

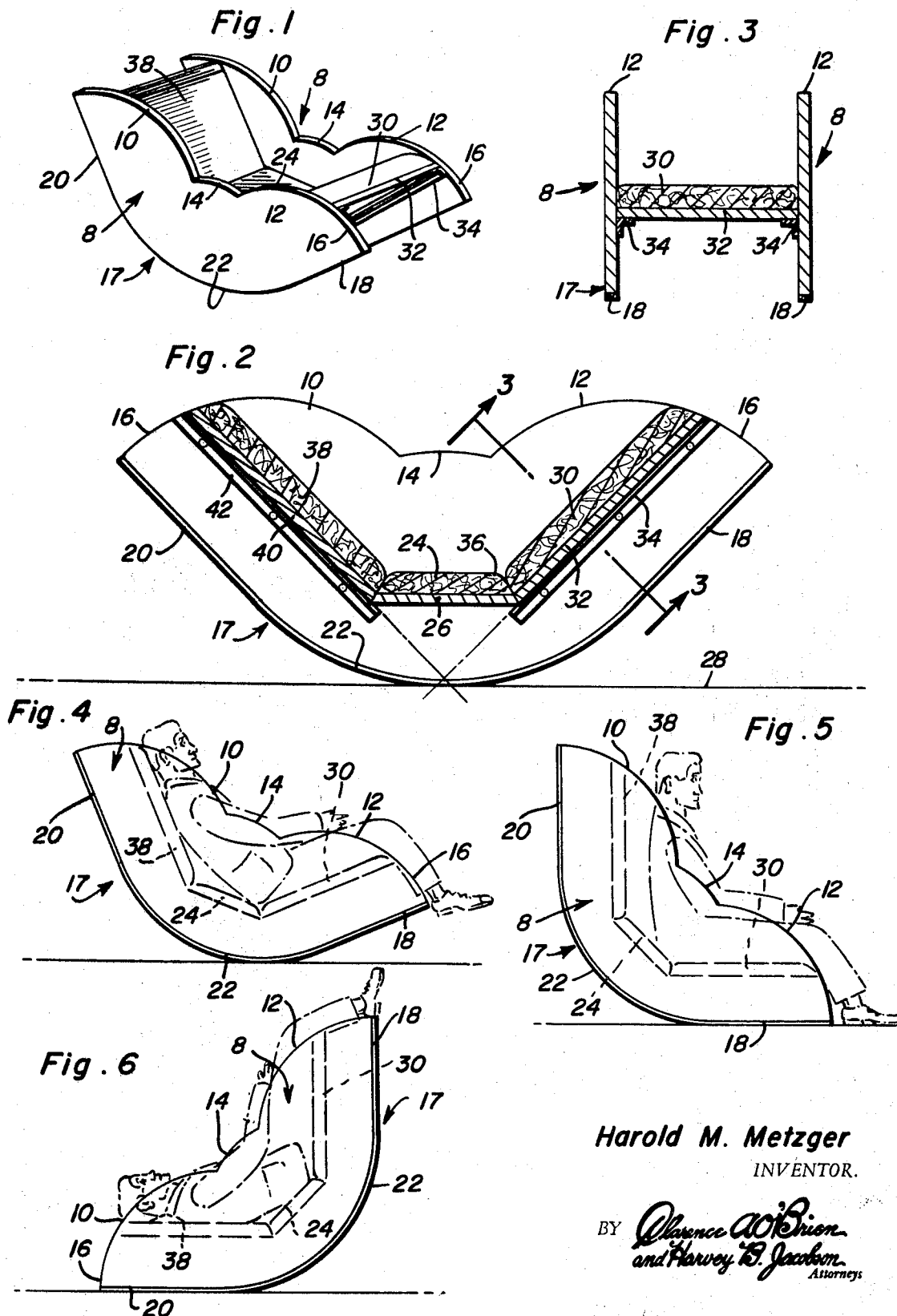
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CHAIR

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CHAIR

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7 Claims

ABSTRACT OF THE DISCLOSURE

A balanced multipurpose rocking, reclining and lounging chair which, generally speaking, cannot overturn when occupied. A pair of spaced parallel symmetrical walls provide coplanar side frames and are marginally delineated to provide the butterfly design desired. Several angularly related pallet-like panels are fixedly suspended in the space between the side frames. The relatively narrow centralized panel fixedly supports a first horizontal cushion. The oblique angled upwardly forwardly inclined panel constitutes a bed or base for a proportionately long second but removable cushion. The oblique angled upwardly rearwardly inclined panel likewise supports the removable third cushion. The upper edges are primarily ornamental. The lower longitudinal edges are unique in that the parallel portions underlying the second and third panels and cushions are straight and are at right angles to each other while the intervening central portions are arcuately curved and provide rockers beneath the first cushion and panel on which it is fixedly bedded.

This invention relates, broadly stated, to chairs and seats and, while capable of being structurally enlarged to function as a couch for more than one person, is expressly designed and adapted to serve as a multipurpose rocking, reclining and lounging chair for a single occupant.

More particularly, the invention pertains to an adaptation whose primary component parts are wooden and wherein several related complementary but distinct cushioned seats are oriented and in fact are simultaneously combinable to provide at least four primary selectable positions for the occupant. By sitting anterior to the center on a seat cushion, an upright stationary seat is had. Secondly, by shifting one's body weight to a substantially centralized position the chair becomes a conventional-type rocking chair. Third, by intentionally shifting the weight to the center of the fixed first or central cushion, the occupant can cradle and nest himself in a relaxed comfortable position—not unlike the position of a cradled astronaut prior to a flight inside a space capsule. In this attitude the occupant's body reclines at minimized stress in a restful easy-to-nap manner. Fourth, by the simple maneuver of placing his hands behind his head when in the above-named position the chair and its occupant now reclines to assume a maximum posterior tilted state thus locating the occupant in an antigravity or slant-board position such as is enjoyed by athletes and is recommended by physical culture advocates and enthusiasts. When the chair is empty, it is self-levelling and can assume a neutral horizontally balanced, but ready-to-use state, accessible from front or back (left or right) ends.

An ordinary rocking chair (not herein shown) and which embodies curvilinear or semicircular rockers lends itself to tilting and overturning either forwardly or backwardly as is well known. The innovation herein comprehended overcomes the stated hazard because of the fact that regular semicircular rockers are replaced by specially delineated floor engaging surfaces which are coordinated with special seating facilities thus making it virtually impossible to accidentally overturn the chair in either direction.

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Briefly, the herein disclosed chair is characterized by two identical flat-faced wooden or equivalent walls disposed in spaced apart parallel relationship and providing companion side frames. The upper longitudinal marginal edges are delineated to define symmetrical selective armrests which, preferably but not necessarily, resemble "butterfly wings." Each lower longitudinal floor contacting edge embodies a straight forward portion, a complementary straight rearward portion at right angles to the forward portion and an intervening portion which is curvilinear and of a predetermined arc. Accordingly, the central curvate portions provide rockers and the straight portions are tangential thereto and provide platform-type seating rests. Three cushions are provided; namely, a relatively narrow first or central cushion and forward and rearward oblique angled selectively usable cushions. The first cushion is normally horizontal and parallel to the floor when in its at rest unoccupied position. It is fixed atop a pallet-like wooden or equivalent panel suspended between requisite portions of the end frames. The second and third (forward and rearward) cushions are removably based or bedded on properly inclined but fixedly mounted pallet-like panels. The rearward cushion provides a backrest when the forward cushion is being used as a seat and vice versa.

To the ends desired and with a chair featuring the aforementioned capabilities it will be evident that the herein disclosed chair is unique in that by merely shifting body weight an occupant can automatically convert from a seat to a rocker, to a cradling recliner and when fully backward to a so-called health promoting slant-board.

In carrying out the principles of the desired concept the chair herein revealed has a permanent central cushion to the left and right of which are second and third longer cushions which have adjacent ends abutting and resting against the respective lengthwise edges of the intervening central or first cushion. These left and right cushions are insertable, removable and adjustable and are in line with the aforementioned forward and rearward straight edges. By occupying one of the removable cushions, either one, the other cushion comes into play as a companion backrest.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

FIG. 1 is a view in perspective of a multipurpose chair constructed in accordance with the present invention and showing the same in its normal or at-rest position.

FIG. 2 is a central longitudinal sectional view on an enlarged scale also showing the chair unoccupied and at rest.

FIG. 3 is a cross section taken on the plane of the section line 3—3 of FIG. 2, looking in the direction of the arrows.

FIG. 4 is a view in side elevation showing the chair with an occupant therein and properly seated to provide an ordinary type rocking chair.

FIG. 5 is a view also in side elevation and showing the occupant seated on the cushion at the right in a manner to provide an upright or stationary seat.

And FIG. 6 is a view also in side elevation and which shows the chair tilted over from right to left (compared to FIG. 5) and wherein the aforementioned anti-gravity or slant-board position of use is attained.

As is evident from the views of the drawing, the aforementioned sidewalls are preferably of uniform cross-sectional thickness from end to end and have flat interior and exterior vertical surfaces. These walls are identical in con-

struction and the manner in which the marginal edges are delineated converts each wall into the desired butterfly shape. Alternatively, these vertical walls constitute the aforementioned elongated side frames. These side frames being alike in construction they are designated by the numeral 8 and each side frame is characterized by a forward end portion, a rearward end portion and an intervening companion central portion. The upper longitudinal edges of the side frames are delineated as at 10, 12 and 14 to define symmetrical selectively usable armrests. The terminal end portions 16 merge with coacting ends of the lower longitudinal specially designed edges 17. Each lower longitudinal edge embodies a straight forward portion 18, a straight rearward end portion 20 which is disposed at right angles to the lengthwise dimension of the straight forward portion 18. The adjacent ends of the portions 18 and 20 are joined by a curvilinear edge portion 22 which is of a predetermined arc or curvature. Accordingly, the central curvate portion in each instance provides a rocker and the straight edge portions 18 and 20 are tangential thereto.

Three cushions are provided and the first cushion 24 here referred to as the permanently mounted central cushion is relatively narrow and is superimposed on and supported by an underlying pallet-like panel 26 which spans the space between the central interior surfaces of the respective side frames 8 and has its respective ends suitably attached thereto. It will be evident from FIG. 2 that when the chair is in the normal unoccupied position (FIGS. 1 and 2) it is self-leveling and the then elevated panel 26 and cushion 24 assume a plane which is horizontal and parallel to the floor or other surface 28. The complementary cushion, the one to the right in FIG. 2 is designated as the upwardly and forwardly inclined cushion 30 and it is more specifically designated as the second cushion. It is approximately twice as long as the first cushion 24 is wide. It is removably based on a correspondingly long pallet or panel 32 which spans the space between the forward portions of the frames and which is securely mounted on suitably anchored angle irons 34. It will be noted that the lower end (FIG. 2) of this cushion 30 abuts the edge portion 36 of the first cushion 24. The correspondingly long and duplicate cushion 38 to the left of the control cushion is inclined upwardly and rearwardly and constitutes the third cushion. This cushion is slidingly supported on the pallet-like panel 40 which in turn is fixedly mounted atop the angle irons 42 secured to the interior sides of the rearward portions of the side frames.

It will be noted that the cushions 30 and 38 are at right angles to each other and that they are parallel to their respectively cooperable forward and rearward end portions 18 and 20 of the aforementioned longitudinal edges.

The self-balancing unoccupied position of the cradle-like chair is shown in FIGS. 1 to 3 inclusive. In FIG. 4 the chair is occupied and the occupant is shown using the same as a reclining rocker. At the right in FIG. 5 the occupant is shown seated on the forward seat or cushion at which time the chair assumes an upright position and provides a stationary seat. At this time the edges 18 of the side frames are flatwise atop the floor or other support surface 28. By resorting to the simple act of placing the hands behind the head the occupant and the chair can be caused to recline to the maximum posterior tilt, leaving the occupant in an antigravity or slant-board position as shown in FIG. 6 and which, as previously mentioned, is the contemplated position preferred by athletes and health enthusiasts. Due to the symmetry of construction the chair maintains the perfect balance in the neutral position in FIG. 2 when not in use.

Due to its simplicity of design and integral mechanical properties, the chair lends itself to maximum comfort to an occupant in any selected position.

By widening the space between side frames 8 the chair will serve more than one person. By widening side frames

still more, the structure becomes a rocking-reclining couch (not shown).

By changing diameter of main arc and adjusting bisecting lines of the chair design, the size can be altered to accommodate children, adults or even "oversized" adults.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. A balanced noncapsizing occupant seating, reclining, cradling and rocking chair comprising: a pair of oppositely disposed duplicate spaced parallel side frames having like upper and lower longitudinal marginal edges joined by corresponding transverse end edges, each frame being elongated and embodying a forward end portion, a like rearward end portion, and an intervening companion central portion uniting said end portions, a first cushion fixedly mounted in and spanning the space between the interior surfaces of the coacting central portions of said frames and disposed in a horizontal plane elevated above and substantially parallel with a level stationary support surface when said chair is not occupied and is standing at rest, a second cushion situated forwardly of the first cushion, spanning the space between the interior surfaces of the forward end portions and normally assuming an upwardly forwardly sloping position at an angle oblique to the horizontality of said first cushion and disposed in a plane generally midway between the upper and lower longitudinal edges of said side frames, and a third cushion complementary to said first and second cushions and situated rearwardly of the rear edge of the first cushion, spanning the space between the interior surfaces of the rearward end portions and assuming an upwardly rearwardly sloping position at an angle oblique to the horizontality of said first cushion and likewise being disposed in a plane approximately midway between the upper and lower longitudinal edges of said side frames, each lower longitudinal edge being characterized by (1) a forward portion oriented with and underlying said second cushion (2) a rearward portion oriented with an underlying said third cushion and (3) a central portion oriented and commensurate in length with and underlying said first cushion, said first cushion being flat and narrow in width compared to said second and third cushions, said second and third cushions being likewise flat, about twice as long as said first cushion is wide, and being bodily insertable into and removable from the space existing between said side frames, the forward portion of each lower longitudinal edge being straight from end to end and being disposed in spaced parallelism beneath said second cushion, the rearward portion of said edge being likewise straight from end to end and likewise being disposed in spaced parallelism beneath said third cushion and being positioned at right angles to said forward straight portion, and said central edge portion being arcuately curved and the radius of said curve being segmental and of a length greater than the width of said first cushion, whereby said forward and rearward edge portions, respectively, are tangential to the respectively cooperable end portions of said arcuately curved central edge portion.

2. The chair defined in and according to claim 1, and wherein all of said cushions are spaced a predetermined distance below the upper edges and a predetermined distance above the lower edges of said side frames, whereby the portions of the side frames projecting above the level of the cushions serve to safely confine the occupant in any one of a number of selectively usable positions.

3. The chair defined in and according to claim 1, and wherein each cushion is superimposed upon and supported by a rigid pallet-like foundation panel, said panels also

spanning the space between said side frames and being parallel with the cushions which are bedded and supported atop the same.

4. The chair defined in and according to claim 3, and wherein each side frame comprises an imperforate wooden wall which is normally in a vertical plane when in use, the interior and exterior vertical surfaces being planar and the upper longitudinal edges being contoured in a manner that said walls are ornamentally butterfly-shaped in side elevation.

5. The chair defined in and according to claim 4, and wherein said chair is not only multipurpose in capability but is approachable for use from either end because of its bilateral symmetry and also wherein it can assume and maintain an upright position of use wherein the occupant can select and use said second cushion as a seat and at which time the third cushion constitutes a backrest and the first cushion bridges the space between adjacent ends of the second and third cushions and can be used for lounging and rocking and also comes into play when desired for antigravity slant-board health promoting purposes.

6. The chair defined in and according to claim 3, and wherein at least two of said panels being mounted on paired angle irons which are fixed to the interior surfaces of said side frames, the angle irons of one pair being at right angles to the angle irons of the other pair.

7. A balanced noncapsizing occupant seating, reclining, cradling and rocking chair comprising: a pair of oppositely disposed duplicate spaced parallel side frames having like upper and lower longitudinal marginal edges joined by corresponding transverse end edges, each frame being elongated and embodying a forward end portion, a like rearward end portion, and an intervening companion central portion uniting said end portions, a first panel fixedly mounted in and spanning the space between the interior surfaces of the coacting central portions of said frames and disposed in a horizontal plane elevated above and substantially parallel with a level stationary support surface when said chair is not occupied and is standing at rest, a second panel situated forwardly of the first panel, spanning the space between the interior surfaces of the forward end portions and normally assuming an upwardly forwardly sloping position at an angle oblique to the horizontality of said first panel and disposed in a plane between the upper and lower longitudinal edges of said side frames, and a third panel complementary to said first and second panels and situated rearwardly of the rear edge of the first panel, spanning the space between the in-

terior surfaces of the rearward end portions and assuming an upwardly rearwardly sloping position at an angle oblique to the horizontality of said first panel and likewise being disposed in a plane between the upper and lower longitudinal edges of said side frames, each lower longitudinal edge being characterized by (1) a forward portion oriented with and underlying said second panel (2) a rearward portion oriented with and underlying said third panel and (3) a central portion oriented and commensurate in length with and underlying said first panel, said first panel being relatively narrow in width compared to said second and third panels, said second and third panels being about twice as long as said first panel is wide, the forward portion of each lower longitudinal edge being straight from end to end and being disposed in spaced parallelism beneath said second panel, the rearward portion of said edge being likewise straight from end to end and likewise being disposed in spaced parallelism beneath said third panel and being positioned at generally right angles to said forward straight portion, and said central edge portion being arcuately curved and the radius of said curve being segmental and of a length greater than the width of said first panel, whereby said forward and rearward edge portions, respectively, are tangential to the respective cooperable end portions of said arcuately curved central edge portion.

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