J. P. NESSLE.

Street Railway-Rail.

No. 162,941. Patented May 4, 1875.

Fig. 1.

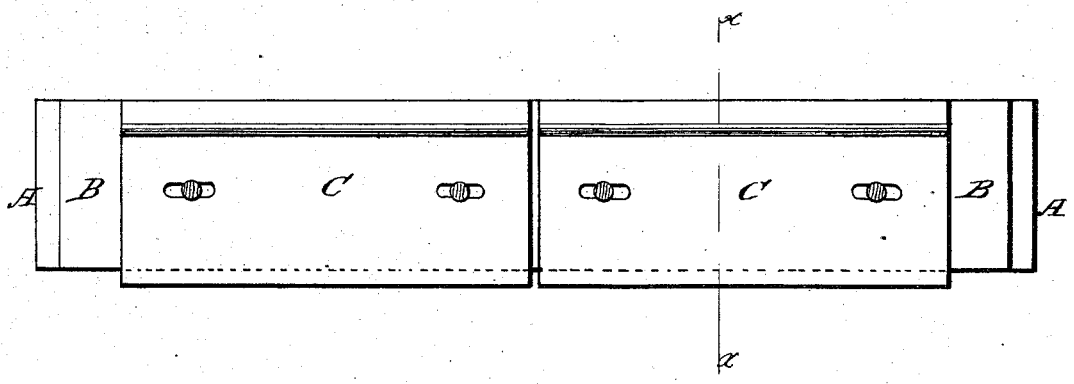
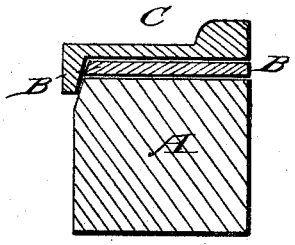


Fig. 2.



WITNESSES.

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UNITED STATES PATENT OFFICE.

JOHN P. NESSLE, OF NEWARK, NEW JERSEY.

IMPROVEMENT IN STREET-RAILWAY RAILS.

Specification forming part of Letters Patent No. **162,941**, dated May 4, 1875; application filed April 16, 1875.

To all whom it may concern:

Be it known that I, JOHN P. NESSLE, of Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Horse-Railroad Rails; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

The nature of my invention consists in the construction and arrangement of a rail for street-railroads, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a plan view, and Fig. 2 is a central vertical section on line *x x*, Fig. 1.

A represents the timber ordinarily laid down to form the base or support for the rails of a street-railroad track. On this timber is secured a series of flat plates, B B, forming one continuous line of plates even with the upper surface of the timber. On top of the plates B are laid the rails C C, in such a manner as to break joints with the under plates, and the spikes which fasten the rails go through and fasten the plates also to the timber.

It is, of course, understood that these spikes pass through slots in the rails and plates, so as to allow for contraction and expansion.

The rail C is made in the ordinary form for street-railroad; but only of about one-half the thickness, the plate B constituting the other half, the two together being of about the same thickness as an ordinary street-railroad rail.

It will readily be seen that when the rails C become so worn as to be no longer serviceable, they can be removed, leaving the plates B in their places, and simply new top rails put down, thus lessening the expense nearly one-half.

I am aware that short metal plates have been placed under the joints of rails; but such simply act as chairs, and do not allow of any reduction in the thickness of the rails.

With my invention the rails are supported by one continuous line of plates, making the track firm and solid, besides lessening the expense in repairing.

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

In a street-railroad track, the combination of the rails C C, reduced in thickness, as described, and the continuous line of supporting-plates B B, said rails and plates being arranged to break joints, substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

JOHN P. NESSLE.

Witnesses:

T. H. ALEXANDER,

W. C. MCARTHUR.