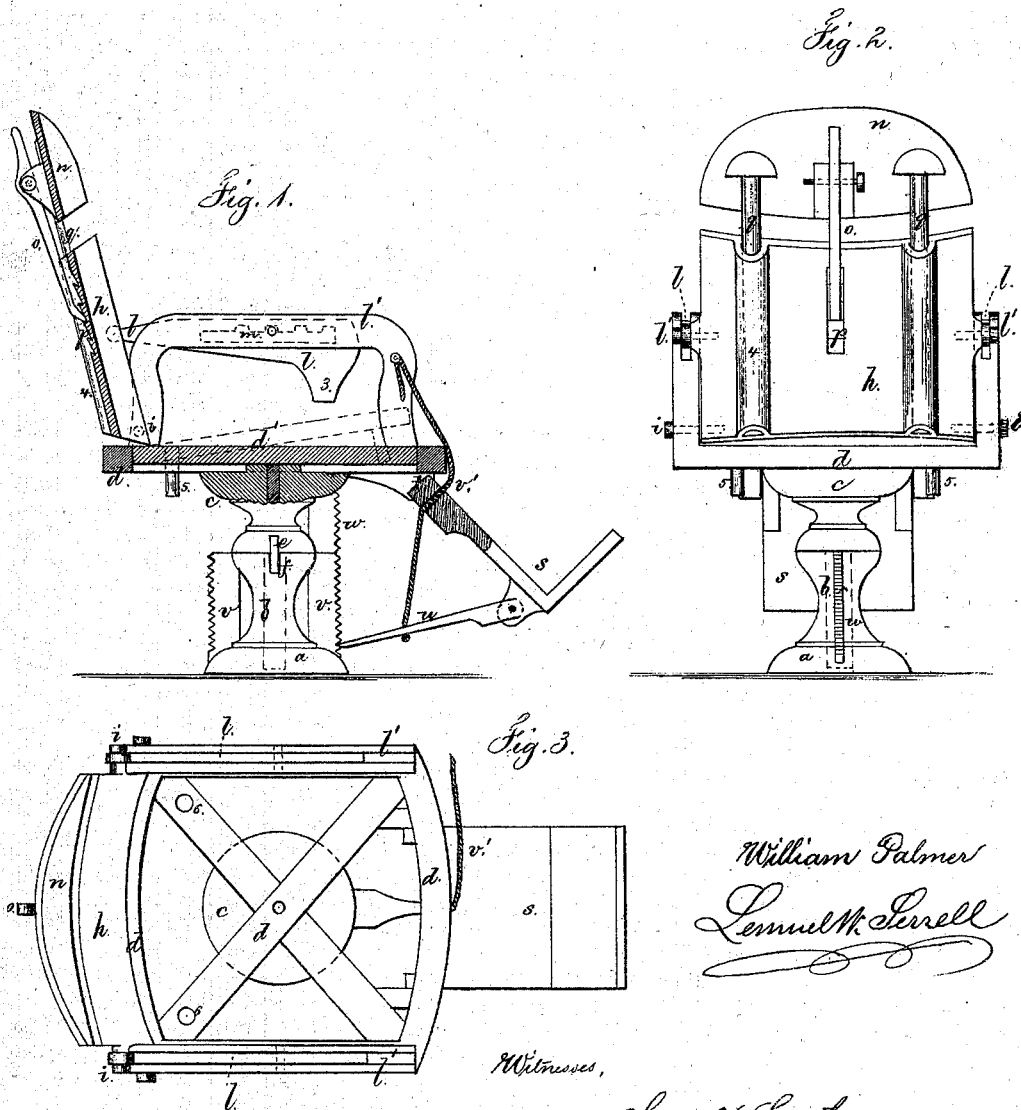


WILLIAM PALMER.

Improvement in Chairs for Railroad Cars.

No. 115,510.

Patented May 30, 1871.



William Palmer  
Lemuel M. Serrell atty

Witnesses,

Charles Smith  
Geo. P. Prickney

## UNITED STATES PATENT OFFICE.

WILLIAM PALMER, OF NEW YORK, N. Y.

## IMPROVEMENT IN CHAIRS FOR RAILROAD CARS.

Specification forming part of Letters Patent No. 115,510, dated May 30, 1871.

*To all whom it may concern:*

Be it known that I, WILLIAM PALMER, of the city, county, and State of New York, have invented a certain new and useful Improvement in Chairs for Railroad Cars, &c.; and the following is hereby declared to be a full and correct description of the same.

My invention is made with special reference to the construction of a chair for railroad cars, so that it can be used as an ordinary seat or chair, or as a reclining-chair, to take the place of the berths now used in sleeping-cars; but said chair is also adapted for household, dentists', and barbers' use.

Reclining-seats with swinging foot-rests have been made, and chairs set upon columns have been reversible, so as to be adapted to railroad cars.

My invention consists of a chair mounted on a column, with divided racks for the pawl that is connected with the swinging foot-rest, so that the said rest can be supported when the seat is turned around to face in either direction. I also make use of a movable cushion-board that may be reversed to incline the seat.

In the drawing, Figure 1 is an elevation of said chair with the seat, back, and foot-rest in section; and Fig. 2 is an elevation of the rear of the chair. Fig. 3 is a plan of said chair.

*a* represents the base, to be securely bolted or fastened to the floor of the car, and said base is provided with a hole to receive the pivot *b* of the column *c*, which column is secured to the under side of the seat *d*. The upper end of the base *a* and lower end of the column *c* are sufficiently broad to form a firm bearing for the seat that is attached to the column *c*; and to prevent said seat turning accidentally a lug or stop, *e*, upon the base of the column *c* is made use of to enter one of the notches *f f* upon opposite sides of the upper part of the base *a*, or vice versa. By lifting the chair and column until the lug is clear of its notch the seat may be turned to reverse its position, and then be held by the lug entering the other notch upon the base *a*. *h* is the back of the chair, hinged at *i i* to the seat *d*, and sustained in position by the links *l l*, which pass in between the two-part arms *u u*, and are provided with slots and notches, as

at *m*, to take over pins passing through the said two-part chair-arms and hold the back at the desired inclination. The downward projections at 3 allow of the links being lifted to change the inclination of the back. *n* is the head-rest, sustained by the pawl *o* and rack *p*, and guided and kept in its proper position by the slide-bars *q q*, which enter sockets 4 upon the back *h*. The guide-bars *q q* and pawl *o* and rack allow the head-rest to be raised or lowered to suit the occupant of the chair, and the cushion or piece of upholstery that may be placed at the back of the chair may extend over the space between the rest *n* and back *h*, when the two are separated to lengthen the back of the chair, and be partially supported by the bars *q q*. The sockets 4 and bars *q* are to be half-round, so as not to present sharp angles to the occupant of the next seat when entering or leaving such seat. The teeth of the rack *p* should be under-cut, as shown in Fig. 1, so that the pawl cannot fall out of the rack by its own weight or by the weight of the person in the chair when the back is inclined or in nearly a horizontal position. *s* is the foot-rest, hinged at *t* to the under side of the seat *d*, and adjusted and sustained by the pawl *u* and racks *v v* and *w*. The racks *v v* are upon opposite sides of the base *a*, and the rack *w* upon the column *c*, so that in either position of the chair one of the racks *v* will coincide with the rack *w* and afford a length of rack necessary for the adjustment of the foot-rest. I prefer to construct the racks in this manner, as being the strongest; but a single rack might be used, attached to the under side of the seat. A cord, *v'*, may be employed to lift the pawl *u* and facilitate the adjustment of the rest. The chair may be upholstered in any suitable manner. The seat is made with a cushion-board, *d'*, upon which are projecting pins 5 5 entering holes 6 6 in the seat-frame or bottom *d*.

When it is desired to elevate the front edge of the seat-cushion the cushion and board *d'* are lifted and reversed, so that the pins resting upon the seat-frame or bottom *d* will raise up the front edge of the cushion, as seen by dotted lines in Fig. 1, and render the same more comfortable when the back of the chair is inclined.

I do not claim a revolving seat upon a col-

umn provided with a clutch; nor a movable section at the upper part of the chair-back; nor notched links between the back and the arm-piece.

I claim as my invention—

1. The divided rack *v w* upon the base *a* and column *c*, in combination with the hinged foot-rest and pawl *u*, as set forth.
2. The cushion-board *d'*, pins 5 5, and holes

6 6 in the seat *d*, as and for the purposes set forth.

Signed by me this 20th day of March, A. D. 1871.

WM. PALMER.

Witnesses:

CHAS. H. SMITH,  
GEO. T. PINCKNEY.