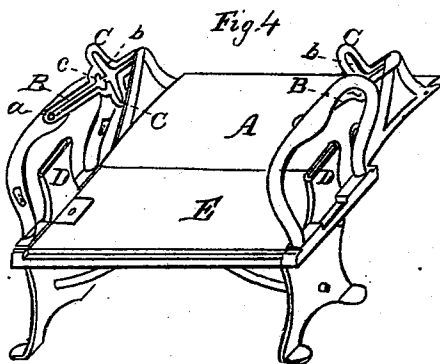
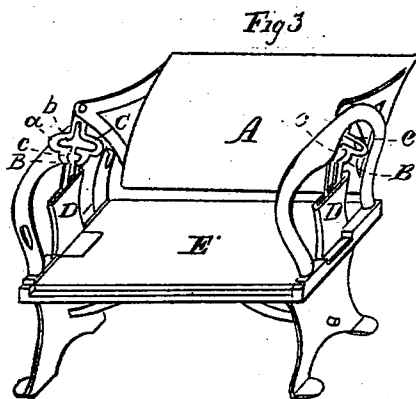
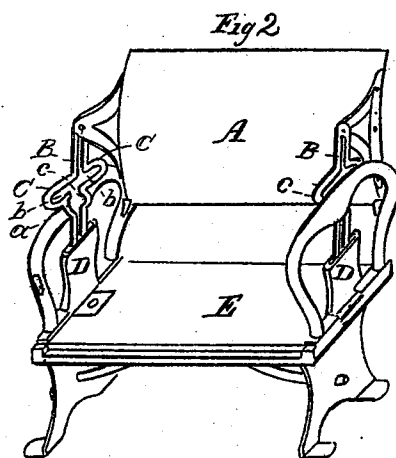
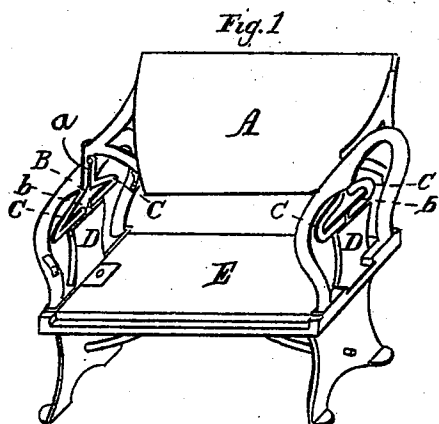


No. 82,482.

PATENTED SEPT. 29, 1868.

H. S. BLOOD.
SEAT FOR RAILWAY CARS.



WITNESSES.

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HANNIBAL S. BLOOD, OF JEFFERSON, LOUISIANA.

Letters Patent No. 82,482, dated September 29, 1868.

IMPROVED SEAT FOR RAILWAY-CARS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, HANNIBAL S. BLOOD, of Jefferson, in the parish of Jefferson, and State of Louisiana, have invented a certain new and useful Improvement in Seats for Railroad-Cars; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the annexed drawing, making a part of this specification.

The object of my invention is to provide a mechanical arrangement or means, by which several different or distinct adjustments of the backs of ordinarily-constructed railroad-car seats may be easily and rapidly made on either side of the seats, by the occupants thereof, and thus to secure to the said occupants a support for their heads and shoulders, or a partially-reclining, or a wholly-recumbent position, as their comfort may require, by an elevation of the backs of the seats, or by giving an inclination thereto, or by turning down the same into the plane of the seats; and this arrangement consists, (I speak of course, of the arrangement for each seat,) of two slotted bars, to the upper extremities of which the back of the seat is pivoted, at each of its ends, by means of the ordinary bifurcated brackets that are now generally employed to pivot the backs to the arms of the seat, which bars are provided with a curved cross-arm, in which there are two curved slots, of unequal length; a pin projecting from each arm of the seat, which takes into the slots of the bars and cross-arms respectively, and subserves the function of holding the back in any of the positions in which it may be put; and two socket-pieces, with flaring ends, to receive the lower extremities of the slotted bars, and hold them in position, which are permanently secured to the seats, under each of the arms thereof.

Thus, consisting of these few and simple mechanical parts, it will be at once seen that my invention can be applied, without the slightest difficulty, and at very small cost, to every existing car-seat, and that, in making the application, the whole operation consists simply in putting it on, no other change, in any particular whatsoever, being necessary.

But my invention will be more clearly and quickly understood by referring to the drawing, on which the same letters denote the same parts at all the figures.

At Figure 1, the drawing represents, in perspective, a car-seat, with my invention attached, the back, however, occupying the usual position found in such seats whenever provided with my adjusting-arrangement or invention. From this position the back A may be turned into a precisely-similar one, on the other side of the seat, precisely as the backs of seats without my arrangement may be thus turned, the only difference being that the axis of the partial revolution, that is requisite to make the change, is fixed, in the latter case, to the arms of the seat, and, in the former, to the upper ends of the slotted bars B. These bars, it will be perceived, on an inspection of any of the figures on the drawing, are secured to the arms of the seat by the pins *a*, in such manner that no inconvenience whatever is sustained by the occupants of the seat, in consequence of the presence of one or the other, for the pins are provided with smooth, round heads, and the bars occupying the same, or nearly the same vertical plane with the arms of the seats, do not, in any appreciable degree, interfere with or affect the dimensions of the seat.

At a point about one-third the whole length of the bars B, from the upper ends thereof, the arm C crosses the same, and in this arm the curved slots *b* and *c* are made, the slot *b* being considerably longer than slot *c*, and curved downwardly, whereas slot *c* curves upwardly, and therefore in a reverse direction to slot *b*. Both the slots *b* and *c* communicate with the slot *d* in the bar B, so that the pins *a* will readily pass into either, whenever a change in the position of the back, A, requires they shall do so.

The socket-pieces D expand from the central point 1, in a backward and forward direction, in order that no obstruction shall be interposed by them to the free vibration of the bars B as they accommodate themselves to the changing positions of the back, A. Two being securely fastened to the seat E, and of uniform width in the direction of the length of the seat, they yet prevent any lateral vibration of the said bars, and effectually secure their lower extremities in the right position.

At Figure 2, an adjustment by means of my arrangement is exhibited, which, by an elevation of the back,

A, brings it into position to support the head and shoulders of the occupants of the seat, without materially changing the angle or inclination of the back with respect to the plane of the seat E, as is clearly shown by the drawing.

This adjustment is effected by simply raising the bars B until the pins *a* will enter the curve *c* of the arm C on the side next the front of the seat, where the gravity of the back, A, will securely keep them, even if there be no pressure against the said back by the occupants of the seat.

At Figure 3, the back, A, is shown in a position that enables the occupants of the seat to lean back or recline at an angle of forty-five degrees, or thereabouts, if their pleasure or comfort makes this desirable. The adjustment of the back into this position is brought about by passing the pins *a* into the front section of the slot *b*, as shown, and this, like the adjustment that elevates the back, as shown at fig. 2, may be effected by the passengers themselves, without other assistance.

By withdrawing the bars B entirely out of the socket-pieces D, and raising them up until the pins *a* are in the lower extremities of the slots *d*, the back, A, will be brought into the same horizontal plane with the seat E, as shown at Figure 4, and this adjustment converts the seat, so to speak, into a bed, on which the occupants may lie down and sleep as comfortably as in an ordinary sleeping-car.

Thus, it will be perceived that, in addition to the usual, or, as it may be called, the normal position of the backs of the car-seats, my invention provides three distinct and widely-different adjustments or arrangements of said backs, and that hence it secures the comfort of railroad-passengers under all possible conditions and circumstances, and at a cost or outlay of money that is almost nominal.

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

The slotted bar B, when provided with the double-slotted cross-arm C, in combination with the socket-pieces D and the pins *a*, when these several parts are constructed, arranged, and operate substantially as herein described for the purpose set forth.

HANNIBAL S. BLOOD.

Witnesses:

JOHN S. CARSON,
H. N. JENKINS.