(No Model.) 3 Sheets—Sheet 1.

E. B. GOELET.

CAR SEAT.

No. 354,127. Patented Dec. 14, 1886.

Fig. 1.

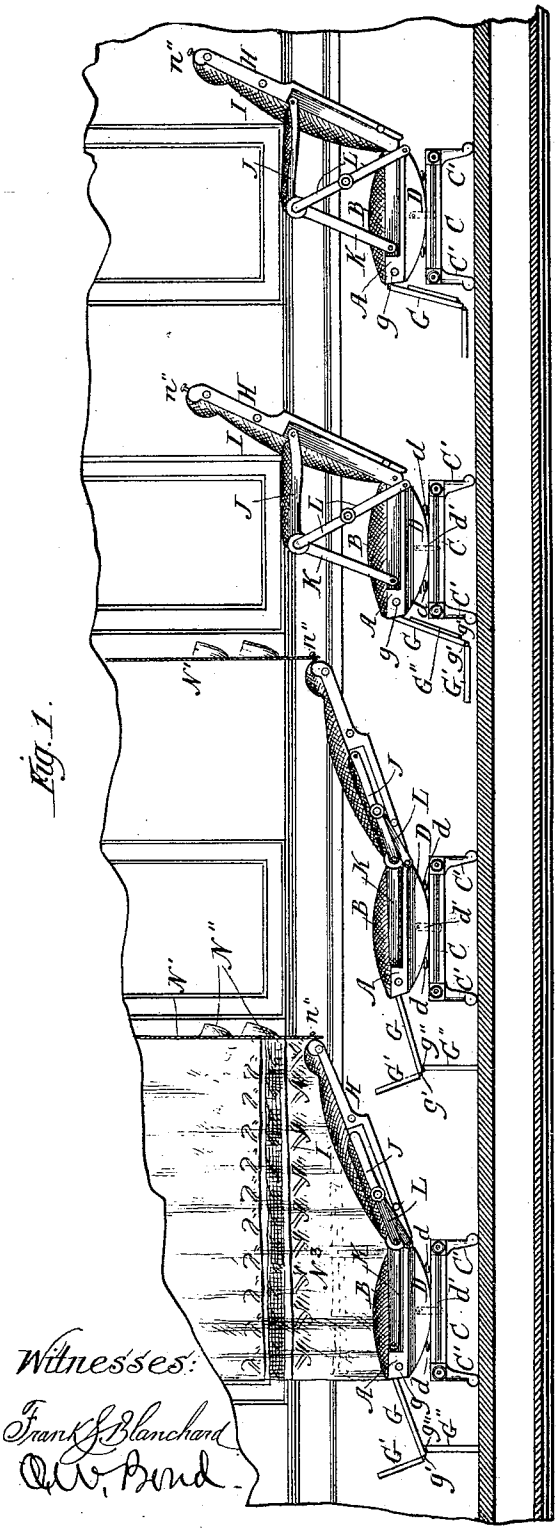


Fig. 2.

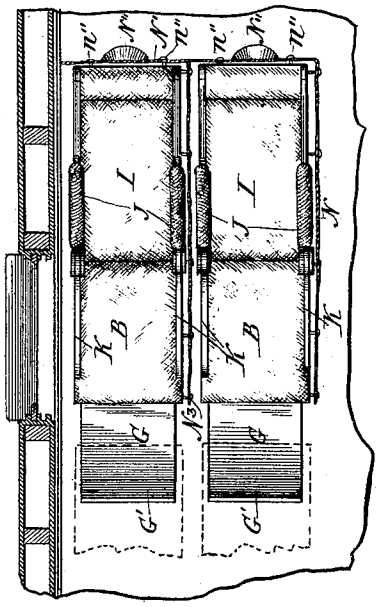
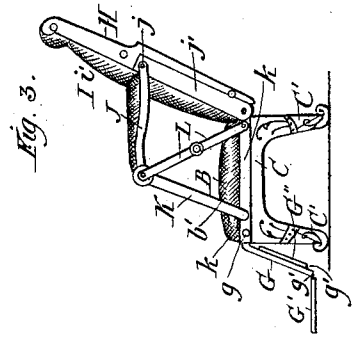


Fig. 3.



Witnesses:

Frank J. Blanchard

C. W. Bond

Inventor:

Edward B. Goelet

N. PETERS. Photo-Lithographer. Washington, D. C.

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Fig 4.

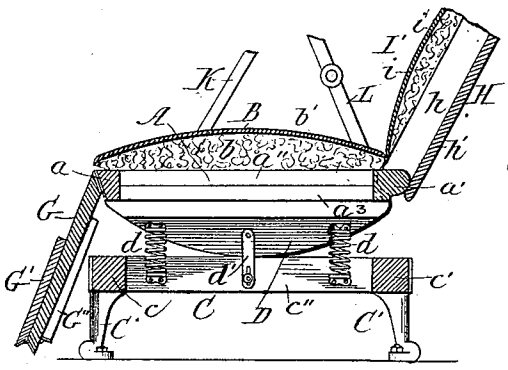


Fig 5.

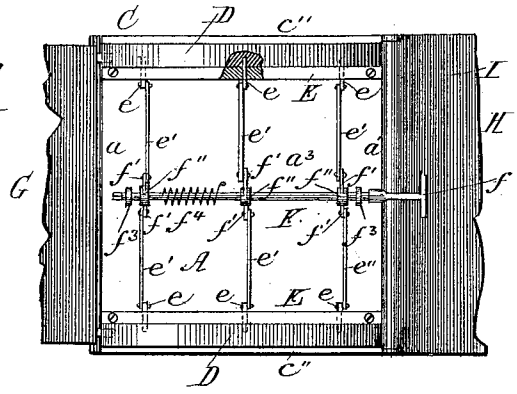


Fig 6

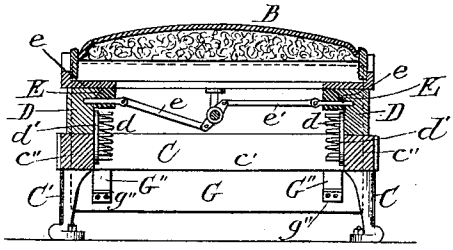


Fig 7

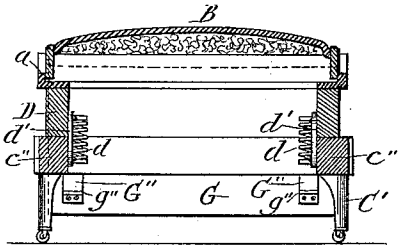
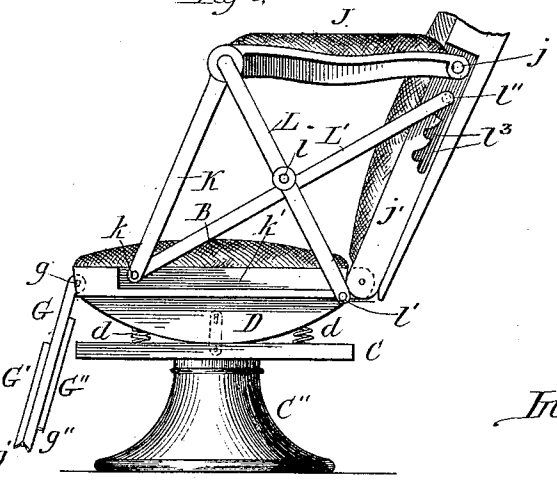


Fig 8.



Witnesses:

Frank J. Blanchard

C. W. Bond

Inventor:

Edward B. Goelet

N. PETERS, Photo-Lithographer, Washington, D. C.

(No Model.) 3 Sheets—Sheet 3.

E. B. GOELET.

CAR SEAT.

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Fig. 9.

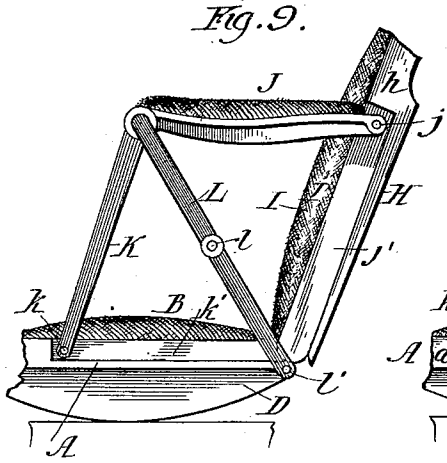


Fig 10

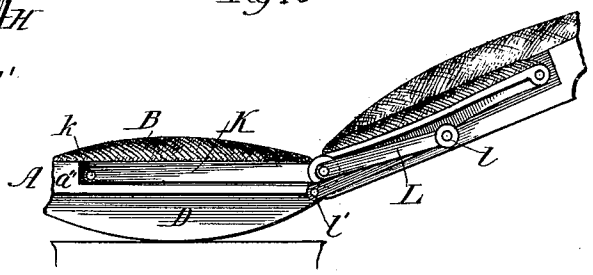


Fig 11

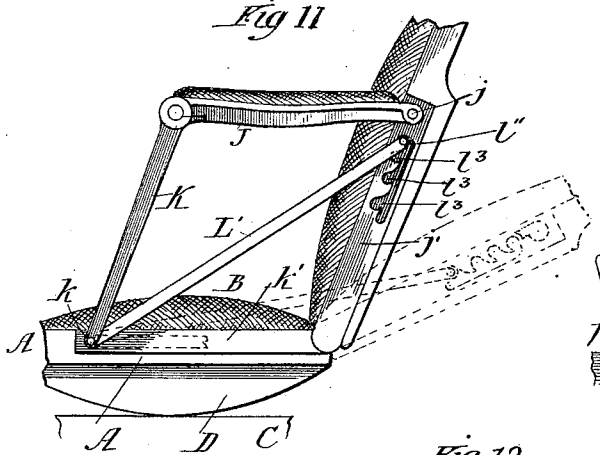


Fig 12

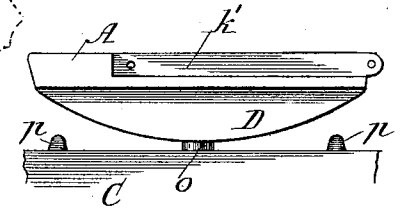
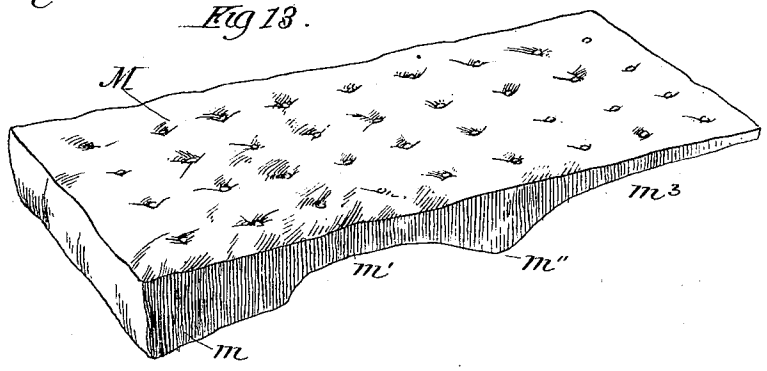


Fig 13.



Witnesses:
Frank J. Blanchard
O. W. Byrd

Inventor:
Edward B. Goelet

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

EDWARD B. GOELET, OF FORT WORTH, TEXAS.

CAR-SEAT.

SPECIFICATION forming part of Letters Patent No. 354,127, dated December 14, 1886.

Application filed March 9, 1886. Serial No. 194,662. (No model.)

To all whom it may concern:

Be it known that I, EDWARD B. GOELET, residing at Fort Worth, in the county of Tarrant and State of Texas, and a citizen of the United States, have invented a new and useful Improvement in Car-Seats, of which the following is a full description, reference being had to the accompanying drawings, in which—

Figure 1 is a detail, being a sectional elevation, showing a portion of a car with my invention applied thereto; Fig. 2, a plan view with the side of the car in section, showing the chairs turned down; Fig. 3, a side elevation of a chair; Fig. 4, a sectional elevation showing the seat and base of one arrangement of chair, the back being broken off; Fig. 5, a bottom view of the chair-seat shown in Fig. 6, with the foot-rest and back broken off; Fig. 6, a sectional elevation of the chair-seat and its support shown in Fig. 4; Fig. 7, a sectional elevation showing the locking devices between the chair-seat and the rockers omitted; Fig. 8, a side elevation showing a modification in the arrangement of the arms and a modification in the construction of the base; Fig. 9, a side elevation of a chair and back, both broken off, showing the position of the arms when the back is raised; Fig. 10, a similar view showing the position of the arms when the back is dropped down; Fig. 11, a side elevation of a chair seat and back, both broken off, showing a modification in the construction and arrangement of the arms, and showing also the back in its raised position in full lines and in its dropped position in dotted lines; Fig. 12, a detail showing a modification in the connection of the rockers with the support; Fig. 13, a perspective view of a mattress to be used with the chair for reclining or sleeping purposes.

This invention relates to sitting and sleeping accommodations for that class of cars termed "chair-cars," and has for its objects to utilize the space in the car, so that a full complement of chairs, equal to the seating capacity of an ordinary sleeping-coach, is provided without the necessity of the upper berths required in a sleeping-coach; to improve the construction and arrangement of the chairs, and to improve generally the construction and arrangement of the parts as a whole; and it consists in the several parts and combinations of parts hereinafter described, and pointed out in the claims as new.

In the drawings, A represents the frame of the seat, formed, as shown, of a front piece, *a*, a rear piece, *a'*, and side pieces *a''*, with a bottom piece, a^3, and, as shown, the rear piece, *a'*, has its rear edge rounded to facilitate the raising and lowering of the back.

B is the cushioned or upholstered portion of the seat, formed of upholstered material *b*, located within the frame A, and covered by suitable material, *b'*, secured in any usual manner to the frame.

C is the base or support for the seat, formed, as shown in Figs. 1, 4, 6, and 7, of a front piece, *c*, a rear piece, *c'*, and side pieces *c''*, secured together at the corners in any firm manner, and having at each corner a leg or support, C'. As shown in Fig. 8, the support C is in the form of a flat board or piece attached to a central support, C'', secured to the floor, the construction in both cases being one to suitably receive and support the seat.

D represents rockers attached to the under side of the seat so as to rest upon the support C. As shown in Figs. 4, 5, 6, and 7, the rockers are attached to the side pieces *a''* of the seat-frame, and rest upon the end pieces, *c''*, of the support. As shown in Fig. 8, the rockers are attached to the side pieces *a''* of the seat-frame, and rest on top of the support C. The rockers are connected to the support by springs *d*, front and rear, the lower end of the springs being suitably secured to the end pieces, *c''*, and the upper ends to the inner face of the rockers, in the construction shown, and to hold the rockers and support them in proper relation a strap, *d*, is attached to each rocker at its upper end, and its lower end is slotted, and receives a pin or guide on the inner face of the end piece, *c''*, by which means the chair-seat is free to rock forward and back, and at the same time is connected securely with its support.

E represents attaching-strips secured to the under side of the chair-seat in any firm manner, one at each side of the seat, and each strip having its outer edge beveled or inclined, as shown in Fig. 6, to coact with an inclined face formed on the upper end of the rocker D, as shown in Fig. 6, by which means the seat is connected with the rocker, so that it

can be slipped therefrom and reversed to have the occupant properly front the direction of travel of the car.

F represents a shaft located on the under side of the seat, and having at one end a handle, *f*, by means of which the shaft can be partly turned or rotated. As shown, this shaft is supported in hangers or pendants f^3 from the under side of the bottom a^3, and on this shaft are located collars f'', from the opposite sides of which extend out arms f', which connect with links e', the outer ends of the links being connected with a sliding pin, *e*, which passes through the strip E and enters the rocker D, and, as shown, three of these locking-pins, with their connecting-links e', are shown for each strip E, and a corresponding number of collars f'', with arms f', are provided on the rock-shaft F. The back and seat of the chair are unlocked from the rocker portion by turning the rock-shaft F through the handle *f*, which causes the arms f' and links e' to withdraw the pins *e* from their engagement with the rocker, and when the pins are withdrawn the seat and back can be slipped from the rockers, which remain connected with the support, and the chair can be reversed, the seat and back being slipped again into position, and when in position they can be locked to the rockers by turning the rock-shaft to cause the arms f' and links e' to force the pins *e* into engagement with the rockers D.

G represents a rest or extension, the upper end of which is connected by suitable pins or pivots, one at each end of the rest, between the ends of the side pieces a'', of the chair-seat in front of the front piece, *a*, the pins *g* entering suitable holes provided therefor in the ends of the side pieces a''. The lower end of the rest G has attached thereto a foot-rest, G′, by suitable hinges or pivots, g', so that the foot-rest can be turned up, as shown in Fig. 4, to lie on top of the rest G, or be turned down, as shown in Fig. 3, to furnish a support for the feet. The under side of the rest G, near the lower end, has attached thereto by suitable pivots or hinges, g'', legs G″, which can be folded up to lie against the under side of the rest G, as shown in Fig. 4, or be thrown down to support the rest G in a horizontal or nearly horizontal position, when the chair is in the position shown in Fig. 1.

H is the seat-back, formed, as shown, of side pieces *h*, with backing h', and a cross-piece at the top, and, as shown, the lower or bottom end of the seat receives between the side pieces *h* the back piece, a', of the seat, and to the ends of this piece a' the side pieces *h* at the lower end are pivotally connected, so that the back can be raised and lowered.

I is the upholstered portion of the back, formed of suitable upholstering material, *i*, located in the frame H, and held in place by a covering, i', attached in any well-known manner to the frame.

J is an arm-rest, one for each side of the chair, and pivotally connected by a suitable pin or pivot, *j*, at the rear end to the side piece *h* of the frame H, and, as shown, the side piece *h* is provided with a recess or cut-away portion, j', of sufficient dimensions to receive the arm-rest J when the back is folded down, as shown in Fig. 10.

K is a brace for the arm-rest J, the upper end being pivotally connected with the arm-rest at the outer end thereof, and the lower end being attached by a suitable pin or pivot, *k*, to the side rail, a'', of the seat, and, as shown, the side rail, a'', is provided with a recessed or cut-away portion, k', to receive the support or brace K when the back is folded down, as shown in Fig. 10.

L is a locking-brace for holding the arm-rest J in a firm manner when extended. As shown in Fig. 9, this brace is formed of two pieces pivotally connected together at their inner ends by a suitable pivot or hinge, *l*, and this brace at one end is connected with the brace K and arm-rest J at their juncture, and at the other end is attached by a suitable pin or pivot to the side rail, a'', so that when the back is thrown down, as shown in Fig. 10, the locking-brace will be turned one portion onto the other, so as to be folded up, as shown in Fig. 10. The arm-rest J can be locked in its extended position by a locking-brace, L′, as shown in Fig. 11, said brace being a single continuous bar connected at its forward ends to the pivot *k* of the brace K, and having at its rear end a pin, l'', to engage with notches l^3, formed in or secured to the side piece *h*, in the recessed portion j' thereof, so that the pin when secured in the upper notch, l^3, will hold the back in a proper position for an ordinary seat, and by connecting this pin with the succeeding notches the back can be held more or less inclined, as required, for using the chair as a reclining one. As shown in Fig. 8, both the locking-brace L and the locking-brace L′ are used, by which means the accidental dropping of the back is prevented in case one of the braces should be accidentally disengaged. For ordinary use, however, the brace L or the brace L′ will be all that is required.

M is a mattress to be used with the chair when thrown down for the purpose of making a lounge or bed, and in order to level the lounge or bed this mattress is formed to have a portion, *m*, to lie on the rest G, a cut-away portion, m', to fit over the cushion of the seat, a corner, m'', to enter the depression between the seat and back, and a thin portion, m^3, to lie over the back, as shown in Fig. 13.

N represents curtains—one for each section occupied by the chairs—the upper end of each curtain being attached to hook-brackets (not shown) extending out from the top of the car, and, as shown, the lower end of the curtain is attached to pins in the chair seat and back; but this end could lie upon the floor of the car.

N′ represents cross-curtains between the sec-

tions of chairs for dividing the car into compartments, each compartment having therein two chairs, side by side, in the arrangement shown. The upper end of each curtain N′ is attached to hooks, (not shown,) and the lower end is attached to heads or hooks *n″* on the upper cross-piece of the chair-back, as shown in Fig. 1.

It is to be understood that the curtains N N′ are only designed for use when the chair is to be used as a sleeping or resting bed or lounge.

The chair when used simply as a seat is to have the back thrown up into the ordinary inclined position, as shown in Fig. 3, in which case the rest G and foot-rest G′ are thrown down, as shown in Fig. 3, and the arm-rest J is braced by the support L.

For a reclining-chair the back can be set at any desired inclination by unlocking the brace L and allowing the chair-back to drop down, and with the brace L′ the inclination can be adjusted by engaging the pin *l″* for such one of the notches *l*³ as is required for the desired inclination. With the brace L the back can be locked at any desired inclination by the use of any suitable locking means.

The chair can be extended for use as a bed or lounge by dropping the back to the limit of its downward movement, raising the rest G and supporting the same by the legs G″, and if desired for sleeping purposes the mattress M and other suitable bedding can be placed on the chair when laid down.

The chair can be reversed to correspond to the direction of travel by withdrawing the seat and back portions as a whole from the rockers and replacing them in the manner already described.

The chairs, when arranged for sleeping purposes, can be shut out from the rest of the car by dropping the curtains in front and the division-curtains N′ between them, and, as shown, the division-curtains are provided with pockets N″, for the reception of such articles as may be desired to be placed therein, and when the curtains are thus dropped a compartment is formed in the car which is exclusively for the seats included between the cross-curtains N′, and, if desired, each seat can be separated from its companion seat by interposing a curtain, N³, depending from the ceiling and attached to the frame of the chair.

A chair constructed as described can be used for ordinary sitting and reclining purposes in other places than a chair-car, and such a chair, with the mattress M, can be used to take the place of cots when it is desired to economize sleeping-room, and when not in use such chairs can be thrown up and be used the same as any ordinary chair provided with rockers and mounted on a base or support. Instead of having a coiled-spring connection between the seat and its support a rubber cushion could be used, as shown in Fig. 12, such cushion being located between the rocker and support, so that the seat will ride thereon, and in order to save the shock in the forward-and-back rock of the chair the support in line with the rockers at each end has located thereon bumpers *p*, against which the end of the rocker will strike. The cushion *o*, which carries the rockers, may be in the form of a tube, as shown, or other suitable form.

The recesses in the side pieces of the seat and back provide a space in which the arm-rest and its braces can be folded, so that when the seat is laid down for reclining or sleeping purposes the arm-rest will be below or on a line with the plane of the top of the seat and back, so that no inconvenience will arise, as would be the case if the arm-rest and its braces were left above the plane of the top of the seat and back, as has heretofore been the custom.

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

1. The combination, with the seat of a chair, of the rockers D, strips E, rock-shaft F, having arms *f′*, links *e′*, and locking-pins *e*, substantially as and for the purpose specified.

2. The combination, with the seat-frame A, having recessed side pieces *a″* and a back piece, *a′*, provided with a rounded rear edge, of a back, H, having recessed side pieces *h h*, between which the back piece of the seat is received, and a folding arm-support adapted to rest in the recessed portions of the back and seat side pieces, substantially as specified.

3. The combination, with the seat and back of a reclining-chair, of an arm-support, J, a brace, K, and a locking-brace, L, formed in two parts pivotally connected at their inner ends, the outer end of one of said parts being pivoted to the arm-support J and brace K at their junction, and the outer end of the other part being pivoted to the side piece of the seat at or near its rear end, substantially as specified.

4. The combination, with the seat and back of a chair, of the arm-support J, brace K, two-part locking-brace L, and continuous locking-brace L′, the brace L being engaged with the brace K, arm-support, and seat-frame, and the brace L′ engaged with the brace K, seat-frame, and chair-back, substantially as specified.

5. The combination, with the seat-frame A and the chair-back H, having side pieces *h h*, provided with notches *l*³, of the arm-support J, the brace K, and the locking-braces L L′, substantially as specified.

6. The combination, with a reclining-chair having an extension, G, of a mattress, M, having a thickened portion, *m*, to rest on said extension, a cut-away portion, *m′*, to fit over the cushion of the seat, a corner or projection, *m″*, to enter the depression between the seat and back, and a thin portion, *m*³, to lie over the chair-back, substantially as specified.

EDWARD B. GOELET.

Witnesses:
O. W. BOND,
E. T. BOND.