Sept. 2, 1952 C. J. BARECKI 2,609,034

CHAIR

Filed Oct. 29, 1946 2 SHEETS—SHEET 1

Fig. 1

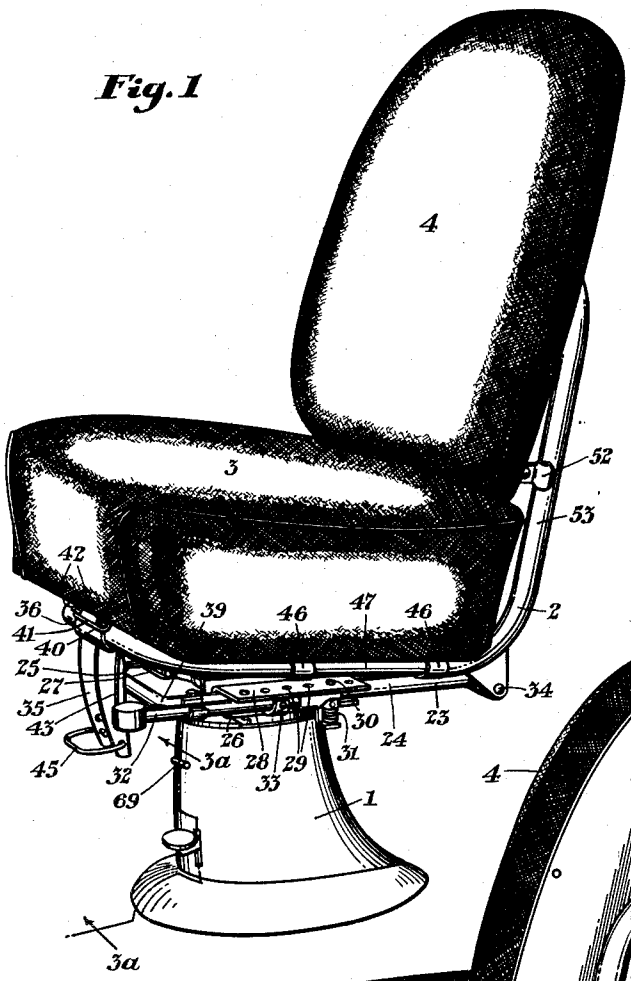
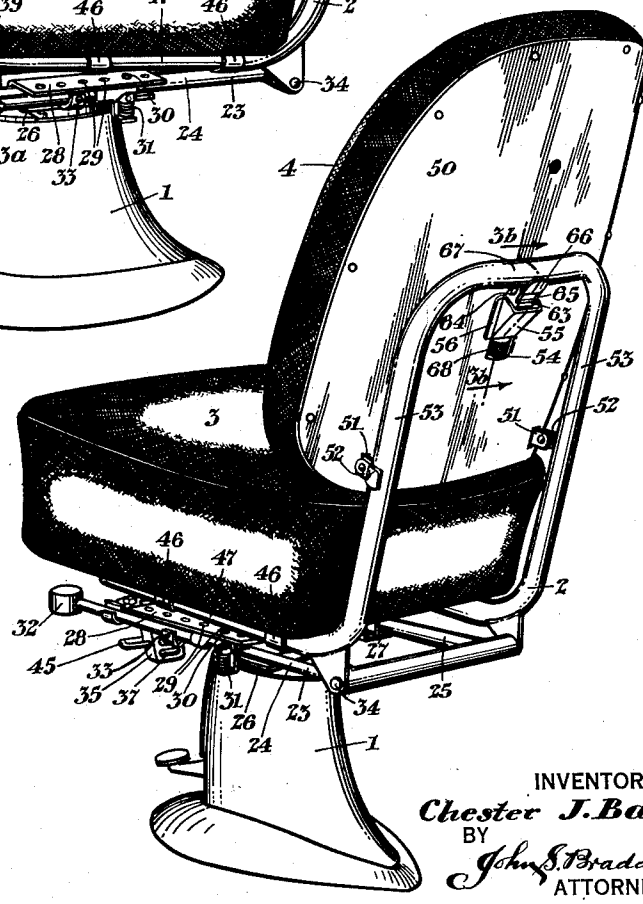


Fig. 2



INVENTOR
Chester J. Barecki
BY
John S. Braddock
ATTORNEY

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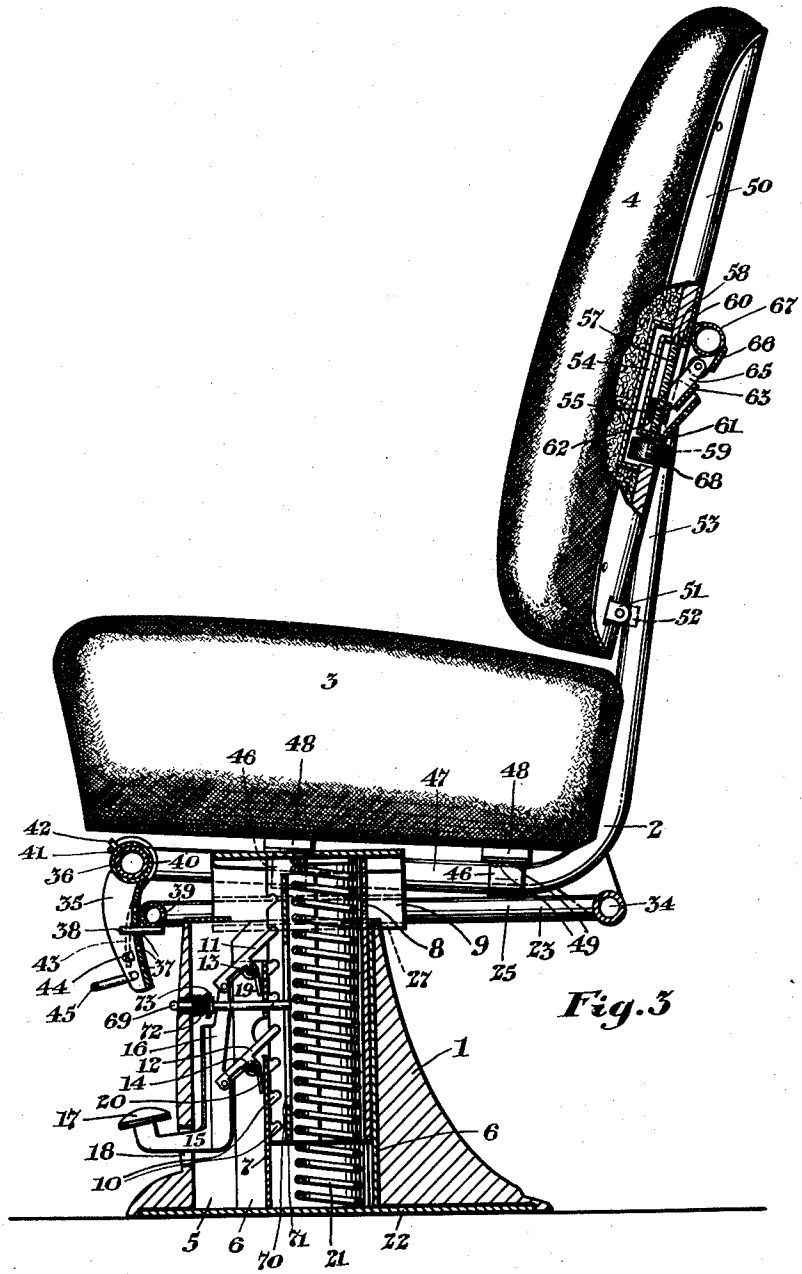


Fig. 3

INVENTOR
Chester J. Barecki
BY
John S. Braddock
ATTORNEY

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CHAIR

Chester J. Barecki, Grand Rapids, Mich., assignor to American Seating Company, Grand Rapids, Mich., a corporation of New Jersey

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3 Claims. (Cl. 155—162)

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The present invention relates to chairs and more particularly to chairs for occupancy by the operators of motor busses and other vehicles.

The primary objects of the invention are generally to provide a bus driver's chair which is universally adjustable to accommodate individuals having different physiques and different preferences in sitting posture; and specifically to provide such a chair which is adjustable in height, in forwardly-rearwardly moved position, in angular pitch of the seat relative to the floor, and in angular pitch of the back relative to the seat; and to provide such a chair which is convenient in adjustment, sturdy in construction and attractive in appearance.

An illustrative embodiment of the invention is shown in the accompanying drawings, wherein:

Figure 1 is a front and side perspective view of a driver's chair;

Figure 2 is a rear and side perspective view of the same; and

Figure 3 is a view of the chair showing the base and adjacent parts in vertical section taken on line 3*a*—3*a* of Figure 1, showing the chair seat in side elevation, and showing the chair back and adjacent parts partially in side elevation and partially in centrally vertical section taken on line 3*b*—3*b* of Figure 2.

Referring now in detail to these drawings, the chair shown therein is of the type especially designed for the operators of motor busses and the like, and generally comprises a pedestal-type base 1 upon which is vertically adjustably, forwardly-rearwardly slidably, and angularly adjustably mounted a chair-supporting frame 2 of tubular metal construction, on which frame 2 is fixedly mounted a chair seat 3 and on which is angularly adjustably mounted a chair back 4.

The base 1 has a hollow interior 5 in which is secured an elongated, cross-sectionally U-shaped casing member 6 having a transverse partitioning member 7, and a second cross-sectionally U-shaped member 8 is vertically slidably disposed in the casing member 6. A supporting bracket 9 of generally inverted U-shaped formation is secured to the top of the member 8 as by welding. The opposite side walls of the member 8 are each provided with a series of vertically spaced rearwardly-upwardly extending notches 10 in the forward edge thereof. A pair of vertically-spaced parallel leaves 11, 12 are pivotally mounted on horizontal pintles 13, 14 respectively which are secured to and extend transversely of the casing member 6. A pedal member 15 has an upstanding portion 16 within the casing pivotally connected to the forward ends of the leaves 11, 12. The foot pedal 17 extends exteriorly of the base 1 through a slot 18. It will be seen that when

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the pedal 17 is depressed, the rearward ends of the leaves 11, 12 will be disengaged from the notches 10 in the member 8, and when the pedal 17 is released springs 19, 20 urge the leaves 11, 12 into their positions of engagement shown in Figure 3 and the pedal 17 to its upward position shown in which positions of the parts the supporting bracket 9 is supported in vertically adjusted position.

A counterbalancing compression spring 21 is disposed within the member 8 and bears against the bottom plate 22 of the base 1 and against the supporting bracket 9. This spring 21 partially counterbalances the weight of the chair parts mounted on the supporting bracket 9 thus facilitating the raising of said parts by the operator when vertically adjusting the chair.

A carriage 23 of generally rectangular formation and constructed of metal tubing, has its side portions 24, 25 slidably disposed on laterally extending flanges 26, 27 of the supporting bracket 9, and the carriage 23 and chair parts carried thereby are thus forwardly-rearwardly movable to adjusted positions. A laterally extending plate 28 secured to the left hand side of the supporting bracket 9 (see Figs. 1 and 2) is provided with a forwardly-rearwardly extending row of apertures 29 in any one of which apertures a plunger 30 vertically slidably mounted on the carriage 23 may be engaged. A compression spring 31 normally urges the plunger 30 into engagement with the plate 28, and a hand lever 32 fulcrumed at 33 on the carriage 23 is operably connected to the plunger to disengage the latter from the apertured plate 28 when it is desired to adjust the chair in a forward or rearward direction.

The chair-supporting frame 2 of the structure has its lower rearward portion swingably mounted at 34 on the rearward end of the carriage 23. A depending arm 35 is turnably mounted on the front portion 36 of the frame 2 and this arm 35 is provided with a plurality of vertically spaced, horizontal apertures 37 adapted to receive and engage a forwardly projecting lug 38 secured as by welding to the front portion 39 of the carriage 23. A wire spring 40 of generally inverted U-shape has its bight portion 41 anchored to pins 42 on the frame 2 and its depending leg portions 43 secured in stamped-out hooks 44 on opposite sides of the depending arm 35. The spring 40 normally urges the arm 35 in a rearward position of engagement with the lug 38. A handle 45 on the lower end of the arm 35 is provided for disengaging the arm 35 when it is desired to effect vertical adjustment of the forward portion of the frame 2 and such adjustment effects adjustment of the pitch of the frame

2, and the seat 3 and back 4, relative to the carriage 23 and the base of the structure.

The seat 3 is rigidly secured to the frame 2 as by means of metal straps 46 secured to the lower side portions 47 of the frame 2 and secured to cross-braces or blocks 48 on the seat 3 as by means of screws 49. Thus the angular inclination of the seat is varied according to the adjustment of the pitch of the frame 2.

The chair back 4 is further adjustable in relation to the supporting frame 2 and the seat 3 of the structure. The back 4 has a sheet metal back panel 50 provided with rearwardly extending lugs 51 at the lower opposite sides thereof and these lugs 51 are pivotally connected to similar, forwardly extending lugs 52 on the upper side portions 53 of the supporting frame 2. The chair back 4 is thus mounted at its lower rear swingably about a horizontal axis on the frame 2. The chair back has a recess 54 in the approximate center rear thereof, and a housing 55 is secured in the recess 54 as by means of side flanges 56 welded to the back panel. A screw 57 has its upper and lower ends 58 and 59 respectively journalled in upper and lower flanges 60, 61 of the housing 55, the screw 57 being thus turnable about a fixed axis in a vertical plane. A block 62 is threaded on the screw 57 and is axially movable thereon in response to turning movement of the screw. A link 63 is provided with side flanges 64, 65 which are pivotally connected to opposite sides of the block 62 at their lower or forward ends. The upper or rearward ends of this link's side flanges 64, 65 are pivotally connected to a bracket 66 secured as by welding to the upper horizontal portion 67 of the frame 2. A knurled adjustment wheel 68 is secured on the lowermost end of the screw 57, and it will be seen that as this wheel is manually turned on the block 62 and the lower or forward end of the link 63 are moved upwardly from their positions shown in Figure 3 to positions in which the link 63 becomes more nearly horizontal and the pitch of the chair back 4 relative to the seat 3 may thus be adjusted.

Means are provided for preventing the inadvertent withdrawal of the entire seat and back assembly with the member 8 depending therefrom, from the base structure, which means comprises a lock pin 69 extending through aligned apertures in the base 1 and the partitioning member 7 and into a vertical slot 70 in a plate 71 whose opposite side edges are secured to the opposite side walls of the member 8. Contact of the lower end of the slot 70 with this lock pin 69 prevents removal of the member 8 from the casing member 6 when the pin is in its rearward position shown in Figure 3, and the pin is normally caused to assume said position by a spring 72 interposed between the base 2 and a collar 73 on the pin. The upper part of the chair structure may, however, be disassembled from the base part by manually withdrawing the lock pin 69 and lifting the seat and back assembly from the base.

It will thus be seen that the invention provides a novel chair which is fully adjustable as to height and forwardly-rearwardly moved position, and also as to slope of seat relative to the base and slope of back relative to the seat, and while but one specific embodiment of the invention has been herein shown and described, it will be understood that certain details thereof may be modified or omitted without departing from the spirit of the invention as the same is defined by the following claims.

I claim:

1. In a chair having a supporting frame, a seat mounted on the frame and a back having its lower end connected to the frame swingably about a horizontal axis: means for maintaining the back in selected angularly tilted positions comprising a block mounted for up and down movement on the back above the swinging connection of the back to the frame; and a link having at one end thereof a fixed pivotal connection with the frame and having its other end pivotally connected to said block, whereby up and down movement of the block effects angular turning movement of the link relative to the frame so that said link maintains the back in selected angularly tilted positions.

2. In a chair having a supporting frame, a seat mounted on the frame and a back having its lower end connected to the frame swingably about a horizontal axis: means for maintaining the back in selected angularly tilted positions comprising a screw journalled on the back for turning movement about a fixed upright axis above the swinging connection of the back to the frame; a block mounted for up and down movement on the screw; and a link having at one end thereof a fixed pivotal connection with the frame and having its other end pivotally connected to said block, whereby turning movement of the screw effects up and down movement of the block and angular turning movement of the link relative to the frame so that said link maintains the back in selected angularly tilted positions.

3. In a chair having a supporting frame, a seat mounted on the frame and a back having its lower end connected to the frame swingably about a horizontal axis: means for maintaining the back in selected angularly tilted positions comprising a screw journalled on the back for turning movement about a fixed upright axis above the swinging connection of the back to the frame; a block mounted for up and down movement on the screw; and a link having at one end thereof a fixed pivotal connection with the frame and having its other end pivotally connected to said block, whereby turning movement of the screw effects up and down movement of the block and angular turning movement of the link relative to the frame so that said link maintains the back in selected angularly tilted positions; and an adjustment wheel on the screw whereby the screw may be manually turned.

CHESTER J. BARECKI.

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