

(No Model.)

J. H. COLLINGWOOD.  
Railroad Chair.

No. 234,458.

Patented Nov. 16, 1880.

Fig. 1.

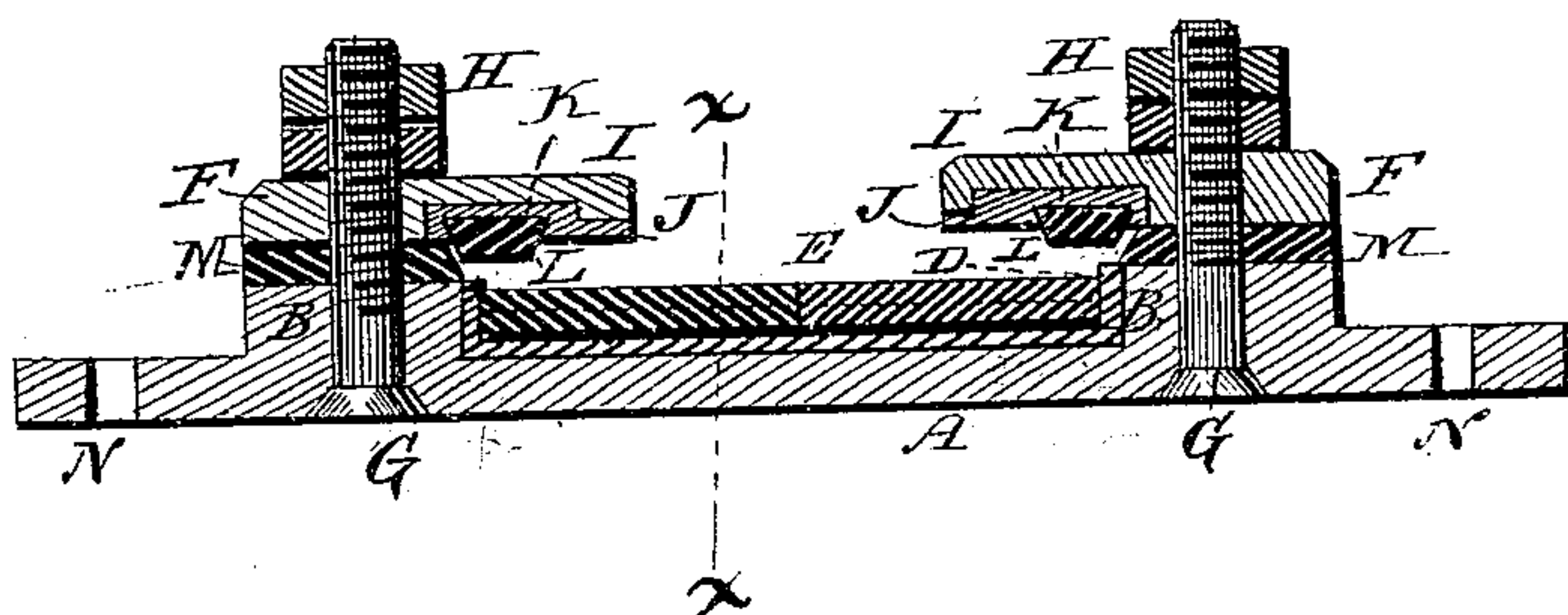
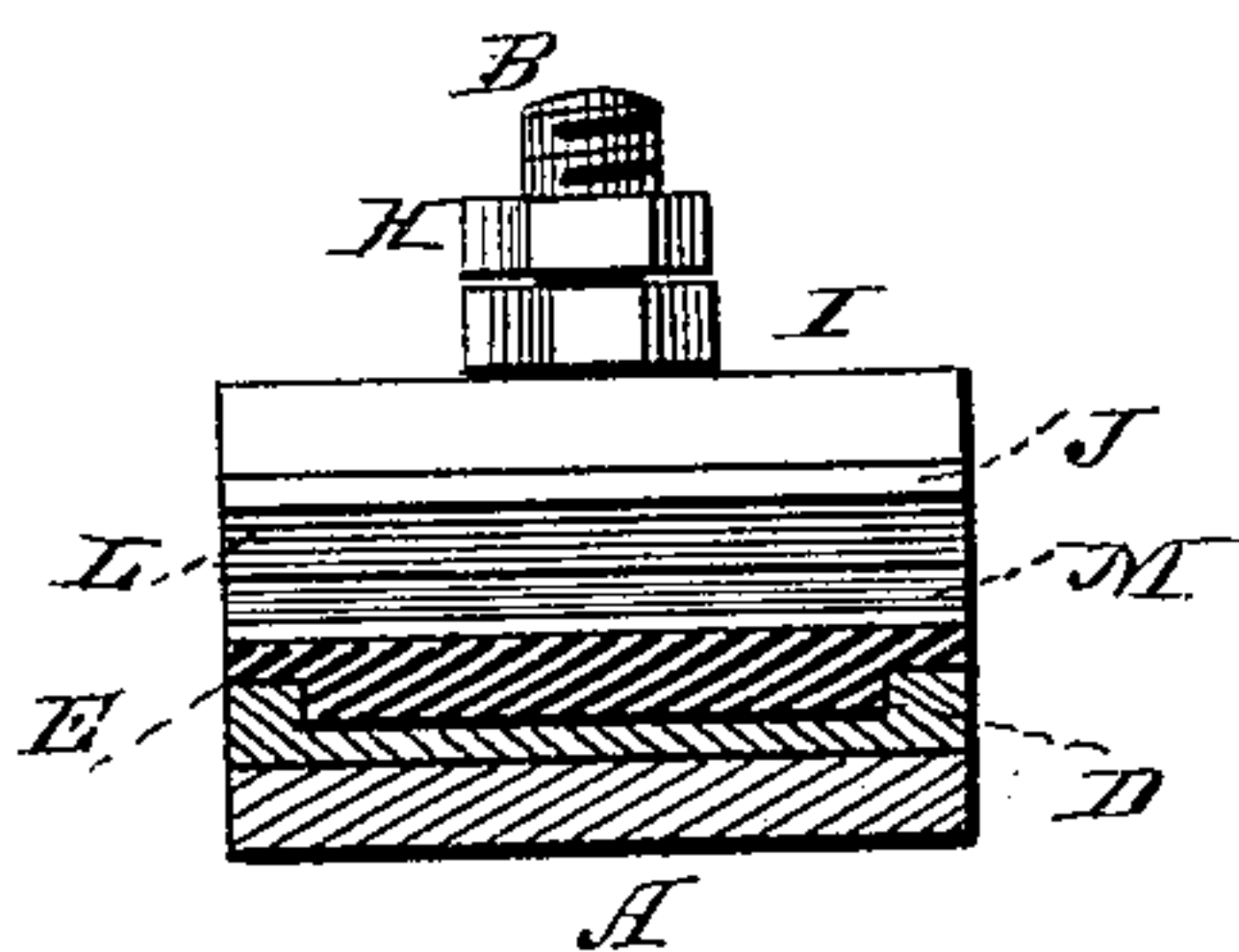


Fig. 2.



WITNESSES  
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# UNITED STATES PATENT OFFICE.

JAMES H. COLLINGWOOD, OF POUGHKEEPSIE, NEW YORK.

## RAILROAD-CHAIR.

SPECIFICATION forming part of Letters Patent No. 234,458, dated November 16, 1880.

Application filed April 5, 1880. (No model.)

To all whom it may concern:

Be it known that I, JAMES H. COLLINGWOOD, of Poughkeepsie, in the county of Dutchess and State of New York, have invented certain new and useful Improvements in Railroad-Chairs; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to railroad rail-chairs, and has for its object the production of a device by which the sound caused by the rolling-stock passing over the track shall be greatly lessened or deadened, and which shall, furthermore, enable the rails to be detached and replaced without removing or loosening any spikes, substantially as I shall now proceed to describe with reference to the drawings, which represent a vertical sectional view of my improved rail-chair.

Figure 1 is a vertical sectional view, and Fig. 2 is a section on the line *xx*, Fig. 1.

Similar letters of reference indicate corresponding parts in both figures.

In the drawings, A represents the base-plate, which is provided with shoulders B B, between which the rail-flange is to be adjusted. Between the shoulders B B the plate A is provided with a lining, C, of lead or other soft metal, which said lining is provided with a recess, D, to accommodate a cushion, E, of rubber or any suitable equivalent material.

F F are caps secured upon the shoulders B of plate A by means of bolts G passing vertically through said plate and caps, and provided with nuts H. Caps F F are provided with flanges I I, extending laterally toward each other above the rail-flange, which is in this manner secured in position.

The rail shank or web is accommodated between the flanges I I. The said flanges are provided upon their under sides with linings J, of lead or other soft metal. These linings, which may be dovetailed into the flanges, are provided with longitudinal dovetailed recesses K to receive and hold the strips or cushions

L, of rubber or other suitable material, which project below the face of said linings, so as to bear against the rail-flange.

Cushions M M are interposed between the shoulders B and caps F, as shown. Plate A is provided, outside the shoulders B, with perforations N to admit the spikes by which the device is secured upon the ties of the track.

By this invention it will be seen that the rail-flange is supported upon and held by rubber cushions, no part of the rail being in contact with metallic parts of the chair. Through the soft-metal linings the vibrations are communicated to the iron parts of the chair in such a gradual manner as to effectually deaden the sound. The cushions M not only prevent rattling of the parts between which they are interposed, but also permit the said parts to be properly adjusted with relation to the rail-flange.

To remove or adjust a rail it is only necessary to remove one of the caps, F, which may be done easily and quickly. Injury to the ties by the removal of spikes is thus avoided.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. The combination, in a rail-chair, of bearing-cushions for the rail, made of rubber or equivalent material, soft-metal linings forming casings for said cushions, and an outer shell or casing of iron, as set forth.

2. As an improvement in rail-chairs, the base-plate A, having shoulders B B recessed, soft-metal lining C, and cushion E, in combination with the caps F F, having flanges I I, provided with soft-metal linings J, having longitudinal dovetailed recesses and cushions L, and the cushions M, all combined, arranged, and operating substantially as and for the purpose herein shown and specified.

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

JAMES HENRY COLLINGWOOD.

Witnesses:

FRANK B. SNOW,  
THOMAS REED, Jr.