

M.M.MARTIN.

Car-Seat.

117553.

PATENTED AUG 1 1871

Fig. 1.

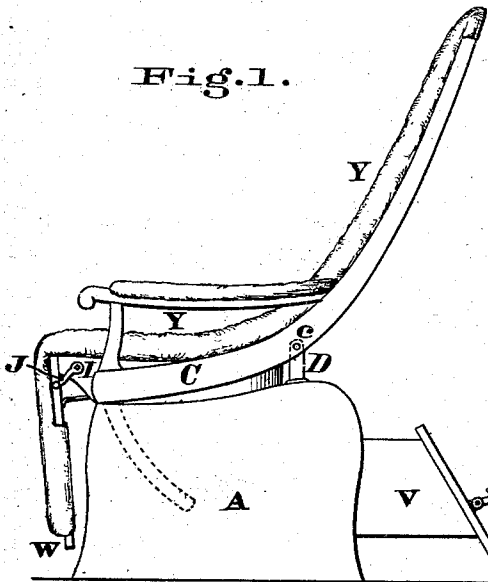


Fig. 2.

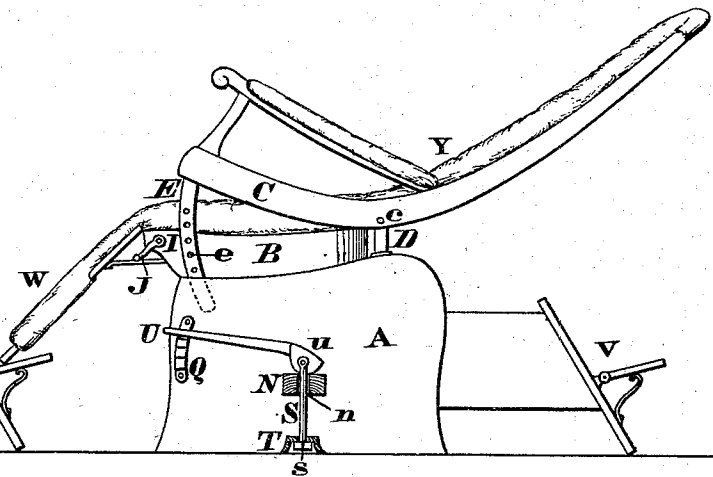


Fig. 3.

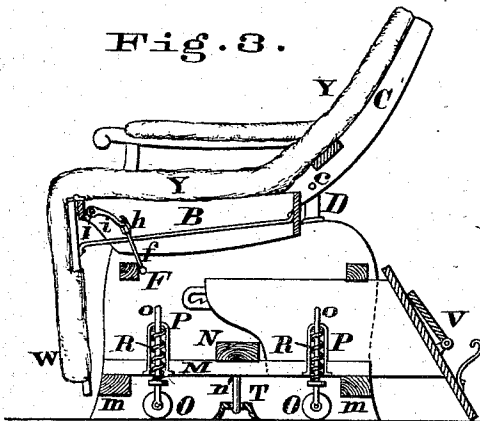


Fig. 4.

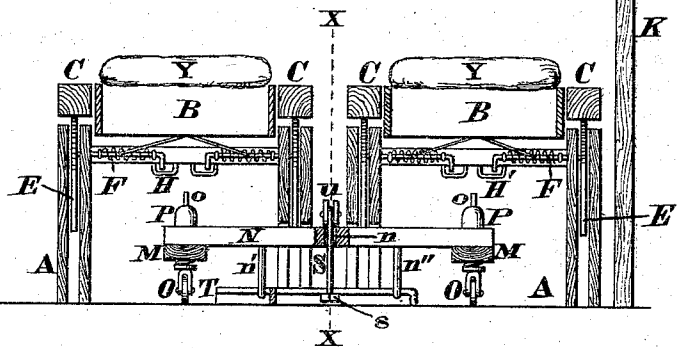


Fig. 5.

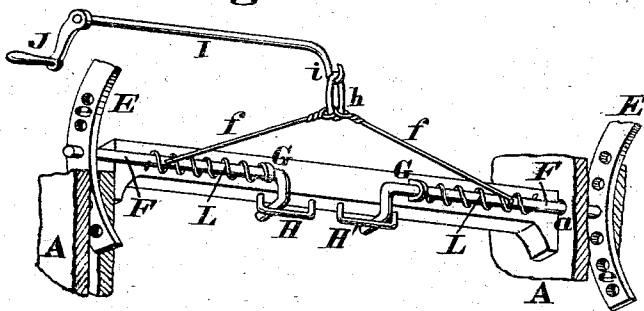
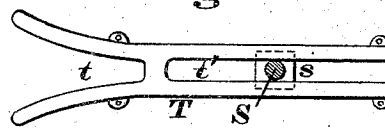


Fig. 6.



Attest.
Jas. H. Layman,
1-1-1871.

M. M. Martin
INVENTOR.
By Knight Bros
Attys.

UNITED STATES PATENT OFFICE.

MARK M. MARTIN, OF COCHRAN, INDIANA.

IMPROVEMENT IN RAILWAY-CAR SEATS.

Specification forming part of Letters Patent No. 117,553, dated August 1, 1871.

To all whom it may concern:

Be it known that I, MARK M. MARTIN, of Cochran, Dearborn county, Indiana, have invented certain Improvements in Car-Seats, of which the following is a specification:

This invention relates to that class of car-seats which is capable of being changed from the ordinary sitting position to an inclined or recumbent position; and the first part of my improvement relates to an arrangement of the devices whereby the angle of the chair may be changed so as to adapt the seat more completely to the various wants of the traveling community. The second part of my improvements consists in uniting two chairs together, and providing them with casters, eccentrics, and a slotted plate, for the purpose of permitting the seats to be turned round whenever desired, the details of which arrangement will be hereafter fully described.

Figure 1 is a side elevation of my improved car-seat, it being represented in the ordinary or sitting position. Fig. 2 is a vertical section at the line *x x*, with the seat placed in its inclined or recumbent position. Fig. 3 is a vertical section through the lower part of the seat. Fig. 4 is a vertical section through the lower portion of two of the seats, the section being taken in the plane of the slotted plate. Fig. 5 is a perspective view of the spring-bolts which maintain the chair in position; and Fig. 6 is a plan of the slotted plate, which is secured to the floor of the car for the purpose of maintaining the seats in position.

My improved chair consists of three principal members, to wit, the base A, the seat B, and the body C, the latter being pivoted at *c* to studs D, which project upwardly from near the back part of base A. Securely attached to the body C and playing within the base A are two curved bars, E, which are concentric with the pivots *c*, and these bars are provided with a series of apertures, *e*, for the reception of spring-bolts F, which are operated in the following manner: The outer ends of these bolts pass through apertures *a* in the base so as to engage with the openings *e* of bars E, while the inner ends of said bolts are confined within eyes G that project from one of the stretchers which unite the bases together. The stroke or play of these bolts is limited by the staples H H'. Attached to the bolts F are rods *f*, whose inner ends connect with a link, *h*, that depends

from the crank *i* of rock-shaft I, which latter is journaled in the frame B of the seat proper. The external end of rock-shaft I has a handle, J, with which it is operated. An India-rubber thong may be provided for the purpose of assisting the action of the springs L L, whose duty is to protrude the bolts after they have been retracted by the devices *h f* and I *i*. By simply depressing the handle J so as to withdraw the bolts F from the apertures *e* the chair may be thrown back upon its pivots *c*, and as soon as the proper inclination has been obtained the operator quits his grasp of the handle, and the springs L L instantly protrude the bolts F and cause them to engage with another one of said apertures *e*, and thus maintain the body of the chair securely in the desired position. In order to turn the seat completely around so as to face either end of the car I provide the following devices: Extending from front to back of the base A and resting upon the stretchers *m m'* are rails M, to whose mid-lengths is attached a beam, N. Rails M are provided with casters O, whose stems *o* are pivoted in sockets P, and said stems are surrounded by springs R. These springs are so powerful that the united action of the four, which are placed under two chairs, is sufficient to elevate the unoccupied seats clear of the car-floor as soon as the locking device has been liberated. This locking device is constructed as follows: That portion of the beam N which is situated between the bases of the two seats has an aperture, *r*, in it, through which passes a bolt, S, whose head *s* engages with a slotted plate, T, which is secured to the floor of the car. Said plate is provided with two slots, *t t'*, of which the one (*t*) extends toward the aisle of the car, while the other one (*t'*) projects toward the side K of the car. The bolt S is pivoted to a lever, U, having a cam, *u*, which bears upon the beam N, and said lever is adapted to engage with curved rack Q. Projecting from the lower side of beam N are two pins, *n' n''*, which, entering the slots *t t'*, prevent the rotation of the seats around the pivot-bolt S. Whenever it is desired to turn the seats completely around the free end of lever U is disengaged from rack Q, which relieves the pressure of cam *u* from beam N, and, there being no longer anything to resist the action of springs R, they immediately elevate the bases A clear of the floor. When the seats are thus elevated the pins *n' n''* are withdrawn from

the slots *t t'*, and, there being no longer anything to prevent the rotation of the chairs, they may be turned completely round upon the pivot-bolt *S* and casters *O*. The slot *t'* permits the seats being drawn toward the aisle a sufficient distance for them to clear the sides *K* of the car when said seats are turned upon their pivots *S*. The chairs having been turned around and the pins *n' n''* brought directly above the slots *t t'* the lever *U* is elevated, which act depresses the bases *A*, causes the pins *n' n''* to enter said slots, and thus prevents any accidental displacement of the seats from their proper position. The sliding and folding foot-rest *V*, together with the flap *W* and cushions *Y*, being precisely similar in their arrangements and adjustments to those described in the patent issued to me May 26, 1868, require no further description in this specification. The

rock-shaft which operates the spring-bolts may, if preferred, be journaled in the base of the chair instead of in the seat-frame, as here shown.

I claim as my invention—

1. The combination, substantially as described, of the base *A*, seat *B*, pivoted body *C c*, bars *E e*, spring-bolts *F F*, and operating devices *f h i I J* or their equivalents, for the purpose set forth.

2. The combination of the rails *M*, beam *N n*, casters *O o P*, springs *R*, bolt *S s*, slotted plate *T t t'*, lever *U*, cam *u*, rack *Q*, and pins *n' n''*, for the object stated.

In testimony of which invention I hereunto set my hand.

MARK M. MARTIN.

Witnesses:

GEO. H. KNIGHT,

JAMES H. LAYMAN.