  
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# UNITED STATES PATENT OFFICE.

WILLIAM N. MORRISON AND THOMAS P. SWIN, OF BROOKLYN, NEW YORK.

## RAIL-SUPPORT.

SPECIFICATION forming part of Letters Patent No. 498,072, dated May 23, 1893.

Application filed October 15, 1892. Serial No. 449,009. (No model.)

*To all whom it may concern:*

Be it known that we, WILLIAM N. MORRISON and THOMAS P. SWIN, both of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Rail-Support, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved rail support, which is simple and durable in construction, and arranged to securely hold and fasten the rail in place.

The invention consists of base plates or chairs adapted to be secured on the tie and forming a rest for the stringer, and a casing fitted in the said base plate and engaging the said stringer, the top of the said casing forming a shoe or rest for the rail.

The invention also consists of certain parts and details, and combinations of the same, as will be described hereinafter and then pointed out in the claims.

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

Figure 1 is a transverse section of the improvement on the line 1—1 of Fig. 2. Fig. 2 is a side elevation of the same; and Fig. 3 is a reduced longitudinal section of the improvement on the line 3—3 of Fig. 1.

The improved rail support is provided with a base plate or chair A, adapted to be secured by spikes B or other means to the ties C or other superstructure. As illustrated in Fig. 3, each tie C carries a chair or base plate A and on the several base plates or chairs rests the stringer D, made of wood or other suitable material and of the desired dimensions.

On the stringer D are fitted a series of casings E one for each chair A, the said casing being preferably made of inverted U-shape in cross section, as plainly shown in Fig. 1, and formed at its ends with outwardly extending flanges E' adapted to fit into correspondingly-shaped longitudinal-extending recesses A<sup>2</sup> formed on the inside of the sides A' of the base plates or chairs A. The middle part E<sup>2</sup> of the casing E is adapted to support the base of the rail F of any approved construction, the sides of the said base resting on pro-

jections E<sup>3</sup> forming a continuation of the sides of the casing E, so that lateral displacement of the rail is prevented.

The rail is fastened in position on the casing E by means of spikes G or other suitable means, the said spikes being driven through apertures in the base of the rail and registering apertures in the middle part E<sup>2</sup> of the casing, so that the spikes enter the stringer D from above. The casing E is also fastened at its sides to the sides A' of the plate or chair A by bolts H or other suitable means.

In setting up this rail support, the chairs A are placed on the ties C and then the stringer D is put in position on the several chairs, after which the casings E are placed over the stringer at one side of the respective chair, and then the said casings are shoved longitudinally on the stringer to engage the base plate or chair, as plainly shown in the drawings, the flanges E' then fitting into the recesses A<sup>2</sup> to prevent upward movement of the casings. The bolts H are then passed through the bolt apertures in the chair and screwed in tapped apertures in the sides of the casing to prevent longitudinal displacement of the latter. It is to be understood however, that we may employ other means for fastening the casing to the chair as previously mentioned. The rail F is then laid in position on the middle part E<sup>2</sup> of the casing and fastened in place by the spikes G driven through the base of the rail and the part E<sup>2</sup> into the stringer D.

It will be seen that the casing forms a shoe for the rail to prevent lateral displacement of the latter, and at the same time, the spikes G which secure the rail to the casing, fasten the latter to the stringer.

Having thus fully described our invention, we claim as new and desire to secure by Letters Patent—

1. A rail support comprising a base plate or chair adapted to be secured on the tie and forming a rest for the stringer, and a casing fitted in the said base plate and engaging the said stringer, the top of the casing forming a shoe or rest for supporting the rail, substantially as shown and described.

2. A rail support comprising a base plate or chair, a stringer supported on the said base

plate, and a casing fitted over the said stringer and engaging with its ends the sides of the said base plate, the top of the said casing forming a shoe or rest for supporting the rail, substantially as shown and described.

5 3. A rail support comprising a series of base plates or chairs adapted to be secured on the ties, a stringer supported on the said base plates or chairs, casings fitted over the said  
10 stringer, one for each base plate or chair, the ends of the said casings being provided with

flanges engaging corresponding recesses in the sides of the said base plates or chairs, the tops of the said casings forming shoes or rests for the rail by extending the sides of the said 15 casings above the middle part thereof, substantially as shown and described.

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THOMAS P. SWIN.

Witnesses:

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C. SEDGWICK.