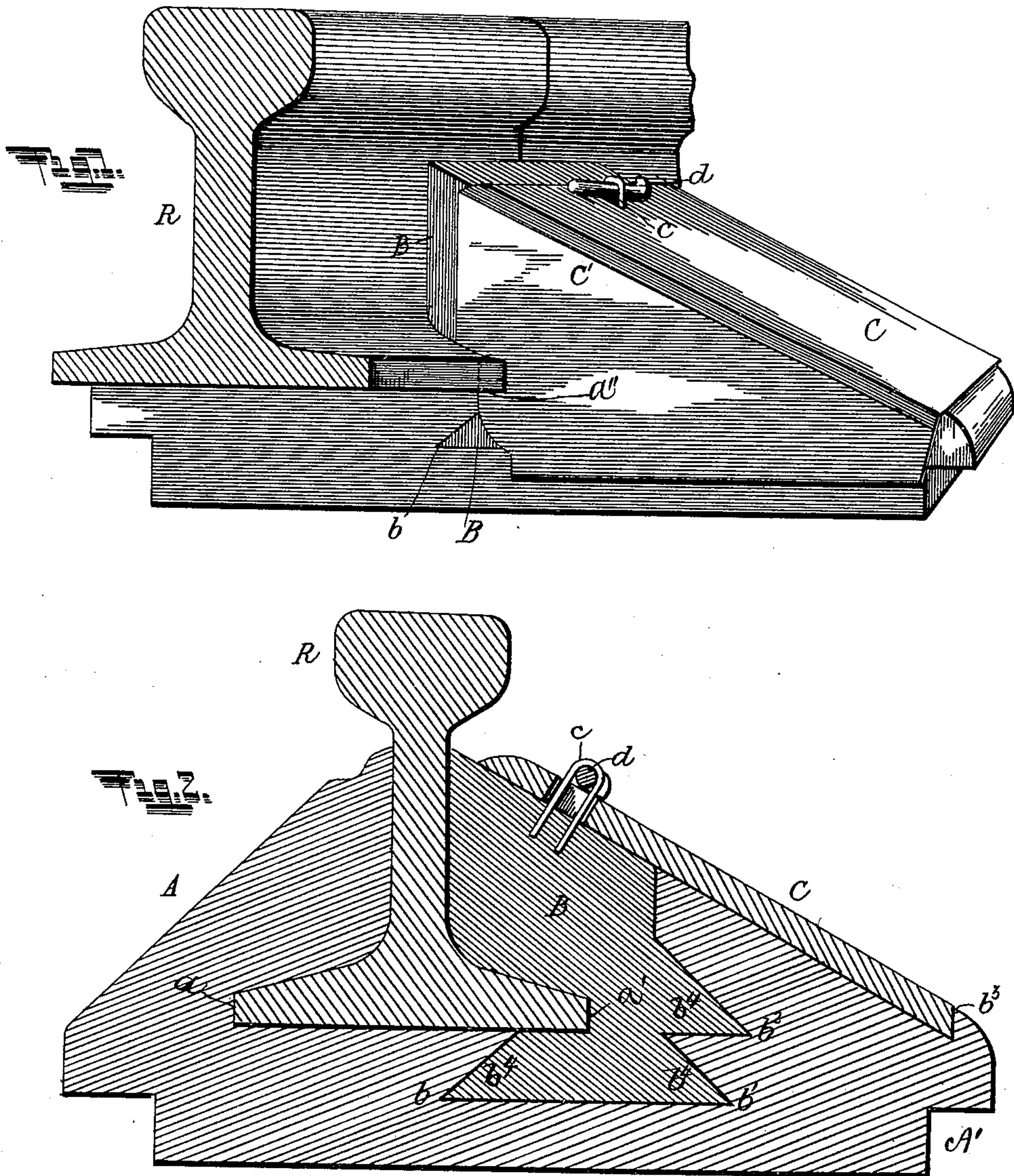


(No Model.)

G. V. LINENDOLL.  
RAILROAD CHAIR.

No. 386,144.

Patented July 17, 1888.



Witnesses.

*Wm. T. Norton,*  
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# UNITED STATES PATENT OFFICE.

GEORGE V. LINENDOLL, OF COLDWATER, MICHIGAN.

## RAILROAD-CHAIR.

SPECIFICATION forming part of Letters Patent No. 386,144, dated July 17, 1888.

Application filed April 23, 1888. Serial No. 271,536. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE V. LINENDOLL, a citizen of the United States, residing at Coldwater, in the county of Branch and State of Michigan, have invented certain new and useful Improvements in Railroad-Chairs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in railroad-chairs, and it has for its object to provide a simple, cheap, and convenient chair for coupling and retaining securely in place the meeting ends of sections of railway-rails, whereby all tendency or liability of the sections thus coupled to work loose is prevented.

To this end the invention consists in the novel construction and combination of the several parts, as will be hereinafter more fully described, and specifically pointed out in the claims.

In the accompanying drawings, to which reference is had, and which fully illustrate my invention, Figure 1 is a perspective view of the chair, and Fig. 2 is a cross-sectional view of Fig. 1.

Similar letters of reference indicate similar parts in the several figures.

A represents the main portion of a railroad-chair, the upper surfaces of which are inclined at an angle of about forty-five degrees upon one side where the rails are inserted, and on the other side at an angle of about thirty degrees, and is preferably made of cast shear-steel, but, if desired, may be made of any suitable metal. This chair A has a longitudinal groove, *a*, formed in the larger portion, A, near its base, for the reception of one of the base-flanges of a rail-section. The other portion, A', of the chair, which is upon the opposite side of the rail-sections, has formed therein a longitudinal wedge-shaped groove, as at *b b'*. From the apex of this wedge-shaped groove is another longitudinal semi-wedge-shaped groove, *b<sup>2</sup>*, within which is snugly but loosely fitted and allowed to slide a sliding block, B, having in it a longitudinal groove, *a'*, corresponding with the groove *a* in the main portion A of the chair. The base-flanges of these sections of the rails take into these grooves *a a'*, where

they are securely held, this block B otherwise in its construction being provided with wedge-shaped projections or flanges *b<sup>4</sup>*, corresponding with and sliding in the longitudinal grooves *b b' b<sup>2</sup>* in the chair. A key is inserted in a notch, *a''*, cut in the base-flange of one of the rail-sections on one side, by which means the sliding block B is prevented from sliding from its position in the center of the meeting ends of the rail-sections, (said key not being shown in the drawings.)

C represents the top, and C' the side pieces, of a removable locking cap or cover for the chair, the lower end of which fits snugly up against a flange, *b<sup>3</sup>*, upon the forward and upper portion, A', of the chair; and near the upper end of this cap or cover is a slot through which a staple, *c*, is passed, the free ends of which are fastened or driven into the block B, the looped end of the staple projecting above the cover, and through which is passed a key, *d*, for securing the locking-cover to the chair and its sliding block. A great advantage is derived from this locking cap or cover, as it serves to hold the parts of the chair together, and at the same time operates to protect them from any foreign substance that may get wedged in between the grooves in the chair and sliding block and prevent the operation of the chair and sliding block when it is necessary to withdraw the latter from the chair for the substitution of other rail-sections.

From the foregoing description, when taken in connection with the accompanying drawings, the operation of my device will be obvious, but may be briefly stated as follows: When it becomes necessary to replace the old rail-sections with new ones, the cap or cover is removed by the operator withdrawing the key from the staple in the sliding block, when the sliding block itself can then be withdrawn longitudinally from its position in the chair, and the rail-sections can then be taken out of the chair. To replace the same or other rail-sections for those taken out, the operator first inserts the base-flanges upon one side of the rail-sections in the groove in the main or larger portion of the chair, when the groove in the sliding block bites the base-flanges upon the opposite side of the rail-sections, and the sliding block is gently slid on over the base-flange



and in the grooves in the smaller or narrower portion of the chair, and it is thus restored to its normal or proper place. The cap or cover is then replaced upon the chair, and the  
5 key is passed through the staple, thus firmly binding all of the parts of the chair and rail-sections firmly together in such a manner that all tendency or liability of these parts to loosen by the constant strain upon them by the weight  
10 of the cars passing over the rails is obviated.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a railroad-chair, the combination, with  
15 the chair constructed as described, of the sliding block B, provided with the wedge and semi-wedge shaped projections or flanges  $b^1 b^2 b^3$  and groove  $a'$ , arranged and operated substantially as and for the purpose set forth.

2. In a railroad-chair, the combination, with 20 the chair having the groove  $a$  and wedge-shaped and semi-wedge-shaped grooves  $b b' b^2$  formed therein, as described, of the sliding block B, having the wedge and semi-wedge shaped projections  $b^1 b^2 b^3$ , and the cover C, 25 having a slot in it near its upper end, through which the staple  $c$ , secured to the block B, projects, and a key,  $d$ , passed through the staple, whereby the several parts of the chair and rail-sections are locked together, substantially 30 as and for the purpose specified.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE V. LINENDOLL.

Witnesses:

FRANKLIN T. EDDY,  
SCOTT McLANE.