(No Model.)

C. M. SELTZER & O. T. MOOCK.

RAILWAY CHAIR.

No. 313,778. Patented Mar. 10, 1885.

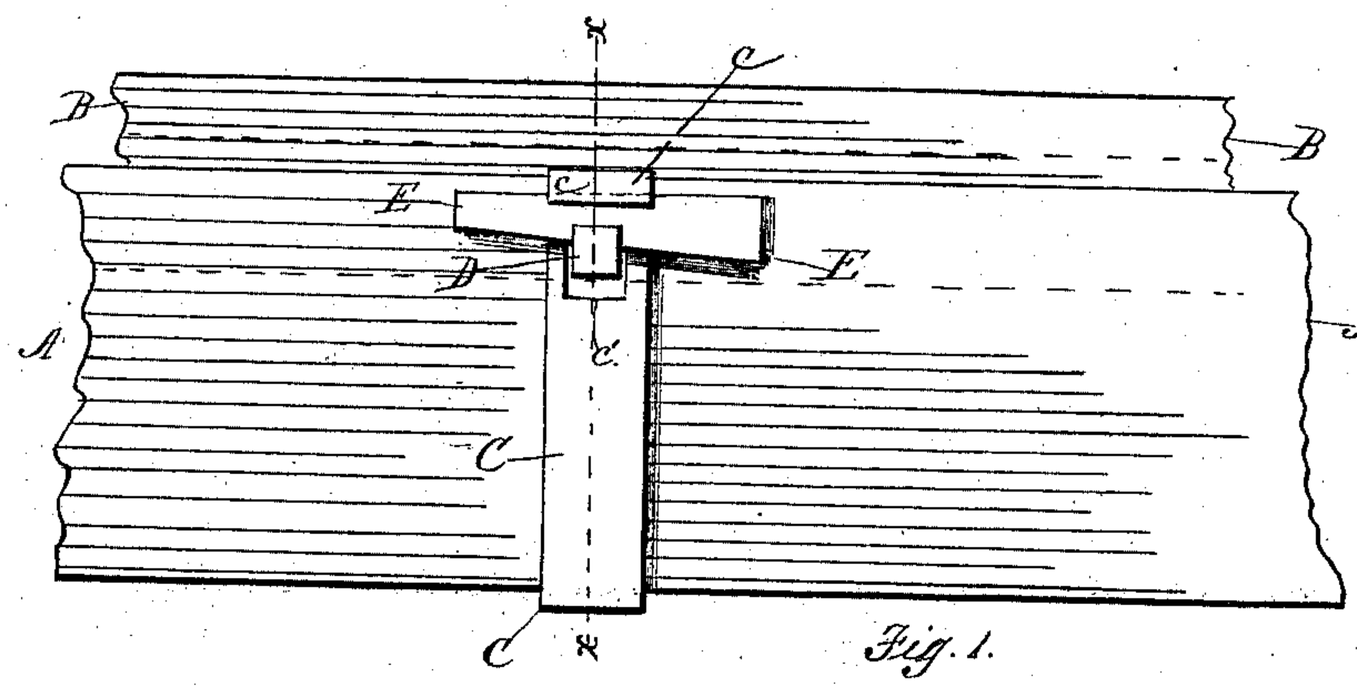


Fig. 1.

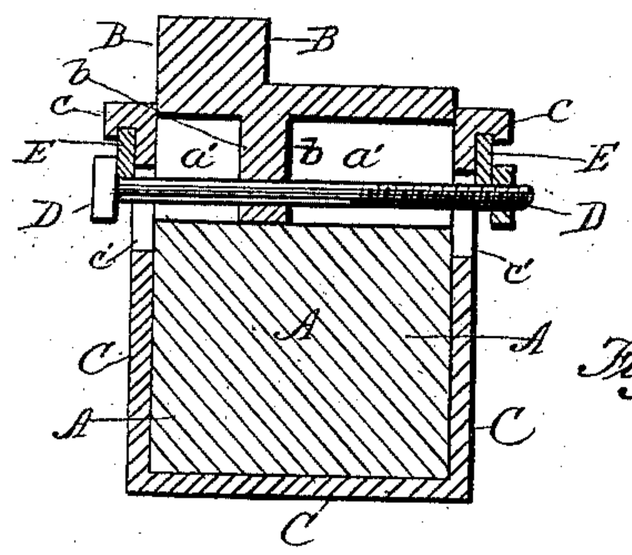
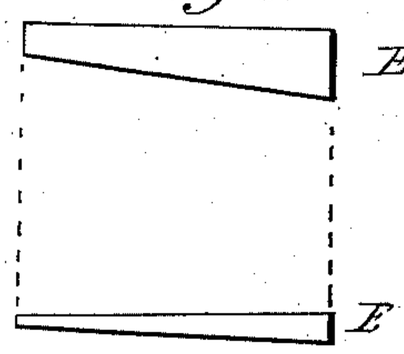


Fig. 2.

Fig. 5.



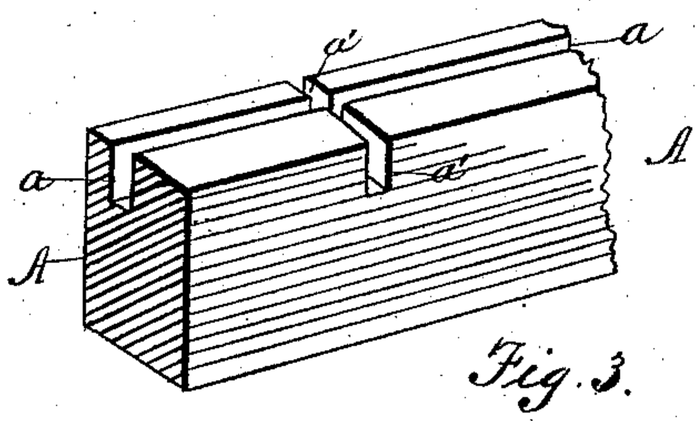


Fig. 3.

Fig. 6.

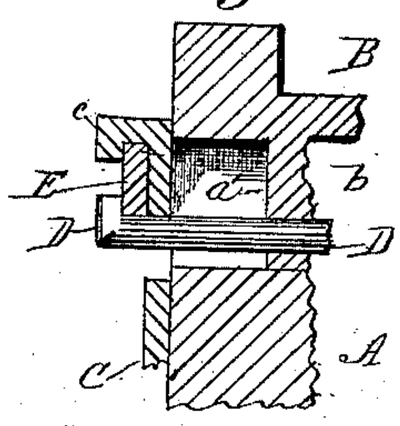
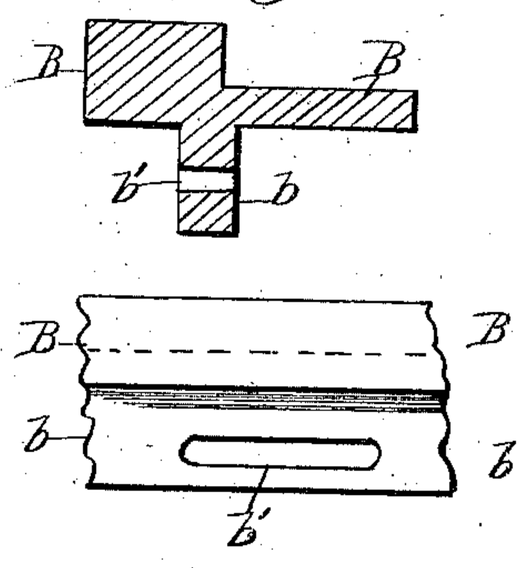


Fig. 4.



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UNITED STATES PATENT OFFICE.

CHARLES M. SELTZER AND OTTO T. MOOCK, OF PHILADELPHIA, PA.

RAILWAY-CHAIR.

SPECIFICATION forming part of Letters Patent No. 313,778, dated March 10, 1885.

Application filed November 12, 1884. (No model.)

To all whom it may concern:

Be it known that we, CHARLES M. SELTZER and OTTO T. MOOCK, citizens of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Railway-Chairs, of which the following is a specification, reference being had therein to the accompanying drawings.

Our invention relates to improvements in chairs for street-railways, and has for its object to secure the rails to the stringers on which they are laid without the use of spikes, and to permit of the expansion and contraction of said rails, caused by the changes of temperature; and the invention consists of the construction, combination, and arrangement of parts, substantially as hereinafter described and claimed.

In the drawings, Figure 1 is a side elevation of a portion of a street-railway rail and stringer having our improved chair applied thereto. Fig. 2 is a cross-section on the line *x x* of Fig. 1. Figs. 3, 4, and 5 are views in detail of parts of our improvements, and Fig. 6 is a modification of the same.

Similar letters of reference in the several drawings denote like or corresponding parts.

Referring to the drawings, A designates the stringer, of which there are two, although only one is shown, of a street-railway track, embedded in the earth in the ordinary and well known manner, and having a longitudinal groove, *a*, formed in its upper surface, in which is fitted a downwardly-projecting flange, *b*, of the rail B, said flange having a slot, *b'*, as shown.

C designates a strap or binder adapted to embrace the stringer A on its opposite sides and under surface, as shown in Fig. 2, and at its upper ends is provided with hooks *c*, between which and the transverse securing-bolt D is driven a wedge, E, thereby firmly securing the rail to the stringer. The straps or binders C are arranged at suitable distances apart, and are further provided with apertures *c'* in their vertical arms. The stringers are provided with transverse apertures *a'*, which coincide with the apertures *b'* in the rails, thereby enabling the bolt D to be readily passed through the said rail and stringer, as shown in Fig. 2.

At each side of the strap, and between the flange *c'* and the head and nut of the bolt D, are driven wedges E, whereby the several parts are firmly secured together and held in place.

It will be observed that we provide a simple and durable chair for a street-railway, one in which the rail can be readily detached from the stringer, and which permits of expansion and contraction of the rail, due to the changes of temperature, without affecting its efficiency.

It will be understood that the stringers are embedded in the earth just deep enough to expose to view the wedge and bolt, thus permitting of the tightening or removal thereof when desired.

In the modification shown in Fig. 6, it will be observed that, in lieu of the headed bolt and nut, we substitute a rod, D, having its ends bent, between which and the flanges of the strap C are driven the wedges E, thereby dispensing with the comparatively expensive threaded bolt and nut, and providing a simpler means for securing the parts together.

Modifications in details of construction and form and proportion of parts, herein shown as an embodiment of our invention, may be made without departing from the principle or sacrificing the advantages thereof—as, for instance, the flange *b* may be made the entire length of the rail, or only of such a length as to insure strength and stability thereof after the slot has been cut therein. It is obvious that, in lieu of the longitudinal groove and flange, lugs on the rail and sockets in the stringer may be employed, or the strap or binder may be provided with the flange *c'* and wedge on one side thereof only. We would therefore have it understood that we hold ourselves at liberty to make such changes and alteration as fairly fall within the scope of our invention.

What we claim as our invention, and desire to secure by Letters Patent of the United States, is—

1. In a street-railway, the combination, with the stringers having longitudinal and transverse grooves, of the rails provided with downwardly-projecting flanges having slots, straps, or binders C, and transverse securing-bolts, substantially as described.

2. In a railway-chair, the combination of

grooved stringers having rails provided with downwardly-projecting flanges, with a strap or binder, a transverse bolt, and a wedge, substantially as described.

3. In a railway-chair, the combination of the following elements, to wit: stringers having longitudinal and transverse grooves, rails provided with downwardly-projecting slotted flanges adapted to fit in the longitudinal groove of the stringers, straps or binders adapted to embrace said stringers, and having flanges and slots at their upper ends arranged coincidently with the transverse groove of the stringers, transverse securing-bolts D, and tightening-wedges E, all arranged as herein described.

4. In a railway-chair and in combination with the stringers and rails, a strap or binder having at its upper ends downwardly-projecting flanges, a transverse securing-bolt, and wedges fitted between said flanges of the binder and bolt, substantially as herein shown and described.

In testimony whereof we affix our signatures in presence of two witnesses.

CHAS. M. SELTZER.
OTTO T. MOOCK.

Witnesses:
RICHARD J. LENNON,
GRANT ROWE.