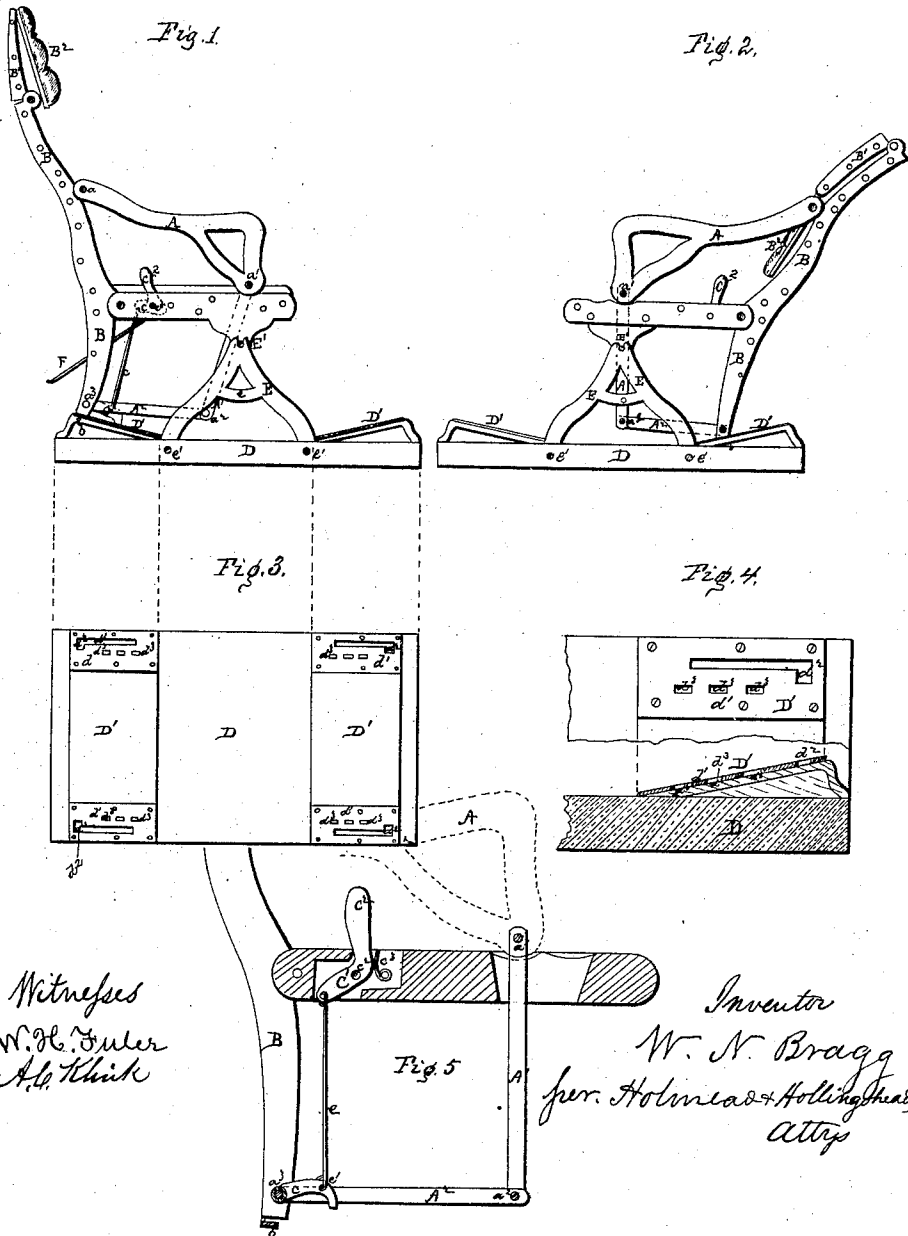


W. N. BRAGG.  
Car Seat and Chair.

No. 78,570.

Patented June 2, 1868.



Witnesses  
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# United States Patent Office.

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W. H. TRAINHAM, AND J. B. WINSTON, OF SAME PLACE.

Letters Patent No. 78,570, dated June 2, 1868.

## IMPROVED CAR-SEAT AND CHAIR.

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, WILLIAM N. BRAGG, of the city of Richmond, in the county of Henrico, and State of Virginia, have invented certain new and useful Improvements in Railroad-Chairs or Car-Seats; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making part of this specification, and in which—

Figure 1 is a side elevation of the seat, with jointed back-piece turned up, and head-pad in place.

Figure 2 is a side elevation, reversed on the platform, with the jointed back-piece turned down.

Figure 3 is a plan of the platform or plinth.

Figure 4 is an enlarged section of the inclined-plane plates, seen at  $D'$  in figs. 1 and 2.

Figure 5 is an enlarged detail section of the operating connecting-bars, by which the pawls on the rock-shaft are operated.

The nature of my invention consists in the combination of certain devices in a railway-car seat, so as to render the same adjustable within itself, so that the occupant, by raising a hand-lever conveniently situated, can adjust the back to any desired angle, and, by releasing the lever, the seat will remain stationary, thus rendering it more desirable than those usually made adjustable, where the least motion of the occupant causes an oscillation, which is unpleasant. My invention also consists in making the chair so that it can be readily turned in the cars, so as to face either way, and yet preserve the same adjustable features.

In the drawings,  $A A$  are the arms of the seat;  $A^1$ , a vertical connecting-bar, jointed to the lower end of arm  $A$  at  $a^1$ .  $A^2$  is a second horizontal connecting-bar, jointed to the first bar  $A^1$  at  $a^2$ , and at the rear end connected to a rock-shaft,  $a^3$ , which is pivoted, at each end, into the lower end of the back legs or standards of the seat.  $B$  is the back-frame and hind leg in one piece.  $B^1$  is a short arm, connected with  $B$  by a hinge-joint, and  $B^2$  is a supplementary piece, acting as a pillow or head-rest, and joined to  $B^1$  by a flexible hinge, of leather, cloth, and other suitable material.  $C C$  are pawls, connected with the rock-shaft, and situated just inside of the legs or standards, and the lower ends of which are made to fit the holes in the foot-board plate, marked  $d^3 d^3$ , &c. These pawls are rigidly fixed to the rock-shaft  $a^3$ , and move together, as will be fully explained.  $C^1$  is a bell-crank, with the lever  $C^2$  extending above the seat; and this crank is placed in a mortise through the side-frames, immediately under the arms  $A A$ . One only may be used; but two will give a stiffer movement to the rock-shaft, as will be explained.  $D$  is a platform, having raised inclined planes,  $D' D'$ , at each end;  $E E$ , the standards, upon which the front end of the seat is pivoted, by the pins, at  $E'$ .  $F$  is a foot-board, between hind legs;  $a$ , the hinge connecting the arm  $A$  and back-frame  $B$ ;  $a^1$ , the pivot connecting lower end of seat-front with connecting-bar  $A^1$ ;  $a^2$ , the joint between bars  $A^1$  and  $A^2$ ;  $a^3$ , the rock-shaft, extending between the lower end of the hind legs  $B$ , and on which, at each end of it, inside of the legs, are the pawls  $C C$ , rigidly fixed;  $b b$ , the hooks at the lower end of the legs, and which are made to fit into the notches  $d^2 d^2$  in the plates  $d^1 d^1$ , on the inclined foot-board  $D' D'$ .  $c$  is a rod, connecting the pawl  $C$  with bell-crank  $C^1$  at  $c^1$ ;  $c^2$ , the pivot of bell-crank;  $c^3$ , the spring which keeps the crank in place.  $d^1 d^1$  are the metal plates on the inclined foot-boards, having cut on them the elongated slots  $d^2$ , and the rectangular notches  $d^3 d^3$ , in which the pawls  $C C$  fit when the seat is to be operated;  $e$ , the brace, supporting standard  $E$ .

By the foregoing description of the figures, it will be seen that, to operate the seat so as to give any desired angle, the occupant can readily take hold of lever  $C^2$  under the arm, and, by forcing it forward, the rod  $c$  is moved, the pawl  $C$  is lifted. The movement of the body upon the back,  $B$ , will cause the lower end of the leg  $B$  to descend along the inclined, the hooked part  $b$  being the plate  $d^1$ . So soon as the desired position is obtained, the lever is released, and the spring  $c^3$  forces it back, and the pawl, by its own weight, immediately drops into the nearest notch  $d^3$  in the plate; and in this position the seat must remain until the occupant desires a change of position, which can be done at once, in the same manner, backwards or forwards.

To reverse the direction of the chair, or to change fronts, the chair can be lifted from its bearings at  $E' E'$ , and turned around, as in fig. 2; and, as the foot-boards on each end of the plinth are exact counterparts, the several parts of the chair, to wit, the hooks  $b b$  and pawls  $C C$ , will fit their corresponding notches at either end. Each seat has its own platform, and in the cars these platforms may be permanently fixed or movable. These seats can be readily turned upon their standards, and, as each seat is independent, the occupant can adopt any angle to suit convenience and comfort, without interfering with his neighbor; and this method will prevent persons from lounging across two seats, or putting their feet upon the upholstery. The chair will be a more comfortable lounge or bed than the most indolent of passengers could make of the ordinary two-seat concerns now in use.

Having thus fully described my invention, what I claim therein as new, and desire to secure by Letters Patent of the United States, is—

1. The combination of the arm  $A$  with the bars  $A^1$  and  $A^2$ , and rock-shaft  $a^3$ , and the bell-crank  $C^1$ , and rod  $c$ , to operate the pawl  $C$ , substantially as and for the purpose specified.

2. The combination of the above parts,  $A$ ,  $A^1$ ,  $A^2$ ,  $a^3$ ,  $C^1$ ,  $c$ , and  $C$ , with the hook  $b$  of the leg, with the notched plates  $d^1$ , for the purpose specified, and as substantially described.

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses.

W. N. BRAGG.

Witnesses:

JOHN D. BLOOR,

EDWIN JAMES.