

[54] **PARALLEL WALKING BAR ASSEMBLY**

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[51] **Int. Cl.²** **A63B 3/00**

[58] **Field of Search** 272/57 R, 59 C, 60 R, 62, 272/63, 64

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Primary Examiner—Richard J. Apley

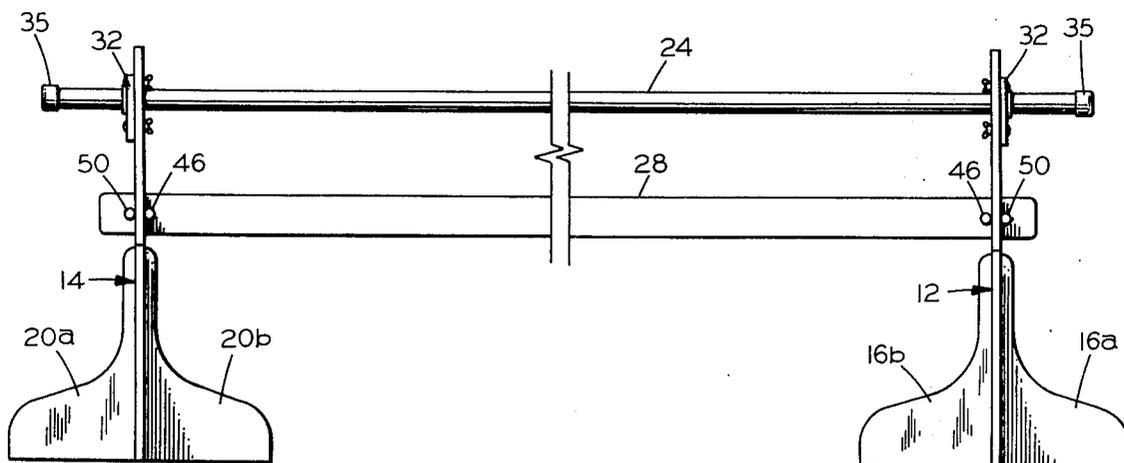
Assistant Examiner—Joseph R. Taylor

[57] **ABSTRACT**

A parallel walking bar assembly is provided which is adapted to be utilized primarily for exercise purposes either in the home or in a hospital particularly by physically handicapped individuals. The assembly includes a pair of substantially U-shaped base supports.

Each of the base supports has a pair of foot members cooperatively associated therewith and operable to maintain the corresponding support in an upstanding position relative to a floor surface. A pair of walking bars are provided each having one end thereof supported on one of the base supports and the other end thereof supported on the other of the base supports. The walking bars are located relative to each other so as to be spaced a suitable distance apart whereby to be easily within grasping distance of someone positioned therebetween. The base supports are each provided with adjustment means operable to vary the distance by which the walking bars are spaced vertically from the supporting floor surface. The assembly further includes a pair of rail members each having one end attached to one of the base supports and the other end thereof attached to the other of the base supports. The rail members function as braces to provide additional strength to the assembly. In addition, the assembly includes a pair of stanchions which are positioned intermediate the ends of the walking bars and are cooperatively associated therewith so as to be slidable therealong. The stanchions function to provide additional support for the walking bars. The stanchions include adjustment means whereby the stanchions can be adjusted to vary the vertical distance between the top thereof and the supporting floor surface to correspond to the vertical distance by which the walking bars are spaced from the floor surface.

1 Claim, 7 Drawing Figures



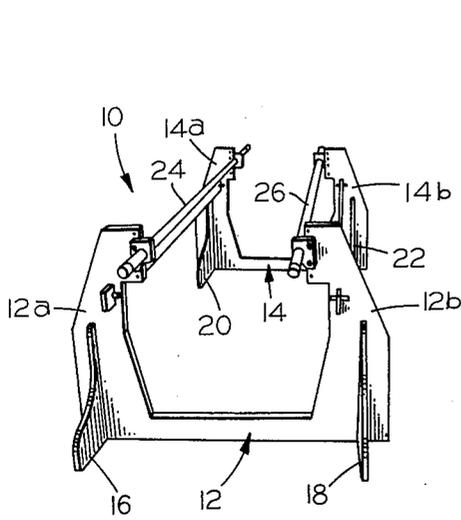


FIG. 1

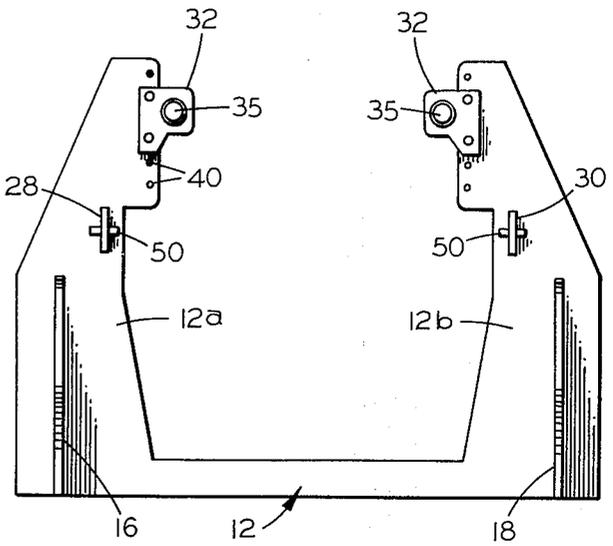


FIG. 2

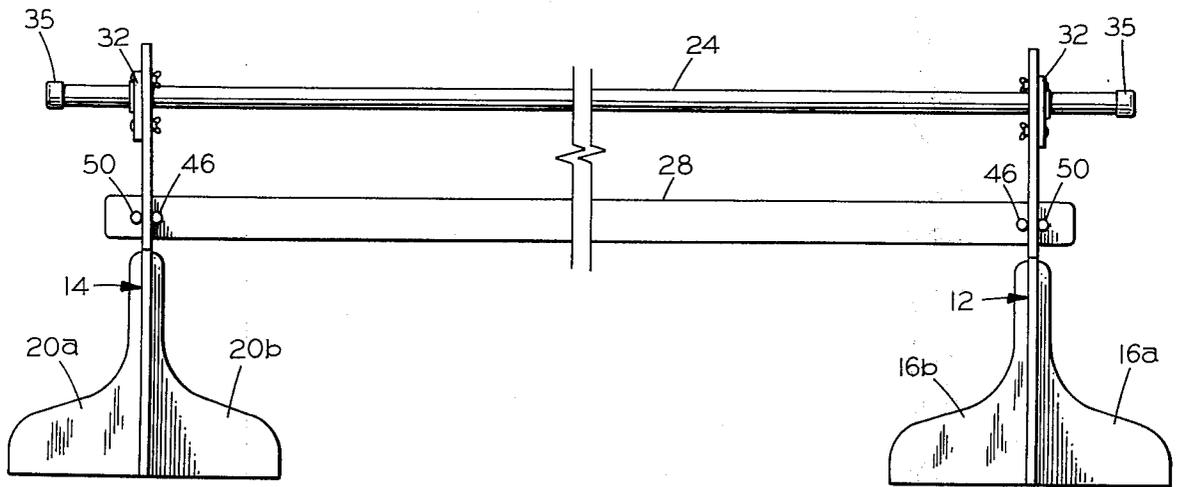


FIG. 3

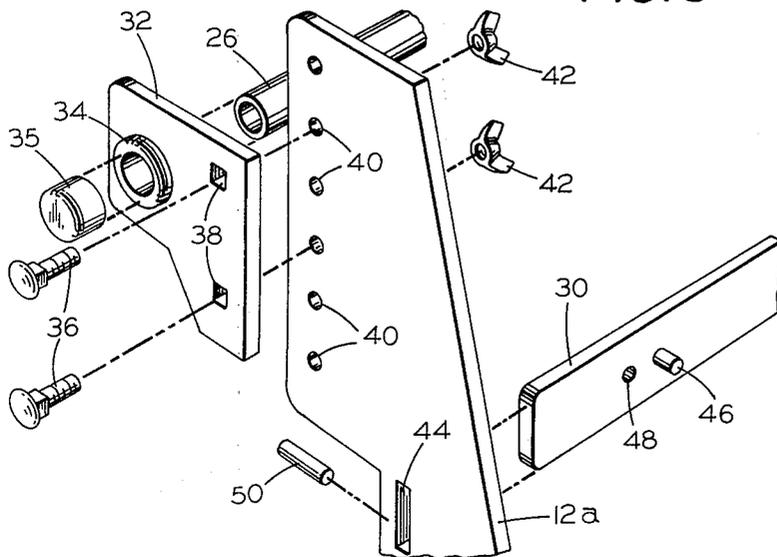


FIG. 4

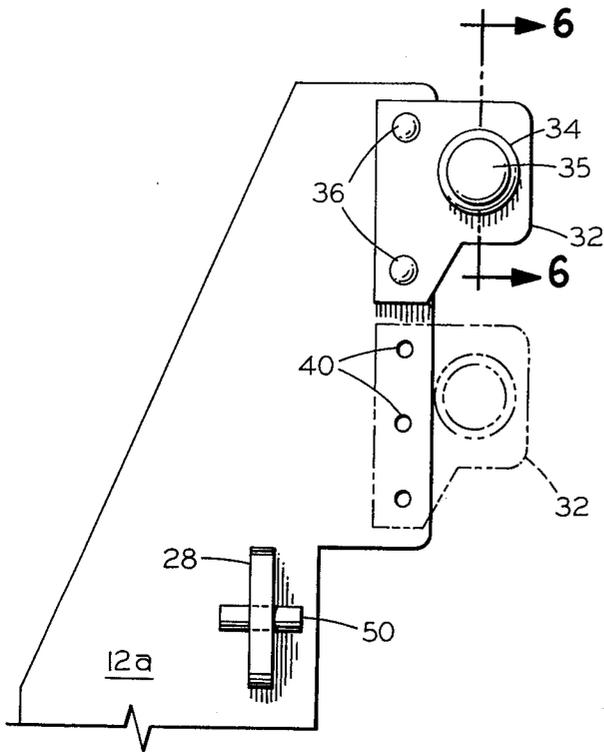


FIG. 5

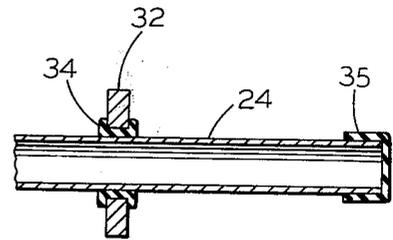


FIG. 6

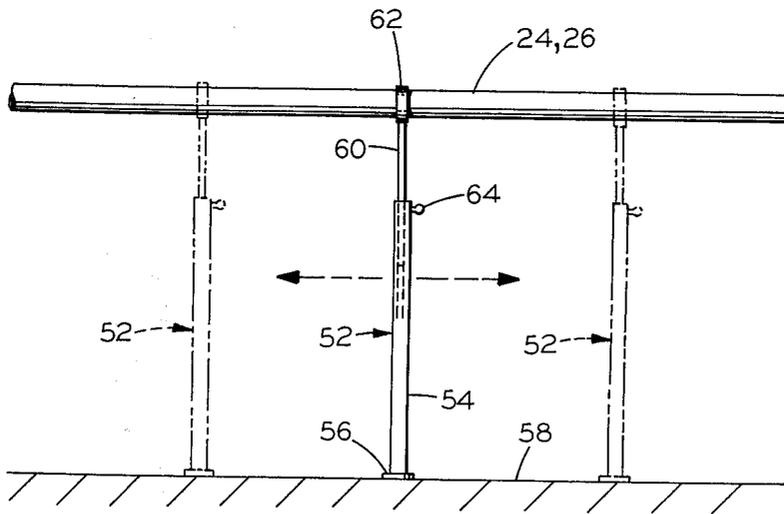


FIG. 7

PARALLEL WALKING BAR ASSEMBLY

BACKGROUND OF THE INVENTION

It has long been a common practice to include in programs designed to be employed in the rehabilitation of physically handicapped persons some form of physical therapy. Very often the form of physical therapy prescribed in this connection is the performance of various kinds of exercises in accordance with some type of schedule, the latter indicating the form of exercise, the number of times the exercise is to be performed and the frequency with which the exercises are to be performed. Moreover, there have been provided heretofore in the prior art devices which are particularly adapted to be employed by a physically handicapped person to assist the latter in performing the prescribed exercises. Generally, such devices are designed so as to be usable solely in conjunction with the performance of a particular type of exercise. For example, devices exist which are designed to be employed to improve the coordination of the fingers and the hands of a person whose physical handicap resides in this area. Also, there have been provided heretofore other devices which are designed to assist a physically handicapped person, who is either unable to walk or is able to walk only with great difficulty, to learn to walk. It is to an improvement in the latter type of device to which the subject matter of the present invention is directed.

One form of device which has been used extensively for purposes of training physically handicapped persons to walk is that having a construction which includes a pair of suitably spaced parallel bars. The bars are designed to be used as a support whereby a person suffering from being physically handicapped by virtue of possessing some form of leg disability is capable of exercising his legs to strengthen them. This occurs as the individual moves along the bars while supporting himself thereon. More particularly, with the pair of bars being supported so as to be vertically spaced a suitable distance from the floor surface, the bars are located so as to be readily accessible to the physically handicapped person. The latter by supporting himself by his arms on the bars is capable of pulling himself along the length of the bars using his arms. Simultaneously, however, in doing so, since the individual's weight need not be suspended on his legs, he is able to exercise better control over his legs to enable him to the extent possible to move them alternately one after the other in a step-by-step fashion. Through this form of exercise, the individual is able to strengthen his legs to the point hopefully where the individual is capable of walking without resort to use of the bars.

Although parallel bar devices operable in the manner described in the preceding paragraph have existed heretofore in the prior art, for the most part such devices have been disadvantageously characterized by their complexity and large size. More specifically, the prior art forms of parallel bar devices which have been previously available have commonly embodied a construction which prevents them from being portable. Namely, the prior art parallel bar devices generally embody a construction which limits their use to a gymnasium or other form of exercise room wherein the devices can be permanently installed. As a result, these prior art parallel bar devices are not readily accessible to large numbers of physically handicapped individuals, who do not have the physical space available in their

residences in which to permanently install a parallel bar device. Moreover, the cost of such prior art parallel bar devices represents a substantial investment which in many cases exceeds the financial capabilities of the physically handicapped individual and/or his family and thereby prevents the purchase thereof by the latter. Consequently, as an alternative the physically handicapped person must be transported from his residence to some other location at which there is provided a parallel bar device.

Another undesirable feature which most often is found to characterize prior art parallel bar devices resides in their appearance. For the most part, the prior art parallel bar devices possess an institutional type design. Consequently, when utilized in many surroundings, these prior art parallel bar devices serve to detract from the esthetics of the surroundings and therefore do not constitute a particularly welcomed addition to the furnishings.

There has therefore existed a need to provide a parallel bar device which is capable of being utilized to assist physically handicapped persons to learn to walk, yet a device which does not suffer from the disadvantages possessed by prior art parallel bar devices which have been referred to heretofore in the preceding paragraphs. More specifically, there has existed a need to provide a parallel bar device which embodies a relatively simple construction so as to be capable of being readily assembled and disassembled thereby to render the device portable, yet a construction which possess sufficient strength so as to be capable of supporting the weight of the physically handicapped person while the latter is making use of the device. Moreover, a need has existed to provide a parallel bar device which possesses a colorful design thereby presenting an attractive appearance as compared to the hospital-like appearance which has heretofore characterized prior art forms of parallel bar devices. Finally, a need has existed to provide a parallel bar device, the purchase of which does not require a substantial financial investment thereby to provide an opportunity for a greater number of individuals who have need thereof to own one.

Accordingly, it is an object of the present invention to provide a novel and improved parallel walking bar assembly adapted to be utilized primarily for exercise purposes either in the home or in a hospital particularly by physically handicapped individuals.

It is another object of the present invention to provide such a parallel walking bar assembly which is characterized by a construction that is lightweight yet is sufficiently sturdy so as to be capable of supporting the weight of a physically handicapped person thereon while the latter is making use thereof.

A still further object of the present invention is to provide such a parallel walking bar assembly that is portable thereby enabling the assembly to be brought to the place whereat the physically handicapped individual is located rather than requiring as has most often been necessary heretofore the individual to be transported to a facility which has a parallel bar device permanently installed thereat.

Still another object of the present invention is to provide such a parallel walking bar assembly which is capable of being easily assembled and disassembled thereby permitting, if so desired, the assembly to be erected during periods when it is to be utilized and to be stored out of view during periods of non-use.

Yet another object of the present invention is to provide such a parallel walking bar assembly which embodies adjustment means operable to vary the height of the assembly relative to a supporting floor surface to enable the assembly to be employed by individuals having different physical statures.

Yet another object of the present invention is to provide such a parallel walking bar assembly which possesses a colorful design that gives the assembly an attractive appearance that contrasts with the institutional appearance that has heretofore characterized the appearance of prior art forms of parallel bar devices.

Yet still another object of the present invention is to provide such a parallel walking bar assembly which is relatively inexpensive to manufacture whereby the purchase thereof does not require a substantial financial investment so that an opportunity exists for a greater number of individuals having need thereof to own one.

SUMMARY OF THE INVENTION

It has now been found that the foregoing and related objects can be readily attained in a parallel walking bar assembly which is adapted to be utilized primarily for exercise purposes either in the home or in a hospital environment particularly by physically handicapped individuals. The parallel walking bar assembly includes base means self-supportable on a floor surface. A pair of walking bars are provided each having the ends thereof supported on the base means. The walking bars are located relative to each other so as to be spaced a suitable distance apart whereby to be easily within grasping distance of someone positioned therebetween. The base means is provided with adjustment means operable to vary the distance by which the walking bars are spaced vertically from the supporting floor surface. The assembly further includes a pair of rail members each having their ends attached to the base means whereby the rail members extend substantially parallel to the walking bars and in spaced relation thereto. The pair of rail members function as braces to provide additional strength to the assembly. In addition, the assembly includes a pair of stanchions which are positioned intermediate the ends of the walking bars and are cooperatively associated therewith so as to be slidable therealong. The stanchions function to provide additional support for the walking bars.

In accord with the preferred embodiment of the invention, the base means consists of a pair of substantially U-shaped base supports. Each of the base supports has a pair of foot members cooperatively associated therewith and operable to maintain the corresponding support in an upstanding position relative to the floor surface. The walking bars each have one end thereof supported on one of the base supports and the other end thereof supported on the other of the base supports. More particularly, each of the ends of the walking bars is attached to the base supports by means of a bracket having an opening suitably formed therein through which the end of the walking bar is passed. The brackets in turn are each detachably mounted on the base support in any one of a plurality of different positions whereby the vertical distance by which the walking bars are spaced from the floor surface is capable of being adjusted. To this end, the base supports are provided with a multiplicity of equally spaced openings adapted to receive therein fasteners operable to fasten

the brackets on the base supports and thereby in turn mount the walking bars also thereon. In spaced relation to the aforescribed multiplicity of openings, each of the base supports is provided with a slot suitably dimensioned so as to permit one end of a rail member to be passed therethrough. For purposes of maintaining the ends of the rail members cooperatively associated with the base support, a pair of spaced dowel pins are preferably employed at each end of the rail members with at least the outermost one of the pair of dowel pins being removable to permit the end of the rail member to be received in the aforesaid slot. The removable dowel pin is then repositioned in an opening provided therefor in the end of the rail member whereby the base support is captured between the two dowel pins which comprise a corresponding pair thereof. The stanchions are each provided with adjustment means whereby the stanchions can be adjusted to vary vertical distance between the top thereof and the supporting floor surface to correspond to the vertical distance by which the walking bars are spaced from the floor surface.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of a parallel walking bar assembly constructed in accordance with the present invention with the stanchions being omitted for purposes of clarity of illustration;

FIG. 2 is an end elevational view of a parallel walking bar assembly constructed in accordance with the present invention;

FIG. 3 is a side elevational view of a parallel walking bar assembly constructed in accordance with the present invention, illustrated with parts broken away for purposes of maintaining clarity of illustration;

FIG. 4 is an exploded perspective view of a portion of a parallel walking bar assembly constructed in accordance with the present invention illustrating the manner in which the ends of the walking bars and the rail members are supported on a base support;

FIG. 5 is an end elevational view of a portion of a parallel walking bar assembly constructed in accordance with the present invention illustrating in solid lines the end of one of the pair of walking bars mounted on the base support in a first position and in broken lines the end of the same one of the pair of walking bars mounted on the base support in a second position;

FIG. 6 is a cross sectional view through a portion of one end of one of the base supports of a parallel walking bar assembly constructed in accordance with the present invention taken substantially along the line 6-6 in FIG. 5; and

FIG. 7 is a side elevational view of one of the stanchions of a parallel walking bar assembly constructed in accordance with the present invention, illustrating in solid lines the stanchions occupying a first position relative to a walking bar and in broken lines alternate positions relative to the walking bar.

DETAILED DESCRIPTION OF THE ILLUSTRATED EMBODIMENT

Referring now to the drawings, and more particularly, FIG. 1 thereof there is illustrated therein a parallel walking bar assembly, generally designated by reference numeral 10, which is adapted to be utilized primarily for exercise purposes either in the home or in a hospital environment particularly by physically handicapped individuals. The assembly 10 includes a pair of

base supports 12 and 14. Each of the base supports 12 and 14 is substantially U-shaped in configuration, the latter configuration being formed by the legs 12a and 12b of the base support 12 and the legs 14a and 14b of the base support 14.

Cooperatively associated with each of the base supports 12 and 14 is a pair of foot members 16 and 18, and 20 and 22, respectively, which are operable to render each of the base supports 12 and 14 self-supporting. The foot members 16, 18, 20 and 22 may each be either formed as a integral member or they may each take the form of two parts, i.e., for example, referring to FIG. 3 of the drawings the foot member 16 may comprise a member assembled from the two portions 16a and 16b and the foot member 20 a member assembled from two portions 20a and 20b. Moreover, the foot members 16 and 18 can be connected to the base support 12 and the foot members 20 and 22 to the base support 14 through the use of any suitable conventionally known method of connecting two members together. To this end, where the foot members 16, 18, 20 and 22 embody a multi-part construction, the two portions which form each foot member are secured in aligned relation on opposite sides on the corresponding one of the base supports. More particularly, the two portions may be secured in place for example, by being glued thereto, through the use of fasteners, etc. On the other hand, where the foot members 16, 18, 20 and 22 are of integral construction, the latter members may each be provided with a slot formed at the center thereof extending less than the entire height of the foot member and suitably dimensioned so as to permit a portion of a corresponding leg of a base support to be received therein with a friction fit.

Referring again to FIG. 1 of the drawings, as depicted therein the assembly 10 further includes a pair of walking bars 24 and 26, and a pair of rail members 28 and 30. Although the walking bars 24 and 26 and the rail members 28 and 30 may have any desired length, in accord with one embodiment of the invention, the walking bars 24 and 26 are preferably provided with a length of 5 to 6 feet. Moreover, the walking bars 24 and 26 are preferably of the same length with the rail members 28 and 30 which are substantially identical in length also each having a lesser length than the walking bars 24 and 26. The walking bars 24 and 26 which are supported on the base supports 12 and 14 in a manner yet to be described lie in a plane which is substantially parallel to the plane in which the rail members 28 and 30 lie when the latter are in their assembled condition relative to the base supports 12 and 14.

Insofar as concerns the manner in which the walking bars 24 and 26 are supported on the base supports 12 and 14, reference will be made for this purpose to FIG. 4 of the drawings. Each of the ends of the walking bars 24 and 26 are mounted on the base supports 12 and 14 through the use of a bracket 32. Inasmuch as the construction and the manner in which they are employed is the same for all four of the brackets 32, it is deemed sufficient for purposes of obtaining an understanding thereof to set forth hereinafter the description of only one of the brackets 32, namely that depicted in FIG. 4 of the drawings. With reference therefore to FIG. 4 of the drawings, the bracket 32 is provided with a suitably dimensioned opening (not shown) capable of receiving therein with a friction fit a rubber bushing 34. The latter bushing 34 has a internal diameter which corresponds to the external diameter of the walking bars 24

and 26 so that an end of one of the walking bars 24 and 26 is capable of being passed therethrough and held captured therein by means of a friction fit in the manner illustrated in FIG. 6 of the drawings. The bracket 32 is fastened to the base support 12 by means of any suitable conventionally known form of fastening means. In this connection, however, in accord with the preferred embodiment of the invention, the bracket 32 is provided with a pair of holes 38 each having a rectangular configuration for a purpose yet to be described. The holes 38 are suitably spaced relative to each other so as to be alignable with different pairs of the multiplicity of holes 40 with which the leg 12a of the base support 12 is provided. Each of the holes 38 and 40 is suitably dimensioned so as to be capable of receiving therein a fastener 36, the latter having a substantially square body portion which conforms to the rectangular configuration of the holes 38 and a threaded circular end portion which conforms to the configuration of the holes 40. To fasten the bracket 32 to the base support 12 and more particularly the leg 12a thereof, the holes 38 of the bracket 32 are aligned with a pair of holes 40. Fasteners 36 are passed through each of the holes 38 and 40. The bracket 32 is tightened in place by means of wing nuts 42 which are threadedly engaged on the threaded ends of the fasteners 36 and tightened in place thereon.

Turning now to a description of the manner in which the rail members 28 and 30 are attached to the base supports 12 and 14 reference will be had for this purpose to FIG. 4 of the drawings. Inasmuch as the ends of the rail members 28 and 30 are all connected to the base supports 12 and 14 in the same manner, it is deemed sufficient for purposes of obtaining an understanding thereof to set forth only hereinafter a description of the manner in which the one end of the rail member 30 depicted in FIG. 4 of the drawings is attached to the legs 12a of the base support 12. As shown in FIG. 4, the leg 12a of the base support 12 has formed therein an elongated slot 44, the latter being suitably dimensioned so as to be capable of receiving therein one of the ends of the rail member 30. The slot 44 is located in the leg 12a of the base support 12 so as to be positioned outwardly of the multiplicity of holes 40. In addition, it is to be understood that although not depicted in FIG. 4 of the drawings, the leg 12b of the base support 12 also has formed therein an elongated slot (not shown) substantially identical in dimensions to the slot 44 and aligned therewith so that when one end of the rail member 30 is received therein the ends of the rail members 28 and 30 which are supported on the base support 12 are aligned in the same horizontal plane which in turn is parallel to the horizontal plane in which the walking bars 24 and 26 lie. The rail member 30 in turn adjacent the end thereof which is visible in FIG. 4 of the drawings is provided with a pair of dowel pins 46 and 50. The dowel pin 46 is positioned in an opening (not shown) provided therefor in the rail member 30 and is intended to be permanently received therein. The dowel pin 46 is therefor operable to function as a stop means to limit the extent to which the end of the rail member 30 is permitted to pass through the slot 44.

Spaced from the point at which the dowel pin 46 is supported on the rail member 30 and in relatively close proximity thereto there is formed in the end of the rail member 30 an opening 48. The spacing between the dowel pin 46 and the opening 48 is selected so as to

slightly exceed the thickness of the base supports 12 and 14 for a purpose which will become readily apparent hereinafter. The opening 48 is suitably dimensioned so as to be capable of removably receiving the dowel pin 50 therewithin.

Insofar as concerns the actual steps of assembling the ends of the rail members 28 and 30 on the base supports 12 and 14, this is believed to be best understood with reference to FIGS. 3 and 4 of the drawings. With reference thereto, the dowel pin 50 is first removed from the end of whichever one of the rail members, i.e., either rail member 28 or rail member 30 is to be passed through one of the slots 44 which is formed in the base supports 12 and 14. With the pin 50 so removed from the end of one of the rail members 28 and 30, the latter end is then inserted through the slot 44 until further movement thereof is prevented by virtue of the engagement of the dowel pin 46 with the surface of the corresponding base support, i.e., either the base support 12 or 14. Thereafter, the dowel pin 50 is reinserted into the opening 48. With the pin 50 positioned in the opening 48, the corresponding base support be it either the base support 12 or the base support 14 is captured between the dowel pins 46 and 50 in the manner depicted in FIG. 3 of the drawings. If the procedure described above is employed to assemble first one end of the rail member 28 to the base support 12, then the same procedure is thereafter followed to connect the other end of the rail member 28 to the base support 14 and the opposite ends of the rail member 30 to the base supports 12 and 14.

Turning next to FIG. 7 of the drawings, the assembly 10 preferably includes a pair of stanchions 52, only one of which is shown in FIG. 7. Each of the stanchions 52 in accord with the illustrated embodiment thereof is of two-part construction consisting of a lower portion 54 which terminates in an enlarged base 56 and an upper portion 60. The lower portion 54 preferably takes the form of a tubular member having an internal diameter suitably dimensioned so as to be capable of receiving the upper portion 60 therein for sliding movement relative thereto. At one end the upper portion 60 terminates in a ring-like element 62. The latter element 62 is suitably dimensioned so as to enable either one of the walking bars 24 or 26 to be received therewithin. In addition, it will be noted with reference to FIG. 7 of the drawings that the height of the stanchion 52 is capable of being adjusted. For this purpose, an opening (not shown) is provided in the upper end, as viewed with reference to FIG. 7 of the drawings, of the lower portion 54. The adjustment of the height of the stanchion 52 is accomplished by positioning the upper portion 60 of the stanchion 52 relative to the lower portion 54 thereof so that the ring-like element 62 is spaced at the desired height relative to the floor surface 58. To secure the upper portion 60 relative to the lower portion 54 in the aforescribed position, a threaded fastener 64 is preferably threaded into the aforesaid opening (not shown) in the lower portion 54 so that the inner end of the fastener 64 engages the external surface of the upper portion 60. It will thus be understood that the mode of operation of the fastener 64 is like that of a conventional, well-known set screw. Of course, it is to be understood that other means could be utilized to maintain the lower and upper portions, 54 and 60, respectively, of the stanchion 52 positioned in the desired fashion relative to each other, without departing from the essence of the invention. The function of the

stanchions 52 is to provide additional support to the walking bars 24 and 26 intermediate the ends thereof. Although only one stanchion 52 has been depicted in the drawings, it is to be understood that there is a stanchion 52 associated with each of the walking bars 24 and 26. Moreover, as depicted in FIG. 7 through the use of solid lines and broken lines, the location of the stanchions 52 relative to the walking bar with which it is associated may vary. More specifically, with reference to FIG. 7 of the drawings, the stanchions 52 may be located substantially at the midpoint of the walking bar as illustrated therein in solid lines or on either side of the center of the walking bar as illustrated therein in dotted lines.

There will now be set forth a description of the manner in which the assembly 10 is easily assembled or disassembled as well as the manner in which the assembly 10 in its erected condition is intended to be employed. For purposes of the following description of the manner in which the parallel walking bar assembly 10 is assembled, it will be assumed that the assembly process is begun with the base supports 12 and 14 having the foot members 16 and 18 and 20 and 22, respectively, attached thereto. With the base supports 12 and 14 spaced relative to each other a distance substantially equivalent to the length of the rail members 28 and 30, the dowel pin 50 is removed from the opening 48 formed therefor on the end of each of the rail members 28 and 30. Starting with either the rail member 28 or the rail member 30, one end thereof is first inserted through one of the slots 44 provided for this purpose in the base supports 12 and 14. Assuming that the rail member 28 and the base support 12 are the first to be interconnected, the end of the rail member 28 is passed through one of the slots 44 in the base support 12 until the dowel pin 46 provided at that end of the rail member 28 engages the base support 12. With the aforesaid one end of the rail member 28 so positioned relative to the base support 12, the dowel pin 50 is reinserted into the opening 48 so as to cause the base support 12 to be captured between the two dowel pins 46 and 50. Thereafter, the other end of the rail member 28 is passed through the slot 44 in the base support 14 which is aligned with the slot 44 in the base support 12 through which the other end of the rail member 28 is passed. With the other end of the rail member 28 received in the slot 44 in the base support 14 so that the dowel pin 46 provided at that end of the rail member 28 is in engagement with a side surface of the base support 14, the dowel pin 50 is reinserted in the opening 48 so as to cause a portion of the base support 14 to be captured between the two dowel pins 46 and 50. In similar fashion, the ends of the rail member 30 are likewise connected to the base supports 12 and 14 by being inserted through the other slot 44 with which each of the base supports 12 and 14 is provided and with the corresponding base support 12 or 14 being captured between the two dowel pins 46 and 50 which are provided at each end of the rail member 30. It, of course, is understood that the dowel pin 50 is reinserted for this purpose into the opening 48 provided at each end of the rail member 30.

After the rail members 28 and 30 and the base supports 12 and 14 have been interconnected in the manner described above, the walking bars 24 and 26 are next mounted on the base supports 12 and 14. For this purpose, the four brackets 32 are secured in position on the base supports 12 and 14 through the use of the

fasteners 36 and the wing nuts 42, the former being received in the holes 38 provided therefor in the brackets 32 and in a selected pair of the multiplicity of holes 40 which are formed in each leg of each of the base supports 12 and 14, so that the brackets 32 are located at such a distance relative to the floor surface 58 so as to cause the walking bars 24 and 26 to be positioned at a preestablished level relative to the floor surface 58. The actual mounting of the walking bars 24 and 26 on the base supports 12 and 14 is accomplished by first passing one end of either of the walking bars 24 or 26 through one of the bushings 34. Thereafter before the other end of the same walking bar is inserted through the bushing 34 in the bracket 32 which is mounted on the other one of the base supports, the walking bar is passed through the ring-like element 62 of one of the stanchions 52. When this has been done, the other end of the walking bar is inserted into the other bushing provided therefor in the other base support. In similar fashion, the other walking bar is likewise mounted in supporting relation on the base supports 12 and 14. It is, of course, to be understood that the height of the stanchions 52 would be adjusted to correspond to the height at which the walking bars 24 and 26 are located. This completes the erection of the parallel walking bar assembly 10 and the latter is then ready to be utilized. The entire procedure described above takes only a matter of minutes to accomplish.

With the assembly 10 in its erected condition, a physically handicapped person is capable of employing the latter to perform exercises therewith. More particularly, the assembly 10 is especially suited to be employed by a person having a leg disability and for whom exercises have been prescribed in an effort to hopefully strengthen the disabled leg or legs of the individual. Accordingly, to use the assembly 10 the handicapped person is positioned at one end thereof so that the walking bars 24 and 26 are within his reach. By grasping the walking bars 24 and 26, the individual is capable of pulling himself along the bars 24 and 26 from one end of the assembly 10 to the other. As the individual moves along the length of the walking bars 24 and 26, his weight is being supported by the assembly 10 rather than on his legs. Therefore, it is easier for the individual to establish control over his legs to cause alternately one then the other to be put forward in a step-by-step fashion. Forcing the individual to exercise his legs in this fashion is intended to have the effect of strengthening them. After the individual has completed the exercises prescribed to be performed in a given time period, the parallel walking bar assembly 10 of the present invention may readily be disassembled in a few minutes so as to enable the assembly 10 to be moved to some form of place of storage until the next time the assembly 10 is to be utilized.

Starting with the walking bars 24 and 26, the assembly 10 is disassembled by performing in reversing order the steps described heretofore to be followed in erecting the assembly 10. Consequently, it is deemed unnecessary for an understanding of the disassembly procedure to set forth in detail the specific steps which are followed in disassembling the parallel walking bar assembly 10. These steps are believed to be readily apparent to anyone in view of the detailed description of the erection, i.e., assembly procedure for the assembly 10 which has been set forth hereinabove.

Although only one embodiment of a parallel walking bar assembly constructed in accordance with the pres-

ent invention has been shown in the drawings and described hereinabove, it is to be understood that modifications in the construction thereof may be made thereto by those skilled in the art without departing from the essence of the invention. In this connection, some of the modifications which can be made in the assembly 10 have been alluded to hereinabove while others will become readily apparent to those skilled in the art when exposed to the present description and illustration of the construction of the parallel walking bar assembly 10. For example, the number of holes 40 with which each leg of the base supports 12 and 14 is provided in order to enable the brackets 32 to be mounted in different positions relative to the corresponding leg of the base support 12 or 14 in the manner shown in solid lines and in dotted lines in FIG. 5 of the drawings can obviously be increased or decreased without departing from the essence of the invention. Also, the ends of the walking bars 24 and 26 can be provided with suitable caps 35 to provide a smooth surface thereto, if so desired, without departing from the essence of the invention. In addition, means other than the stanchions 52 could be employed to provide additional support for the walking bars 24 and 26, if so desired, without departing from the essence of the invention. Finally, the walking bars 24 and 26 and the rail members 28 and 30 may embody different configurations or be constructed in other ways without departing from the essence of the invention.

Thus, it can be seen that the present invention provides a novel and improved parallel walking bar assembly adapted to be utilized primarily for exercise purposes either in the home or in the hospital particularly by physically handicapped individuals. The parallel walking bar assembly of the present invention is characterized by a construction that is lightweight yet is sufficiently durable so as to be capable of supporting the weight of a physically handicapped person thereon while the latter is making use thereof. In accord with the present invention, a parallel walking bar assembly is provided that is portable thereby enabling the assembly to be brought to the place whereat the physically handicapped individual is located rather than requiring as has most often been necessary heretofore the individual to be transported to a facility which has a parallel bar device permanently installed thereat. Moreover, a parallel walking bar assembly is provided in accord with the present invention which is capable of being easily assembled and disassembled thereby permitting, if so desired, the assembly to be erected during periods when it is to be utilized and stored out of view during periods of non-use. Also, in accord with the present invention a parallel walking bar assembly has been provided which embodies adjustment means operable to vary the height of the assembly to be employed by individuals having different physical statures. In addition, the parallel walking bar assembly of the present invention possesses a colorful design that gives the assembly an attractive appearance that contrasts with the institutional-type appearance that has heretofore characterized the appearance of prior art forms of parallel bar devices. Finally, in accord with the present invention a parallel walking bar assembly is provided which is relatively inexpensive to manufacture whereby the purchase thereof does not require a substantial financial investment so that an opportunity exists for a greater number of individuals having need thereof to own one.

Having thus described the invention, I claim:

1. A readily assembled and disassembled parallel walking bar assembly comprising:
 - a. a first base support having front and rear surfaces which define parallel planes and including a first leg and a second leg interconnected by a central portion, each of said first and second legs having a multiplicity of holes intersecting said surfaces and having axes substantially perpendicular thereto in suitably spaced relation relative to each other, each of said first and second legs further having slot means formed therein in spaced relation to said multiplicity of holes, said first base support also including planar portions extending outwardly therefrom at an angle to the said surfaces thereof operable for maintaining said first base support in an upstanding position on a planar surface, said portions comprising foot members extending outwardly on each side of said first leg and said second leg of said first base support substantially at right angles thereto;
 - b. a second base support spaced from said first base support and having the front and rear surfaces thereof defining planes parallel to the planes defined by said first base support, said second base support including a first leg and a second leg interconnected by a central portion, each of said first and second legs having a multiplicity of holes intersecting said surfaces and having axes substantially perpendicular thereto in suitably spaced relation relative to each other, each of said first and second legs further having slot means formed therein in spaced relation to said multiplicity of holes, said second base support also including planar portions extending outwardly therefrom at an angle to said surfaces thereof operable for maintaining said second base support in an upstanding position on a planar surface, said portions comprising foot members extending outwardly on each side of said first leg and said second leg of said second base support substantially at right angles thereto;
 - c. first bracket means detachably secured on said first base support in one of a plurality of adjustable positions relative to said first base support, said first bracket means including a first pair of brackets, one of said first pair of brackets being detachably mounted on said first leg of said first base support by means of said multiplicity of holes formed in said first leg of said first base support, and the other of said first pair of brackets being detachably mounted on said second leg of said first base support by means of said multiplicity of holes formed in said second leg of said first base support so that by selectively employing different pairs of said multiplicity of holes to mount said first pair of brackets on said first and second legs of said first base support the position of said first pair of brackets relative to said first base support may be adjusted;
 - d. second bracket means detachably secured on said second base support in one of a plurality of adjustable positions relative to said second base support, said second bracket means including a second pair of brackets, one of said second pair of brackets being detachably mounted on said first leg of said second base support by means of said multiplicity of holes formed in said first leg of said second base support, and the other of said second pair of brackets

- e. a first walking bar having one end thereof supported by said one of said first pair of brackets on said first base support and the other end thereof supported by said one of said second pair of brackets on said second base support so that said first walking bar is detachably supported by said first and second base supports substantially at right angles to the front and rear surfaces of each of said first and second base supports;
- f. a second walking bar having one end thereof supported by said other of said first pair of brackets on said first base support and the other end thereof supported by said other of said second pair of brackets on said second base support so that said second walking bar lies in the same horizontal plane as said first walking bar and is detachably supported by said first and second base supports substantially at right angles to the front and rear surfaces of each of said first and second base supports;
- g. a first rail member having one end thereof detachably received in said slot means of said first leg of said first base support and the other end thereof detachably received in said slot means of said first leg of said second base support so that said first rail member extends between said first and second base supports substantially at right angles to the major axis of each of said first and second base supports and in spaced relation to said first walking bar, said first rail member being provided at each end thereof with a pair of dowel pins, one of said pair of dowel pins being removable to permit the ends of said first rail member to be received in said slot means, said one of said pair of dowel pins thereafter being repositioned so that a portion of the corresponding one of said first and second base supports is captured between said pair of dowel pins, said first rail member being operable to increase the rigidity of the parallel walking bar assembly;
- h. a second rail member having one end thereof detachably received in said slot means of said second leg of said first base support and the other end thereof detachably received in said slot means of said second leg of said second base support so that said second rail member is spaced from said second walking bar and lies in the same horizontal plane as said first rail member and extends between said first and second base supports substantially at right angles to the major axis of each of said first and second base supports, said second rail member being provided at each end thereof with a pair of dowel pins, one of said pair of dowel pins being removable to permit the ends of said second rail member to be received in said slot means, said one of said pair of dowel pins thereafter being repositioned so that a portion of the corresponding one of said first and second base supports is captured between said pair of dowel pins, said second rail member being operable to increase the rigidity of

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the parallel walking bar assembly; and
 i. additional support means cooperatively associated with each of said first and second walking bars to impart additional support thereto intermediate the ends thereof and positionable intermediate said base supports, said additional support means comprising a pair of stanchions, one of said pair of stanchions being cooperatively associated with said first walking bar and the other of said pair of stanchions being cooperatively associated with said second walking bar, each of said pair of stanchions including a lower portion terminating at one end in

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an enlarged base supportable on a planar surface, and an upper portion terminating at one end in a ring-like element operable for receiving there-through one of said first and second walking bars, said upper portion being supported on said lower portion for sliding movement relative thereto to enable said upper portion to be adjusted relative to said lower portion so that the height of said ring-like element corresponds to the height of said first and second walking bars.

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