

H. A. WOOD.
Reclining Car-Seats.

No. 156,397.

Patented Oct. 27, 1874.

Fig. 1.

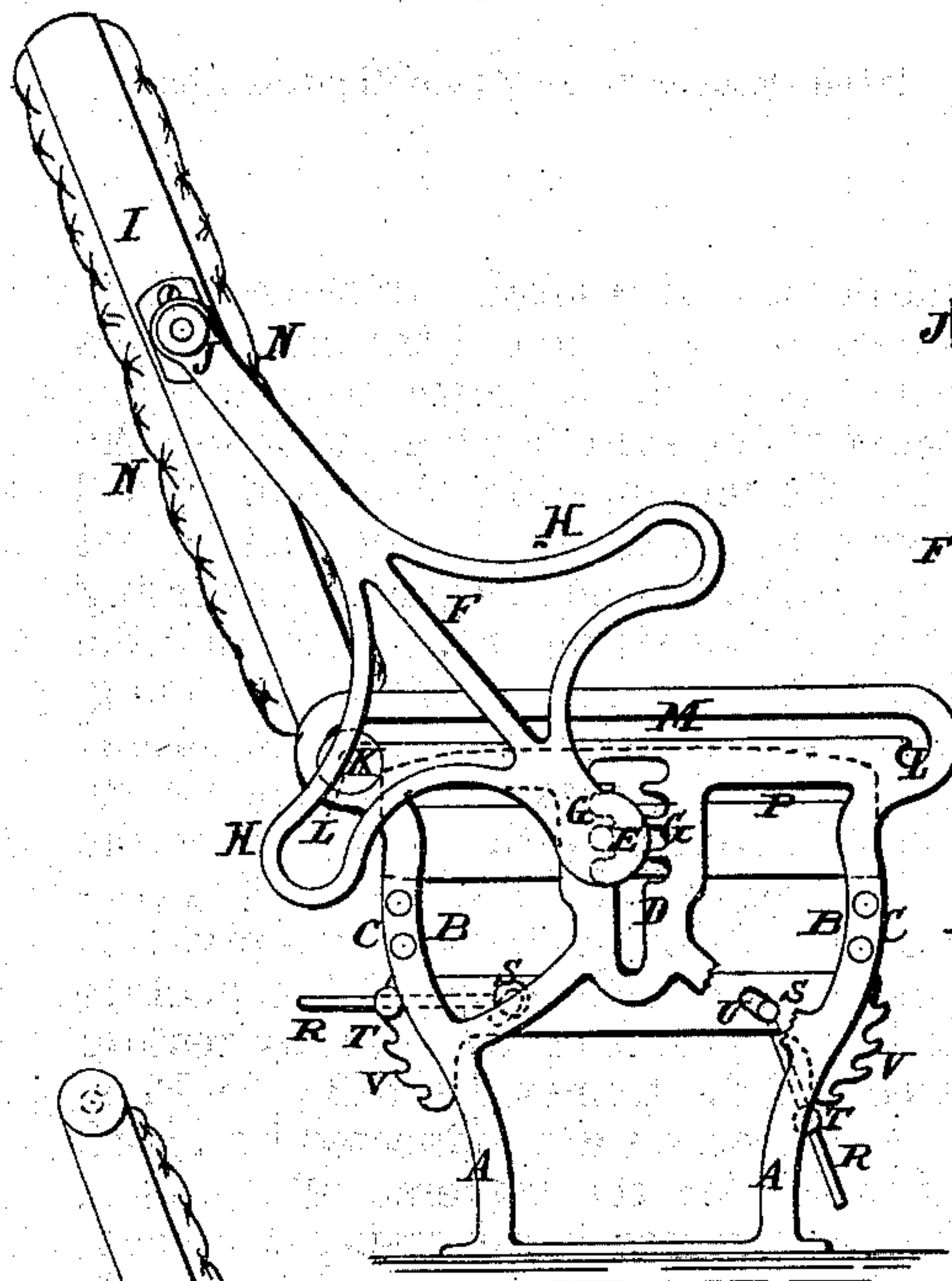


Fig. 2.

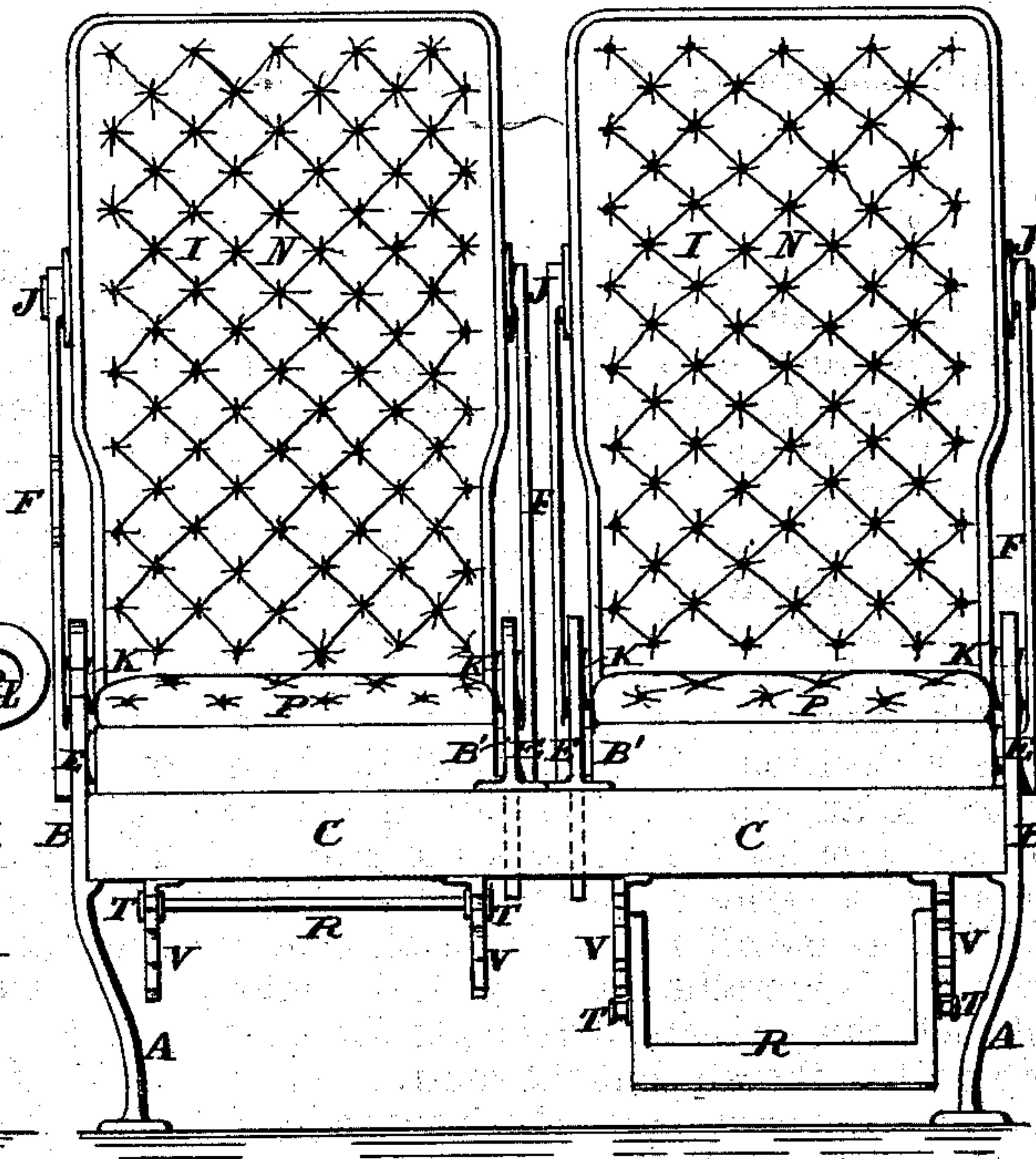


Fig. 3.

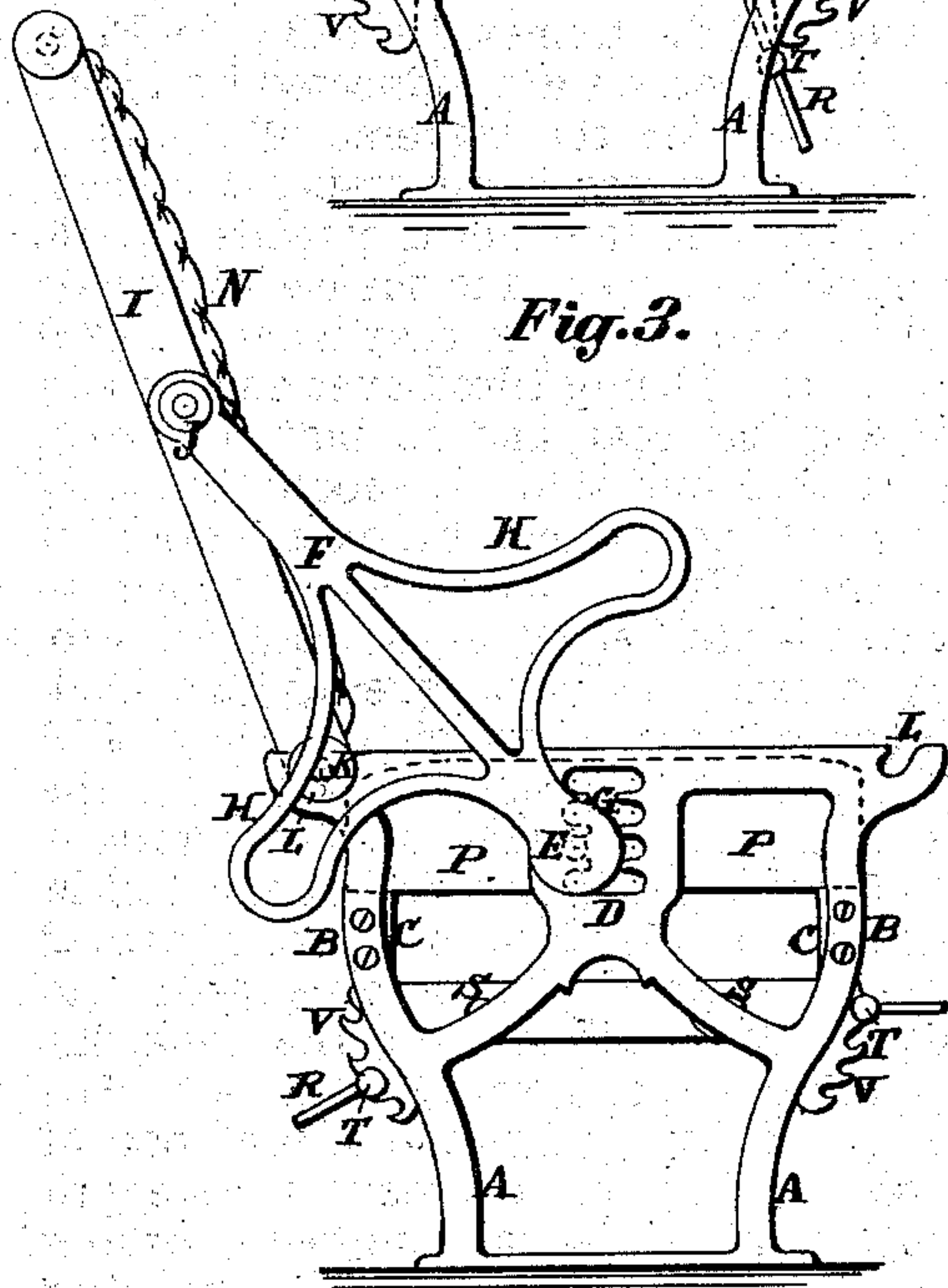
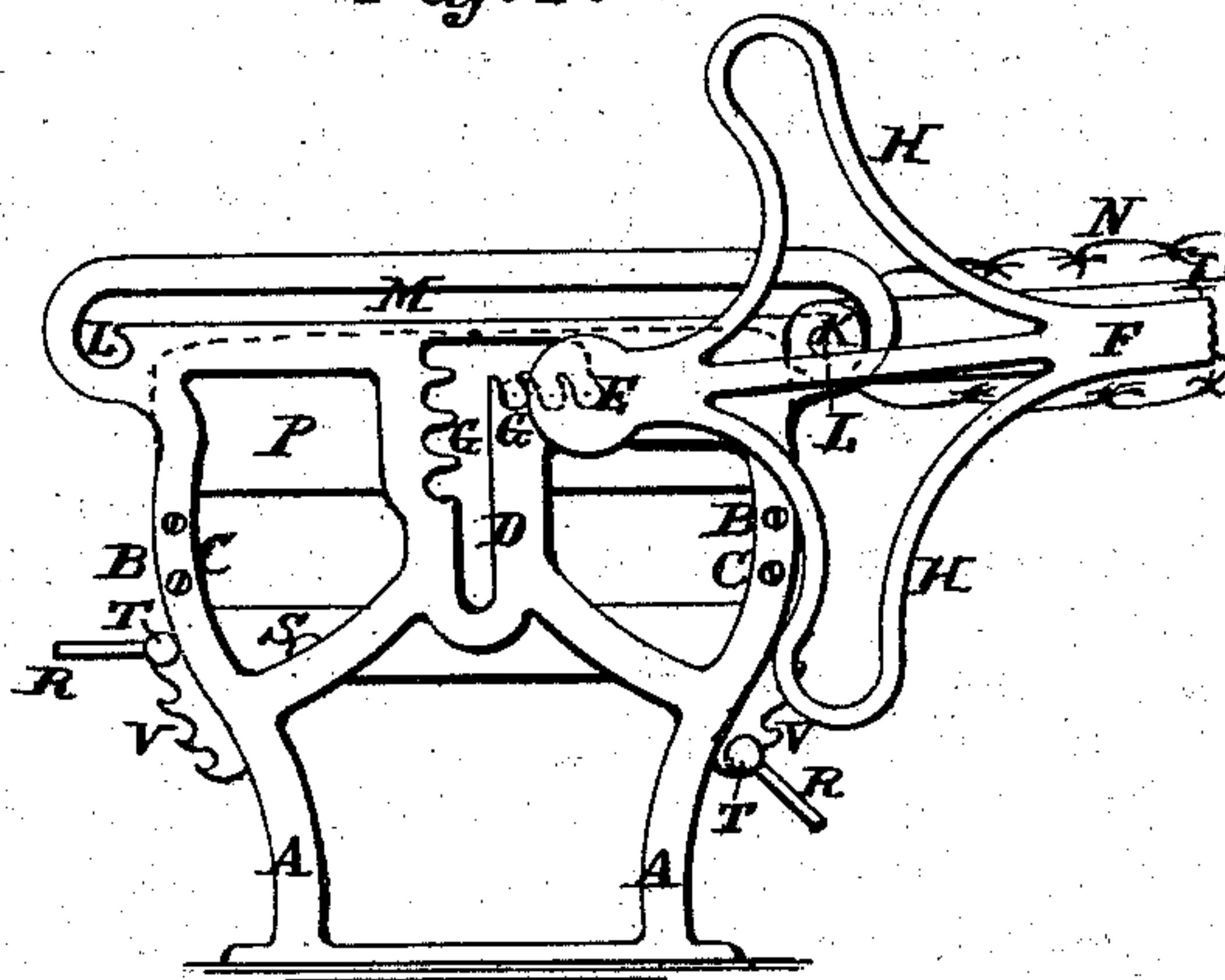


Fig. 4.



ATTEST:

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UNITED STATES PATENT OFFICE.

HARRY A. WOOD, OF ST. LOUIS, MISSOURI.

IMPROVEMENT IN RECLINING CAR-SEATS.

Specification forming part of Letters Patent No. **156,397**, dated October 27, 1874; application filed April 13, 1874.

To all whom it may concern:

Be it known that I, HARRY A. WOOD, of St. Louis, St. Louis county, Missouri, have invented a certain new and useful Improvement in Reclining Car-Seats, of which the following is a specification:

The first part of my improvement relates to the means employed to allow the adjustment of the inclination of the backs. In this the back has pivot-pins at the corners, which rest in suitable recesses to hold the lower end of the back in position. The center of the back is pivoted to an arm at each side, the lower end of each arm having a side pin or stud entering one of a series of recesses at the sides of slots in the metallic frame at each side of the seat. This metallic frame, upon the outer side of each pair of seats, extends to the floor and is attached thereto, but the central frames are supported on cross-bars, which are secured to the outer frames.

The second part of my invention relates to the adjustable foot-rest. This has upon each side two studs, by which it is supported in an adjustable manner. One of the studs on each side is upon the inner corner, and rests in an elongated socket or slot, so as to allow it some freedom of movement to admit of the other studs being moved from one hook to another on racks at each side of the seat, so as to fix the foot-rest at any height desired.

In the drawings, Figure 1 is a side elevation of one of the seats. Fig. 2 is a front elevation of a pair of seats. Figs. 3 and 4 are side elevations, showing modifications of my car-seat.

A A are the legs on which the seat is supported. B is an upright metallic frame at the outer side of each pair of seats; and B' is a frame, of which there are two centrally located on each pair of seats. The frames B and B' are similar in all respects, except that those B are provided with legs A to support the pair, while those B' are supported on cross-bars C, extending from end to end. Each frame B B' has a slot, D, in which works the stud E at the lower end of the brace-arm F. At either or both sides of the slot D are recesses G, forming a rack to engage the stud E. In Figs. 1 and 3 the slot D is shown as vertical, while in Fig. 4 the slot is in part ver-

tical and in part horizontal. In the modifications shown in Figs. 1 and 4 the slot extends down below the rack, as shown, so as to allow the descent of the stud E when reversing the back. In the modification shown in Fig. 3 this downward extension of the slot is not necessary, as there is no horizontal traversing slot to prevent the rising of the back, and the latter is tilted over end for end in reversing. The arm F has elbows H, which are so formed as to admit of their necessary movement without coming in contact with the bars C of the frame. The upper end of the arm F is connected to the side of the back I by a pivot, J. K K are studs in the corners of the back to hold the lower corners of the back by resting in recesses L of the frames B and B'. In Figs. 1 and 4 these recesses are connected by a horizontal slot, M, for the traverse of the stud from recess to recess in reversing the back, while in Fig. 3 the said slot is dispensed with, the recesses being open, and the back has side studs K at each corner, so that it can be used either end up, it being tilted over end for end in reversing the seat, and so that it is only necessary that one side, N, should be cushioned, as will be evident by examination of the drawing. In the modification shown in Figs. 1 and 4 both sides of the back are subject to be used, and consequently the back must be cushioned on both sides. The slot M is shown as extending completely through the frames B and B', in which case the studs K should have flanged heads *k*; but the slot M and recesses L need not necessarily extend completely, but may be merely recessed into the side of the frames next to the back, the studs in this case being without heads *k*. The bars C extend from end to end of each pair of seats, (see Fig. 2,) and are made of strength sufficient to give adequate support without connection with the floor between the outer legs A A, (so as to dispense with the usual central supports found in reclining car-seats, where each back of the pair has independent movement,) leaving the floor without obstruction at that point, making it easier to be kept clean. P are the seat-cushions, supported on bars C. R is the foot-rest, of which there are two to each chair. The foot-rest has at each side two studs, the studs S S being at the in-

ner corners, and occupying elongated sockets or slots U in the frames B and B', and forming the pivot-bearing of the rest. V V, &c., are series of hooks, forming racks at the edges of the frames B B'. T T are studs on the edges of the rest, engaging in the hooks V. These racks are concentric with the slots U, which have sufficient length to allow the disengagement of the studs T from the hooks V in changing the elevation of the rest.

This arrangement allows the foot-rest to be placed in any position required for the comfort of the sitter in the various positions of the seats, the foot-rest upon one seat being used by the occupant of a seat to the rear, as usual. The rest may also be used for children for the seat to which it is attached.

By making the racks G of sufficient length, or by the horizontal extension, as shown in Fig. 4, the back may be made capable of adjustment all the way from a vertical to a horizontal position.

I am aware that car-seats and chairs have

been heretofore constructed having racks in which engage lugs to lock the chair-back in any desired inclination, and also that such chairs have been made with their backs reversible on the seats, and this I do not broadly claim; but

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

1. The combination of the reversible back I, having studs K, and pivoted arms F, having studs E, with the seat-frame B, having rack-recesses G, slots D, and recesses L, substantially as and for the purpose set forth.

2. The combination of the foot-rest R, having studs S S and T T, with the frame B, having elongated slots U and segmental racks V V, substantially as and for the purpose set forth.

HARRY A. WOOD.

Witnesses:

SAML. KNIGHT,
E. J. KNIGHT.