

E. E. LEWIS.
RAILROAD TRACK.

No. 183,766.

Patented Oct. 31, 1876.

Fig. 1.

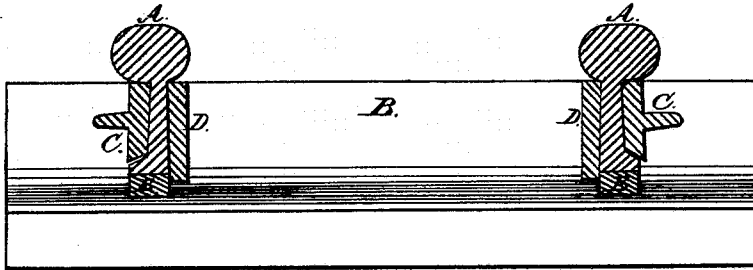


Fig. 2.

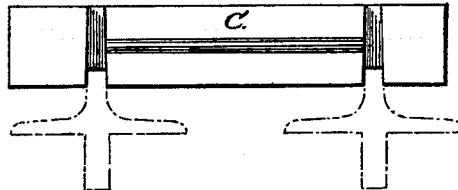


Fig. 3.

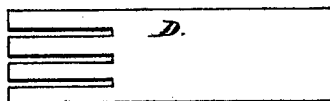
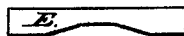


Fig. 4.



Witnesses:

John S. Lewis
Charles Ketchum.

Inventor:

Ebenzer E. Lewis.

UNITED STATES PATENT OFFICE

EBENEZER E. LEWIS, OF GENEVA, ASSIGNOR OF ONE-FOURTH HIS RIGHT
TO DAVID P. DEY, OF WATKINS, NEW YORK.

IMPROVEMENT IN RAILROAD-TRACKS.

Specification forming part of Letters Patent No. **183,766**, dated October 31, 1876; application filed
December 31, 1875.

To all whom it may concern:

Be it known that I, EBENEZER E. LEWIS, of Geneva, in the county of Ontario and State of New York, have invented a new and useful Improvement in Railroads, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings.

The object of my invention is to make a railroad-rail with a flange on one side of the rail only at the base, and the opposite side from the flange vertical or nearly so, from the base up to the rounded part or top portion of the rail, and the rounded top part with the largest portion of it extending outward over the flange, thus making that part of the top most acted upon by the car-wheels rolling over it, directly above the vertical portion which supports it. Below the rounded top the middle part increases in thickness downward; and a side plate is to be used at the union of the rails, ribbed and notched to give it strength and keep it in place; also wedges to keep them firmly united, and a wooden saddle between the rail and tie—all fitted into the upper projection of a metallic railroad-tie, as shown in the accompanying drawing, in which—

Figure 1 is an end view of the rails and side of the tie; Fig. 2, a view of the side plate; Fig. 3, wedges to hold the parts together; Fig. 4, a side view of the saddle.

The letters of reference refer to the same parts in each figure.

A is one of the railroad-rails composed of a base to rest upon the tie, a vertical portion to connect the base and top, and the top part on which the car-wheels roll, as represented in Fig. 1. The base is composed of the lower part of the vertical portion and the flange on one side of it only. The vertical portion extends upward, with one side at right angles, or nearly so, with the base and line of the tie; the other side inclines so as to leave the lower part the thickest, to give any required weight and strength to the rail. The top is made rounded to form a face for the wheel on the top and flange of the wheel at the side and with the rounded part above the flange the

largest, thus having the part acted most upon by the wheels supported to prevent being broken, and make it more durable. B is the metallic railroad-tie that supports the rails. It has a seat made in it for each rail. The seat is made to receive this kind of rail only, and the side plate C for the union of the rails and wedges, and, when made for the middle of the rails, for the rail and wedge only. C is the side plate. It is made of iron or steel, and made to rest upon the flange of the rail, and extend in width upward to the top part, and any length required. It has a rib extending along the middle of the outside, and notches near each end that receive a portion of the tie and keep it in place, and, when put in place and the wedges driven, will hold the tie in place and strengthen the rail and keep it in place. D is a wedge that is to be driven within the rail-seat at the inside of the rail, and, when made to extend from one tie to another where rails are united, it should be longer than the distance of the ties apart and wide enough to extend up from the flange to the top part of the rail, and in thickness not more than the distance the top projects from the vertical side of the rail, and when used in ties for the middle of the rail the wedge may be shorter, and only pass through one tie. The points of the wedges are slitted into several parts, so that when they are properly driven one of the parts may be bent outward, and thus keep the wedges in place. E is the saddle, that is placed between the tie and lower part of the rail. It may be made of wood or other material, and should be as wide as the base of the rail and as long as the width of the tie, or it may be made to extend across two or more ties. The under side must be made to fit upon the top of the rail-seat under the rail. This saddle may be used in every tie, or only in part, as proposed.

What I claim as new and my invention, and desire to secure by Letters Patent, is—

1. A railroad-rail, with the upper rounded part larger on one side of its support, and the support vertical on one side and inclined on the other and largest at the base, substantially as specified.

2. The side plate C with the rib and notches to hold it in place, as herein set forth.

3. The wedges D made with the points slit-
ted, as and for the purpose set forth.

4. The saddle E, made to rest on a metallic
railroad-tie beneath the rail, as herein speci-
fied.

5. In combination with the side plate C and
wedge D, the rail-seat for the rail A in the tie
B, as herein specified.

EBENEZER E. LEWIS.

Witnesses:

JOHN L. LEWIS,
CHARLES KETCHUM.