(No Model.) 2 Sheets—Sheet 1.

E. L. TAYLOR.

METALLIC RAILWAY TIE.

No. 524,359. Patented Aug. 14, 1894.

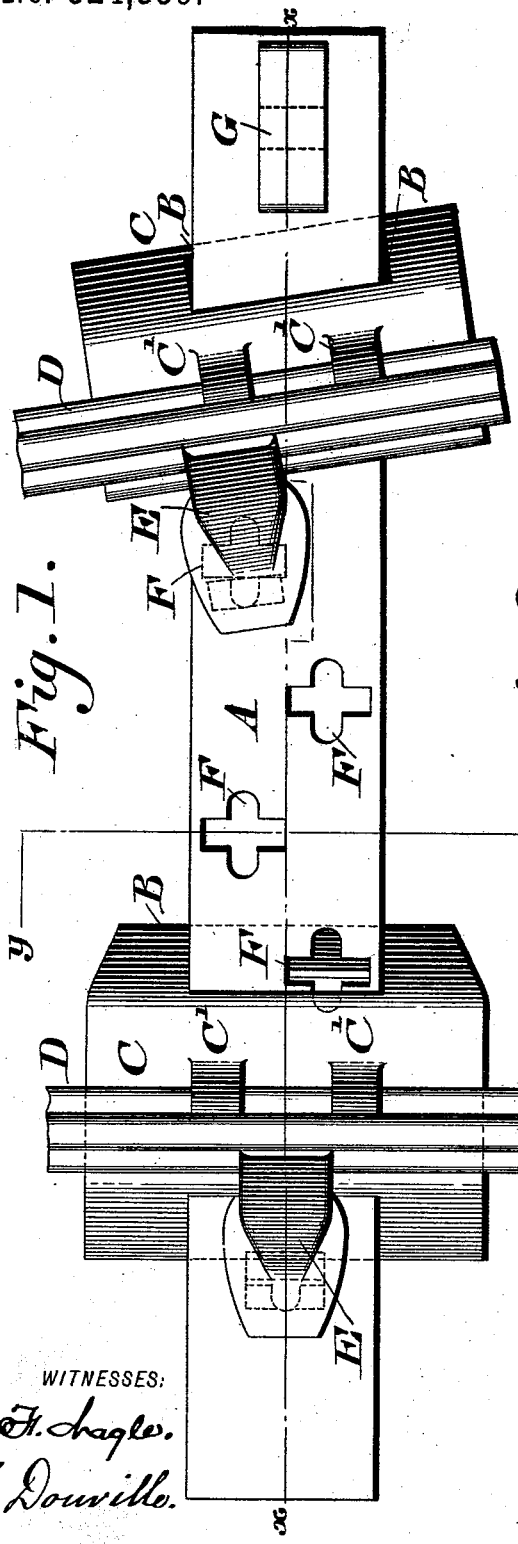

Fig. 1.

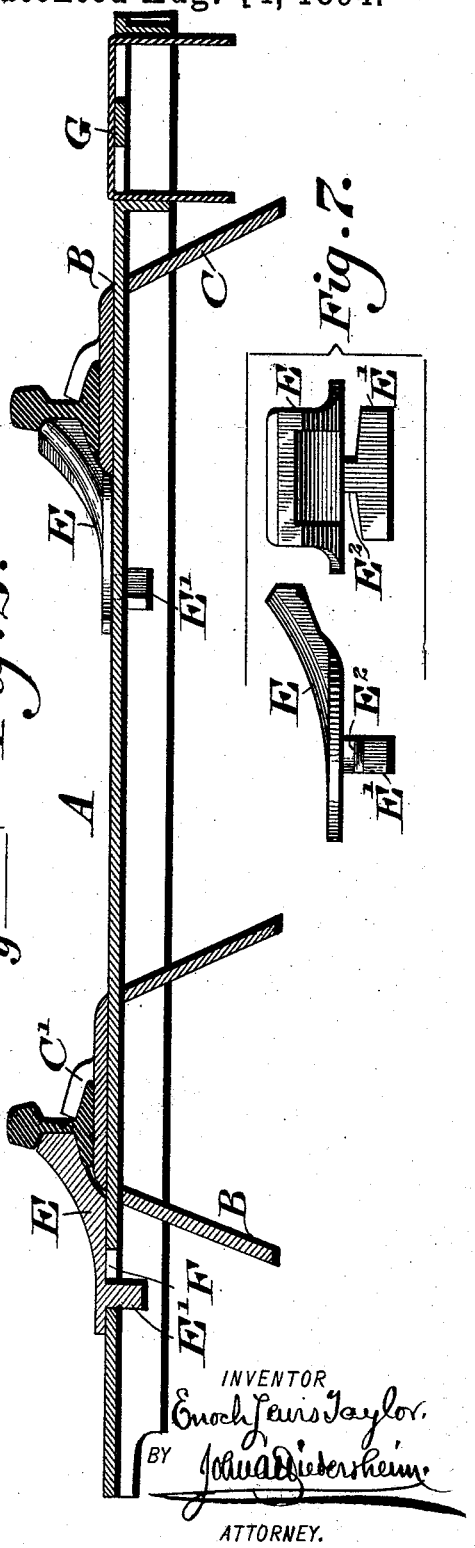

Fig. 2.

Fig. 7.

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(No Model.) 2 Sheets—Sheet 2.

E. L. TAYLOR.

METALLIC RAILWAY TIE.

No. 524,359. Patented Aug. 14, 1894.

Fig. 4.

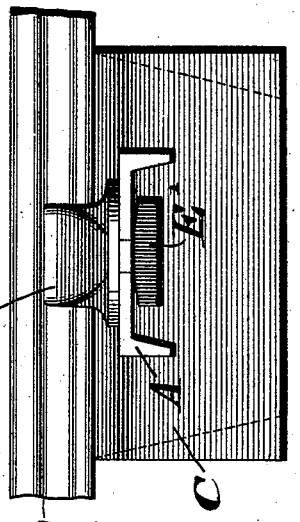


Fig. 5.

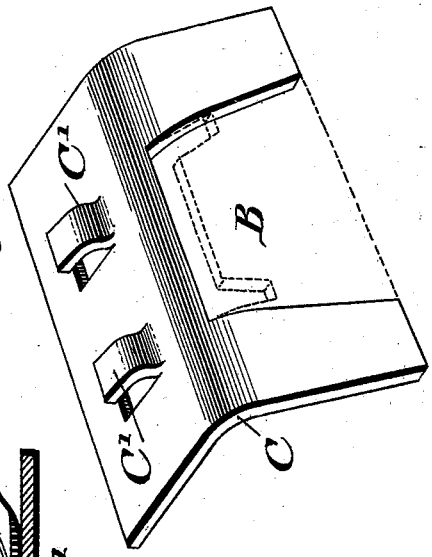


Fig. 3.

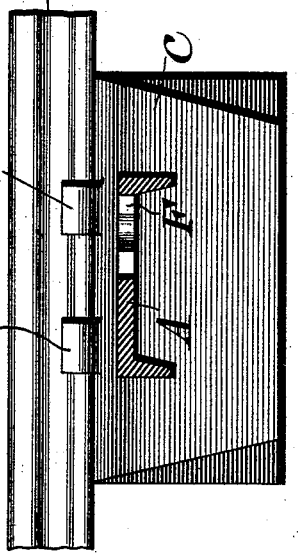


Fig. 9.

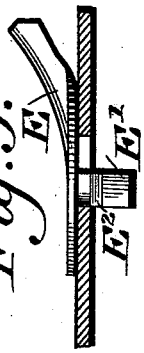


Fig. 6.

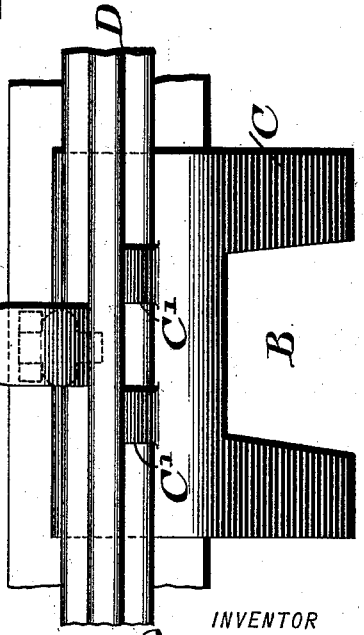
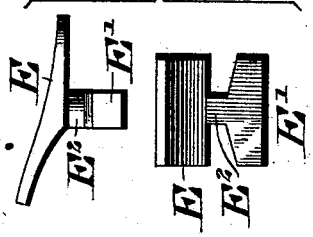


Fig. 8.



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UNITED STATES PATENT OFFICE.

ENOCH L. TAYLOR, OF PHILADELPHIA, PENNSYLVANIA.

METALLIC RAILWAY-TIE.

SPECIFICATION forming part of Letters Patent No. 524,359, dated August 14, 1894.

Application filed October 9, 1893. Serial No. 487,570. (No model.)

To all whom it may concern:

Be it known that I, ENOCH LEWIS TAYLOR, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Metallic Railway-Ties, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of improvements in metallic railway ties which support the rails in a firm and effective manner, and also permit the same to be angularly adjusted relatively to sidings, turn-outs, &c., while remaining clamped to said ties and the connecting tie-bars in the angular position.

Figure 1 represents a top or plan view of a railway tie, embodying my invention. Fig. 2 represents a longitudinal vertical section thereof, on line x, x, Fig. 1. Fig. 3 represents a transverse vertical section on line y, y, Fig. 1. Fig. 4 represents an end view thereof. Fig 5 represents a view of one of the parts detached. Fig. 6 represents a top or plan view showing the rail in position, parallel with the tie bar. Figs. 7 and 8 represent side elevations of the clamp or cheek pieces. Fig. 9 represents a side elevation of a part of one of the cheek pieces, and section of the adjacent portion of the bar.

Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings: A designates tie bars which pass through horizontal openings B in the metallic supports C, which are somewhat of channel form, wider below than on top, the top plates of said supports having the clamps or cheek pieces C′ thereon for engagement with the bases of the rails D, on one side thereof, the opposite sides being engaged by clamps or cheek pieces E, which are provided with inverted T-heads E′, the latter entering openings F in the bars A, said openings being of T or cross shape, whereby when the heads E are inserted in said openings, the necks E^2 of said heads, enter the limbs of said openings, and the heads are below the walls thereof, whereby the cheek pieces are connected with the bars and the rails are tightly held while resting on the supports. Furthermore, the cheek pieces may turn in the openings F, and as the openings B are somewhat wider than the tie bars A, the supports may be turned to acute or obtuse angles with said bars, so that the rails may be adjusted to sidings, turn-outs, curves, &c., while remaining securely clamped to the ties and bars, as most clearly shown in Fig. 1. It is also evident that the support and tie bar may be employed to clamp a rail when the same extends in a direction parallel with said tie bar, as shown in Fig. 6, instead of the directions shown in Figs. 1 and 2.

In all of the dispositions of the rails, I employ clamps or cheek pieces of proper size, while the rails are properly supported on the ties, and controlled by the cheek pieces of said ties and bars, it being evident that the openings in said ties, and the shape of the cheek pieces E, permit the adjustment on the rails in positions at a right angle to each other, or at an acute or obtuse angle to the tie bars as shown in the several figures.

The tie bars and supports may be properly ballasted, and as the supports are of channeled or angular form, they possess strength and elasticity, while the tie bars A may also be of channeled or angular form, whereby they are strong and durable, and firmly sustain the ties and consequently the rails thereon.

G designates anchors which are somewhat of staple form, the same passing through openings in the tie bar and entering the ground, thus more firmly holding said bar in position on the road bed.

The supports *c* may be formed with one or two limbs according to requirements, as most plainly shown in Figs. 1 and 2.

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

1. A metallic support, in combination with a tie bar which is passed through said support, the openings in said support being such that the same may be set at right, acute and obtuse angles on said bar, substantially as described.

2. A metallic railway support having openings therein, a tie bar fitted therein, and having an opening, and a cheek plate having a

T-shaped head adapted to lock in the walls of the said opening, said parts being combined substantially as described.

3. A channeled railway support, having openings therein, and provided with the cheek pieces C′, C′, thereon, the cheek piece E with inverted T-shaped head E′, adapted to engage with the walls of the opening in the tie bar, and a rail resting on said support and having its base engaged on the one side by said cheek pieces C′, C′, and the opposite side by the cheek piece E, said parts being combined substantially as described.

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Witnesses:
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