H. WITTE & J. B. SCHUERMANN.

CAR SEAT.

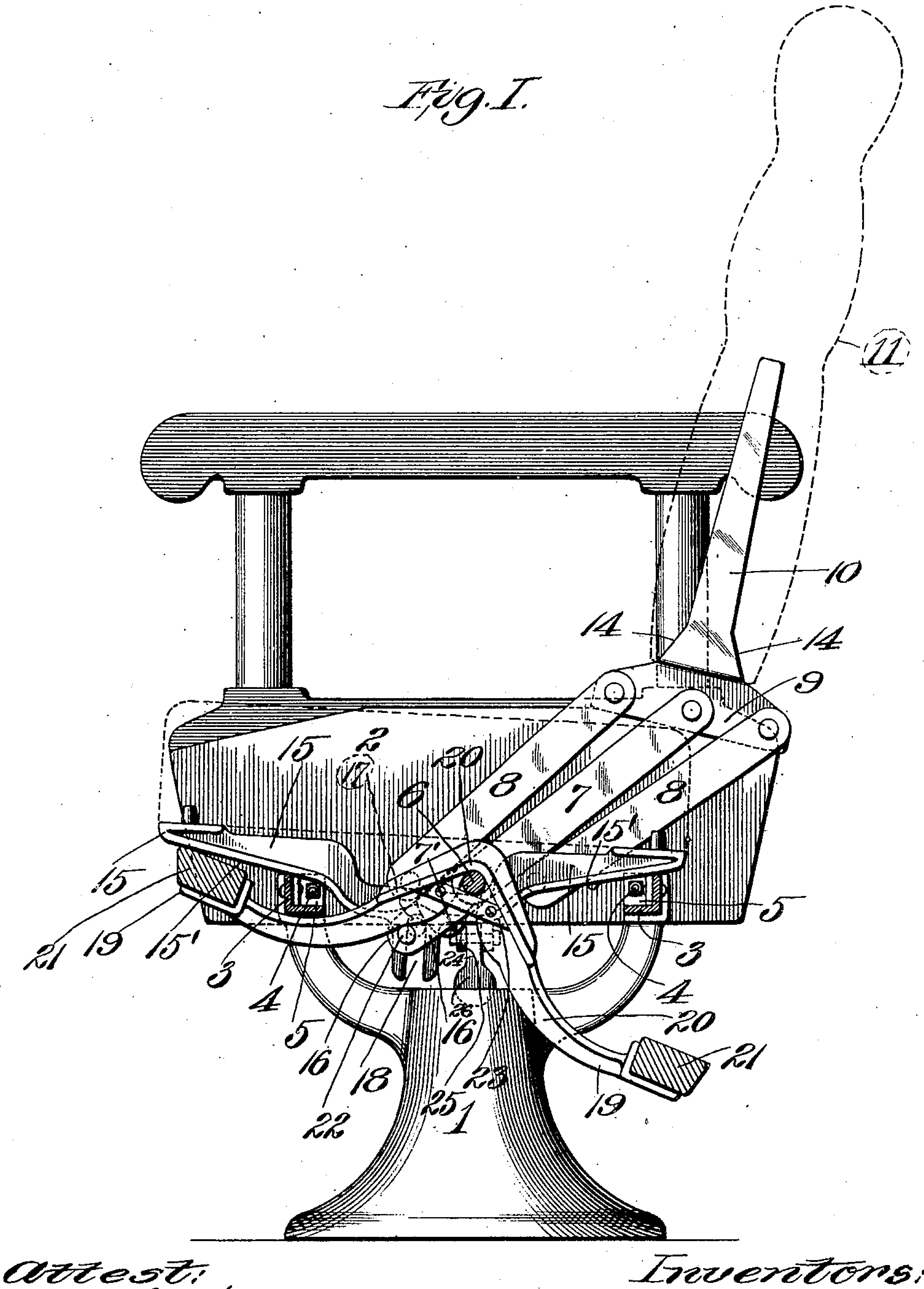
APPLICATION FILED OCT. 5, 1908.

925,066.

Patented June 15, 1909.

2 SHEETS—SHEET 1.

Fig. I.



Attest:

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by Geo H Knight Atty.

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2 SHEETS—SHEET 2.

Fig. II.

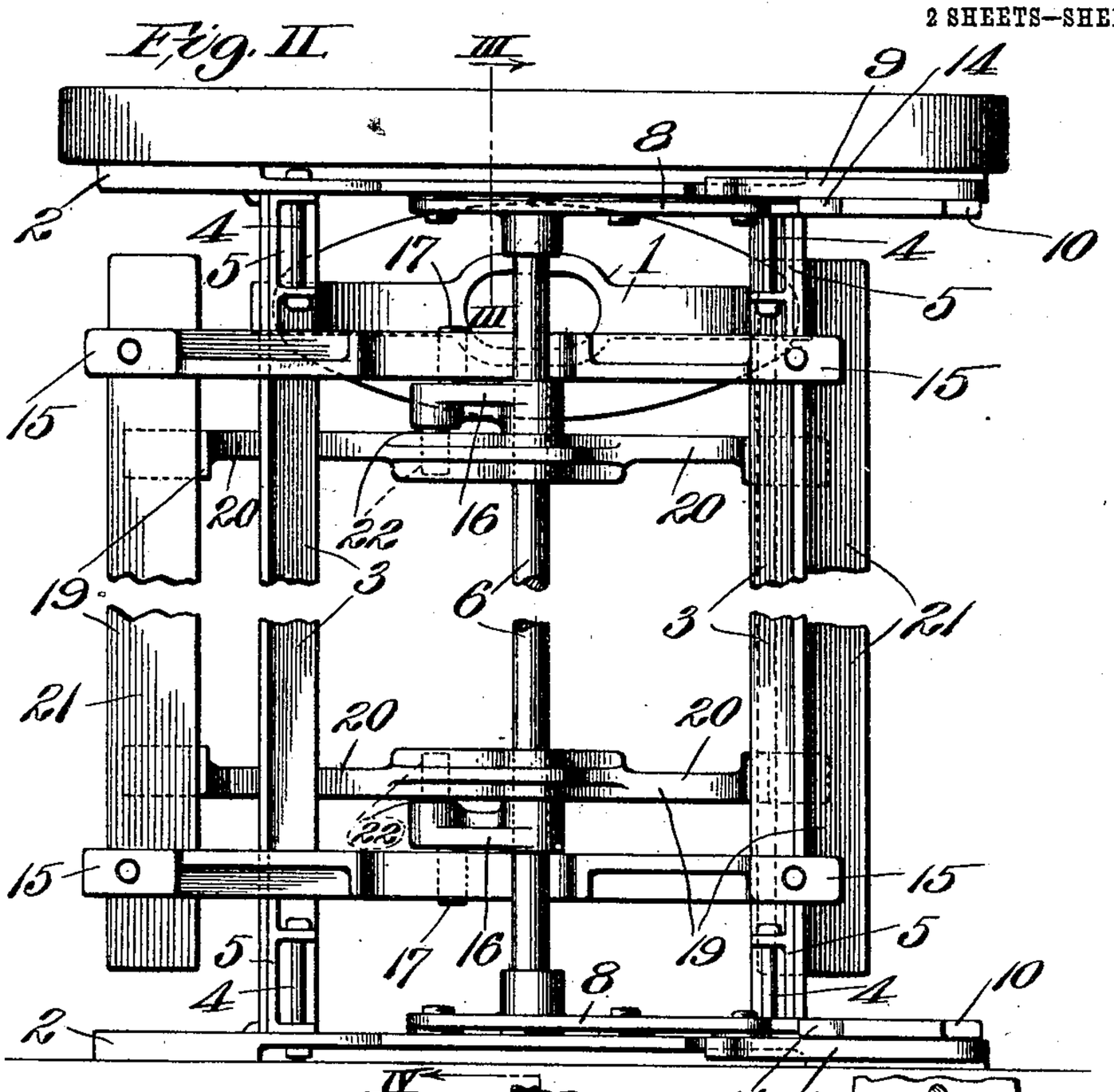


Fig. III.

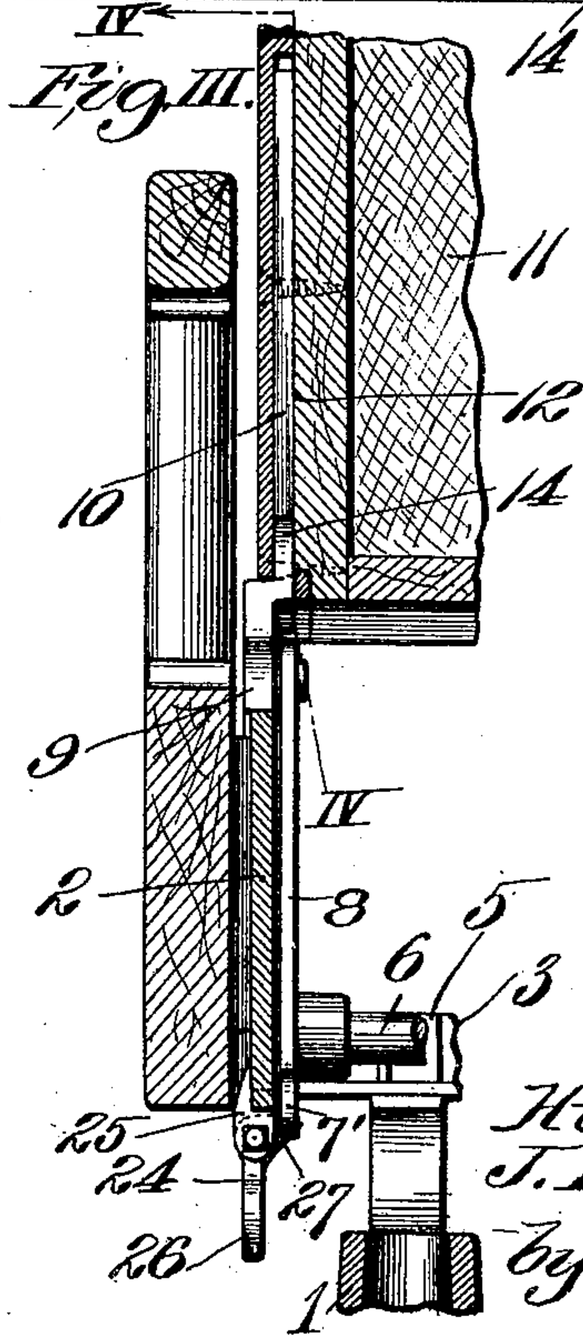


Fig. IV.

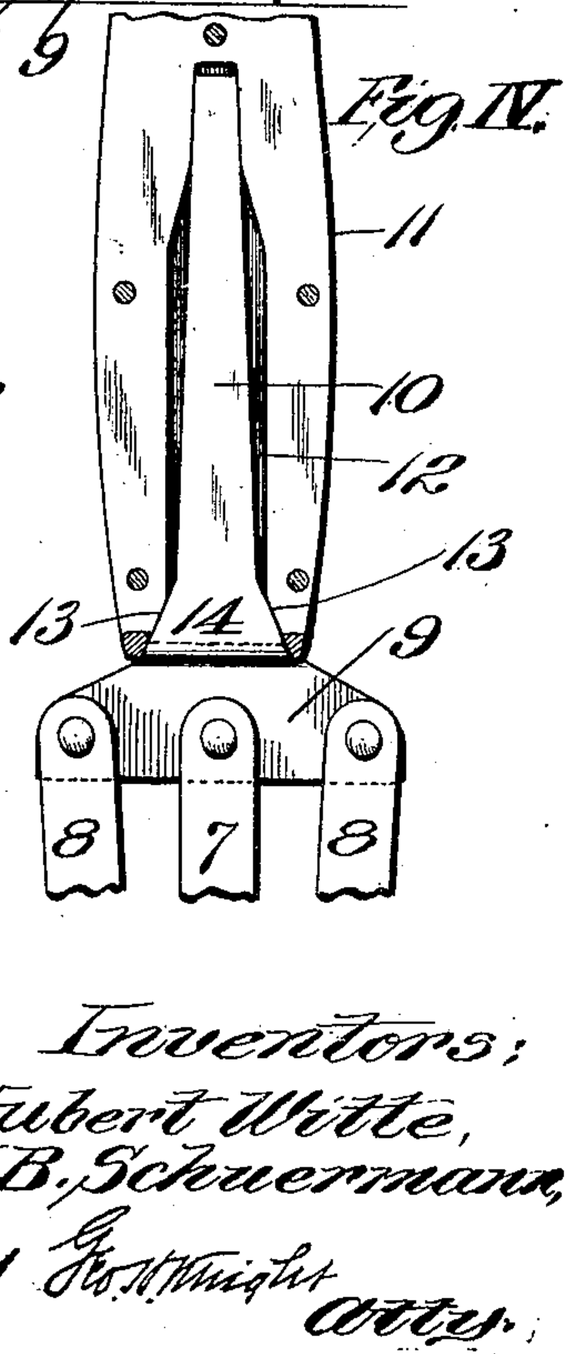
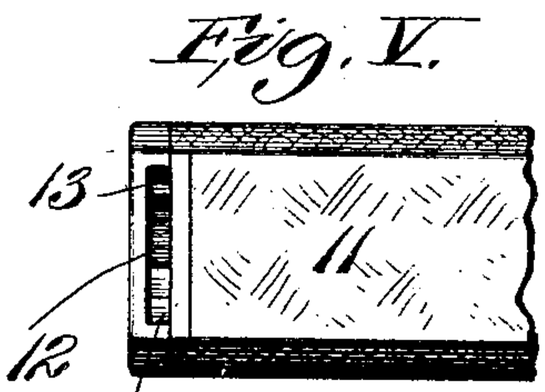


Fig. V.



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Atty.

UNITED STATES PATENT OFFICE.

HUBERT WITTE AND JOSEPH B. SCHUERMANN, OF ST. LOUIS, MISSOURI, ASSIGNORS TO ST. LOUIS CAR COMPANY, OF ST. LOUIS, MISSOURI, A CORPORATION.

CAR-SEAT.

No. 925,066. Specification of Letters Patent. Patented June 15, 1909.

Application filed October 5, 1908. Serial No. 456,314.

To all whom it may concern:

Be it known that we, HUBERT WITTE and JOSEPH B. SCHUERMANN, both citizens of the United States of America, residing at the city of St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Car-Seats, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

Our invention relates to that class of car seats known as walk-over seats, and has for its object to produce a seat of that character having all of the desired features, at a minimum cost of manufacture, and one wherein the moving parts are unlikely to become impaired.

Figure I is a vertical transverse section of our improved seat, the cushion seat and back being shown in dotted lines. Fig. II is a top or plan view, the central portion being broken away, of our improved seat, the cushion seat and back being omitted. Fig. III is a vertical section of one end of the seat, taken on line III—III, Fig. II. Fig. IV is a detail section taken on line IV—IV, Fig. III. Fig. V is an inverted plan view of one end of the seat back.

1 designates a pedestal which supports the outer end of our seat, the inner end of the seat being preferably adapted to be supported by the side wall of a car. 2 are end frames, and 3 the tie bars that connect the end frames and are in part supported by the pedestal 1. The side frames 2 are secured to the tie bars 3 by bolts 4 which pass through suitable brackets 5, secured to the tie bars, and through the end frames 2.

6 designates a rock shaft journaled in the end frames 2. Arranged at each end of the seat is a lever 7 and a pair of links 8, the lever being secured to the rock shaft 6, while the links, which are arranged one on each side of said lever, are pivoted to the end frames 2 in horizontal alinement with, and on each side of the rock shaft 6. The links 8 and the lever 7 are pivotally secured at their upper ends to cross pieces 9 having upwardly extending arms 10 tapered at their lower ends at 14, said cross pieces and their extending arms constituting supports for the seat back 11. The seat back 11 is provided upon each end with pockets 12 the lower ends of which are tapered at 13 and which are designed to receive the extending arms 10 of the cross pieces 9, the tapered portion 14 of said arms 10 engaging the tapered portions 13 of the pockets.

By the construction just described it will be seen that the seat back can be readily removed and replaced, and that, due to the inclined faces of the pockets and the arms which they receive, all rattling or shaking of the seat back is eliminated.

The levers 7 and the two pairs of links 8 perform the sole function of carrying the seat back in its backward and forward movements, and the links are pivoted at a greater distance apart at their upper ends than at their lower ends, due to which a desired inclination of the seat back is attained. The centrally arranged levers 7 perform the sole function of operating the rock shaft 6, the purpose of which will presently be explained.

15 designates the cushion seat supports which are provided at their lower sides with inclined faces 15′ that rest upon the tie bars 3, and due to these inclined faces 15′ the cushion seat is given a desired inclination when properly operated backwardly or forwardly by means of the rock shaft 6.

16 designates arms secured to the rock shaft 6 and each provided near its outer end with a laterally extending stud 17 which enters a slot 18 formed in the under face of the corresponding seat support 15, and by which construction it will be seen that, upon moving the seat back from one normal position to the other, the said rock shaft, through the instrumentality of the arms 16 and their studs, the cushion seat is advanced in the desired direction and given the proper inclination.

19 designates a foot rest frame which consists of two levers 20 that rest upon and are pivotally supported by the rock shaft 6, said levers being connected together at each of their outer ends by foot rest bars 21. This foot rest frame is rocked, in order that one bar 21 will be in proper position for service for the occupant of a seat in the rear thereof, and that the other of said bars will be raised up out of the way of an occupant of the seat to which said bars are attached. This movement of said frame is accomplished by means of laterally extending studs 22 carried by the arms 16 on the rock

shaft 6, which engage the properly shaped under faces of the levers 20 and act thereagainst when the seat back is shifted.

It will be observed from an inspection of Fig. I of the drawing that when one foot rest bar 21 is down in service position the arms of the levers 20 carrying the other foot rest bar are in contact with the under face of one of the tie bars 3, whereby a solid support for the first mentioned foot rest bar is obtained.

23 designates keeper plates suitably secured to the levers 20 and located below the rock shaft 6 to prevent accidental displacement and rattling of the foot rest frame 19.

To prevent operation of the seat by unauthorized persons, or to prevent the seat from being operated by pressure upon the back thereof, we have provided a lock which consists of a gravity actuated, pivotally supported dog 24 (see Figs. I and III) mounted in suitable lugs or ears 25 carried by one of the end frames 2. This dog is provided with a weighted lower end 26 which normally holds the upper end 27 of the dog in a position directly in the path of movement of an extension 7′ carried by the lever 7 and in such position of the parts, the seat cannot be reversed. When it is desired to reverse the seat, however, all that is necessary to do is to move the end 27 of the dog out of the path of movement of the extension 7′, this being done by pressing the weighted end 26 inwardly.

The seat back is stopped or held in its extreme backward position by means of the cross pieces 9 contacting with and resting upon the upper faces of the end frames 2, said frames being exactly inclined to provide for the proper slant of the cross pieces 9 and the seat back supported thereby.

We claim:

1. The combination of the end frames, tie bars between the end frames, seat supports formed with slots and having inclined faces at their lower sides supported upon the tie bars, a rock shaft mounted upon the end frames and provided with arms having inwardly extending studs entering the slots of the seat supports, and outwardly extending studs, a foot rest frame mounted upon the rock shaft over the outwardly extending studs, cross pieces having back arms and levers secured to the rock shaft and pivoted to the cross pieces.

2. The combination of the end frames, tie bars between the end frames, seat supports formed with slots and having inclined faces at their lower sides supported upon the tie bars, a rock shaft mounted upon the end frames and provided with arms having inwardly extending studs entering the slots of the seat supports, and outwardly extending studs, a foot rest frame consisting of two levers, foot rest bars and keeper plates, and mounted upon the rock shaft over the outwardly extending studs, cross pieces having back arms, and levers secured to the rock shaft and pivoted to the cross pieces.

HUBERT WITTE.
JOSEPH B. SCHUERMANN.

In presence of—
M. H. Murphy,
M. C. Murphy.