

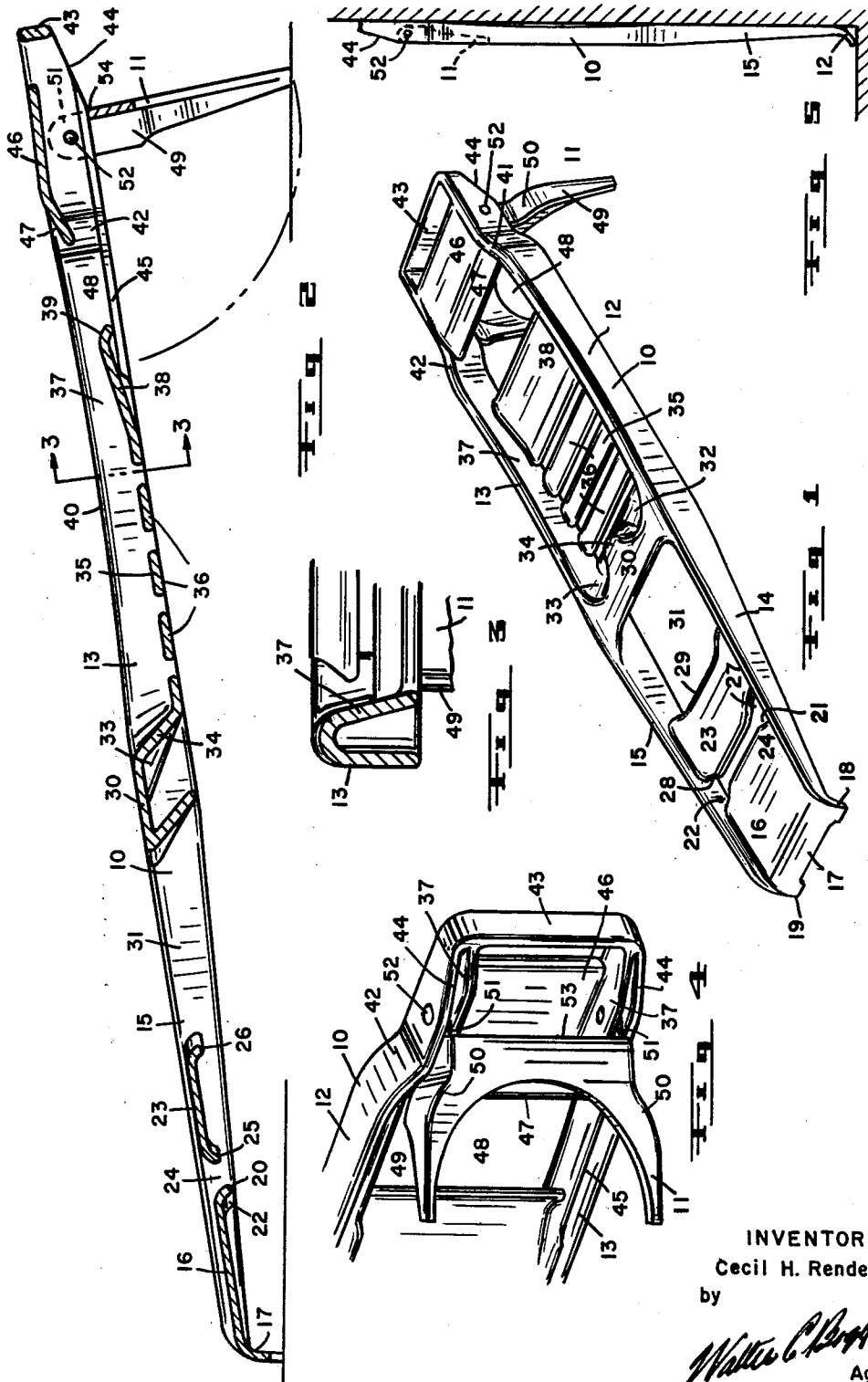
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LOUNGING CHAIRS

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1

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LOUNGING CHAIRS

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The invention relates to a lounging chair of the reclining or recumbent type, and the principal object thereof is to provide an inclined chair, designed with manifold and spaced cross members, to adequately support the various contacting surfaces of a supine human body, and so give a feeling of almost weightless restfulness, without the aid of cushions.

A further object of the invention is to provide a specific saddle cross member for receiving the buttocks of said human body and support same against the tendency to slide down the chair incline.

A further object of the invention is to mold the chair in a streamlined manner, said molding conforming roughly to the side contours of the body, with smoothly rounded corners, so the body will easily conform, when received therein, and the chair will have considerable maneuverability when carried, as the corners will not be inclined to catch on other objects.

Further objects of the invention are to design the chair in a light-weight hollowed construction, for minimum use of material, and such that the hollow design will give buoyancy and permit the chair to float, in an emergency.

Further objects of the invention are to design the chair with a variety of openings between the cross members, for airing various parts of a body reclining thereon, lightness of construction, ease in mounting the chair, for draining water therefrom, and for reducing air resistance so it will not have a tendency to be carried by high winds.

A further object of the invention is to provide foldable legs for one end of the chair, such that the chair can be supported at a slant by said legs, when they are opened out, and said legs can be folded into the chair framework, when not in use, and same will occupy a minimum of space.

Still further objects of the invention are to design both the framework and the legs as individual unit moldings, for simplicity of construction, at minimum cost, and creation of a rugged long lasting product which can be marketed at a reasonable retail price.

With the above important and other minor objects in view, which will become more apparent as the description proceeds, the invention consists essentially in the design, construction and arrangement of the various parts hereinafter more particularly described, reference being had to the accompanying drawings in which like characters of reference indicate corresponding parts in the several figures, and wherein:

FIGURE 1 is a perspective view of the lounging chair set up for use.

FIGURE 2 is an enlarged vertical sectional view longitudinally therethrough.

FIGURE 3 is an enlarged cross section taken on the line 3-3, FIGURE 2.

FIGURE 4 is an enlarged partial perspective view of the leg end of the chair.

FIGURE 5 is a relatively diagrammatic view showing the compact storage possibilities of the lounging chair.

The chair shown in FIGURE 1 of the drawings is preferably plastic molded in two units, namely; the body receiving framework 10 and the leg member 11 which is adapted to support the end of said framework. These parts are now described as follows:

A pair of spaced rails 12 and 13 form the sides of the framework 10, and their lower ends present side arms 14 and 15 which are vertical bars with rounded upper

2

and lower edges. These arms taper down toward their lower ends and at the same time come closer together. Their extreme lower ends are connected by a rectangular plate 16 which has its lower edge rolled down, as shown at 17, and is provided with a pair of feet 18 and 19, which blend in with the side arms. It will be noted that the upper surface of this plate is well below the upper edges of the side arms while its upper front edge rolls downwardly at 20 and is recessed back on each side, as shown at 21 and 22.

A further rectangular plate 23 connects the side arms 14 and 15, above and in spaced relation from the plate 16, as indicated at 24. Both the upper and lower edges of this latter plate are rolled downwardly, as shown at 25 and 26 while its upper surface is just below the upper edges of the side arms 14 and 15. It will also be noted that the back corners are cut back at 27 and 28 while the front edge is inwardly curved, as at 29. The sides of both plates, 16 and 23, curve upwardly into the side arms.

A central saddle member 30 connects the spaced side rails 12 and 13, which are now inverted channel-shaped. The central cross section of this saddle is of a downwardly sloping inverted U-shape, best shown in FIGURE 2. The saddle is also some distance above or ahead of the plate 23, and the large spacing 31 so left forms, what I term, a well for a purpose later explained. The front or upper edge of the saddle presents a pair of semi-circular dished hollows 32 and 33 which are spaced by a central nub or protrusion 34. Both the nub and the dished walls of the hollows extend down to a flooring 35, which is composed of a series of spaced cross bars or slats 36. The outer curving sides of the hollows 32 and 33 run into and form part of the inner wall 37 of the now channel-shaped side rails, shown in FIGURE 3. These inner walls support the flooring bars 36, the bottoms of which are flush therewith. In other words; the inverted U-shape of the above described seat-shaped saddle connects with the inverted channels of the side rails to form a U-shaped troughing under the chair framework. The front cross bar of the flooring is relatively wide, slopes sharply upward, as at 38, to terminate in a downward roll 39.

The channel-shape of the side rails 12 and 13 maintain a parallel relationship from the rear of the saddle 30 to the roll 39 of the flooring 35, the upper edges of these rails are well rolled, and at the same time is given a slight lengthwise dipped curvature, as shown at 40 in FIGURE 2. After passing the roll 39, these channel side rails are each provided with an opposite ogee curve 41 and 42 for closer parallel relationship, and then terminate in a single vertical connecting cross bar 43. This cross bar is rounded top and bottom, is of less height than the side rails which slope up from their bottoms to meet it, as shown at 44. It will be particularly noted that the lower edges of the inside walls 37 of these channel rails are higher than the lower edges of the outer walls, for some distance back, as shown at 45 in FIGURE 2. The upper edges of these closer rails are connected by a plate 46 which has its front edge spaced back from the cross bar 43, its upper surface is at a slight forward sloping angle with the side rails, and projects slightly thereabove. Its rear edge is dipped, as shown at 47, to terminate some distance in front of the flooring 35, leaving a spacing 48 therebetween.

The legs 11, as mentioned, are molded separately in one piece, and are of a U-shape thereacross, with tapered side walls 49. These side walls also curve in ogee-shapes 50 which correspond to the ogee-shapes 41 and 42 of the framework side rails, in which they are to be received. The upper corners of this leg member terminate in side tongues 51, each of which are received in one of the rail channels, under the plate 46, where they are pivoted at 52. The legs can swing open on these pivots, as shown

3

in FIGURE 4, until the upper edge 53 of the leg member, between the tongues, is in contact with the under side of the framework side rails 12 and 13, as shown at 54 in FIGURE 2. The legs are then in a position to support the framework at the correct chair lounging angle. When the leg member is folded, the side walls 49 thereof nest in the channel side rails of the framework, at the cut-back portion 45, so the member is flush with the side rails and out of sight, as shown in FIGURE 5.

When the chair is set up ready for service, the user can step into the well 31 for easier mounting of the chair. From this position he can easily sit down on the lower rear end of the flooring, his crotch receiving the saddle, his buttocks in the dishd hollows 32 and 33 thereof. From this position the legs are lifted out of the well and then laid over the lower plates 23 and 16, while the upper part of the body reclines back onto the flooring with the head resting on the plate 46, and the body is lengthwise supine. In this position, each cross member of the chair will contact a specific part of the body for support. The calves of the legs will be on the plate 23, and as this plate is higher than the plate 16, the heels will be lightly supported by this latter plate. The legs kind of hang from the saddle, which is a very comfortable position. The semi-circular hollows of the saddle permit the buttocks more support area than they would normally receive from a flat support, and this is attained at a sloping position. This enlarged area reduces the weight support per square inch and gives a sense of lightness, and the caught buttocks easily hold the sliding weight of the body without effort. The shoulders are raised slightly, so the arch of the back can lower smoothly onto the flooring, for nested support of the body torso, all along the spinal column. The head is supported by the raised plate 46 in the manner of a pillow, and the sloping portion 47 takes the weight of the neck. At the same time, the inward taper of the inner walls 17 of the side rails, permit the torso to conform thereto, and relax therein with ease. A lengthwise supine body, normally lying on a flat surface, is supported by its principal projections, namely; the head, the back, including part of the buttocks, and the heels. The other parts, such as the calves, the shoulders, and the neck, all have to sink in an endeavor to reach the flat surface for support. This deformation is uncomfortable and gives a feeling of hurt, and accordingly a false sense of excessive weight. The scientific method of this invention, which gives weight support to all parts of the lengthwise supine body, at the correct elevation, creates a feeling or sense of weightlessness which is hard to define, but most restful. There is no necessity for cushions.

The rounded upper edges of the side rails 12 and 13 are smooth. They nicely serve as arm rests, when the body is outstretched, and the interior walls 37 will also form back rests for the torso, when the body is reclining on its side. The narrowed ends of the chair, not only reduce weight, but greatly facilitate carrying same, as it eliminates sharp square corners, which are inclined to catch. The curvatures of the various parts, including the U and T-shaped connections of the cross members with the side rails, give great structural strength, also saves weight, and presents improved appearance. The leading edges of both the plates 16 and 23 can be used for foot rests therealong, and at different knee-bent positions of the legs, when desired. The spacing between the cross members are at locations where the body requires no support, and they reduce the overall weight considerably, air is permitted to freely circulate therethrough and over the body to cool same, and water drains quickly therethrough, if the chair is left in the rain. If desired, the user can sit on the plate 23, with his feet in the well 31, and use the saddle, including the flooring, as working areas. The lounging chair, with such open cross members, offers little resistance to moving air, and therefore is not inclined to blow over or be carried away by high winds.

4

When the leg member is folded into the side rails of the framework, the chair will stack very compactly, such as between the studs of a garage wall (note FIGURE 5). The legs could be made integral with the framework, and give a considerable saving in construction costs, when such a chair is permanently set up, such as in a park. And finally, the U-shaped troughing under the framework could trap air therein and permit the chair to float as a raft, in an emergency.

What I claim as my invention is:

1. A lounging chair for receiving a human body thereon, comprising: a pair of spaced inverted channel-shaped side rails; a leg support at one end of said rails, hinge connected thereto to open out and support the rails at a slant; a pair of spaced cross plates connecting the opposite ends of the rails, at different elevations, to receive and support the heels and calves of said body; a flooring centrally connecting the bottoms of the rails, for supporting the torso of said body; said flooring comprising a series of cross bars, spaced apart for fluid passage therebetween, and with one of the end bars at an upward angle in relation to said rails, to receive the shoulders of said torso; a plate connecting the first mentioned end of the rails, at the upper edges thereof and at a slight forward slant therewith, and spaced from said flooring, to support the head of the body in an elevated position in respect to said torso; a seat-shaped saddle connecting the rails, adjacent the end of the flooring remote from said end bar, to receive the buttocks of the torso and hold said body against sliding movement, when the side rails are in said slant position; said saddle of an inverted channel-shape, and connecting the channels of the rails, to provide a U-shaped troughing under said chair; a spacing between one of said cross plates and the saddle to provide a well for said body to stand in, before reclining in the chair; and said leg support swingable on said hinge connection, to a lengthwise nesting position in the channels of the rails.

2. A lounging chair, comprising: a pair of spaced lengthwise side rails; means at one end of the rails for supporting said rails at a sloping angle; a series of spaced cross members connecting the side rails therealong, and said cross members positioned at specific elevations on said rails to conform with, receive, and support a human body in a lengthwise, supine resting position thereon; said connecting members including a central saddle member, shaped to receive the crotch thereover, and the buttocks therein, of said human body, and hold same against sliding movement down said sloping chair.

3. A lounging chair, comprising: a pair of spaced lengthwise side rails; leg means at one end of the rails to support same at a slant; a series of intermittent cross members connecting the side rails at specific elevations thereto therealong, to correspond with and selectively support parts of a human body, when said body is lengthwise supinely resting on said connecting members; said connecting members including a seat-shaped saddle member for receiving the crotch of said body therearound, and the buttocks thereof therein, to prevent endwise sliding movement of said body down said chair, when the rails thereof are in said slant position.

4. A lounging chair, comprising: a pair of spaced lengthwise rail members of an inverted channel-shape in cross section; the channel-shape of said rail members closed off at one end of said rail members; leg means at said end of the rail members, to support same at a slanting position in use; a series of cross members connecting the rail members at varying spaced intervals therealong, and at specific elevations in relation to said rail members, to form a framework for support of a human body, when lengthwise supinely resting thereon; said cross members including a central saddle member for receiving the crotch of said body therearound and for holding the buttocks thereof therein, to prevent sliding movement of the body down said chair, when the rail members thereof are in

5

said slant position; said saddle member of an inverted U-shape in cross section, and connecting the opposite ends of the inverted U-shaped rail channels, to form a single channel therewith, under said framework.

5. A lounging chair presenting a pair of spaced straight side rails interconnected at spaced intervals therealong by a series of cross rails, to support a lengthwise supine human body thereon, and comprising: a pair of cross plates connecting one end of said side rails, each at different elevations thereon to shape receive and support the heels and calves of said body; a spaced slat flooring centrally connecting the lower edges of the side rails, for supporting the torso of said body; a plate connecting the upper edges of the opposite ends of said side rails, to support the head of said body, in an elevated posture in relation to said torso; a saddle connecting the side rails, adjacent the flooring remote from said head support and in

6

well spaced relation from said first mentioned cross plates, to provide an open well to stand in; leg means pivotally mounted on the head supporting end of said side rails, for supporting said latter rails at a sloping angle, and for folding therein in the storage of said chair; and said saddle shaped to receive the crotch of said body therearound and the buttocks thereof therein, to prevent sliding movement of said body, when the side rails are in said sloping position.

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