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2,733,754

INVALID WALKER

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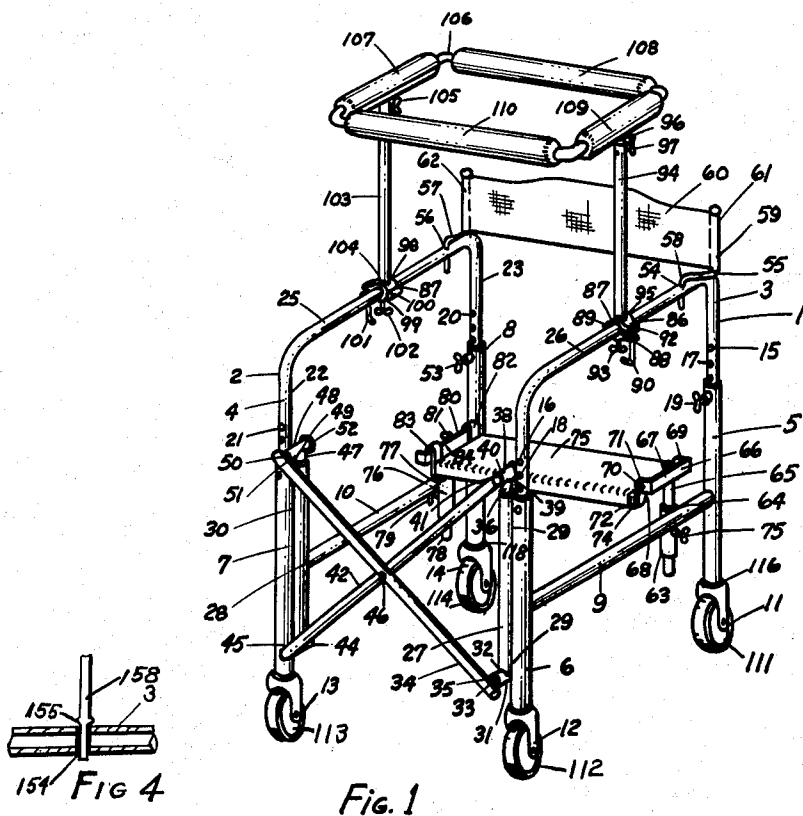


Fig. 1

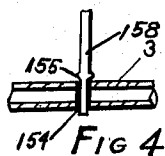


Fig. 4

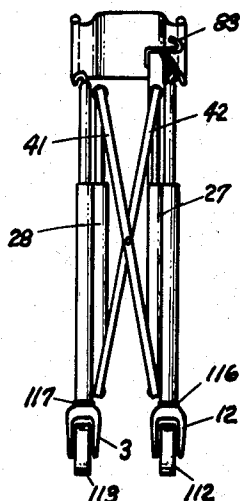
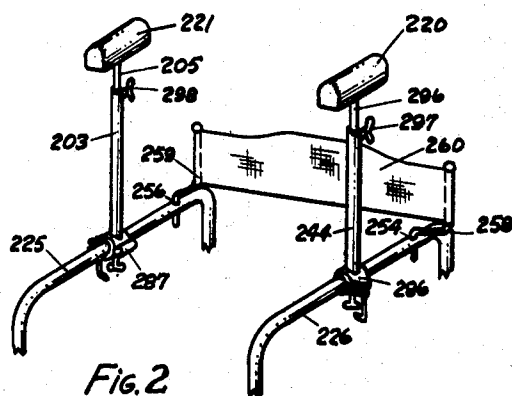


Fig. 3



1

2,733,754

INVALID WALKER

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This invention relates to devices for supporting invalids and more particularly to a combined seat and walker or a combined seat and crutches.

In valid walkers of previous design and of the type with which we are familiar, folding the walker for storage or transportation is difficult. In some designs of previous walkers, the lateral bracing members were removed to allow the various sections of the walker to be stacked for storage and transportation. In other types of foldable walkers and invalid supports, the folding mechanism was complicated in construction and had certain other disadvantages.

It is, accordingly, an object of this invention to overcome the above and other defects in prior invalid walker designs and it is more particularly an object of our invention to provide a laterally foldable invalid walker which is simple in construction, economical in manufacture and cost, rigid and durable in construction, and comfortable to the occupant and light in weight.

Another object of our invention is to provide a laterally foldable seat and walker combination which is light in weight and easily portable.

Another object of the invention is to provide a novel means of attaching a seat to a walker.

Another object of our invention is to provide a novel folding means for a walker.

Another object of this invention is to provide a novel combination of crutches in a laterally foldable walker.

With the above and other objects in view, the present invention consists of the combination and arrangement of parts hereinafter more fully described, illustrated in the accompanying drawing, and more particularly pointed out in the appended claims, it being understood that changes may be made in the form, size, proportions, and minor details of construction without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawing:

Fig. 1 is a perspective view of a seat and walker according to our invention;

Fig. 2 shows the movable crutches which may be substituted for the body supporting member shown in Fig. 1;

Fig. 3 shows the walker of Fig. 1 shown in a collapsed position; and

Fig. 4 is a detailed view of another embodiment of our invention.

Referring now to the drawing, Figs. 1 and 3 show oppositely disposed side frames 1 and 2 made up of the upper U-shaped side members 3 and 4 and the leg members 5, 6, 7, and 8, respectively. The legs 5 and 6 are joined together intermediate their ends by the lower frame member 9 and the legs 7 and 8 are joined together intermediate their ends by the lower frame member 10. The legs 5, 6, 7, and 8 are made of tubular material and are provided with casters 11, 12, 13, and 14 at the lower end thereof and the legs 5 and 6 telescopically receive the ends 15 and 16, respectively of the U-shaped top members 3 and 4. Spaced holes 17 are provided in the end 15 and spaced holes 18 are provided in the end 16. These holes are adapted to adjustably receive the locking devices 19 and to support

2

the side frame 3 in a vertical adjustable position. Similar holes 20 and 21 are provided in the ends 22 and 23 of the U-shaped side member 4 and the ends 22 and 23 are integrally connected by the top member 25 which corresponds to the top member 26 which connects the ends 15 and 16 of the member 3.

Tubular sleeve members 27 and 28 are attached to the leg members 6 and 7, respectively, at 29 and 30, respectively, by welding, brazing, or any other well known fastening means. The tubular member 27 has the tubular member 31 welded to the lower end thereof at 32 in normal relation thereto. The tubular member 31 telescopically and pivotally receives the member 33 which is integrally attached to the diagonal cross brace member 34 at 35 by welding or other known means and the pin member 36 is telescopically received in the sleeve member 27. A hollow member 38 is integrally attached to the member 36 at 39 and the member 38 pivotally receives the internal member 40 which is integrally connected at 41 to the cross member 42.

The tubular member 28 has a cross member 44 welded thereto similar to the member 31 and pivotally receives a member integrally attached to the cross member 42 at 45 and the cross member 42 is pivotally attached to the cross member 34 by the pin 46. The tubular member 47 is telescopically received in the member 28 and the member 48 is welded to the member 47 at 49. The offset member 50 is welded to the member 34 at 51 and held against removal from the hollow member 48 by the washer 52 which is attached to the end of the member 50 and pivotally and slidably engages the end of the member 48.

The top member 25 is vertically adjustable in the leg member 8 by means of the holes 20 which are adapted to adjustably receive the pins 53. A hole 54 is formed in the top of the top member 26 of the side member 1 to receive the back supporting member 55 and a similar hole 56 is formed in the member 25 to receive the back supporting member 57. Back supporting member 55 is bent outwardly at 58 and upwardly at 59 to receive the fabric material 60 which is provided with a hem 61 to receive the member 55 and provided with a hem 62 to receive the member 57.

The tubular member 63 is welded or by other means attached to the frame member 9 at 64 and telescopically receives the pin 65 which is attached to the brace 66 at 67 and which has the ends 68 and 69 bent at right angles thereto and provided with holes 70 which receive a pin 71 which pivotally engages the bracket 72 which engages the seat 73 at 74.

A screw 75 threadably engages the tubular member 63 and frictionally engages the member 65 to adjust the seat 73 vertically. A tube 76 is welded to the lower frame member 10 at 77 and it slidably receives the pin 78 and the pin 78 is adjustably held against vertical movement by a screw 79. A lateral member 80 is welded to the pin 78 at 81 and is adapted to receive the brackets 82 which have the hooks 83 attached thereto and which have the normally bent members 84 which support the seat 73. Clamps or brackets 86 and 87 are provided. The clamps 86 and 87 have a top portion which is hinged to the bottom member 88 at 89 and which has the fastening member 90 threadably engaged at 92 to clamp the bracket member to the top member or arm 26 of the walker. A set screw 93 threadably engages the member 88 to further lock the clamps 86 and 87 in slidable movement on the arm 26. The vertical support arm 94 is welded to the bracket 86 at 95 and telescopically receives the pin 96 and holds it in position by means of the screw 97. The brackets 87 are similar to the brackets 86 and they have the upper portion 98 and the

3

lower portion 99 pivotally attached together at 100 and the opposite ends thereof from the pivot are held together by the threaded member 101. A set screw 102 is threadably engaged in the member 99 to hold the clamps or brackets 87 against slidable movement on the arm or top member 25.

The vertical support member 103 is welded to the brackets 87 at 104 and the upper end of the vertical support 103 telescopically receives the pin 105 which is welded to the body receiving frame 106 under the body engaging padding 107. It will be noted that the frame 106 is provided with the body engaging padding 107, 108, 109, and 110 disposed around the periphery of the frame in order to provide a comfortable supporting surface for an invalid. The casters 11, 12, 13, and 14 have wheels 111, 112, 113, and 114, respectively, which are pivotally received in the lower end of the tubular legs 5, 6, 7, and 8, respectively, at 115, 116, 117, and 118, respectively.

In the embodiment of the invention shown in Fig. 2, we show the arms 225 and 226 supporting the fabric back 260 and having the back rest support members 258 and 259 supported in holes 254 and 256 in the arm members. The vertical supports 244 and 203 telescopically receive the members 205 and 296 and are held in a vertically adjustable position by screws 297 and 298.

The padded members 220 and 221 are attached to the upper ends of the members 296 and 205 and are adapted to engage the armpits of an invalid using the walker. The crutches supported by the members 203 and 244 are adapted to be used on the chair shown in Fig. 1 and substituted for the body supporting frame 106. Clamps 286 and 285 which are similar to the clamps 86 and 87 in Fig. 1 are adapted to hold the crutches on the walker shown in Fig. 1.

In Fig. 4, we show another embodiment of our invention wherein the back rest supporting member 158 corresponds to the support 58 in Fig. 1. The support 158 has the struck out portions 155 thereon which may be formed by deforming a part of the metal of the back rest support to prevent the support 158 from sliding through the hole 154. The side member 3 corresponds to the side member 3 in Fig. 1.

In the foregoing specification, we have set forth the invention in its preferred practical forms but we are aware that the structure shown is capable of modification within a range of equivalents without departing from the invention which is to be understood is broadly novel as is commensurate with the appended claims.

What we claim is:

1. An invalid walker comprising spaced hollow leg members, spaced U-shaped side members having legs telescopically received in said hollow leg members, sleeve members attached to two of said legs, cross brace members pivotally connected together intermediate their ends, one end of each said cross brace being pivotally connected at one end thereof to a sleeve member and pivotally connected at the other end thereof to a member telescopically movable in another said sleeve member, lower frame members attached to said legs, a vertically adjustable seat supported on said lower frame members, a body supporting member adjustably supported on said U-shaped members, said body supporting member comprising a hollow vertical support member attached to each U-shaped member, a pin telescopically received in each vertical support, and a body receiving frame supported on said vertical supports.

2. An invalid walker comprising two pairs of spaced, hollow upwardly extending legs, a lower frame member attached between each pair of legs, a folding mechanism attached between one of each pair of legs, said folding means comprising a tubular sleeve attached to each leg member, said sleeve member having an up-

4

wardly extending member and a hollow member extending forwardly, a pin member having a horizontally extending hollow member attached to the upper end thereof telescopically engaging said sleeve members, a cross member pivotally attached to each said sleeve member and pivotally engaging said horizontally extending hollow member, said members being pivotally connected together, and a seat swingably attached to one said lower frame member and removably attached to said other lower frame member.

3. An invalid walker comprising spaced hollow leg members, spaced U-shaped side members having legs telescopically received in said hollow leg members, sleeve members attached to two of said legs, cross brace members pivotally connected together intermediate their ends, one end of each said cross brace being pivotally connected at one end thereof to a sleeve member and pivotally connected at the other end thereof to a member telescopically movable in another said sleeve member, lower frame members attached to said legs, a vertically adjustable seat supported on said lower frame members, a body supporting member adjustably supported on said U-shaped members, said body supporting member comprising a hollow vertical support member attached to each U-shaped member, a pin telescopically received in each vertical support, and crutch members supported on said vertical supports.

4. The invalid walker recited in claim 1 wherein said invalid walker is provided with a back rest comprising a flexible body member having the opposite ends thereof removably supported on said U-shaped members.

5. The invalid walker recited in claim 2 wherein said invalid walker is provided with a back rest comprising a body member having the opposite ends thereof removably supported on said U-shaped members, said body member comprising a sheet of flexible material.

6. An invalid walker comprising two spaced pairs of spaced tubular members disposed in parallel relation to each other, two lower frame members, one said lower frame member connecting the tubes of one said pair together and the other said lower frame member connecting the other said pair together, a U-shaped member having the legs thereof telescopically received in the open upper ends of each said pair of tubular members, floor engaging means received in the lower ends of said tubular members, means to lock said U-shaped member legs to said tubular members for vertical adjustment thereon, a sleeve member disposed in side by side relation to and attached to one said tubular leg of each said pair, a pin member telescopically received in each said sleeve, two cross brace members pivotally connected together midway between their ends, one end of one said brace being pivotally connected to the lower end of one said sleeve, the other end of said brace being pivotally connected to one said pin in the other said sleeve, one end of the other said brace being pivotally connected to the lower end of the other said sleeve, the other end of said other brace being pivotally connected to said other pin, and a seat swingably attached to the lower frame member of one said pair of tubular members and detachably secured to said other lower frame member of one said pair of tubular members.

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