J. WODISKA.

Railway-Rail Chair.

No. 217,718. Patented July 22, 1879.

Fig: 1

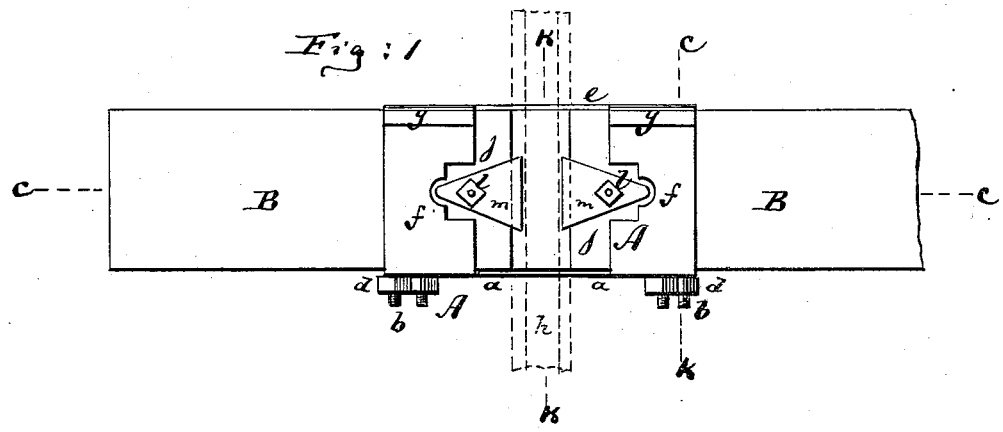


Fig: 2

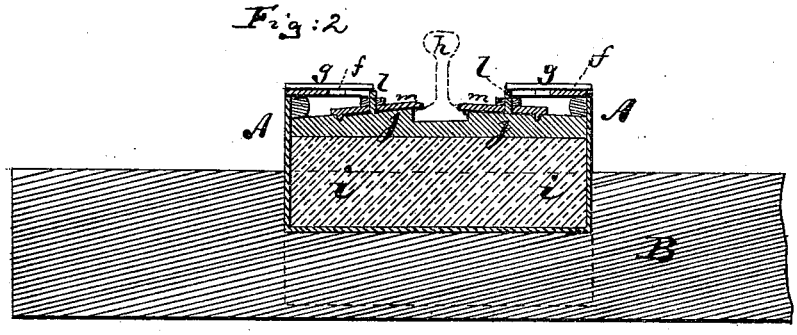


Fig: 3

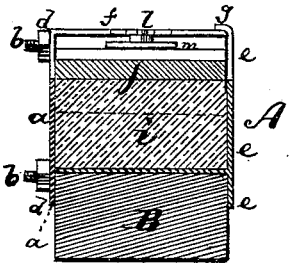
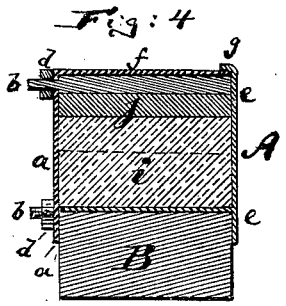


Fig: 4



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UNITED STATES PATENT OFFICE.

JULIUS WODISKA, OF NEW YORK, N. Y.

IMPROVEMENT IN RAILWAY-RAIL CHAIRS.

Specification forming part of Letters Patent No. **217,718**, dated July 22, 1879; application filed May 28, 1879.

To all whom it may concern:

Be it known that I, JULIUS WODISKA, of New York, in the county and State of New York, have invented a new and Improved Chair for Railroad-Rails, of which the following is a specification.

In the accompanying drawings, Figure 1 is a top view of my improved chair for rails, showing the same attached to the sleeper of a railroad-track. Fig. 2 is a vertical central section of the same on the line *c c*, Fig. 1; Fig. 3, a vertical central section of the same on the line *k k*, Fig. 1; and Fig. 4, a vertical transverse section on the line *c k*, Fig. 1.

Similar letters of reference indicate corresponding parts in all the figures.

This invention relates to an improved cushioned support or chair, to be interposed between the sleepers and the rails of an elevated or other railroad, to prevent the transmission of vibration from the rails to the supporting-frame of the track, and the consequent noise; also, to counteract as much as possible the vibration of the rails.

The invention consists in the combination of a box-shaped chair, adapted to be fastened upon the sleeper, and having two notched sides, of which one side is removable, and an open top with an interior cushion and a metallic top plate, to which the rail may be fastened.

The invention also consists in the details of improvement hereinafter more fully pointed out.

In the drawings, the letter A represents my improved chair or support for rails. This chair is made box-shaped, of metal or other strong material, and adapted to be placed upon or sunk into a recess in the face of the sleeper B.

The box-shaped chair A, which is preferably of rectangular form, is open on top, and has one of its sides, *a*, made removable.

The removable side *a* may be secured in place by four (more or less) bolts, *b b*, that project from the side of the box A and pass through holes in the plate *a*, and by nuts *d*, which are screwed upon the ends of the bolts *b* against the face of the plate *a*.

I prefer to extend the plate *a* and the opposite plate, *e*, of the box A downward below the bottom of the box, so that said plates bear against the sides of the sleeper B, as shown in Figs. 3 and 4, and prevent the chair from being loosened by the vibration caused by the trains.

The removable plate *a* is made L-shaped, being made in one piece, with two wings or end plates, *f f*, which extend across the top of the box A, as shown in Fig. 1. The free ends of the wings *f f* extend beneath, and are secured in place by hook-shaped projections *g*, formed on the upper edge of the plate *e*. Between the wings *f f* the top of the box A is open to allow for the admission of the rail *h*, and the side plates, *a* and *e*, are recessed at their upper edges in line with said top opening, to allow for slight up-and-down play of said rail.

It will be seen that by removing the nuts *d* and the plate *a*, with its wings *f f*, one side and the top of the box A are entirely exposed, and free access to said box obtained.

Within the box A is placed (the side *a* being previously removed) a cushion, *i*, of rubber or other elastic material. Upon this cushion rests a metallic plate, *j*, which is made of the same width as the interior of the box A, so that said plate *j* is capable of up-and-down but not of lateral play. The upper face of the plate *j* is provided with a groove, or is otherwise adapted for the reception of the rail *h*, which is rigidly attached to said plate by bolts *l* and clamps *m*, or in any other manner. After the cushion *i* and top plate, *j*, have been placed within the box A, the side plate, *a*, is fastened to the box in proper manner, and confines said cushion and top plate within the box.

It will be seen that the above-described railway-chair allows slight up-and-down play of the rail *h* on its cushioned support. It effectively prevents the transmission of vibration from the rails to the sleepers B, and the consequent noise. At the same time any one chair on the track may be opened for the removal and replacement of the cushion, or for other repairs, or any one entire chair may be removed without disturbing the remaining chairs or the track, or even the rail. The chair is, moreover, compact and of simple construction.

I claim—

1. The combination of the box-shaped rail-

way-chair A, having an open top, and the recessed side plates, *a* and *e*, of which the side plate, *a*, is removable, with the cushion *i* and bearing-plate *j*, substantially as herein shown and described.

2. A railroad-chair, A, having the removable side *a*, which carries the top wings, *f f*, in combination with the side *e*, having hooks *g*, and with the cushion *i* and top plate, *j*, substantially as specified.

3. The box-shaped railway-chair provided with downwardly-projecting plates *a* and *e*, which straddle the sleeper, and of which the plate *a* is removable, substantially as herein shown and described.

JULIUS WODISKA.

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