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CHARLES G. WILSON, OF BROOKLYN, NEW YORK.

IMPROVED RAILWAY.

Specification forming part of Letters Patent No. 94,856, dated September 14, 1869.

To all whom it may concern:

Be it known that I, C. G. WILSON, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Railroad-Tracks; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

Figure 1 is a top view of a portion of my improved railroad-track. Fig. 2 is a cross-section of the same, taken through the line $x \ x$, Fig. 1.

My invention has for its object to improve the construction of railroad-tracks, so as to make them stronger, smoother, more durable, safer, and more easily and cheaply kept in repair than when constructed in the ordinary manner; and it consists in the track constructed, as hereinafter more fully described.

A are the sleepers, which are laid longitudinally with the track, are bedded in the road, may be made of half-round or square timber, and may be of any convenient length.

B are wooden rails or timbers, two of which are laid longitudinally upon each sleeper A, at sufficient distance apart to receive between them the metallic parts of the track. The wooden rails B are secured to the sleepers A by wooden pins placed at suitable distances apart.

C are iron plates, made with projecting flanges at the upper and lower edges of their outer side, the lower one of said flanges being let into the lower side of the wooden rails B, and the upper flange overlapping or being let into the upper sides of said wooden rails B.

D are the steel rails, which are made in about the form shown in Fig. 2—that is to say, with their heads formed upon the upper edge of a vertical plate.

E are tie-bars, which pass horizontally through the wooden rails B, the flanged iron plates C, and the body or plate of the steel rails D.

Upon the tie-bars E, upon the outer sides of the wooden rails B, are placed washers F, the outer sides of which are notched with notches of different depths, as shown in Figs. 1 and 2. The washers F are secured in place, clamping the five parts of the track to each other by spring or wedge keys G, passed through holes in the tie-bars E, and through one or the other of the notches of the washers F. By this construction, by removing the keys G and turning the washers F partly around the parts of the track may be tightened and the track kept at the proper gage. The tie-bars E should be placed at the distance of six feet (more or less) from each other.

The five parts BCDCB of the track should be so laid as to break joints in such a way that the joint of only one of said five parts may be in the same place, as indicated in Fig. 1.

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

1. The combination of the two wooden rails B, the two flanged iron plates C, and the central steel rail, D, with each other, and with the longitudinal sleepers or timbers A, substantially as herein shown and described, and for the purpose set forth.

2. The combination of the tie-bars E, graduated washers F, and spring or wedge keys G with the compound rails B C D C B of the track, substantially as herein shown and described, and for the purpose set forth.

The above specification of my invention signed by me this 21st day of July, 1869.

CHARLES G. WILSON.

Witnesses:

GEO. W. MABEE, JAMES T. GRAHAM.