## N. KENNY.

Means for Lessening Noise on Railways.

No. 208,475.

Patented Oct. 1, 1878.



Witnesses: Herry Colling Elbert L. Burnham Jr.

Inventor: Nicholas Kenny, per John Francis Meyer, Atty.

## UNITED STATES PATENT OFFICE.

NICHOLAS KENNY, OF NEW YORK, N. Y., ASSIGNOR OF ONE-HALF HIS RIGHT TO ASHER N. LUCHS AND JACOB N. LUCHS.

## IMPROVEMENT IN MEANS FOR LESSENING NOISE ON RAILWAYS.

Specification forming part of Letters Patent No. 208,475, dated October 1, 1878; application filed September 12, 1878.

To all whom it may concern:

Be it known that I, NICHOLAS KENNY, of the city of New York, State of New York, have discovered and invented a New Process for Lessening the Noise Made by Railroads when in Operation, of which the following is a specification:

My invention is designed to afford a simple, effective, and economical means of lessening the noise upon railroads caused by the passage of trains over the same, particularly in elevated railroads, such as those now in oper-

ation in New York city.

This object I effect by reducing the sound-conducting capacity of the rails, stanchions, girders, columns, or other portions of the railway, by letting into the ends of the rails, columns, or girders lead, or a like material of low capacity for the transmission of sound, whereby the sound of the parts will be deadened and greatly diminished.

In the drawings, Figure 1 represents a view, partly in elevation and partly in section, of a rail having my invention applied thereto. Fig. 2 represents an end view of my improved rail.

The letters A A represent holes, which are drilled or otherwise formed in the ends of a rail or other portion of a railway-structure, and which are filled with lead, or a like material having low capacity for the transmission of sound. In practice, I have found lead to answer well for the purpose, as it may be readily filled into the holes when in a fluid condition.

Instead of two holes, but one may be employed; or more than two may be employed, if desired.

The rail thus constructed when struck, or when a train of cars passes over it, will have its sound-vibrations materially interfered with and lessened, its clear ringing sound being changed to a dull muffled one.

In the present instance I have shown my invention simply as applied to a rail; but I do not intend to limit myself to this, as other parts of a railway-structure may be similarly constructed.

I am aware that lead and like non-vibratory substances have heretofore been employed in compound rails, and in open slots in the body of rails; but I have found such objectionable, because the material inserted was liable to jar out, and I therefore do not claim these constructions; but

What I do claim is-

An integral rail having a mass of lead or like non-vibratory substance inserted in a cavity sunk into the body of the rail from the end faces thereof, as and for the purposes set forth.

Dated New York, August 31, 1878.

NICHOLAS KENNY.

In presence of— ELBERT L. BURNHAM, Jr., CHARLES A. MEYER.