No. 676,170. Patented June 11, 1901.

H. WITTE.

CAR SEAT.

(Application filed Dec. 17, 1900.)

(No Model.)

Fig. I.

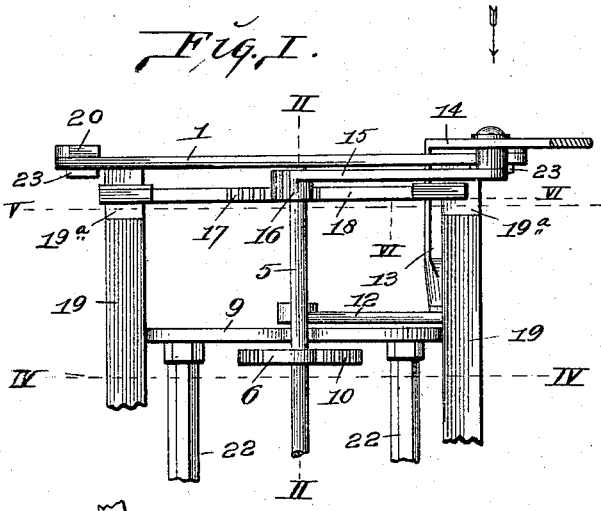


Fig. II.

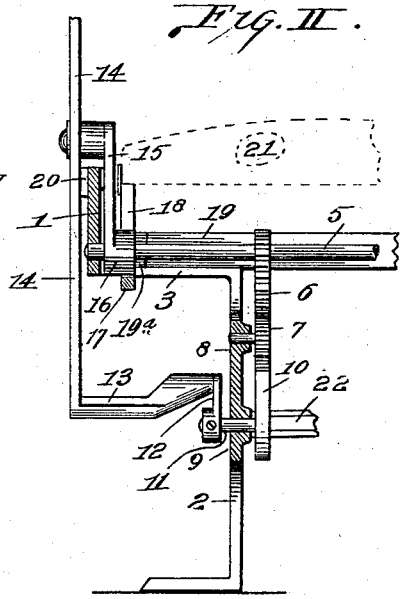


Fig. III.

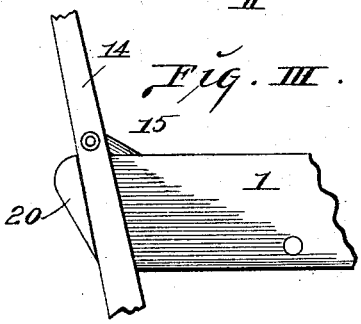


Fig. IV.

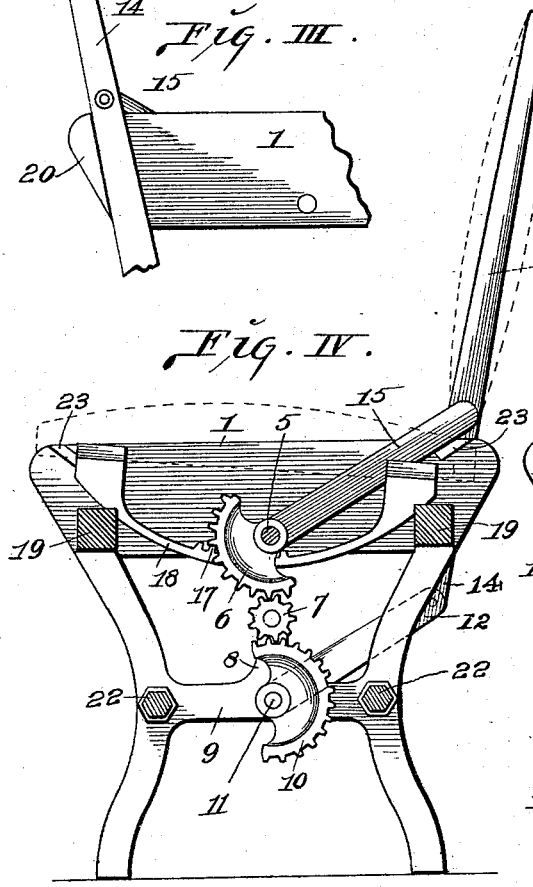


Fig. V.

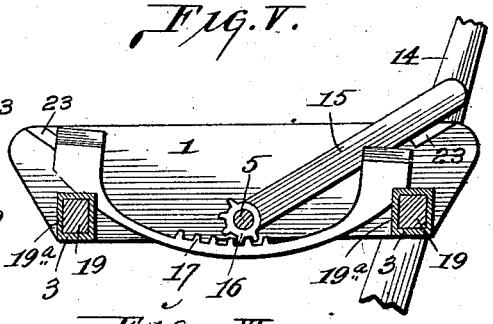
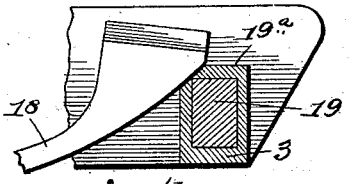


Fig. VI.



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UNITED STATES PATENT OFFICE.

HUBERT WITTE, OF ST. LOUIS, MISSOURI, ASSIGNOR TO THE ST. LOUIS CAR COMPANY, OF SAME PLACE.

CAR-SEAT.

SPECIFICATION forming part of Letters Patent No. 676,170, dated June 11, 1901.

Application filed December 17, 1900. Serial No. 40,064. (No model.)

To all whom it may concern:

Be it known that I, HUBERT WITTE, a citizen of the United States, 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.

My invention relates to certain improvements in what are known as "walk-over" car-seats; and my invention consists in features of novelty hereinafter fully described, and pointed out in the claims.

Figure I is a detail top or plan view showing one end of my improved seat. Fig. II is a vertical section taken on line II II, Fig. I. Fig. III is a detail elevation looking in the direction of the arrow, Fig. I. Fig. IV is a vertical transverse section taken on line IV IV, Fig. I. Fig. V is a vertical transverse section taken on line V V, Fig. I. Fig. VI is a detail section taken on line VI VI, Fig. I.

One end only of the seat is shown, but the other end is a duplicate thereof, the two ends being connected by the usual cross-bars and foot-rests.

1 represents the end casting of the seat, which is connected to the supporting-legs 2 by short horizontal bars 3, that extend inwardly from the end casting. The legs extend downwardly from the inner ends of the bars 3, the legs 2, the bars 3, and the end pieces constituting a single casting. By providing the bars 3 the legs of the seat are located some distance inwardly from the outer end of the seat, thus providing more aisle-space in the car beneath the cushion-line of the seat. Journaled in the end casting is a shaft 5, the other end of which is journaled in the end casting (not shown) at the other end of the seat. Secured to the shaft 5 is a cogged segment 6, that meshes with a pinion 7, journaled in a projection 8, that extends upwardly from a cross-bar 9 of the legs 2. The pinion 7 likewise meshes with a cogged segment 10, secured to the inner end of a short shaft 11, that is journaled in the cross-bar 9. On the outer end of the shaft 11 is secured a crank 12, to which is pivoted an arm 13, that extends inwardly from the end bracket 14, to which the back of the seat is secured in the ordinary manner. Pivoted to the inner face of the bracket 14 is a link 15, that fits inside of the end casting 1, as seen in Fig. II, and on the lower end of which is a cogged segment 16, through which the shaft 5 passes and which is rigidly secured to the shaft. The segment 16 meshes with a rack 17, that forms part of the usual casting 18, upon which the cushion 21 of the seat rests, the casting being supported on the sockets 19^a, that are cast integral with the ends 1 and which receive the ends of the cross-bars. The casting 18 moves on the sockets 19^a as the cushion is shifted by the reversing of the back of the seat, the cushion being thus shifted by the engagement of the segment 16 with the rack 17.

The above-described construction provides a reversible back-support and cushion-mover which work effectively and easily and without a twisting strain being produced in the back of the seat as it is reversed from side to side.

19 represents the cross-bars that fit in the sockets 19^a and that connect the end of the seat that is shown in the drawings to a like end not shown.

On the outer faces of the end castings 1 are formed shoulders 20, against which the brackets 14 bear when the back of the seat is in either of its normal positions, one of these shoulders being clearly shown in Fig. III. The other or corresponding shoulder is shown in Fig. I.

22 represents the foot-rests of the seat.

23 represents stops on the inner face of the end casting, against which the link 15 bears when the back is in its respective normal positions.

I claim as my invention—

1. In a car-seat, the combination of supporting-legs, an end casting, bars connecting the legs and end casting together, a shaft journaled in the end casting, a segment secured to the shaft, a segment, a short shaft secured to said segment, said short shaft being journaled in said legs, a pinion located between said segments, a crank secured to the last-mentioned shaft, a back-supporting bracket having an inwardly-extending arm connected to said crank, and a link pivoted

to said bracket at one end and the other end of which is secured to the shaft that is journaled in said end casting, substantially as set forth.

2. In a car-seat, the combination of supporting-legs, an end casting, bars connecting the legs and end casting together, an upper shaft journaled in said end casting, a lower shaft journaled in said legs, a gear connection between said shafts, a back-supporting bracket, a crank connected to said bracket, said crank being secured to said lower shaft, and a link connection between said bracket and said upper shaft, substantially as set forth.

3. In a car-seat, the combination of supporting-legs, an end casting, bars connecting said legs and end casting together, an upper shaft journaled in said end casting, a lower shaft journaled in said supporting-legs, a gear connection between said shafts, a back-supporting bracket, a crank connected to said bracket, said crank being carried by said lower shaft, a link pivoted to said bracket, a cogged segment on the lower end of said link and which is secured to said upper shaft, and a seat-supporting casting having a rack engaged by said segment, substantially as set forth.

HUBERT WITTE.

In presence of—
MORITZ WEBER,
LOUIS RUBENBAUER.