No. 813,267. PATENTED FEB. 20, 1906.

H. WITTE.

REVERSIBLE CAR SEAT.

APPLICATION FILED JULY 7, 1905.

Fig. I.

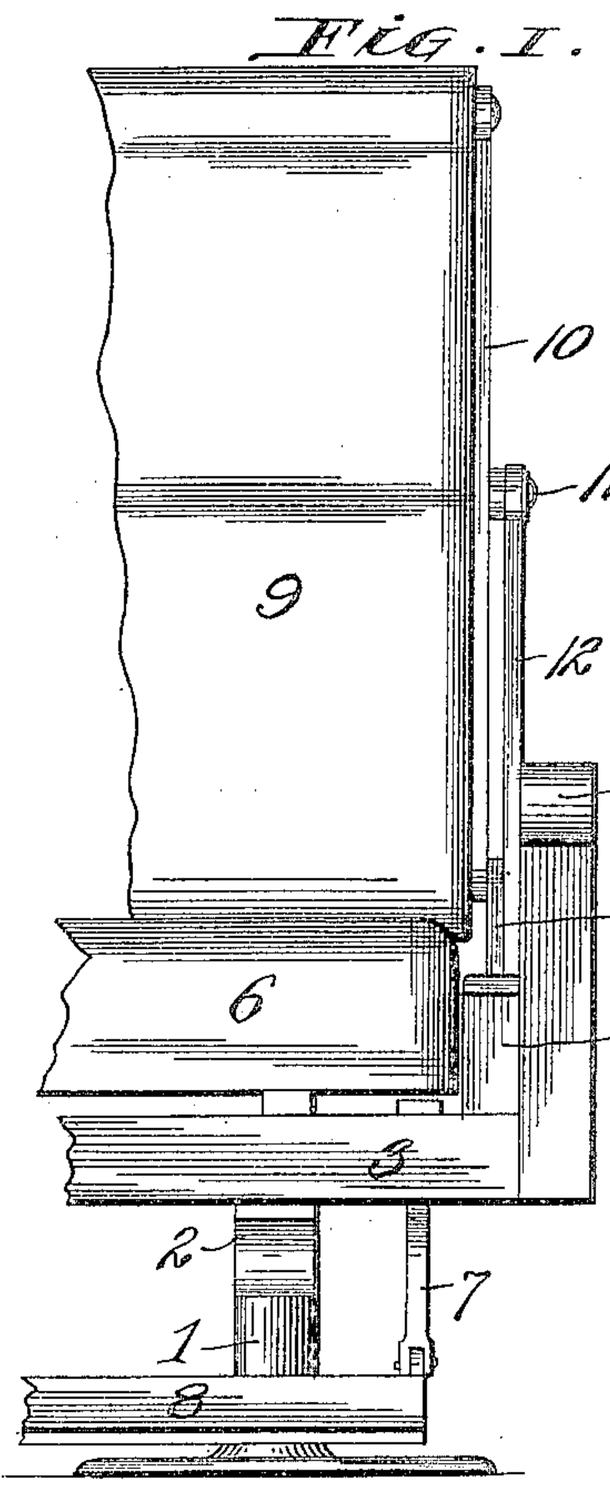


Fig. II.

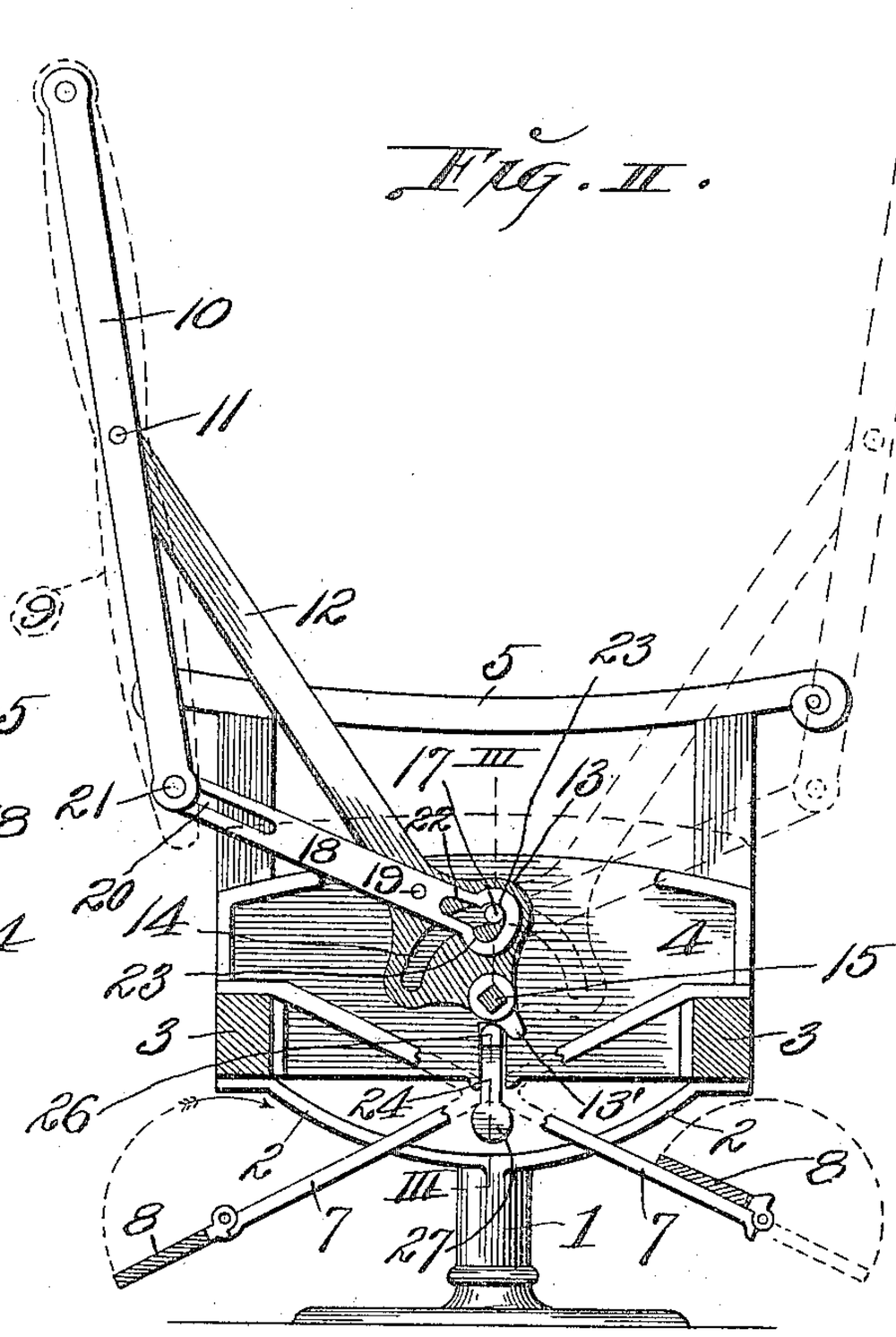
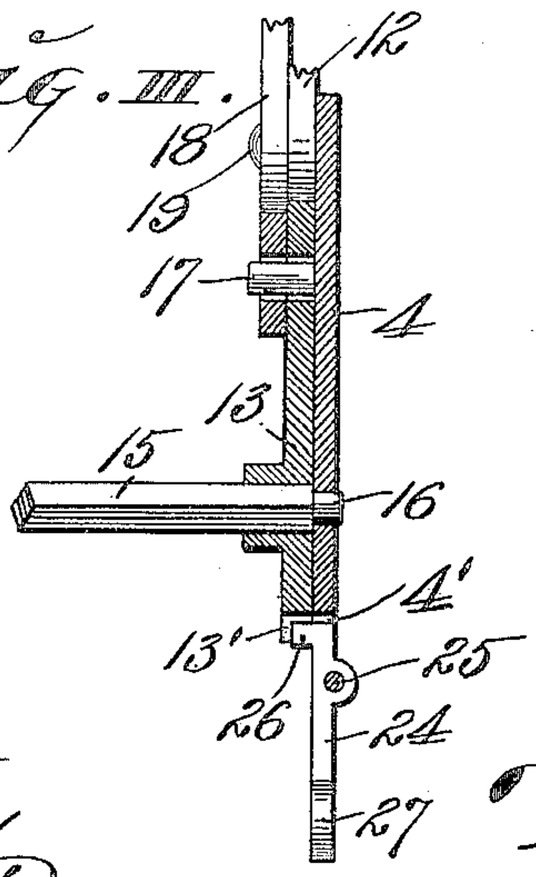


Fig. III.



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UNITED STATES PATENT OFFICE.

HUBERT WITTE, OF ST. LOUIS, MISSOURI, ASSIGNOR TO ST. LOUIS CAR COMPANY, OF ST. LOUIS, MISSOURI, A CORPORATION.

REVERSIBLE CAR-SEAT.

No. 813,267. Specification of Letters Patent. Patented Feb. 20, 1906.

Application filed July 7, 1905. Serial No. 268,652.

To all whom it may concern:

Be it known that I, HUBERT WITTE, a citizen of the United States, residing in the city of St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Reversible 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.

My invention relates to that class of seats for use in railway-cars in which the seat-back is so mounted as to be reversible from side to side of the seat in order that the seats may be occupied with the passengers facing either in one direction or in a reverse direction.

Figure I is a front elevation of one end of my car-seat. Fig. II is a view of the seat, partly in elevation and partly in vertical cross-section. Fig. III is a vertical section taken on line III III, Fig. II.

1 designates one of the legs of my car-seat, which is duplicated at the other end of the seat and is provided with arms 2, on which are supported the longitudinal seat-rails 3, which unite the seat ends 4. The seat ends are surmounted by the arm-rests 5.

6 is the cushion, which is supported by the legs 1.

7 designates foot-rest arms supported by the longitudinal rails 3 and extending in crossing directions, so that a pair of said arms extend to one side of the seat beneath it and the other pair extend in the opposite direction beneath the other side of the seat. These arms 7 have pivoted to them the footboards 8, that are adapted to be folded beneath the seat when not in use and to be unfolded into a position extending from the seat when in use by the occupant of the seat at the rear of the seat supplied with the footboard that is being used.

9 designates the seat-back, which is supplied with the usual end bars 10. These end bars have pivoted to them at 11 intermediate of their ends the swinging supporting-arms 12, the said arms being two in number and located adjacent to the seat ends 4 and between said seat ends and the cushion 6. Each of the back-supporting bars is provided at its lower end with an enlargement 13, that contains a curved slot 14, and each arm is fixed to a rock-shaft 15, journaled in the seat ends, as seen at 16, Fig. III, the said shaft extending from end to end of the seat. One of the back-supporting arms terminates at its lower end in a stud 13′, located beneath the rock-shaft 15.

17 is one of a pair of studs or pins projecting from the seat ends 4 at their inner ends and which protrudes into the curved slot 14, contained by the enlargements of the back-supporting arms 12. These studs serve to restrict the movement of the back-supporting arms when they are rocked from side to side of the seat to carry the back 9 from one side of the seat to its other side.

18 designates one of a pair of restraining-links pivoted at 19 to the back-supporting arms 12. In the outer end of each of these links is a longitudinal slot 20, that is loosely connected to the lower end of the seat-back end bar 10, corresponding to said link, the described connection being preferably accomplished by a pin 21, passing through the lower end of each end bar and received by the slot 20. The inner end of each restraining-link 18 has therein a T-shaped slot 22, that receives the adjacent stud 17, the head of said slot being provided with shoulders 23, that bear against said stud to prevent accidental movement of the restraining-link.

24 designates a dog that is pivotally mounted at 25 in a slot 4′ in one of the seat ends 4, so that said dog will hang suspended in a position beneath the rock-shaft 15. This dog is provided at its upper end with an inwardly-extending finger 26, that is adapted to normally occupy a position in the path of movement of the adjacent stud 13′, carried by the back-supporting arm 12. The dog 24 is weighted by providing an enlargement 27 at its lower end to provide for it being normally maintained suspended perpendicularly beneath the seat end 4, with the finger 26 projecting inwardly beyond the inside face of the seat end 4 to serve as a stop for the back-supporting-arm-carried stud 13′, which normally rests against said finger.

When the back of the seat is to be reversed, its lower end is tilted slightly forward and upward, thereby rocking the restraining-links 18 on their pivot-points 19 to free them from the studs 17. The lower end of the dog 24 is then swung inwardly to rock its upper end outwardly in the slot 4′ of the seat end by which said dog is supported, thus moving the finger 26 of the dog away from the adjacent back-supporting-arm stud 13′ to permit

movement of the back-supporting arms. The seat-back is then swung to the opposite side of the seat, during which action the back-supporting arms and the restraining-links are reversed from the positions seen in full lines to the positions seen in dotted lines, Fig. II. When the parts have been so shifted, the dog 24 is permitted to return to its normal position and serves to hold the back-supporting arms in the same manner as before, due to its finger riding into a position at the opposite side of the stud 13′ from that which it previously occupied.

I claim as my invention—

1. In a car-seat, the combination of the seat ends, one of which is provided with a vertical slot; a dog positioned in said slot and pivoted to said seat end and having a finger at its upper end and a weighted lower end; a pair of back-supporting arms rockingly supported by said seat ends and one of which is provided with a stud adapted to engage the finger of said dog, and a back supported by said arms, substantially as set forth.

2. In a car-seat, the combination of the seat ends provided with studs, a pair of back-supporting arms rockingly supported by said seat ends and provided with slots to receive said studs, a back supported by said arms, and restraining-links pivoted to said arms intermediate of their ends and provided at their inner ends with T-shaped slots to receive the studs of said seat ends and having their outer ends loosely connected to said back, substantially as set forth.

HUBERT WITTE.

In presence of—
ARTHUR DIEKMANN,
HELEN J. MURPHY.