L. LEYPOLDT.
Railroad-Rail.

No. 209,817. Patented Nov. 12, 1878.

Fig. 1.

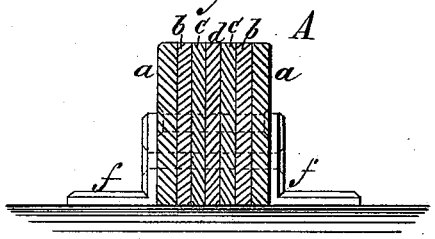
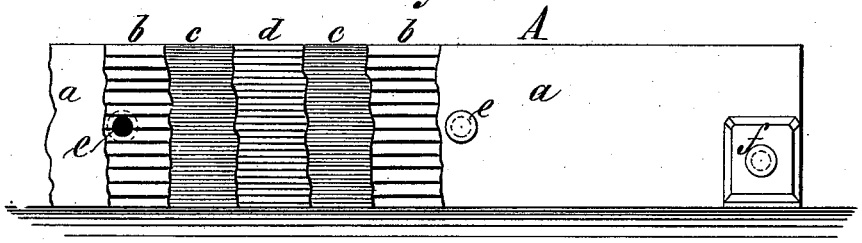


Fig. 2.



WITNESSES:
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UNITED STATES PATENT OFFICE.

LOUIS LEYPOLDT, OF NEW YORK, N. Y.

IMPROVEMENT IN RAILROAD-RAILS.

Specification forming part of Letters Patent No. **209,817**, dated November 12, 1878; application filed October 5, 1878.

To all whom it may concern:

Be it known that I, LOUIS LEYPOLDT, of the city, county, and State of New York, have invented a new and Improved Rail for Railroads, of which the following is a specification:

The object of my invention is to construct a rail for railroads in such a manner that the wheels of the car will make the least possible noise in passing over the same, the rail being intended for use on railroads in cities.

The invention will first be described in connection with the drawing, and then pointed out in the claim.

In the accompanying drawing, Figure 1 is a cross-section of a rail constructed in accordance with my invention, and Fig. 2 is a sectional side elevation of such rail.

Similar letters of reference indicate corresponding parts.

A represents my improved rail. It is shown as composed of outer plates, *a*, preferably steel, metal plates *c c*, preferably iron, and a central strip or filling, *d*, of lead or other soft metal lacking in resonant qualities. Between each outer plate, *a*, and the plates *c* is placed a strip of yielding material, such as leather or pasteboard.

The plates and intervening material are clamped firmly together by the rivets or bolts *e*, which are placed at suitable distances apart to resist any tendency of the rail to separate by pressure.

The number of steel and iron plates in the rail will be in accordance with the weight that is to run over the rail. Instead of the two iron plates *c*, there may be four, with packing between them, as described. In any case the width of the complete rail at the edges of the plates is to be about the same as the head of a rail of ordinary character.

The rail constructed as described is to be laid with the plates on edge, the edges being the bearing-surface for the car-wheels. I have shown angle-plates *f* at each side, connected by bolts, by which plates the rail can be secured to the ties. The rail may be turned with the bottom edges upward when the upper surface becomes too much worn for use.

The effect of the packing between the plates will be to prevent vibration of the plates, and the noise caused by trains will be deadened to a great extent. The sharp metallic ring caused by the iron wheels striking upon rails as heretofore made will be entirely prevented.

I am aware that it is not new in railroading to place a plate of lead between two beams, or between a wooden beam and an iron plate; but

What I claim as new and of my invention is—

A railroad-rail composed of the outer steel plates, *a a*, inner iron plates, *c*, and central strip of lead *d*, the plates *a* and *c* being separated by layers of leather or similar material, substantially as and for the purposes set forth.

LOUIS LEYPOLDT.

Witnesses:

C. SEDGWICK,

GEO. D. WALKER.