

(No Model.)

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

No. 498,073.

Patented May 23, 1893.

Fig: 1.

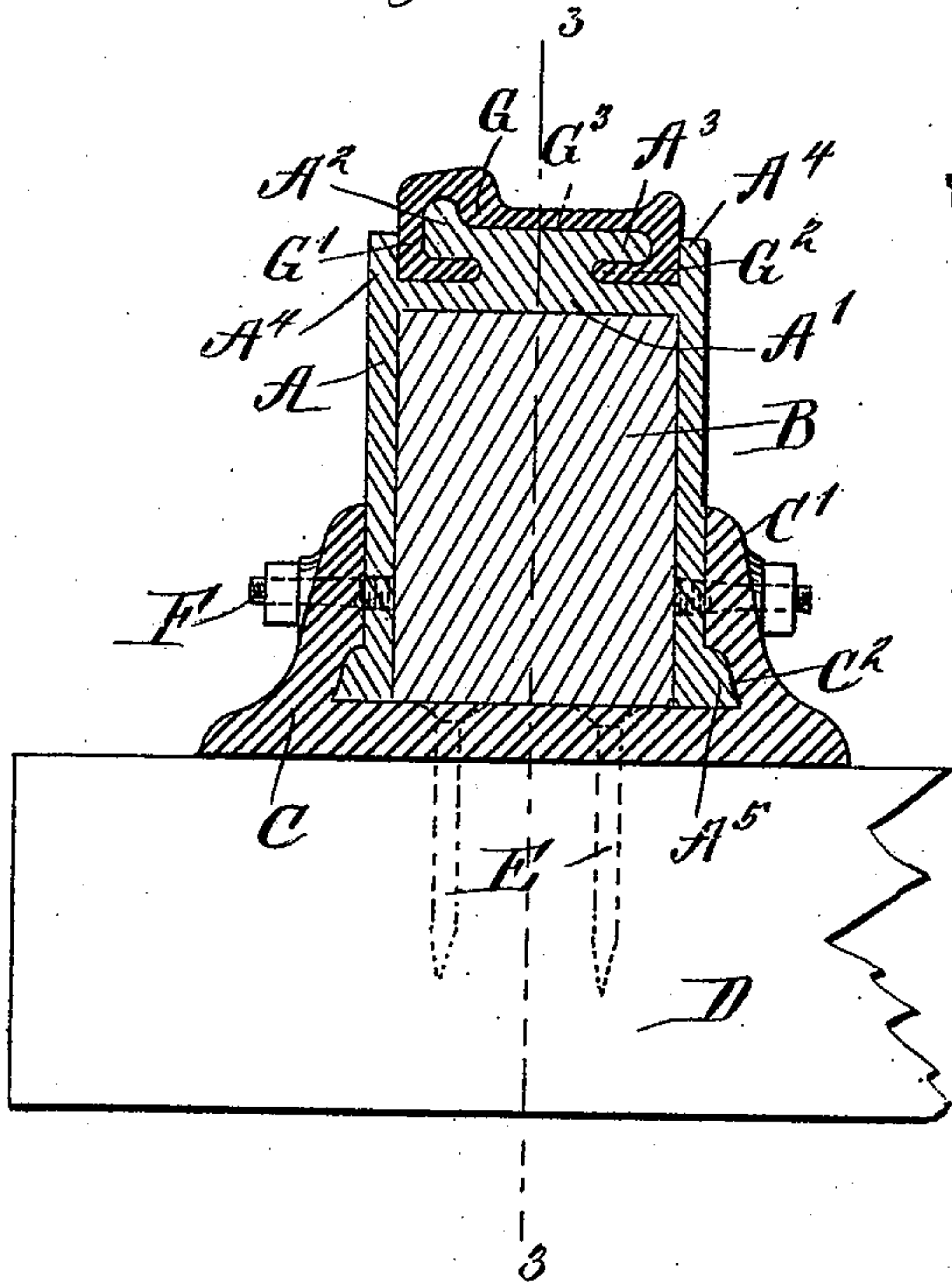


Fig: 2.

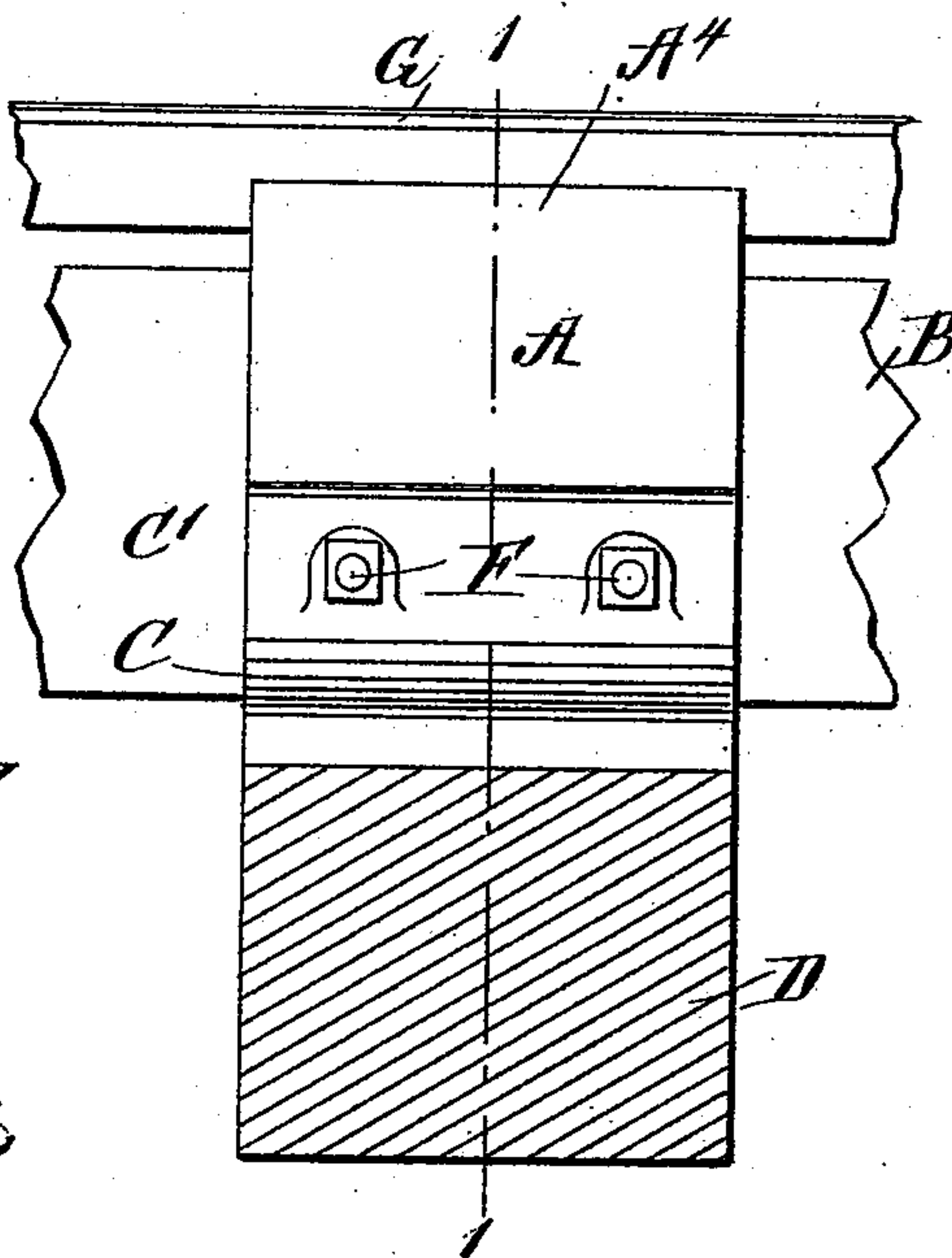
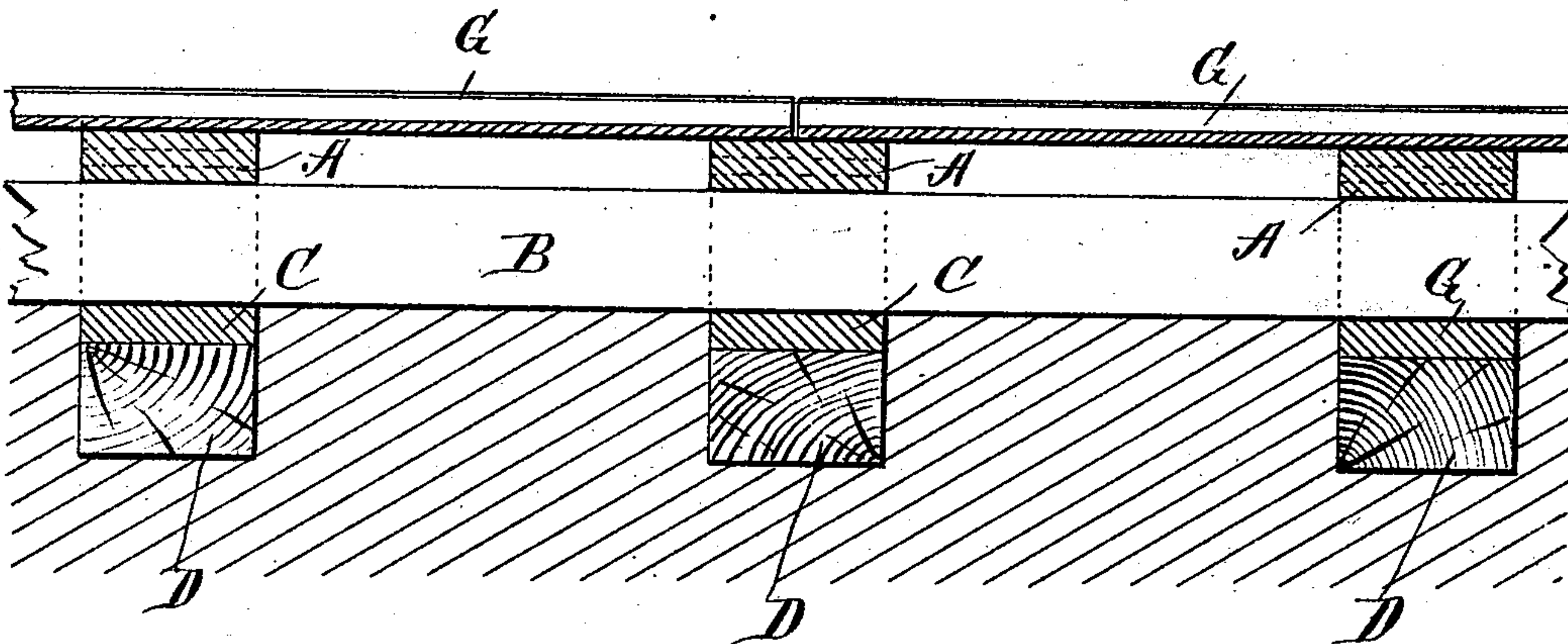


Fig: 3.



WITNESSES:

Chas. Niela.  
Co. Bedgwick

INVENTORS:

W. N. Morrison  
BY T. P. Swin  
Munn & Co.  
ATTORNEYS.



# UNITED STATES PATENT OFFICE.

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

## RAIL-SUPPORT.

SPECIFICATION forming part of Letters Patent No. 498,073, dated May 23, 1893.

Application filed October 15, 1892. Serial No. 449,010. (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 and a support therefor, which is simple and durable in construction and arranged to securely hold the rail in place without spikes or bolts and without danger of lateral displacement.

The invention consists of certain parts and details, and combinations of the same, as will be hereinafter described 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 cap A preferably made in an inverted U-shape, so that its sides are adapted to straddle a stringer B, set on base plates or chairs C fastened on the ties D by spikes E or other suitable means. The sides of the cap A are fastened by bolts F or other devices to the vertically-extending flanges C' forming part of the plates or chairs C. The middle part A' of the cap A forms the seat for the rail G which is for this purpose provided with two flanges G' and G<sup>2</sup> extending in opposite directions transversely, the said flanges being arranged however, longitudinally, and being adapted to be engaged by the interlocking flanges A<sup>2</sup> and A<sup>3</sup> formed on the part A', and at the upper side thereof. As illustrated in Fig. 1, the interlocking flange G' is a continuation of the head of the rail G, while the other flange G<sup>2</sup> is formed on the outer edge of the web of the rail, as plainly illustrated in Fig. 1. The web G<sup>3</sup> of the rail rests on top of the middle part A' of the cap and also on the upper surfaces of the flanges A<sup>2</sup> and A<sup>3</sup>, as plainly shown in the said Fig. 1. The sides

of the cap are extended as at A<sup>4</sup>, so as to engage the outer edges of the interlocking flanges G' and G<sup>2</sup> to securely hold the rail in place.

In laying the track we first place the chairs C onto the several ties D and then place the stringer B in position on the several chairs, after which the caps A are placed over the stringer, one for each chair and along side of the same, and then the respective cap is shoved longitudinally to pass into the chair at its lower ends. The cap A is then secured in place on the chair C, by the bolts F, being screwed into the sides of the cap through the bolt apertures in the chair. As previously mentioned other fastening devices however may be employed. The lower ends of the cap A are preferably provided on their outer sides with longitudinally-extending flanges A<sup>5</sup> adapted to engage corresponding recesses C<sup>2</sup> formed on the inside of the flanges C' of the chair C, so that an upward movement of the cap is prevented after the latter is once inserted in the respective chair.

Previous to applying the caps on the stringers, the caps are placed endwise in engagement with the rail, the flanges A<sup>2</sup> and A<sup>3</sup> of the caps being in engagement with the interlocking flanges G' and G<sup>2</sup> respectively, of the rail G. It will be seen that the rail is held in place on the cap without any spikes, bolts or equivalent devices, is not liable to get loose or displaced laterally, as the flanges A<sup>2</sup> and A<sup>3</sup>, and the extensions A<sup>4</sup> prevent shifting of the rail in a transverse or in an upward direction.

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

1. A rail support provided with a cap made approximately inverted U-shape and having its middle or top portion formed with a seat for the rail, the said seat being formed by longitudinally extending flanges integral with the said middle or top portion, substantially as shown and described.

2. A rail provided with a head, webs integral with the said head and interlocking flanges integral with and extending longitudinally from the said head and webs, substantially as shown and described.



3. A rail support, comprising a series of caps adapted to rest on the stringer and each made approximately inverted U-shape, the middle or top portion of the cap being provided with integral longitudinally extending flanges forming a seat for rail, and a rail provided with longitudinally extending interlocking flanges engaging the said seat on the cap, substantially as shown and described.
- 10 4. A rail support comprising a series of chairs adapted to be fastened to the ties, a stringer supported in the said chairs, caps straddling the said stringer and engaging the said chairs, each cap being provided at the top part with longitudinally-extending flanges adapted to be engaged by interlocking flanges on the rail, substantially as shown and described.

WILLIAM N. MORRISON.  
THOMAS P. SWIN.

Witnesses:

THEO. G. HOSTER,  
C. SEDGWICK.