Sept. 2, 1969 N. W. MIZELLE 3,464,736

RECLINING ROCKING CHAIR FIXTURE

Filed Aug. 21, 1967

3 Sheets-Sheet 1

FIG. 2

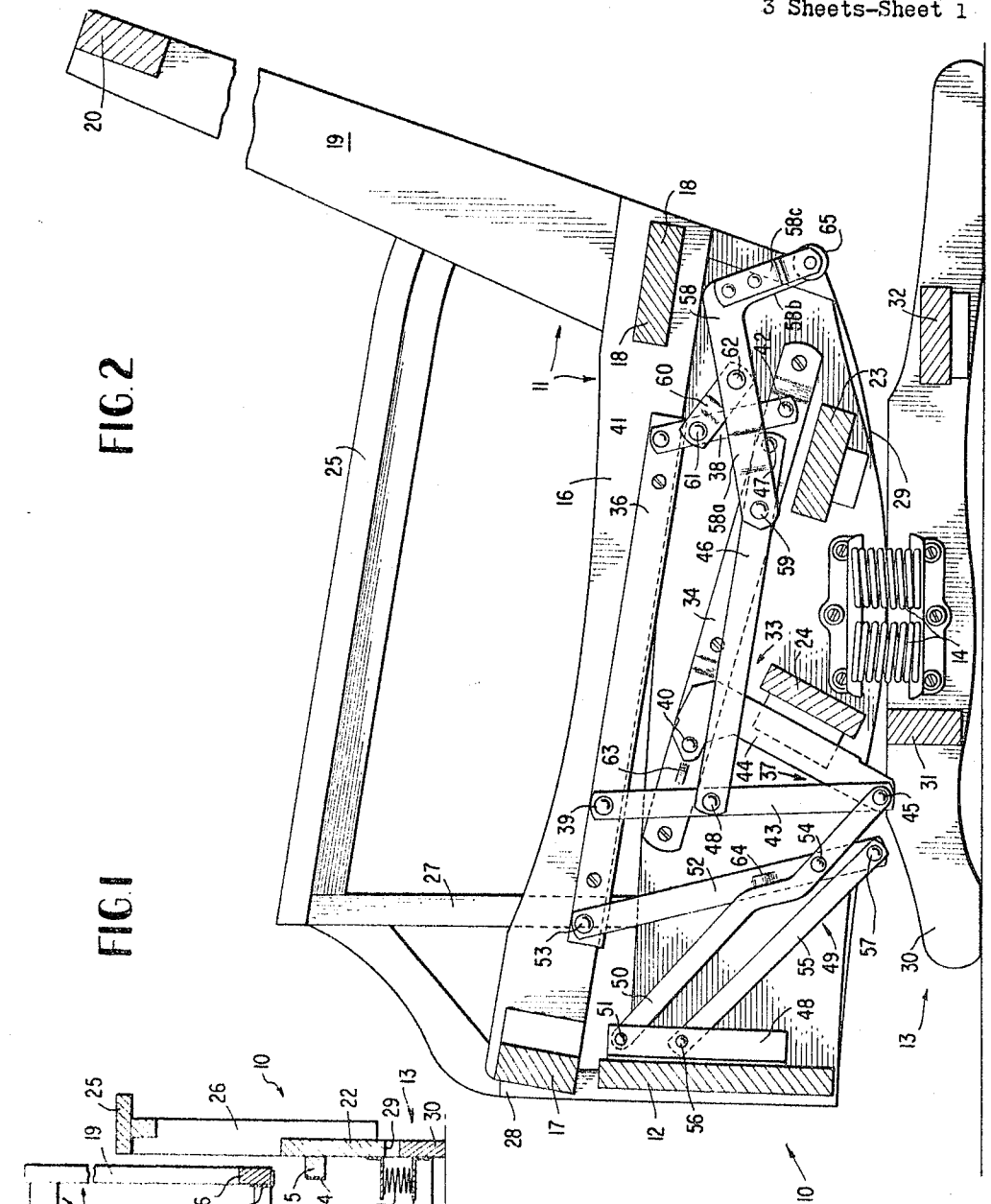
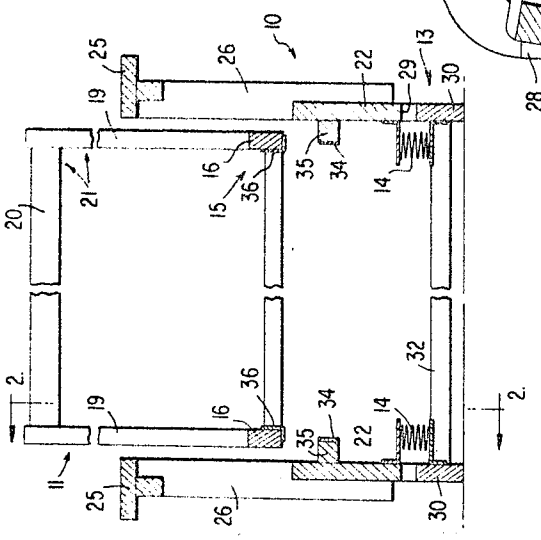


FIG. 1



INVENTOR

NED W. MIZELLE

BY Browne, Schuyler & Beveridge

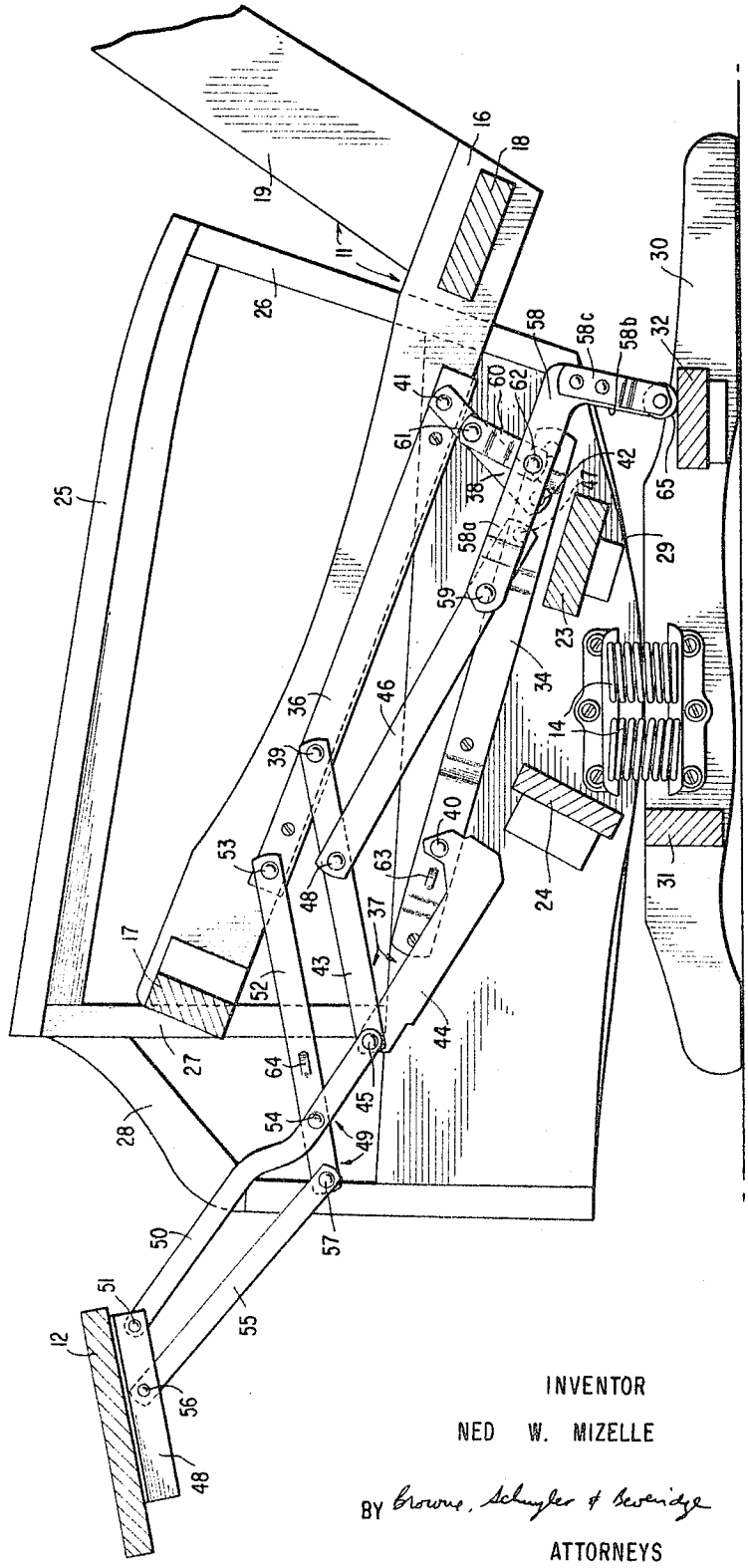
ATTORNEYS

Sept. 2, 1969 N. W. MIZELLE 3,464,736

RECLINING ROCKING CHAIR FIXTURE

Filed Aug. 21, 1967 3 Sheets-Sheet 2

FIG. 3



INVENTOR

NED W. MIZELLE

BY Browne, Schuyler & Beveridge

ATTORNEYS

Sept. 2, 1969 N. W. MIZELLE 3,464,736

RECLINING ROCKING CHAIR FIXTURE

Filed Aug. 21, 1967 3 Sheets-Sheet 3

FIG. 5

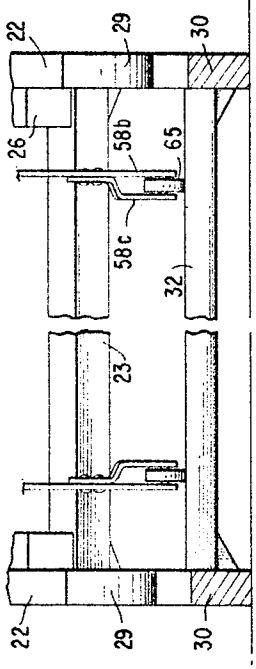
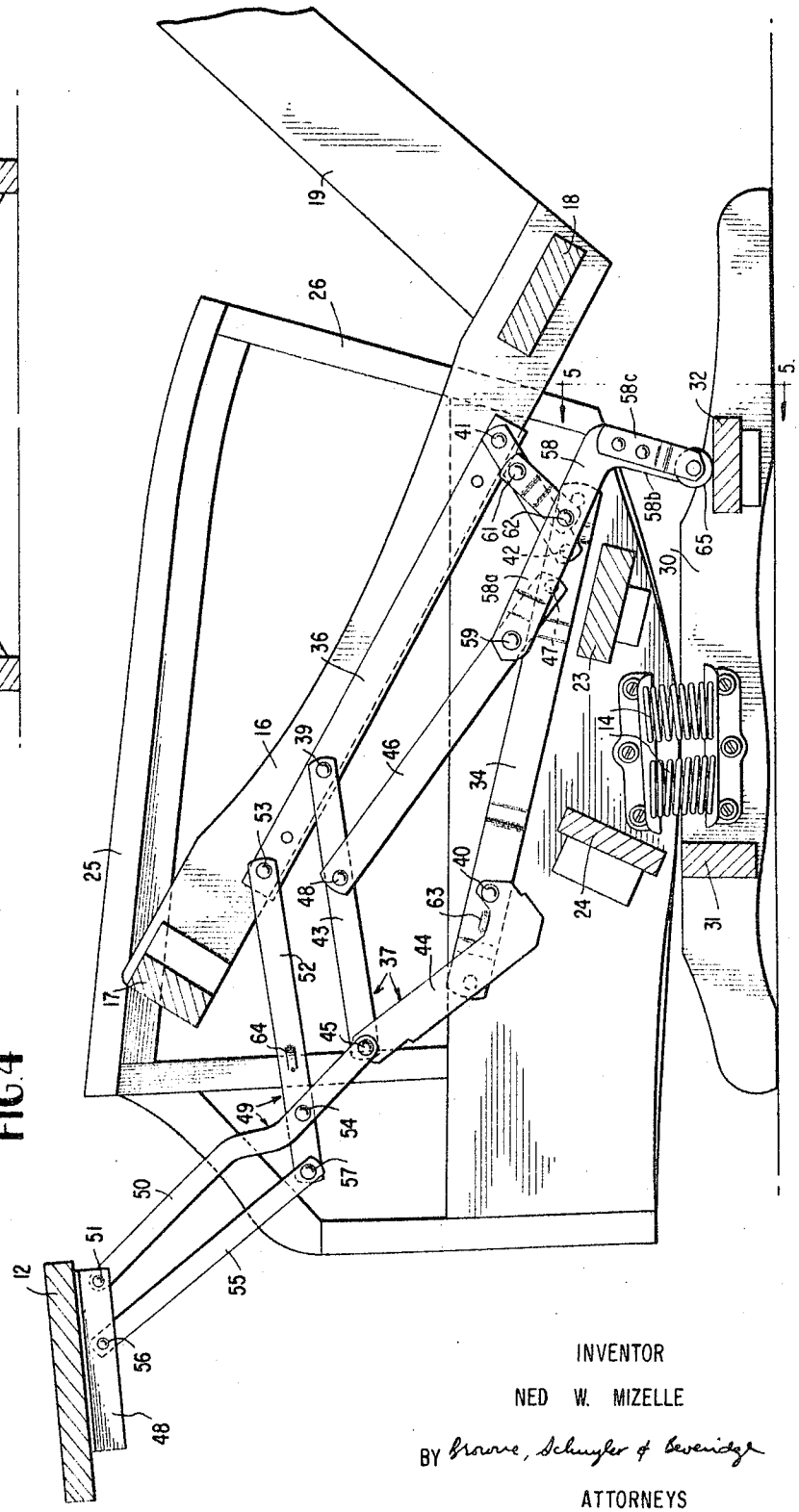


FIG. 4



INVENTOR

NED W. MIZELLE

BY Browne, Schuyler & Beveridge

ATTORNEYS

United States Patent Office 3,464,736 Patented Sept. 2, 1969

3,464,736

RECLINING ROCKING CHAIR FIXTURE

Ned W. Mizelle, High Point, N.C., assignor to General Steel Products, Inc., High Point, N.C., a corporation of North Carolina

Filed Aug. 21, 1967, Ser. No. 662,101
Int. Cl. A47c 3/02
U.S. Cl. 297—84 13 Claims

ABSTRACT OF THE DISCLOSURE

A combined rocking and three position reclining chair having an integral seat-back unit with an extendible leg rest, constrained compound linkage means for swinging the seat-back unit from an upright chair position to an intermediate position with a motion that is principally translatory, the linkage reaching a dead center position at the intermediate chair position and thereafter swinging the seat-back unit to a reclining position with a motion which is principally rotary; the linkage means extending the leg rest between upright and intermediate positions and keeping it extended in reclining position; and there being means actuated by the linkage for automatically locking the chair against rocking both in intermediate and reclining positions.

This invention relates to an improved fixture for supporting the integral seat and back unit and the extendible leg rest of a positionable reclining platform rocking chair incorporating rocker lock-out provisions for preventing rocking motion to the rear when the leg rest is extended in the intermediate and fully relined positions of the chair. In particular this relates to a two-way, three positions type of lockable fixture in which the term "two-way" means that the seat and back are fixed relative to each other and move as a unit relative to the chair chassis while extending the leg rest and the term "three position" means that the fixture supports the seat and back unit and the leg rest in each of three different positions relative to the chair chassis which is rockably supported on a rocker base. The three positions are the (1) normal upright position in which the seat is generally horizontal and the back extends upwardly therefrom to establish a comfortable, upright, normal seating position with the leg rest retracted to the seat, (2) a fully reclined position in which the seat and back unit are moved rearwardly on the chair chassis from the normal position and are tilted rearwardly through a substantial angle with the leg rest extended ahead of and generally in line with the seat in a comfortable leg supporting position and (3) an intermediate position in which the seat and back unit are rearwardly of the normal position but the angle of inclination is intermediate that of the normal and the fully reclined positions to establish a semi-reclined position.

In the usual two-way, three position fixed base chair the occupant adjusts the position of the seat-back unit and the leg rest by applying forward or rearward pressure on the arm rests and altering the relative amounts of pressure on the seat and the leg rest to drive the chair to the desired position in which the occupant is either in a semi-reclined or a fully reclined position. The two-way, three position fixed base reclining chair is well-known and very popular but certain problems become involved in combining the reclining chair chassis with the rocker base and mechanism of a platform rocker. Such a combined chair in the normal upright position with the leg rest retracted provides a comfortable rocking chair. However, when the seat and back unit is swung rearwardly to the intermediate position or tilted further rearwardly to the fully reclined position with the leg rest extended, the weight of

the chair occupant is shifted to the rear with the occupant's head lowered and feet raised so that rearward rocking motion of the chair chassis on the rocker must be prevented in order that the chair occupant does not inadvertently become reclined to an uncomfortable or unstable position. Since the chair occupant gradually assumes a more rearwardly reclining position as the chair moves between the normal and the intermediate positions, the rocking prevention device should come gradually into effect during this interval to prevent him from inadvertently rocking rearwardly to an unstable position. Further, in moving the full range of the three positions, the motion is more comfortable to the occupant and he can assume any desired intermediate position more readily if the seat-back unit and the leg rest operate in a continuous motion uninterrupted by intermediate stops. In designing reclining chair fixtures which operate through a range of three distinct positions, since two distinct phases of motion are required in moving between the normal and the intermediate position and between the intermediate and the fully reclined position, this motion is most easily accomplished by utilizing a system of stops which block relative motion between certain pivoting links of the fixture during one or both phases of the motion of the fixture. However, the employment of stops and the two distinct phases of motion are undesirable as these stops exactly establish the intermediate position of the chair and the relative position of the leg rest. The intermediate position of the chair for one person, and particularly the position of the leg rest, is not necessarily the most comfortable position for everyone and it is obviously quite desirable to avoid any fixed intermediate position. Furthermore, a linkage system utilizing stops does not provide a smooth transition between the two distinctive phases and the occupant is subjected to a noticeable change in force in carrying the chair through the intermediate position when the stops come into play and a different set of links must be actuated from rest.

It is, therefore, an object of this invention to provide a two-way, three position fixture for a reclining platform rocker in which the rocking action can be locked-out when the chair reaches the intermediate, semi-reclined position.

A further object of this invention is to provide a fixture with a rocker locking device for supporting the seat and back unit and leg rest of a three position, reclining chair in which the supporting fixture linkages move in a continuous motion uninterrupted by intermediate stops through the full range of motion of the chair.

A further object of this invention is to provide a locking arrangement for a two-way, three position constrained linkage type fixture in which the locking action is brought into effect gradually during the first phase of motion between the normal and intermediate positions so that the rearwardmost inclination of the occupant in the rocker is moderately constant between the normal and intermediate positions.

The foregoing and other objects are achieved in a fixture in which an integral seat-back unit is attached to a seat link which is swingably supported from a base member attached to the chair chassis by front and rear support links with a constraining link member pivotally connected between the front supporting links and the base member to establish a compound linkage system having a deadcenter position generally at the intermediate position which permits a principally translational type of swinging motion of the seat link on the front and rear support links in moving between the normal and intermediate positions and a principally rotational motion of the seat link about the base member in moving between the intermediate and fully reclined positions. A locking

arm with a bearing surface is pivotally mounted on one of the members, base member or constraining link member, and is pivotally connected to the rear support link by a connecting link so that motion of the rear support link in moving the seat link between the normal and the intermediate positions raises the bearing surface into and out of contact with the rocker base. The fixture supports a leg rest link, which is affixed to the leg rest, through a system of leg rest supporting links which are pivotally connected between the leg rest link, the front support links and the seat link for moving the leg rest between the retracted position and the extended position on relative motion of the support links and the seat link in moving between the normal and intermediate positions.

Other objects and features of the invention will be apparent by reference to the following description which is illustrated by the attached drawings in which:

FIGURE 1 is a schematic front elevation of the chair in section in which the structural details of fixture which supports the seat-back unit and the leg rest are omitted.

FIGURE 2 is a sectional side elevation of the chair taken along section lines 2—2 of FIGURE 1 with the chair chassis in the normal, upright position and the rocker lock retracted to permit rocking of the chair chassis on the rocker base.

FIGURE 3 is a sectional side elevation similar to FIGURE 2 in which hte chair chassis is in the intermediate position with the seat-back unit moved rearwardly and tilted to a semi-reclined position, the leg rest extended ahead of the seat in a leg supporting position and the rocker lock in the extended position to lock the chair against rearward rocking motion on the rocker base.

FIGURE 4 is a sectional side elevation similar to FIGURES 2 and 3 but with the chair chassis in the fully reclined position and the rocker lock in the extended position locking the chair against rearward rocking motion.

FIGURE 5 is a partial rear sectional elevation taken along section lines 5—5 of FIGURE 4.

The chair chassis **10**, on which the seat and back unit **11** and the leg rest **12** are movably supported, rests on the fixed rocker base **13** with the chair chassis **10** and the rocker base being connected by conventional rocker springs **14**.

The seat and back unit **11** is a unitary structure of conventional frame construction in which a generally rectangular seat frame **15** includes two side frames **16** connected at the front by the front frame **17** and at the rear by the rear frame **18** which also connects the lower ends of the two vertically extending side frames **19** of the back which are connected by the top frame **20**. A suitably upholstered seat (not illustrated) with the usual inner springs and padding is supported by the seat frame **15** and an upholstered and suitably padded back (not illustrated) is supported within the generally rectangular back frame **21** defined by the rear frame **18**, the side frames **19** and the top frame **20**.

The chair chassis **10**, in which the seat and back unit **11** described above and the leg rest **12** are movably supported by a fixture to be described, is the usual frame construction having two widely spaced horizontally extending side rails **22** connected by a rear cross rail **23** and a front cross rail **24**. Horizontally extending chair arms **25** are supported above each of the side rails **22** by vertically extending rear arm supports **26** and front arm supports **27** and **28**, which are affixed at their lower ends to the side rails **22**. The lower surface **29** of each of the side rails **22** has a longitudinal profile shape which is arcuate so that the side rails **22** and the chair chassis **10** may rock on the flat top surfaces **30***a* of the rocker base side rails **30**. The center portions of the side rails **22** and **30**, respectively, of the chair chassis and the rocker base are resiliently connected by the previously mentioned rocker springs **14**. The fixed rocker base **13** comprises the two spaced, horizontally extending side rails **30** which rest on the floor and are connected by a front base rail **31** and a rear base rail **32**.

The seat and back unit **11** and the leg rest **12** are movably supported from the chair chassis **10** by means of two fixtures **33** which are affixed to the opposite side rails **22** of the chair. Since the two fixtures are left and right hand fixtures, respectively, which are mirror images of one another, only one of the fixtures will be described and illustrated in the drawings. Each fixture **33** has a mounting member **34** which is bolted or otherwise affixed to an inwardly extending ledge **35** of the chair side rail **22** to extend longitudinally of the side rail at a small inclination to the horizontal, all other links of the fixture being directly or indirectly supported on the mounting member **34**. A seat link **36**, in the form of a channel bolted to the sides and bottom of the seat side frame **16**, is swingably supported from the mounting member **34** by front support link means **37** and a rear support link **38**, the front support link means pivotally interconnecting a front seat pivot **39** on the forward portion of the seat link **36** and a first fixed pivot **40** at the forward end of the mouting member **34**, and the rear support link **38** pivotally interconnecting a rear seat pivot **41** and a second fixed pivot **42** at the rear of the mounting member **34**. The front support link means **37** comprises a first front support link **43** and a second front support link **44** which are pivotally connected end-to-end at **45**, the other two ends being pivotally connected, respectively, to the front seat pivot **39** and the first fixed pivot **40**, as previously indicated. Thus the seat link **36** is swingably supported from the mounting member **34** by the front and rear support links **38**, **43** and **44** so that it can move both translationally and rotationally with respect to the mounting member **34**. A stop **63** in the form of a projection from the mounting member **34** is located ahead of the first fixed pivot **40** in a position to engage the edge of the second front support link **44** when the chair is in the fully reclined position. A constraining link member **46** is pivotally connected to the mounting member **34** by pivot **47** just forwardly of the second fixed pivot **42**, and the other end of the constraining link member is pivotally connected by pivot **48** to the first front support link **43** intermediate its ends.

A leg rest link **48***a*, affixed to the bottom of the leg rest **12**, is supported from the seat link **36** and the front support link means **37** by an extendible leg rest supporting link system **49**. The leg rest extension system includes a first leg rest support link **50** which is pivotally connected at one end by the pivot **51** to the rear of the leg rest link **48***a* and at the other end to the pivotal connection **45** between the first and second front support links, a second leg rest support link **52** which is pivotally connected at one end by pivot **53** to the forward end of the seat link **36** and intermediate its ends is pivotally connected by pivot **54** to the first leg rest support link intermediate the pivots **51** and **45**, and a third leg rest support link **55** which is pivotally connected at one end to the leg rest link **48***a* by the pivot **56** forwardly of the pivot **51** and at the other end is pivotally connected by the pivot **57** to the other end of the second leg rest support link **52**. It is clearly evident that the leg rest link **48***a* and the leg rest **12** are supported by the scissors type linkage arrangement **49** which is extended and retracted by the swinging motion of the front support link means **37** and the seat link **36**. A stop **64** in the form of a detent on the second leg rest support link **52** is located to contact the edge of the first leg rest support link **50** when the chair is in the normal position.

An L-shaped locking arm **58** has a longitudinal leg **58***a* and an upright leg **58***b*. The longitudinal leg **58***a* is connected at one end by the pivot **59** to the restraining link member **46** intermediate its ends and slightly forwardly of the pivot **47** to the mounting member **34**, the intermediate portion of the longitudinal leg **58***a* being connected to an intermediate point on the rear support link **38** through the locking arm extension link **60**

which has pivotal connections **61** and **62** at its ends to the rear support link **38** and said leg **58***a*, respectively. An offset member **58***c* is bolted or riveted to one side of the upright leg **58***b* of the locking arm **58** with its lower portion parallel to the upright leg **58***b*; and a roller **65** is rotatably mounted between the offset **58***c* and the lower end of the leg **58***b* to provide the bearing surface which locks the chair against rocking motion as will be subsequently explained. As can be seen from the explanation of the function of the locking arm **58**, the pivot **59** at the inner end of the arm could be connected to the mounting member **34** and carry out its intended function, the connection to the constraining link member **46** being a matter of convenience to avoid interference between the various links as they are moved through the various chair positions.

The various components of the chair and the links of the fixture **33** are shown in the normal upright position of the chair in FIGURE 2. In this figure the seat and back unit **11** is supported by the seat link **36** from the mounting member **34** with the leg rest **12** supported by the leg rest link **48***a* retracted against the front of the chair chassis beneath the forward portion of the seat frame **15**. The locking arm **58** is in the retracted position in which the roller **65** is lifted well clear of the rear base rail **32** of the rocker base and the chair chassis **10** is free to rock back and forth on the side rails **29** of the rocker base.

When the chair occupant wishes to assume a more reclined position in the chair, he leans back against the back of the chair and exerts forward pressure on the side arms **25** of the chair. This pressure exerted against the seat link **36** through the chair seat causes the seat link **36** to swing rearwardly relative to the mounting member **34** about the front support link means **37** and the rear support link **38** to move the seat link in a general translational type of swinging motion to the position shown in FIGURE 3 in which the seat link **36** is moved rearwardly relative to the mounting member **34** from the normal position of FIGURE 2, and tilted more to the rear than in said position. As the seat link **36** moves rearwardly, the motion transmitted to the leg rest link **48***a* through the scissor like leg rest extension linkage system **49** causes the leg rest link **48***a* to move forwardly and swing upwardly to place the leg rest **12** well ahead of and generally in line with the seat frame **15** when the chair reaches the intermediate position of FIGURE 3. Also during this motion between the normal and intermediate positions, the rearward motion of the rear support link **38** through the locking arm extension link **60** causes the locking arm **58** to pivot downwardly about the pivot **59** to bring the roller **65** at the lower end of the locking arm **58** into contact with the top surface of the rear base rail **32** of the rocker base. Thus when the seat and back unit of the chair reaches the intermediate position of FIGURE 3, the contact between the roller **65** and the rocker rail **32** prevents any rearward rocking of the chair chassis **10** on the rocker base **13**.

It will be noted from FIGURE 2 that in the normal position of the chair the pivot point **45** between the first and second front support links **43** and **44** is below a plane passing through the rear seat pivot **41** and the first fixed pivot **40** on the forward portion of the mounting member **34**. While the pivot **45** lies below this plane the movement of the seat link **36** relative to the mounting member **34** is a swinging motion which is principally translatory, with both front seat support links **43** and **44** and link **38** rotating in one direction so that there is a relatively small amount of angular movement of the seat link **36** about the mounting member **34**. However, when the pivot **45** between the front support links **43** and **44** passes above the plane through the rear seat pivot **41** and the first fixed pivot **40**, the second front support link **44** continues to rotate about the first fixed pivot **40** in said one direction, while the first front support link **43** and the rear support link **38** no longer pivot in the same direction, thus imparting to the seat link **36** a swinging motion which is principally rotary about the rear seat pivot **41** so as to tilt the seat link **36** to the greater angle of the fully reclined position indicated in FIGURE 4. It can be seen that the intermediate chair position is established by the relationship between the pivot **45**, the first fixed pivot **40**, and the rear seat pivot **41**, the fixture being at a deadcenter position when these three pivots are in line, with the principally translatory swinging motion of the seat link **36** occurring when the pivot **45** is below deadcenter, and the principally rotary swinging motion of the seat link occurring when the pivot **45** is above deadcenter. Actually FIGURE 3 shows the pivot **45** slightly above the plane through the rear seat pivot **41** and the first fixed pivot **40** so that in this figure the fixture has passed slightly beyond the intermediate position toward the fully reclined position.

When the fixture moves between the intermediate position represented by FIGURE 3 and the fully reclined position indicated in FIGURE 4, the leg rest extendible link system **49** continues to carry the leg rest link **48***a* and the leg rest upwardly in the same general relation to the seat link **36** that it occupied in the intermediate position. The stop **63** on the base member contacting the edge of the second front support link **44** at the fully reclined position prevents further extension of the linkage system beyond the fully reclined position. As the seat link **36** is rotated relative to the mounting member **34** in moving between the intermediate and the fully reclined position of FIGURE 4, there is a small amount of motion in the rocker locking arm which is accommodated by movement of the roller **65** forwardly along the top surface of the rear rail **32**.

The motion of the various links in moving the chair from the fully reclined position through the intermediate position to the normal position is the opposite of that previously described, the roller **65** of the rocker locking arm **58** leaving contact with the surface of the rear base rail **32** at substantially the same time that the pivot **45** of the front support links passes the deadcenter position in line with the first fixed pivot **40** and the rear seat pivot **41** at the intermediate chair position. As the chair progresses toward the normal position from the intermediate position, the spacing between the rocker locking arm roller **65** and the rocker base rear rail **32** increases so that the chair may be rocked rearwardly in increasing angular movements as the chair progresses toward the normal upright position. Contact between the edge of the first leg rest support link **50** and the stop **64** on the second leg rest support link at the normal position prevents further contraction of the links beyond that position.

While the above matter describes and illustrates a preferred embodiment of the invention, it should be understood that the invention is not restricted solely to the described embodiment but that it covers all modifications which should be apparent to one skilled in the art.

What is claimed is:

1. A fixture with a rocker locking mechanism for movably supporting an integral seat-back unit and an extendible leg rest on a chair chassis which is rockably supported on the base portion of a platform rocking chair in which the seat-back unit and the leg rest are movable between: (1) a normal chair position in which the seat-back unit is an upright seating position and the leg rest retracted to the seat, (2) a fully reclined chair position in which the seat-back unit is moved to the rear and tilted rearwardly relative to the chair chassis from the normal position with the leg rest extended ahead of and generally in line with the seat in a leg supporting position and the chair chassis locked against rearward rocking motion, and (3) an intermediate chair position in which the seat-back unit is intermediate the upright and fully reclined positions with the leg rest in the extended, leg supporting

position and the chair chassis locked against rearward rocking motion, said fixture comprising:

a mounting member affixable to the chair chassis and having a first fixed pivot and a second fixed pivot;

a seat link affixable to the seat-back unit and having a front and a rear seat pivot;

front support link means pivotally connected together end-to-end, and including first and second front support links pivotally connected to said front seat pivot and to said first fixed pivot, respectively;

a rear support link with its ends pivotally connected to said second fixed pivot and to said rear seat pivot, respectively;

a constraining link member having a first pivotal connection to said mounting member, and spaced therefrom a second pivotal connection to a front support link to provide a compound linkage system with a deadcenter position which is generally at said intermediate chair position, said system between the normal chair position and said deadcenter position having a movement in which the front and rear support links all rotate in one direction relative to the mounting member to impart to the seat link a swinging motion which is principally translatory, said system between said deadcenter position and said fully reclined chair position having a movement in which only said second front support link continues to rotate in said one direction to impart to the seat link a swinging motion which is principally rotary;

a leg rest link affixable to the leg rest;

leg rest supporting link means pivotally connecting said leg rest link to a front support link and said seat link for movement of said leg rest between the retracted and the extended positions when moving between said normal and intermediate positions;

a rocker locking arm having a bearing surface and spaced therefrom a pivotal connection to one of said members; and

link means for rotating said rocker locking arm about its pivotal connection to move said bearing surface from a retracted position clear of the rocker base portion to an extended position in contact with the rocker base portion at said intermediate position and between said intermediate and fully reclined positions to prevent the chair chassis from rocking rearwardly on the rocker base portion in the latter positions.

2. The fixture of claim 1 in which the second pivotal connection of the constraining link member is to the first front support link and at deadcenter position the pivotal connection between the first and second front support links, said second pivotal connection of said constraining link member and said rear seat pivot are aligned.

3. The fixture of claim 1 in which said rocker locking arm is an L-shaped element and is pivotally connected at one end to said constraining link member intermediate the first and second pivotal connections of said member, and said bearing surface is at the other end of said arm.

4. The fixture of claim 1 in which the link means for rotating the rocker locking arm comprises a rocker lock extension link having a first pivotal connection to said rocker locking arm and a second pivotal connection to said rear support link.

5. A fixture with a rocker locking mechanism for movably supporting an integral seat-back unit on a chair chassis which is rockably supported on the base portion of a platform rocking chair in which the seat-back is movable between: (1) a normal chair position in which the seat-back unit is in an upright position, (2) a fully reclined chair position in which the seat-back unit is moved to the rear and tilted rearwardly relative to the chair chassis from the normal position and the chair chassis locked against rearward rocking motion, and (3) an intermediate chair position in which the seat-back unit is intermediate the upright and fully reclined positions and the chair chassis locked against rearward rocking motion, said fixture comprising:

a mounting member affixable to the chair chassis and having a first fixed pivot and a second fixed pivot,

a seat link affixable to the seat-back unit and having a front seat pivot and a rear seat pivot,

front support link means pivotally connected together end-to-end and including first and second front support links pivotally connected to said front seat pivot and to said first fixed pivot, respectively,

a rear support link with its ends pivotally connected to said second fixed pivot and to said rear seat pivot, respectively,

a constraining link member having a first pivotal connection to said mounting member, and spaced therefrom a second pivotal connection to a front support link to provide a compound linkage system with a deadcenter position which is generally at said intermediate chair position, said system between the normal chair position and said deadcenter position having a movement in which the front and rear support links all rotate in one direction relative to the mounting member to impart to the seat link a swinging motion which is principally translatory, said system between said deadcenter position and said fully reclined chair position having a movement in which only said second front support link continues to rotate in said one direction to impart to the seat link a swinging motion which is principally rotary;

a rocker locking arm having a bearing surface and spaced therefrom a pivotal connection to one of said members, and

link means for rotating said rocker locking arm about its pivotal connection to move said bearing surface from a retracted position clear of the rocker base portion to an extended position in contact with the rocker base portion at said intermediate position and between said intermediate and fully reclined positions to prevent said chair chassis from rocking rearwardly on said rocker base portion in said latter positions.

6. The fixture of claim 5 in which the front support link means consists of two directly pivotally connected links.

7. The fixture of claim 5 in which the rocker locking arm is an L-shaped element with one end pivotally connected to one of said members and said bearing surface is at the other end of said arm.

8. The fixture of claim 5 in which the link means for rotating the rocker locking arm comprises a rocker lock extension link having a first pivotal connection to said rocker locking arm and a second pivotal connection to said rear support link.

9. A reclining platform rocking chair comprising

a rocker base,

a chair chassis rockable on said rocker base,

an integral seat-back unit,

linkage means movably supporting said seat-back unit on said rocker base for movement between: (1) a normal chair position with said seat-back unit in an upright seating position, (2) a fully reclined chair position in which said seat-back unit is moved to the rear and tilted rearwardly relative to the chair chassis from the normal position and the chair chassis locked against rearward rocking motion, and (3) an intermediate chair position in which said seat-back unit is intermediate said normal and fully reclined positions and the chair chassis locked against rearward rocking motion, said linkage means comprising:

front support link means pivotally connected together end-to-end and including a first link having means for pivotally connecting one of its ends to a forward portion of said seat-back

unit, and a second link having means for pivotally connecting one of its ends to the forward portion of said chair chassis,

a rear support link with one end having means for pivotally connecting said rear support link to the rear portion of said seat-back unit and ing other end having means for pivotally connecting the rear support link to the rear portion of said chair chassis, and

a constraining link member having means at one end for establishing a pivotal connection to said chassis and at the other end having a pivotal connection to a front support link to provide a compound linkage system wtih a deadcenter position which is generally at said intermediate chair position, said system between the normal chair position and said deadcenter position having a movement in which the front and rear support links all rotate in one direction relative to the chair chassis to impart to the seat-back unit a swinging motion which is principally a compound linkage system with a deadcenter position and said fully reclined chair position having a movement in which only said second front support link continues to rotate in said one direction to impart to the seat-back unit a swinging motion which is principally rotary;

a rocker locking arm having a bearing surface, and spaced therefrom a pivotal connection to one of said chair chassis and said restraining link member, and

linkage means for rotating said rocker locking arm about its said pivotal connection to move said bearing surface from a retracted position clear of the rocker base to an extended position in contact with the rocker base at said intermediate position and between said intermediate and fully reclined positions to prevent said chair chassis from rocking rearwardly on said rocker base in said latter positions.

10. The fixture of claim **9** in which the rocker locking arm is an L-shaped element with one end pivotally connected to one of said members and said bearing surface is at the other end of said arm.

11. The fixture of claim **9** in which the link means for rotating the rocker locking arm comprises a rocker lock extension link having a first pivotal connection to said rocker locking arm and a second pivotal connection to said rear support link.

12. The fixture of claim **7** in which the link means for rotating the rocker locking arm comprises a rocker lock extension link having a first pivotal connection to said rocker locking arm and a second pivotal connection to said rear support link.

13. The fixture of claim **10** in which the link means for rotating the rocker locking arm comprises a rocker lock extension link having a first pivotal connection to said rocker locking arm and a second pivotal connection to said rear support link.

References Cited

UNITED STATES PATENTS

3,141,700	7/1964	Fletcher	297—271
3,162,483	12/1964	Fletcher	297—89
3,163,464	12/1964	Martin	297—85
3,243,226	3/1966	Katz	297—85
3,279,847	10/1966	Ré	297—89

JAMES T. McCALL, Primary Examiner

U.S. Cl. X.R.

297—89, 271