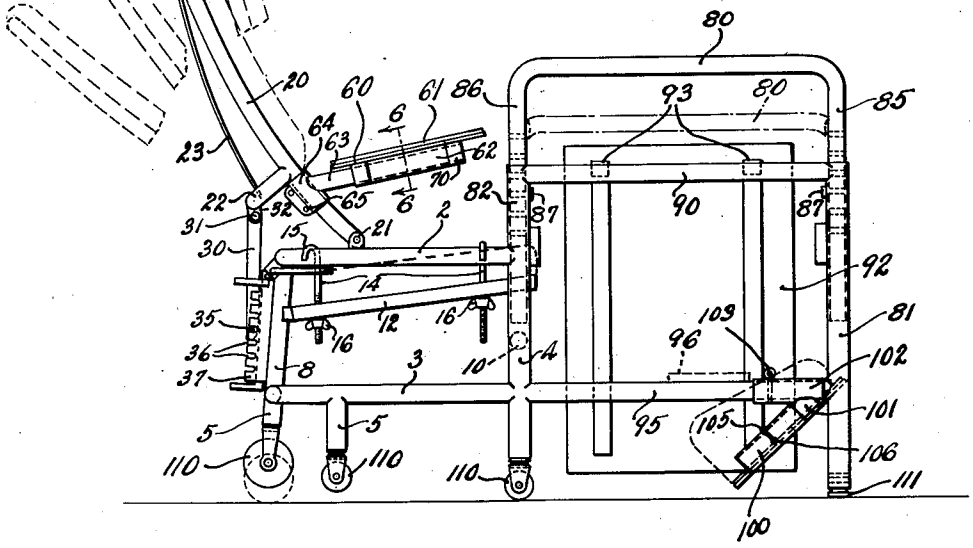
Sept. 4, 1934. W. C. GREENE 1,972,557

INVALID CHAIR

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Fig. 1



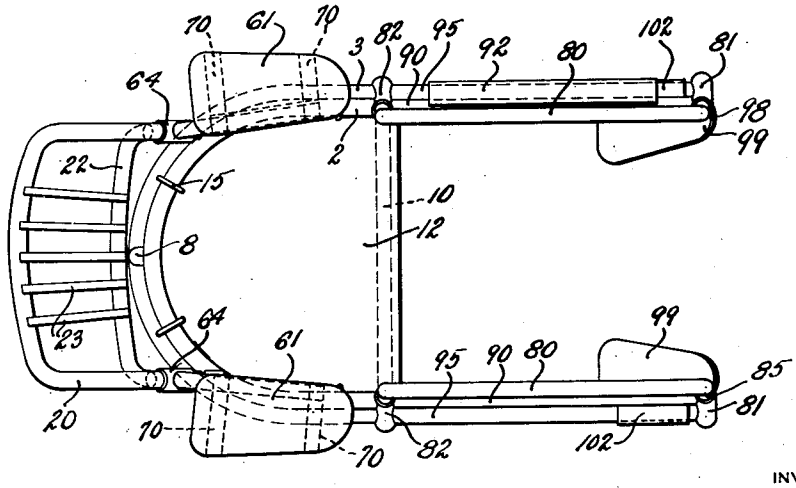


Fig. 2

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Sept. 4, 1934. W. C. GREENE 1,972,557

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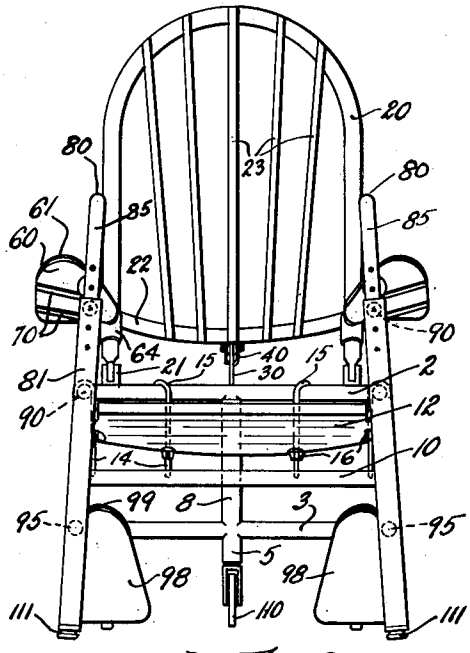


Fig. 3

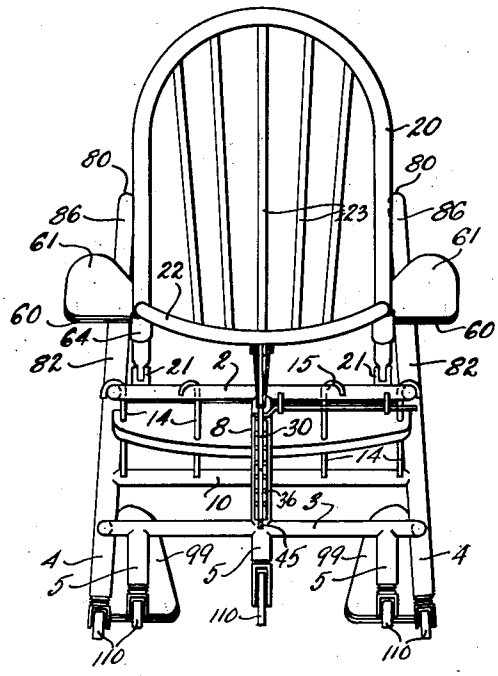


Fig. 4

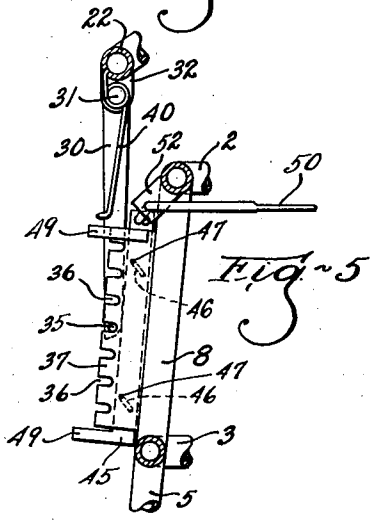


Fig. 5

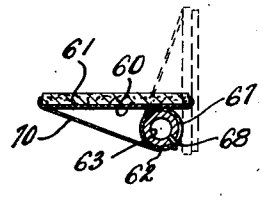


Fig. 6

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UNITED STATES PATENT OFFICE

1,972,557

INVALID CHAIR

Walter C. Greene, Cleveland Heights, Ohio

Application September 19, 1932, Serial No. 633,705

9 Claims. (Cl. 155—22)

This invention relates to improvements in invalid chairs and more particularly, in chairs especially adapted for use by people who, for one reason or another, find walking difficult. With the use of the present chair, as will hereinafter more fully appear, a large proportion of such people not only are enabled to move about otherwise unaided but also, their leg muscles, etc., are given sufficient exercise to strengthen them and to otherwise improve their condition.

Still more particularly, the present invention relates to a chair which not only includes an exceedingly comfortable chair structure but also, a pair of bar structures extending forwardly from said chair structure in generally parallel relation, said bar structures being spaced apart substantially the width of the seat of said chair structure and being free of connection to each other at their front ends, whereby a passageway is provided between said bar structures to and from the seat of said chair structure, along which passageway a person can walk, relying upon said bar structures for such support and assistance as he needs.

In the preferred embodiments of the present invention, the bar structures of the present chair include a pair of horizontally disposed upper supporting bars arranged at substantially lap level with respect to the seat of the chair structure thereof and a pair of horizontally disposed lower supporting bars arranged at substantially "stair riser" height. As will hereinafter more fully appear, said upper supporting bars are adapted to receive and support a meal tray, work tray or the like and said lower supporting bars are adapted to receive and support a removable board member with which a user of the chair can practice going up and down stairs.

Furthermore, in the preferred embodiments of the present invention, the front and rear legs of the chair structure of the present chair, but not the two legs of the bar structures thereof, (said bar structure legs being located at the front ends thereof) are provided with suitable casters, the casters of the chair structure front legs lying below a plane which passes through the casters of the chair structure rear legs and the uncastered lower ends of the bar structure legs, whereby the present chair, in its entirety, can teeter fore and aft upon the casters of the chair structure front legs, which legs are preferably located at or adjacent the middle of the present chair. As a result of the foregoing construction, the present chair can rest either on the casters of the chair structure legs (in which case, the uncastered lower ends of the bar structure legs do not touch the floor), with consequent ease of movement of the chair along the floor, or the present chair can rest on the casters of the chair structure front legs and the uncastered lower ends of the bar structure legs (in which case, the casters of the rear legs of the chair structure do not touch the floor), the uncastered bar structure legs, in this position, affording such stability and such permanency of position that a person can walk or exercise between the bar structures of the present chair with no liability of undesired and possible injurious movement of the chair, all as will more fully appear.

Furthermore, in its preferred embodiments, the present chair is provided with a tiltable back rest, the tilting of which is readily effected by an occupant of the chair while comfortably sitting on the seat of the chair structure thereof, and with arm and foot rests which not only are adjustable relative to said chair structure seat but also, are adapted to be swung laterally to out-of-the-way positions when their use is not desired.

To readily adapt the present chair for use by people of different size, certain parts of the chair structure and the bar structures thereof are made adjustable, the adjustment in each instance being easily and quickly effected.

Other features of the present chair are in part obvious and in part will appear more in detail hereinafter.

The construction of the present chair will be readily understood from the following description of one embodiment thereof, reference being had to the accompanying drawings in which

Fig. 1 is a side elevation of the present improved chair; Fig. 2 is a top plan view thereof; Fig. 3 is a front view thereof; Fig. 4 is a rear view thereof; Fig. 5 is a detail side elevation of the latching mechanism for the tiltable back rest of the present chair; and Fig. 6 is a detail vertical sectional view of one of the two arm rests of said chair, the view being on the line 6—6, Fig. 1.

Although the present chair may be made of any suitable materials and in any form or shape suitable for the purpose, I prefer to make most parts of said chair of metal tubing bent to the proper shape and suitably secured at the crossings or angles either by pipe fittings or by welded joints. Steel or iron tubing is suitable for the purpose but tubing of aluminum and aluminum alloys, such as what is commercially known as "aeroplane tubing", may in some instances be more satisfactory because of its extreme lightness in weight.

As heretofore mentioned, the present chair comprises the combination of a chair structure and a pair of bar structures, said bar structures extending forwardly from said chair structure in generally parallel relation. As clearly shown in the accompanying drawings, said chair structure, in the embodiment of the invention here illustrated, comprises a suitable frame made up chiefly of metal tubing and including upper and lower bars 2, 3 of generally U-shape and connected at their ends by a pair of vertically disposed tubular legs 4, which legs constitute the front legs of the chair structure. Depending from the lower bar 3, at or adjacent the rear end thereof, is one or more tubular legs 5, which leg or legs constitute the rear legs of the chair structure. In the chair structure here shown, there are three rear legs 5, two being located at the sides of said bar adjacent the rear end thereof and the other one being located at the rear end of said bar, said last mentioned leg serving to prevent the present chair from being tipped over backwardly, as will be readily understood. For strengthening purposes, the curved rear ends of said U-shaped frame bars 2, 3 preferably are connected by a vertically disposed bracing tube 8 and the front legs 4, between said frame bars, are preferably connected by a generally horizontally disposed bracing tube 10.

Suitably supported upon the upper frame bar 2 is the seat 12 of the present chair structure, said seat being of any suitable shape and of any suitable material. A metal seat, such as here shown, is satisfactory and in order to make said seat more comfortable, a spring, air or other suitable cushion or pad may be provided, such as shown in dotted lines, Fig. 1.

To adapt the present chair for proper and convenient use by people of different size, certain parts of it must or should be adjustable, and for this reason, the seat 12 is vertically adjustable, it being here shown as supported by a series of bolts 14 having hook-shaped upper ends 15 which are hung over the upper frame bar 2, the lower ends of said bolts being extended through the marginal portion of said seat and being threaded to receive adjustable wing nuts 16, whereby said seat may be supported at the desired level and in an inclined position, as here shown, if desired.

The present chair, in its preferred embodiments, is provided, of course, with a suitable back rest and preferably, one which is tiltable or adjustable to various inclined positions, as indicated in dotted lines, Fig. 1. The back rest of the chair here illustrated includes a tubular member 20 of inverted U-shape, the curve thereof forming the top of the back rest and the two ends of said member being pivotally connected to ears 21 suitably secured to the upper frame bar 2, as shown. The lower end portions of said back rest member 20 are suitably connected by a rearwardly curved generally horizontally disposed tubular member 22, to the middle portion of which are suitably secured the lower ends of a series of generally vertically disposed metal strips 23 having their upper ends suitably secured to the curved top portion of the back rest member 20. As best shown in Fig. 1, the ears 21, by means of which the back rest member 20 is secured to the frame bar 2, are located at or to the rear of the middle of the side portions of said bar, and said back rest member 20 and its back rest strips 23 are preferably longitudinally curved rearwardly, a construction which not only results in a more comfortable back rest, inasmuch as the side portions of the back rest member 20 do not unpleasantly press on the under surfaces of the upper arm portions of an occupant of the chair, etc., but also more space is provided said occupant at the sides of the chair structure for convenient access to neighboring objects, all as will be readily understood.

To enable said back rest to be firmly held in any desired position, and to be conveniently and easily adjusted from one position to another, suitable latching mechanism is provided, the control or actuation of which is preferably capable of accomplishment by an occupant of the chair while comfortably sitting on the seat 12 thereof.

The particular latching mechanism here shown includes a generally vertically disposed, relatively flat latching bar 30 having its upper end lying between and pivotally connected at 31 to a pair of ears 32 suitably secured to substantially the middle portion of the generally horizontally disposed back rest member 22, all as clearly shown in the accompanying drawings. At its lower end, the latch bar 30 is provided with a transversely disposed latch pin 35 projecting laterally from both sides of said bar and adapted for cooperation with a plurality of pairs of horizontally disposed and vertically spaced slots or notches 36, said slots or notches being open at their rear ends and being carried by a pair of generally parallel and generally vertically disposed brackets 37 suitably mounted on the vertically disposed bracing tube 8 of the chair structure frame. As best shown in Figs. 4 and 5, the lower end portion of the latch bar 30 is adapted to lie between the brackets 37 and in order to releasably maintain the latch pin 35 of said bar in the desired one of the pairs of slots or notches 36 of said brackets, means in the form of a spring 40 is provided for normally urging the lower end portion of the latch bar 30 forwardly, said spring being here shown as associated with the upper end of said latch bar and with the ears 32 by means of which said bar is connected to the back rest member 22.

In order to conveniently effect the transfer of said latch pin 35 from one of said pairs of slots or notches 36 to another pair thereof, to thereby change the position of inclination of the chair back rest, a suitable latch pin release member 45 is provided, said member being here shown as a generally vertically disposed, relatively flat metal bar lying between and supported by the brackets 37, between the latch bar 30 and the bracing tube 8 of the chair structure frame. The support of said latch pin release member by said brackets is effected by providing said release member with a pair of slots 46, one located in the upper end portion thereof and the other located in the lower end portion thereof and both being inclined upwardly and rearwardly, as viewed in Fig. 5, and also by providing said brackets with a pair of transversely disposed pins 47, one extending through each of said slots 46. The effect of this pin and slot support or mounting of the latch pin release member 45 is that whenever said member is raised by the means hereinafter described, it moves rearwardly as well as upwardly, with the result that the lower end portion of the latch bar 30 is likewise moved rearwardly, with consequent release of the latch pin 35 of said bar from the particular pair of bracket slots or notches 36 in which it is seated.

Such release of the latch pin 35 effects, of course, the release of the chair back rest and by merely maintaining said latch pin release member in raised position, said back rest can be raised and lowered, the latch pin 35 moving idly along the

rear edges of the brackets 37 inasmuch as the latch pin release member covers and thereby prevents said pin from entering any of the slots or notches 36 of said brackets, all as will be readily understood. When the chair back rest has been moved to the desired new position, the latch pin release member 45 is lowered, with the result that the latch pin is free to enter the nearest pair of slots or notches 36 of said brackets, and such entrance is effected under the influence of the spring 40, the normal tendency of which, as before mentioned, is to cause said pin to move forwardly and thus snap into one of said pairs of slots or notches 36 of said brackets.

To confine the latch pin 35 to movement along the rear edges of the brackets 37, with consequent limitation of the extent of tilting or adjustment of the chair back rest, the latch pin release member 45 is preferably provided at its upper and lower ends with rearwardly extending flanges 49, which flanges effectively limit the latch pin to movement therebetween and hence along the brackets 37, all as will be readily understood.

The means here shown for raising and lowering the latch pin release member 45, to thereby enable the chair back rest to be adjusted, as just described, comprises a suitable lever 50, the front and operating end of which is preferably located at the side of the chair structure, just below the frame bar 2. The rear end of said lever is suitably secured to the upper end of said latch pin release member 45 and intermediate portions of said lever extend through and are suitably supported in lugs 52 carried by the rear end portion of the frame bar 2, all as clearly shown. Such a location of the front, operating end of said lever enables an occupant of the present chair, while comfortably sitting on the seat 12 thereof, to easily and conveniently operate said lever and thus himself effect the desired adjustment of the chair back rest, a very desirable feature in a chair of this type.

In its preferred embodiments, the chair structure of the present chair is preferably provided with a pair of arm rests, the ones here shown being mounted on the lower end portions of the back rest member 20. Inasmuch as said arm rests are of identical construction, a description of one will suffice for both. As clearly shown in the accompanying drawings, particularly Fig. 6 thereof, each of said arm rests includes a generally flat, arm supporting member 60 of wood, metal or the like, and preferably of substantially the shape here shown with the rear end portions of said members slightly wider than the front end portions thereof. If desired and as shown, correspondingly shaped pads or cushions 61 may be provided for said arm supporting members, which are here shown as of metal, each being suitably mounted on a metal sleeve 62 rotatably mounted on the forward end portion of a tubular member 63 having its rear end suitably secured to a tubular bracket 64 adjustably mounted, by the use of a set screw or suitable clamping means 65, on one of the lower end portions of the main back rest member 22.

As best shown in Figs. 1 and 6, means is provided for limiting the rotary movement of the arm supporting members 60 with their pads or cushions 61, the means here shown for each arm rest including a transversely disposed slot 67 with which each sleeve 62 is provided and through which extends a screw 68 carried by the tubular supporting member 63. As a result, the arm supporting parts 60, 61 of each of said arm rests can move between a generally horizontally disposed arm supporting position, shown in full lines in the accompanying drawings, to a generally vertically disposed, out-of-the-way position, shown in dotted lines, Fig. 6. If desired and as shown, metal bracing strips 70 may be provided to aid in supporting the outer end portions of the arm supporting parts 60, 61, said bracing strips, two for each arm rest, being here shown as having their inner ends secured to the sleeves 62 and their outer ends secured to the outer ends of the metal supporting members 60, all as clearly shown in Fig. 6.

As heretofore mentioned, the present chair includes a chair structure, heretofore described, and a pair of bar structures, said bar structures extending forwardly from said chair structure in generally parallel relation and spaced apart substantially the width of the seat 12 of said chair structure. Inasmuch as said bar structures are of identical construction, one being a right hand bar structure and the other being a left hand bar structure, a description of one will suffice for both.

As clearly shown in the accompanying drawings, each bar structure is made chiefly of metal tubing and includes a generally horizontally disposed top bar 80, a generally vertically disposed front leg bar 81 and a generally vertically disposed rear attaching bar 82, said attaching bars being adapted for suitable securement to or association with the front legs 4 of the chair structure. In the present embodiment of the invention, the two rear attaching bars 82 of the two bar structures are integral with the chair structure front legs 4, a construction which is preferred because of its simplicity, its improved appearance, etc.

The two top bars 80 of the two bar structures are adapted for what is here termed "parallel bar use". In other words, said bars are adapted to be located at such a height or level that a person standing between said bars can easily and conveniently grasp them with his hands and by the use of his arms, impose upon his feet and legs as much or as little of his body weight as he desires, to enable him to take walking steps between the bar structures or otherwise exercise his legs, or do both, as will be readily understood. To enable said top bars 80 to be located at the proper "parallel bar height" for each user of the present chair, said bars are made vertically adjustable, and for this reason, each of said bars is provided at its front end with a depending extension 85 telescoping into one of the bar structure front legs 81 and at its rear end with a depending extension 86 telescoping into one of the bar structure rear attaching bars 82, said extensions, which may or may not be integral with said bars 80, being adjustably secured in said parts 81, 82 by means of cross pins 87 inserted into vertically spaced holes in said extensions and said parts, as best shown in Fig. 1.

Each of the present bar structures is also provided, below and in generally parallel relation with its top bar 80, with a generally horizontally disposed upper supporting and bracing bar 90, said bar having its rear end suitably connected to one of the rear attaching bars 82 and its front end suitably connected to one of the bar structure front legs 81. These two upper supporting and bracing bars 90 are more or less definitely located as to level or height with respect to the seat of the chair structure, said bars being elevated above said seat, that is, above the cushion or pad thereof, by a distance approximately equal to the thickness of the thigh of a leg, the chain seat being adjustable vertically to more or less regu-

late this difference in level or height, so that said upper supporting bars 90 are located at what is here termed "lap level". Said bars are adapted, therefore, to receive and support a tray or table top upon which may be positioned, in convenient location for an occupant of the chair, a meal service, typewriter, or the like. If desired, the top bars 80 may also be used as a support for work or the like at a high level, and for cooperation with said top bars and said upper supporting bars 90, particularly the latter, a suitable tray 92 may be provided, the tray here shown being a simple rectangular member, of wood or the like, having its under surface provided at one end thereof with a pair of hooks 93 by means of which it may be suspended or supported in vertical position from one of the upper supporting bars 90, when it is not in use, and which may be laid across either the supporting bars 90 or the top bars 80 when its use as a support is desired.

In the preferred embodiments of the present chair, the bar structures thereof preferably include a pair of generally horizontally disposed lower supporting and bracing bars 95, which bars have their rear ends suitably connected to the chair structure front legs 4 and their front ends suitably connected to the bar structure front legs 81. These lower supporting and bracing bars 95, which lie in generally parallel relation with the upper supporting and bracing bars 90 and the top bars 80, are preferably located at what is here termed "stair riser" height, that is, about seven or seven and one-half inches above the floor upon which the chair rests. Provided for use with these lower supporting and bracing bars 95 is a simple flat cross member or board 96, shown in dotted lines, Fig. 1, and made of wood or other suitable material, in a length which enables it when its use is desired, to be laid upon and therefore be supported by said bars 95, as shown in Fig. 1. In such position, said board or cross member 96 constitutes a single stair step with which a user of the chair, aided by the top bars 80 of the bar structures thereof, can practice going up and down stairs, by first stepping up onto said board or cross member and then stepping down from it, either forwardly or backwardly, or both, all as will be readily understood. In the use of said board or cross member, it may be laid upon the lower supporting and bracing bars 95 at any desired position therealong, it being shown in Fig. 1 as being supported upon intermediate portions of said bars. If desired, the foot rests hereinafter described and which are mounted upon the bars 95 may be moved to the rear ends of said bars and the "stair step" board or cross member 96 supported on the front end portions of said bars. When the use of said board or cross member is not desired, it is simply removed and placed in any desired location pending its further use.

In addition to providing a support for the "stair step" board or cross member 96, the lower supporting and bracing bars 95 may also be used to support a pair of foot rests, with which preferred embodiments of the present chair are preferably provided. The particular foot rests here shown are similar in construction to the arm rests heretofore described and each includes a generally flat foot supporting member 98 of wood, metal or the like and provided, if desired and as shown, with a correspondingly shaped pad or cushion 99. Each foot supporting member 98, which is here shown as of metal, has its outer longitudinal edge portion suitably secured to a metal sleeve 100, Fig. 1, rotatably mounted upon a downwardly and rearwardly inclined tubular arm 101 having its upper end suitably secured to a generally horizontally disposed tubular bracket 102 mounted for sliding adjustment, by means of a cross pin 103, along one of the lower supporting and bracing bars 95. To limit rotary movement of the foot supporting parts 98, 99 of each foot rest, the sleeve 100 of each foot rest is provided with a transversely disposed slot 105 through which extends a screw 106 carried by a tubular arm 101, whereby said foot supporting parts 98, 99 of each foot rest are movable between the foot supporting position shown in full lines in the accompanying drawings and the generally vertical out-of-the-way position shown in dotted lines, Fig. 1. By suitable manipulation of the cross pins 103, the present foot rests may be readily adjusted toward and from the chair seat 12, to locate them in the proper position for each particular user of the chair. The rotary mounting of the foot rests enables the foot supporting parts thereof to be readily swung upwardly to generally out-of-the-way positions when their use is not desired, whereby the passageway between the two bar structures is unobstructed by said foot rests, all as will be readily understood.

In the use of the present chair, if the patient or other user thereof desires to move to another part of the room or to some other location, he grasps the arm rests or the depending rear extensions 86 of the bar structures and raises himself to a vertical position between said bar structures, supporting his body with his arms, but allowing his feet to rest upon the floor. In such position, he is able to use the forwardly extending, parallel top bars 80 of the bar structures more or less as crutches for the purpose of swinging his body fore and aft or of using either or both of his legs for step-like movements, dragging or pushing the chair as a whole after or before him. In this way, he is enabled to move from place to place otherwise unaided, in addition to which the muscular exertion of such activity not only strengthens and otherwise improves the condition of his legs but also of his entire body.

The present chair is of particular use in connection with toilet facilities because the user of said chair can move by his own efforts the entire chair into the bathroom to a position in which the stool is between the parallel bar structures and can thereby care for himself without assistance. Likewise the chair as a whole may be moved to a position at one side of a bathtub, in which position the parallel bar structures serve as supports to enable the user of the chair to climb into and out of the bathtub without additional assistance.

To enable the present chair to be readily moved, the lower ends of the front and rear legs 4 and 5 of the chair structure thereof are preferably provided with suitable casters 110, but in order to provide sufficient stability and permanency of position for the chair during use of the bar structures thereof, the lower ends of the bar structure leg bars 81 are provided with suitable sliding feet 111 rather than casters. In the preferred embodiments of the present chair, the casters of the chair structure front legs 4 and located below a plane which passes through the casters of the chair structure rear legs 5 and the uncastered lower ends of the bar structure legs 81, whereby the present chair, in its entirety, can teeter fore and aft upon the casters of the chair structure front legs, which legs are preferably located at or adjacent the middle of the sides of the present chair. As a result of the foregoing

construction, the present chair can rest either on the casters of the chair structure legs 4, 5, as shown in dotted lines, Fig. 1, (in which case, the uncastered lower ends of the bar structure legs 81 do not touch the floor) with consequent ease of movement of the chair along the floor, or the present chair can rest on the casters of the chair structure front legs 4 and the uncastered lower ends of the bar structure legs 81, as shown in full lines, Fig. 1, (in which case, the casters of the rear legs 5 of the chair structure do not touch the floor) the uncastered bar structure legs 81, when the chair is tilted forwardly in such position, affording such stability that a person can walk or exercise between the bar structures of the present chair with no liability of undesired and possibiy injurious movement of the chair. In such position, that is, with the bar structure legs 81 engaging the floor, the bars 80, 90 and 95 of the bar structures are substantially horizontal, which is, of course, the best positioning of them for their most convenient use.

As heretofore mentioned, the present chair as a whole is so constructed that it may be readily and comfortably used by people of different size. To this end, the chair structure legs 4, 5 and the bar structure legs 81 are of such length that the seat 12, by proper adjustment thereof, can be located at the proper height to position the upper supporting and bracing bars 90 at substantially "lap level". To enable the bar structure top bars 80 to be located at proper "parallel bar height" for each user of the chair, said bars are made vertically adjustable, and to provide a more comfortable back rest, as well as one which will provide proper back support, the present back rest is capable of being adjusted from a substantially vertical position to various inclined positions. Likewise, the arm and foot rests are adjustable, the arm rests being mounted for vertical adjustment and the foot rests being mounted for horizontal adjustment toward and from the chair seat. With such adjustments, the present chair offers very material assistance to anyone with some body strength but whose legs are weak and therefore require exercise.

For the purpose of stability, and as best shown in Figs. 3 and 4, the chair structure front legs 4 and the bar structure legs 81 are preferably arranged in downwardly divergent relation, the angle of divergence being such that the lower ends of said legs lie outside the vertical planes of the top bars 80 of the bar structures. By this arrangement, a pyramidic support is provided which insures such stability that overturning of the present chair, with its consequent liability of injury, is effectively prevented.

It is, of course, to be understood that the chair here illustrated is merely one embodiment of my invention and that many changes can be made therein without departing from either the scope or the spirit of this invention.

What I claim is:

1. A device of the character described, comprising the combination of a chair structure and a pair of frame structures connected to the front edge thereof and extending forwardly therefrom in substantially parallel relation and being free of connection to each other at their forward edges, said chair structure including a seat and a supporting frame therefor and said frame structures being spaced apart substantially the width of said seat and including a pair of vertically adjustable, generally horizontally disposed top bars adapted for "parallel bar" use, the adjustability of said bars enabling them to be located at proper "parallel bar" height for each user of the device, whereby each such user, when standing between said frame structures, may grip said bars and use them as a support in taking steps, in exercising and the like.

2. A device of the character described, comprising the combination of a chair structure and a pair of frame structures connected to the front edge thereof and extending forwardly therefrom in substantially parallel relation and being free of connection to each other at their forward edges, said chair structure including a seat and a supporting frame therefor and said frame structures being spaced apart substantially the width of said seat and including a pair of generally horizontally disposed top bars adapted for "parallel bar" use, whereby a user of the device, when standing between said frame structures, may grip said bars and use them as a support in taking steps, in exercising and the like, said frame structures also including a pair of generally horizontally disposed supporting bars located at substantially lap level with respect to the seat of said chair structure, said supporting bars being adapted to receive a transverse support on which may be positioned various articles for convenient use by a user of the device while sitting on the seat of the chair structure thereof.

3. A device of the character described, comprising the combination of a chair structure and a pair of frame structures connected to the front edge thereof and extending forwardly therefrom in substantially parallel relation and being free of connection to each other at their forward edges, said chair structure including a seat and a supporting frame therefor and said frame structures being spaced apart substantially the width of said seat and including a pair of generally horizontally disposed top bars adapted for "parallel bar" use, whereby a user of the device, when standing between said frame structures, may grip said bars and use them as a support in taking steps, in exercising and the like, said frame structures also including a pair of generally horizontally disposed supporting bars located at substantially lap level with respect to the seat of said chair structure, said supporting bars being adapted to receive a transverse support on which may be positioned various articles for convenient use by a user of the device while sitting on the seat of the chair structure thereof, said chair structure seat being vertically adjustable to enable said supporting bars to be located at the lap level of each user of the device.

4. A device of the character described, comprising the combination of a chair structure and a pair of frame structures connected to the front edge thereof and extending forwardly therefrom in substantially parallel relation and being free of connection to each other at their forward edges, said chair structure including a seat and a supporting frame therefor and said frame structures being spaced apart substantially the width of said seat and including a pair of generally horizontally disposed top bars adapted for "parallel bar" use, whereby a user of the device, when standing between said frame structures, may grip said bars and use them as a support in taking steps, in exercising and the like, said frame structures also including a pair of generally horizontally disposed supporting bars located at substantially "stair riser" height relative to the floor upon which the device rests, said supporting bars being adapted to receive a transverse support

which may be used as a stair step by a user of the device while standing between the frame structures thereof and thereby enable him to practice stepping up on and down from stair steps.

5. A device of the character described, comprising the combination of a chair structure and a pair of frame structures connected to the front edge thereof and extending forwardly therefrom in substantially parallel relation and being free of connection to each other at their forward edges, said chair structure including a seat and a supporting frame therefor and said frame structures being spaced apart substantially the width of said seat and including a pair of generally horizontally disposed top bars adapted for "parallel bar" use, whereby a user of the device, when standing between said frame structures, may grip said bars and use them as a support in taking steps, in exercising and the like, said frame structures also including a pair of foot rests adjustable toward and from the seat of said chair structure and swingingly mounted to enable them to be moved to out of the way positions when desired, in which positions they do not interfere with movement of a user of the device between the frame structures thereof.

6. A device of the character described, comprising the combination of a chair structure and a pair of frame structures connected to the front edge thereof and extending forwardly therefrom in substantially parallel relation and being free of connection to each other at their forward edges, said chair structure including a seat, a supporting frame therefor and a pair of arm rests mounted on said frame, said frame structures being spaced apart substantially the width of said seat and including a pair of generally horizontally disposed top bars located above the level of said arm rests and adapted for "parallel bar" use, whereby a user of the device, when standing between said frame structures, may grip said bars and use them as a support in taking steps, in exercising and the like, the location of said arm rests at a lower level than said top bars enabling a user of the device, while sitting on the seat of the chair structure, to conveniently lean sideways over said arm rests when desired.

7. A device of the character described, comprising the combination of a chair structure and a pair of frame structures connected to the front edge thereof and extending forwardly therefrom in substantially parallel relation and being free of connection to each other at their forward edges, said chair structure including a seat, a supporting frame therefor, a back rest tiltably mounted on said frame and a pair of arm rests adjustably mounted on said back rest, said frame structures being spaced apart substantially the width of said seat and including a pair of generally horizontally disposed top bars located above the level of said arm rests and adapted for "parallel bar" use, whereby a user of the device, when standing between said frame structures, may grip said bars and use them as a support in taking steps, in exercising and the like, the adjustability of said arm rests on said back rest enabling them to be adjusted as to height for more convenient use by different users of the device.

8. A device of the character described, comprising the combination of a chair structure and a pair of frame structures connected to the front edge thereof and extending forwardly therefrom in substantially parallel relation and being free of connection to each other at their forward edges, said chair structure including a seat and a supporting frame therefor having front legs and a rear leg, said frame structures being spaced apart substantially the width of said seat and including a pair of front legs and a pair of generally horizontally disposed top bars adapted for "parallel bar" use, whereby a user of the device, when standing between said frame structures, may grip said bars and use them as a support in taking steps, in exercising and the like, the lower ends of the front legs of said chair structure frame lying below a plane passing through the lower ends of the rear leg of said chair structure frame and the lower ends of the front legs of said frame structures, whereby the entire device can be teetered fore and aft about the front legs of said chair structure frame.

9. A device of the character described, comprising the combination of a chair structure and a pair of frame structures connected to the front edge thereof and extending forwardly therefrom in substantially parallel relation and being free of connection to each other at their forward edges, said chair structure including a seat and a supporting frame therefor having front legs and a rear leg, said frame structures being spaced apart substantially the width of said seat and including a pair of front legs and a pair of generally horizontally disposed top bars adapted for "parallel bar" use, whereby a user of the device, when standing between said frame structures, may grip said bars and use them as a support in taking steps, in exercising and the like, the lower ends of the front legs of said chair structure frame lying below a plane passing through the lower ends of the rear leg of said chair structure frame and the lower ends of the front legs of said frame structures, whereby the entire device can be teetered fore and aft about the front legs of said chair structure frame, the lower ends of the front legs of said chair structure frame being provided with casters but there being no casters for the front legs of said frame structures.

WALTER C. GREENE.