

T. C. Robinson,

Railroad Chair.

No. 39079.

Patented Apr. 20, 1869.

Fig. 1.

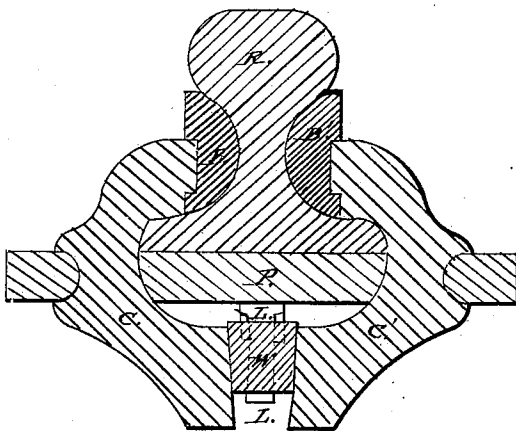


Fig. 3.

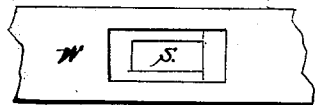


Fig. 4.

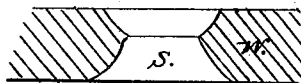


Fig. 5.

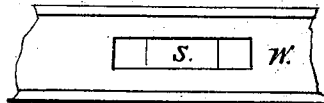
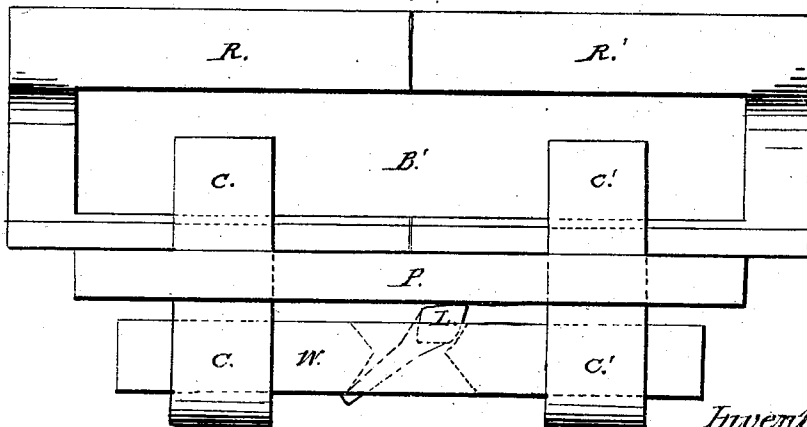


Fig. 2.



Witnesses:
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Inventor:
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By his Attorney
Chas. F. Mansburt

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THOMAS C. ROBINSON, OF BOSTON, MASSACHUSETTS, ASSIGNOR
TO HIMSELF AND GEORGE H. SANBORN.

Letters Patent No. 89,079, dated April 20, 1869.

IMPROVEMENT IN RAILROAD-CHAIRS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, THOMAS C. ROBINSON, of Boston, in the county of Suffolk, and State of Massachusetts, have invented a new and useful Improvement in Railroad-Chairs; and I do hereby declare the following to be a full and correct description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a vertical transverse section of my improved chair, applied to a rail;

Figure 2 is a side elevation of the same;

Figure 3 is a bottom view of the wedge;

Figure 4 is a longitudinal vertical section; and

Figure 5, a top view of the wedge.

The same letter indicates the same part wherever it occurs.

The nature of this invention consists in a peculiar construction of railroad-chair, by which the rails are held most securely and immovably, when subjected to the greatest superincumbent weight, thereby tending to protect the abutting ends of adjacent rails from those injuries from the wheels of passing trains, which result from their being more or less out of line, and which constitute so important an element in the wear and tear of a road.

To enable others to make and use my improved chair, I will proceed to describe its construction and operation.

The abutting ends of the rails R R' rest upon a plate, P, which is provided with four slots, through which pass four clamps, C C'.

The edges of the slots are rounded, so as to form, with corresponding concavities in the clamps, knuckle-joints, to allow lateral vibrating movement to the clamps.

The shape of the clamps is clearly shown in fig. 1.

They are passed through the slots in plate P, as shown in that figure, and their upper ends enter recesses in the sides of the side-braces B B', which embrace and press against the sides of the abutting rails R R', as shown in figs. 1 and 2.

The lower ends of the clamps C C' do not touch each other, but receive between them a wedge, W, their ends having an inclination to each other, corresponding with that of the sides of the wedge.

The wedge W is long enough to extend from one pair of clamps to the other, as shown in fig. 2.

It has a slot, S, of peculiar form, in its middle, said slot being clearly represented in figs. 3, 4, and 5.

This slot receives the latch, or lock L, which rests, by projecting shoulders, upon its edges.

The latch has an arm projecting down through the slot, whose weight tends to keep it in a vertical position.

The result of this construction is, that when weight is applied, as by a passing train, to the top of the joint between the abutting rails R R', the braces B B' are pressed down, and draw the upper ends of the clamps C C' together. This forces their lower ends apart, and permits the wedge W to descend between them, and hold all the advantage gained.

The latch, or lock L, acts as a pawl to hold the wedge down.

It is obvious, that the greater the weight applied to the top of the rails, the greater the force with which the braces B B' are held against them, and tend to keep them immovable and in line with each other.

Having thus fully described my invention,

What I claim, and desire to secure by Letters Patent, is—

1. The combination of the plate P, clamps C C', braces B B', and wedge W, all constructed and operating substantially in the manner and for the purpose set forth.

2. In combination with the slotted wedge W and plate P, the lock L, arranged and operating as described.

3. A railroad-chair, constructed substantially as described, by which the rails are held most immovably, and most directly in line with each other, when subjected to the greatest superincumbent weight, as specified.

The above specification of my said invention, signed and witnessed at New York, this 6th day of February, A. D. 1869.

T. C. ROBINSON.

Witnesses:

JOS. S. SANBORN,
CHAS. F. STANSBURY.