

H. WITTE.

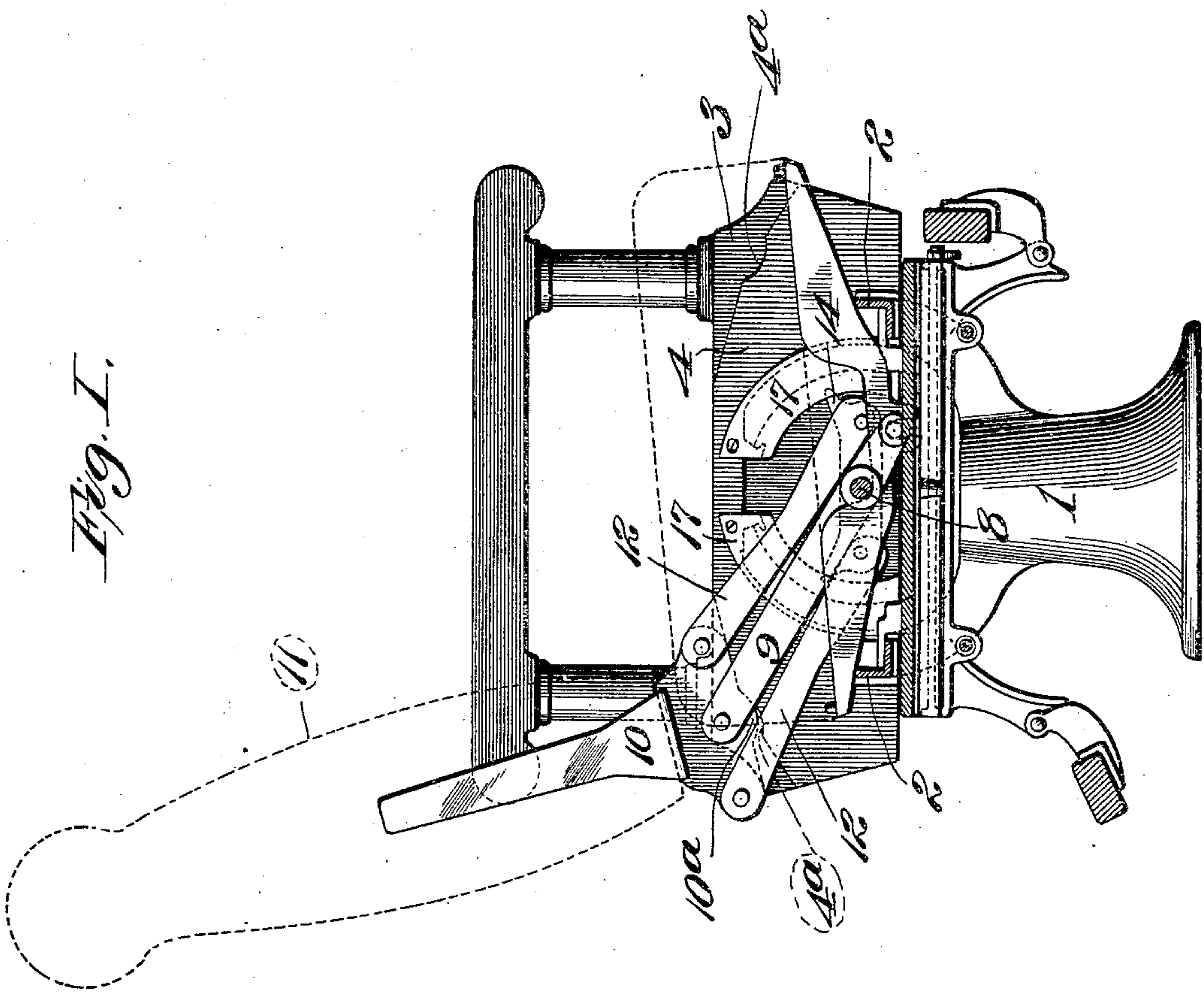
CAR SEAT.

APPLICATION FILED JAN. 12, 1909.

935,242.

Patented Sept. 28, 1909.

3 SHEETS—SHEET 1.



Attest:
Wm. H. Scott.
E. M. Harrington.

Inventor:
Hubert Witte,
by E. J. Smith
att'y.

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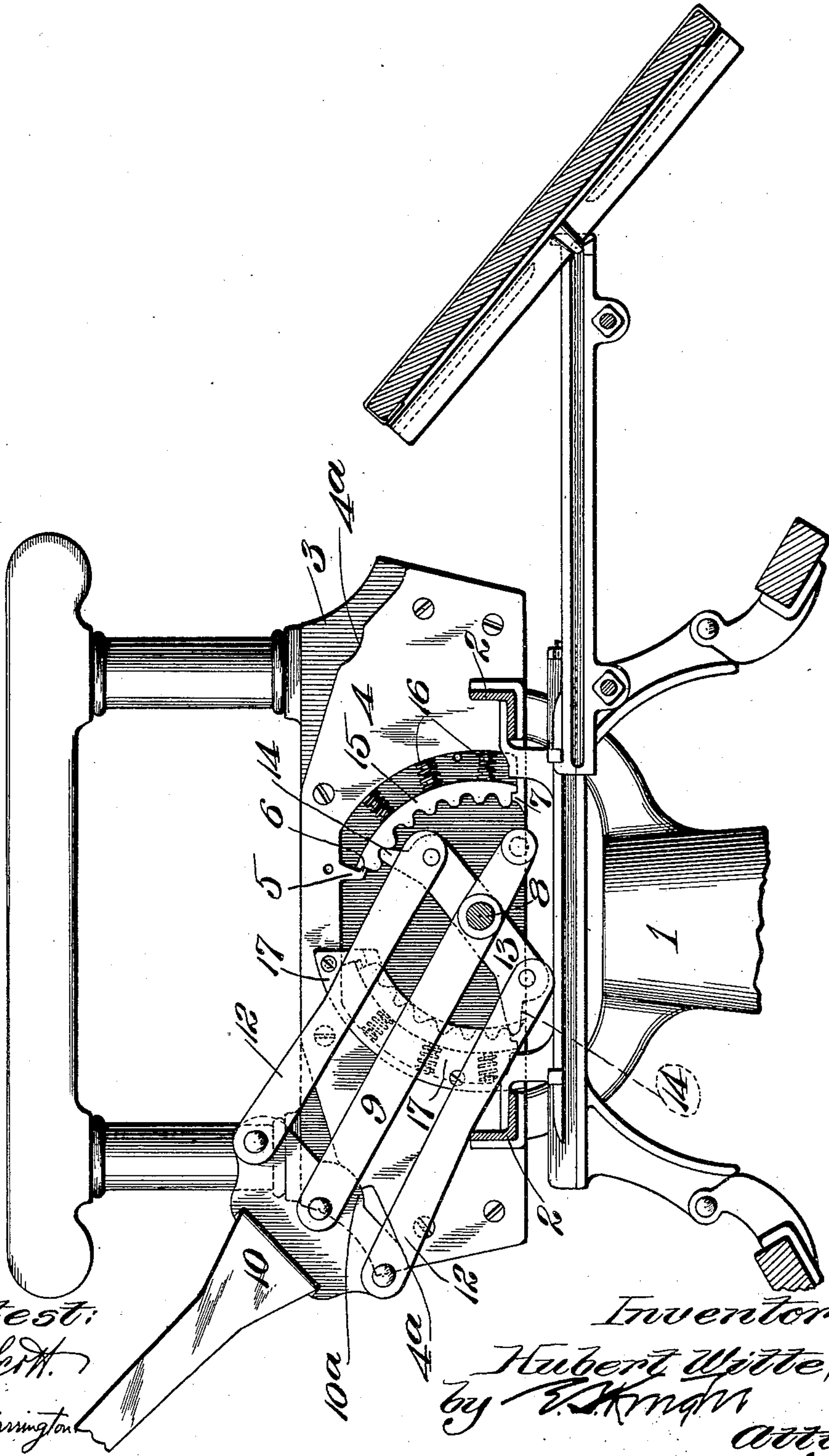
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3 SHEETS—SHEET 2.

Fig. II.

Attest:
W. A. J. H.
E. M. Harrington

Inventor:
Hubert Witte,
by E. A. Knapp
att'y.



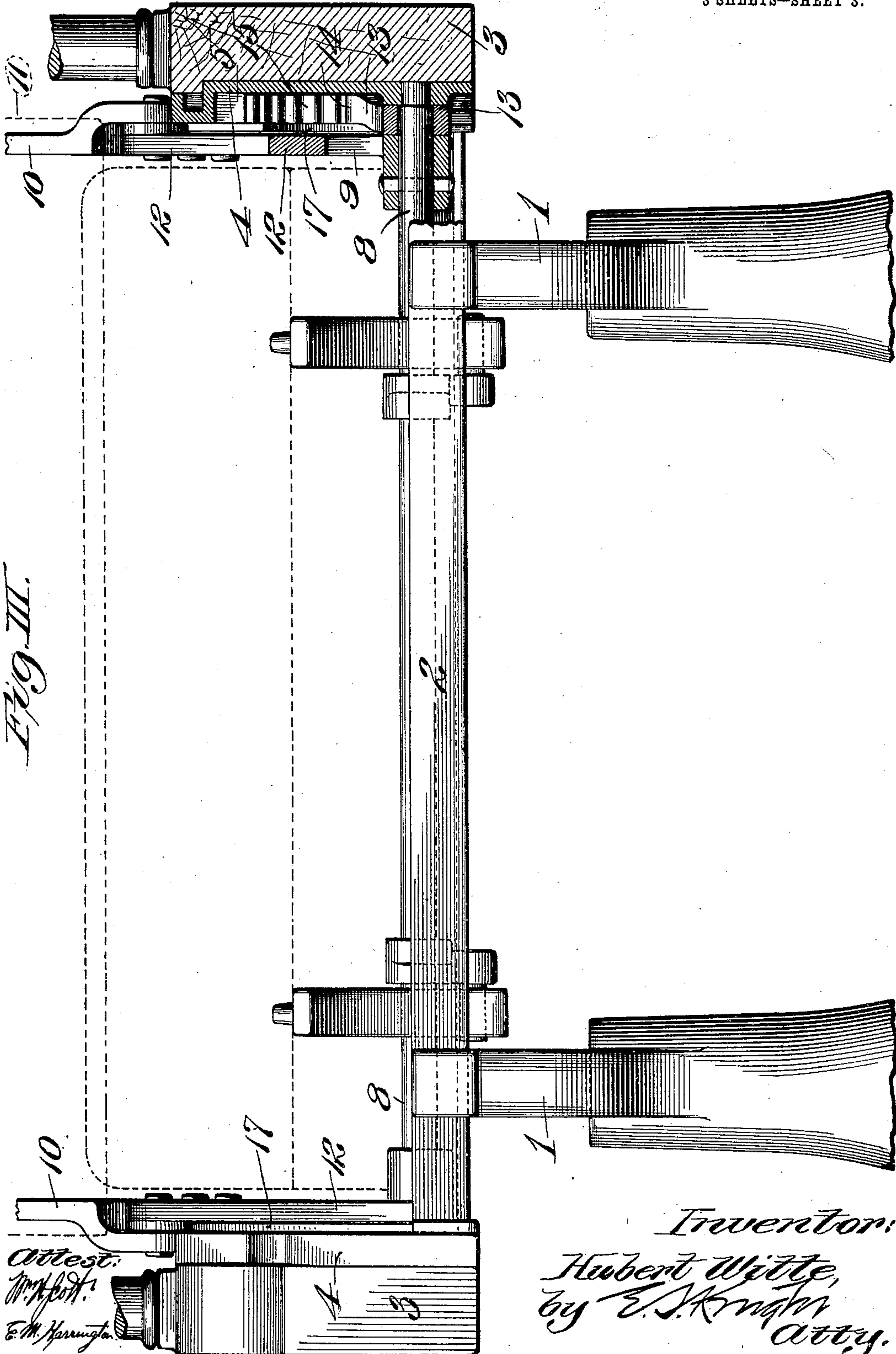
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3 SHEETS—SHEET 3.



UNITED STATES PATENT OFFICE.

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

CAR-SEAT.

935,242.

Specification of Letters Patent.

Patented Sept. 28, 1909.

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To all whom it may concern:

Be it known that I, HUBERT WITTE, a citizen of the United States of America, residing in the city of St. Louis and 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 that character of car seats known as "walk over" seats, and which has for its object the production of a simple, efficient and durable means whereby the back of the seat may be held in reclined positions of different degrees when it is located at either side of the seat.

Figure I is a vertical cross section taken through my car seat, with the members at one end of the seat and at the inner side of the seat end shown in elevation. Fig. II is an enlarged view similar to Fig. I, with one of the rack housings omitted to afford a view of the parts back of said rack housings. Fig. III is in part an enlarged side elevation of the seat, and in part a vertical longitudinal section.

In the accompanying drawings: 1 designates the pedestal of my seat and 2 are tie bars or supporting bars that are mounted upon suitable arms at the upper ends of the pedestals.

3 are seat end pieces supported by the tie bars 2. Each end piece 3 has suitably secured to it a pocket plate 4 that is located at the inner side of the end piece, the pockets in the plates being located at their inner sides. At the top of the pocket in each plate is a pair of stop lugs 5 extending downwardly within the pocket and spaced apart from each other, each stop lug being provided with an outturned lip 6, (see Fig. II and dotted lines Fig. I.) At the bottom of the pocket in each plate are stop lugs 7 that are of service in conjunction with the stop lugs 5 and their lips, as will hereinafter appear.

8 designates a rock shaft extending longitudinally of the car seat and having its ends journaled in the pocket plates 4, (see Fig. III.)

9 designates levers fixed to the rock shaft 8 near the pocket plates 4 at the ends of the

seat and the outer ends of the levers are centrally pivoted to arms 10 that are secured to the ends of the back of the seat, as shown in dotted lines 11, (see Fig. I.)

12 are links pivoted to the arms 10 at opposite sides of the lever 9, and which occupy positions parallel to said lever. The inner ends of the links 12 are pivoted to latch bars 13 that are loosely mounted upon the rock shaft 8 and are adapted to move independently of said rock shaft when the same is rotated. The latch bars 13 have arms extending laterally from the rock shaft in both directions to receive the connection of the links 12 and at the end of each arm of each latch bar is a finger 14. It should be mentioned that the latch bars 13 are offset from the levers 9 and occupy the pockets in the pocket plates 4.

15 designates socket pieces of segmental shape that are located in the pockets in the pocket plates 4, and each of which is serrated or provided with a plurality of sockets adapted to receive the fingers 14 of the latch bars 13. These socket pieces are limited in their inward movements by the stop lugs 5 and 7 in the pockets of the pocket plates, and they are normally pressed toward the centers of the pockets in said plates by springs 16 located back of the socket pieces, (see Fig. II.) The socket pieces and the springs that control them are partially inclosed by housing plates or caps 17 which are suitably secured to the pocket plates 4, and which serve to prevent lateral movement of said parts.

4^a designates sockets located at the upper edges of each of the pocket plates 4, (see Figs. I and II,) said sockets being designed to receive complementally shaped lugs 10^a carried by the arms 10, said lugs being located about midway of the length of the arms, or in proximity to the upper point of pivotal connection of the lever 9.

In the practical use of my invention, the seat back may be moved in the "walk over" fashion to one side of the seat proper or the other, and when in either position the back may be independently adjusted to any desired degree by manipulating said back in the manner about to be described. When it is desired to adjust the inclination of the seat back, all that is necessary to do is to

put pressure upon the upper portion of the back in the proper direction and cause the lug 10^a to rotate in its seat, or socket, 4^a, which movement will not change the position of the lever 9, but will cause longitudinal movement in opposite directions of the links 12, thereby slightly rotating the latch bar 13 on the shaft 8 and cause the fingers 14 of said latch bar to engage the next adjacent sockets formed in the spring actuated socket piece 15, to effect a lock between said seat back and its support. When it is desired to reverse the position of the seat back, the seat back must be in, or brought to, a position of adjustment most nearly approaching the vertical, such as is illustrated in Fig. 1 of the drawing, whereupon it will be observed that further independent movement of the back is prevented by one face of the arm 10 being in contact with the upper face of the pocket plate 4. The back may now be thrown over to the opposite side of the seat, being properly guided in such movement by the lever 9 and the links 12, the latter acting similar to a parallel rule movement, whereby the said back is brought in its new position to the same angular relation to the seat as it was just previous to this "walk over" movement. Simultaneously with the above movement, the shaft 8 will be rotated, due to the fixed relation of the lever 9 thereto which will, through suitable mechanism not described or claimed in this application, move the seat cushion to its proper position relative to the new position attained by the back.

I claim:—

1. In a car seat, the combination of a stationary support, a seat back supporting element, a lever having one end pivotally connected to said stationary support and its other end pivotally connected to said seat back support, a latch bar pivotally supported by said support, means coöperable with said seat back support and said latch bar whereby movement is imparted from the former to the latter, and means coöperable with said latch bar for retaining the same in a predetermined position.

2. In a car seat, the combination of a stationary support having a socket, a seat back supporting member provided with a lug or projection designed to be received by said socket, a lever having one end pivotally connected to said stationary support and its other end pivotally connected to said seat back support, a latch bar pivotally supported by said support, means coöperable with said seat back support and said latch bar whereby movement is imparted from the former to the latter, and means coöperable with said latch bar for retaining the same in a predetermined position.

3. In a car seat, the combination with a stationary support, a seat back supporting

member, a lever, one end of which is pivotally connected to said seat back supporting member, and the other end of which is pivotally supported by the first mentioned support, a latch bar pivotally supported by said support, spring actuated means coöperable with said latch bar, and links pivotally connected to said latch bar and to said seat back support whereby movement of the latter is imparted to the former.

4. In a car seat, the combination of a stationary support having a socket, a seat back supporting member provided with a projection designed to be received by said socket, a lever one end of which is pivotally connected to said seat back supporting member and the other end of said lever being pivotally supported by the first mentioned support, a latch bar pivotally supported by said stationary support, spring actuated means coöperable with said latch bar, links pivotally connected to said latch bar and said seat back support whereby movement of the latter is imparted to the former.

5. In a car seat, the combination with a stationary support, a pivot element mounted on said support, a lever supported by said pivot element, a seat back support pivotally connected to said lever, a latch bar pivotally supported by said support, means coöperable with said seat back support and said latch bar for transmitting movement of the former to the latter, and means coöperable with said latch bar for retaining the same in a predetermined position.

6. In a car seat, the combination with a stationary support, of a pivot element mounted on said support, a lever supported by said pivot element, a seat back support pivotally connected to said lever, a latch bar loosely and pivotally mounted upon said pivot element, links coöperable with said seat back support and said latch bar for transmitting movement of the former to the latter, and means coöperable with said latch bar for retaining the same in a predetermined position.

7. In a car seat, the combination of a stationary support carrying a pivot element, a lever, and a latch bar independently movable relative to each other mounted on said pivot element, a seat back support pivotally connected to said lever, and means coöperable with said seat back support and said latch bar for causing movement imparted to the former to be conveyed to the latter, and spring actuated means for locking said latch bar at predetermined positions.

8. In a car seat, the combination with a stationary support having a socket, a seat back support having a lug or projection designed to be received in said socket, a pivot element, a lever supported by said pivot element and having pivotal connection with said seat back support, a latch bar pivotally supported by said support, means coöperable

with said seat back support and said latch bar for transmitting movement of the former to the latter, and means coöperable with said latch bar for retaining the same in a predetermined position.

9. In a car seat, the combination with a stationary support having a socket, of a seat back support having a lug or projection designed to be received by said socket, a pivot element carried by said support, a lever mounted upon said pivot element and having pivotal connection with said seat back support, a latch bar mounted upon said pivot element and having independent movement relative to said lever, links pivoted to said seat back support and to said latch bar, and a pair of spring actuated locking elements for coöperation with the ends of said latch bars.

10. In a car seat, the combination with a stationary support, having a socket, of a seat back support, having a lug or projection designed to be received by said socket, a pivot element carried by said support, a lever mounted upon said pivot element and having pivotal connection with said seat back support, a latch bar mounted upon said pivot element and having independent movement relative to said lever, a pair of links disposed one on each side of said lever, and each of which links is pivotally connected at one end to the seat back support and pivotally connected at their other end to said latch bar, and a pair of spring actuated segmental shaped serrated elements for coöperation with the ends of the latch bar.

11. In a car seat, the combination of a rock shaft, a double armed latch bar loosely carried by said rock shaft, a seat back supporting member connected to said latch bar, and a pair of spring pressed socket pieces engaged by the arms of said latch bar.

12. In a car seat, the combination of a support, a rock shaft, a latch bar loosely mounted on said rock shaft and having a pair of arms extending laterally from the rock shaft and provided with fingers, a seat back support connected to said latch bar, and a pair of spring pressed socket pieces engaged by the fingers of said latch bar arms.

13. In a car seat, the combination of an end piece, a pocket plate secured to said end piece, a rock shaft journaled in said pocket plate, a latch bar loosely mounted on said rock shaft and having a pair of arms extending laterally from the rock shaft, a seat back support connected to said latch bar, and a pair of socket pieces arranged in said

pocket plate and engaged by the arms of said latch bar.

14. In a car seat, the combination of an end piece, a pocket plate secured to said end piece, a rock shaft journaled in said pocket plate, a latch bar loosely mounted on said rock shaft and having a pair of arms extending laterally from the rock shaft, a seat back support connected to said latch bar, and a pair of segmental shape spring pressed socket pieces mounted in said pocket plate and engaged by the arms of said latch bar.

15. In a car seat, the combination of a support, a rock shaft, a latch bar loosely mounted on said rock shaft, a spring pressed socket piece in engagement with said latch bar, a seat back support, a lever fixed to said rock shaft and having pivotal connection with said seat back support, and a pair of links pivotally connected to said latch bar and to said seat back support.

16. In a car seat, the combination of a support, a rock shaft, a double armed latch bar loosely mounted on said rock shaft, a pair of spring pressed socket pieces in engagement with the arms of said latch bar, a seat back supporting member, a lever fixed to said rock shaft and pivoted to said seat back supporting member, and a pair of links pivotally connected to the arms of said latch bar and to said seat back supporting member at opposite sides of said lever.

17. In a car seat, the combination of a support, a rock shaft mounted in said support, a latch bar loosely carried by said rock shaft, socket pieces in engagement with said latch bar, a seat back supporting member having pivotal engagement with the said support, a lever fixed to said rock shaft and pivoted to said seat back support, and links having pivotal engagement with said latch bar and seat back support.

18. In a car seat, the combination of an end member provided with a socket, a rock shaft, a latch bar loosely carried by said rock shaft, socket pieces in engagement with said latch bar, a seat back supporting member having a lug or projection fitted in the socket of said end member, a lever fixed to said rock shaft and having pivotal connection with said seat back support, and a pair of links arranged parallel with said lever and pivotally connected to said latch bar and seat back support.

HUBERT WITTE.

In the presence of—

M. C. MURPHY,

E. P. CHITTENDEN.