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(54) **BED ASSEMBLY**

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(57) **ABSTRACT**

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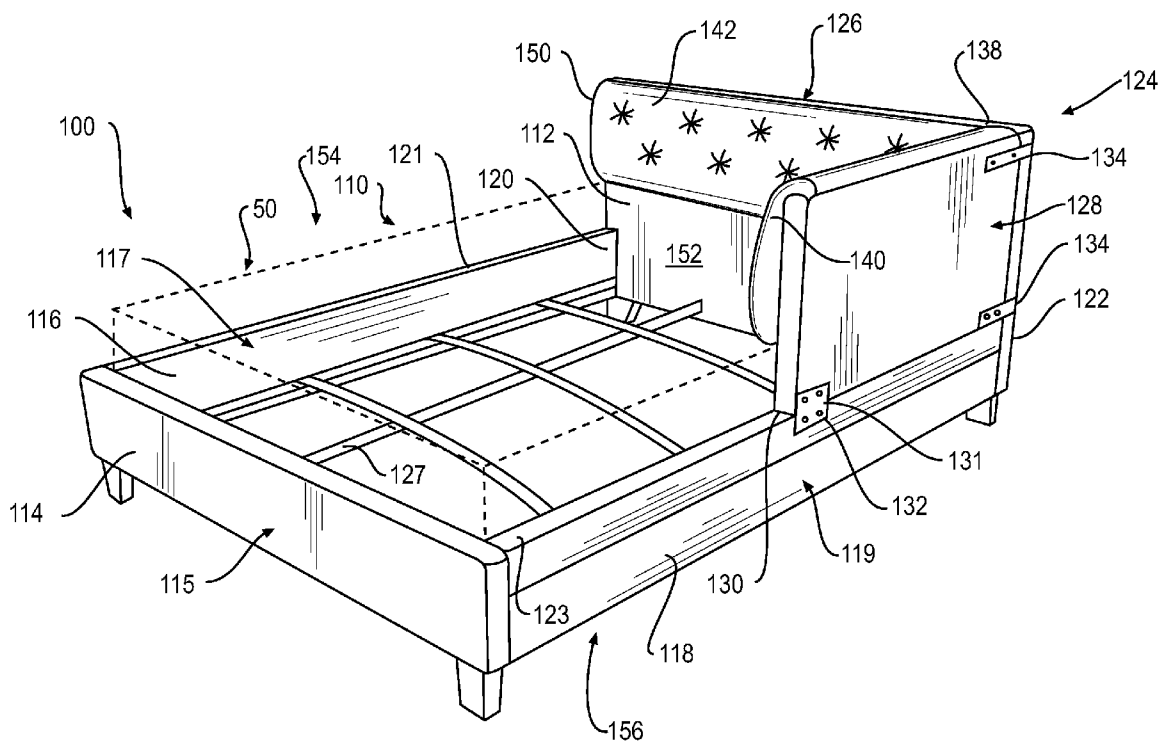
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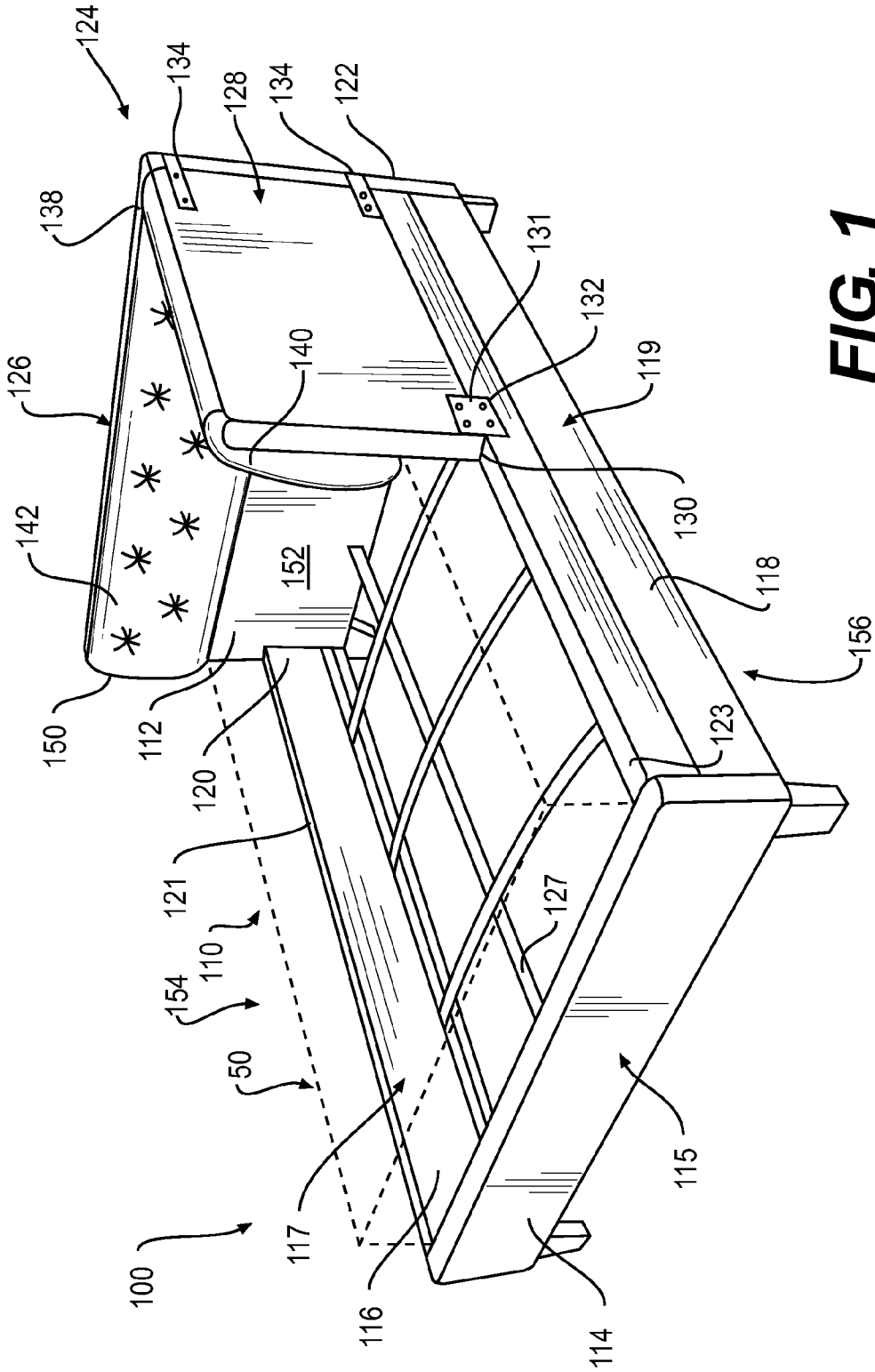
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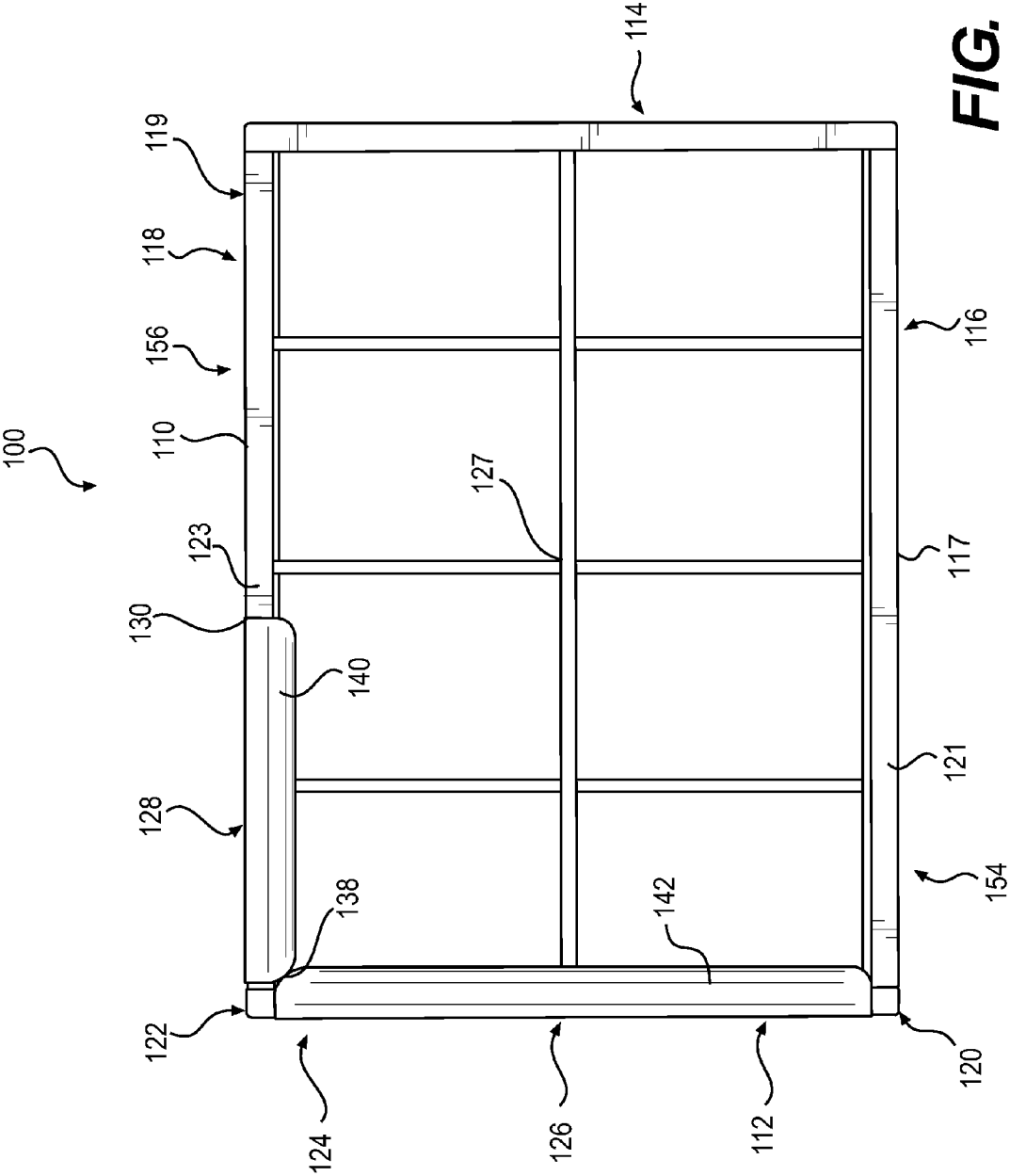
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A bed assembly is provided that includes a corner barrier structure extending upward from the bed frame. The corner barrier can include a headboard and a side panel and is aligned adjacent one of the head corners of the bed frame. The side panel can be mounted along one of the two sides of the bed frame to allow one side to be open for access to the bed and the other side closed to form a partial barrier. The bed assembly with such a corner barrier can be installed adjacent a room corner.





**FIG. 1**



**FIG. 2**

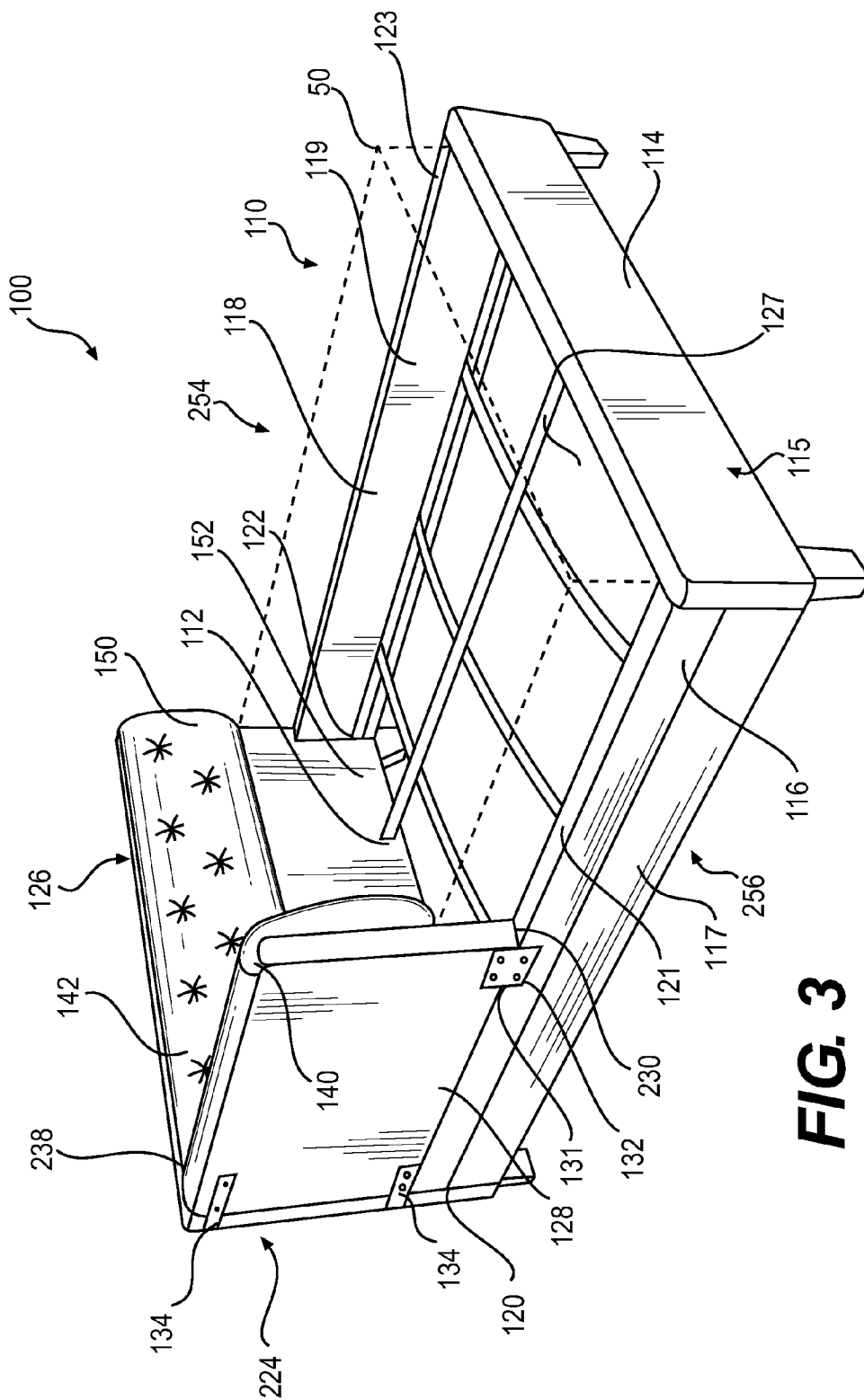
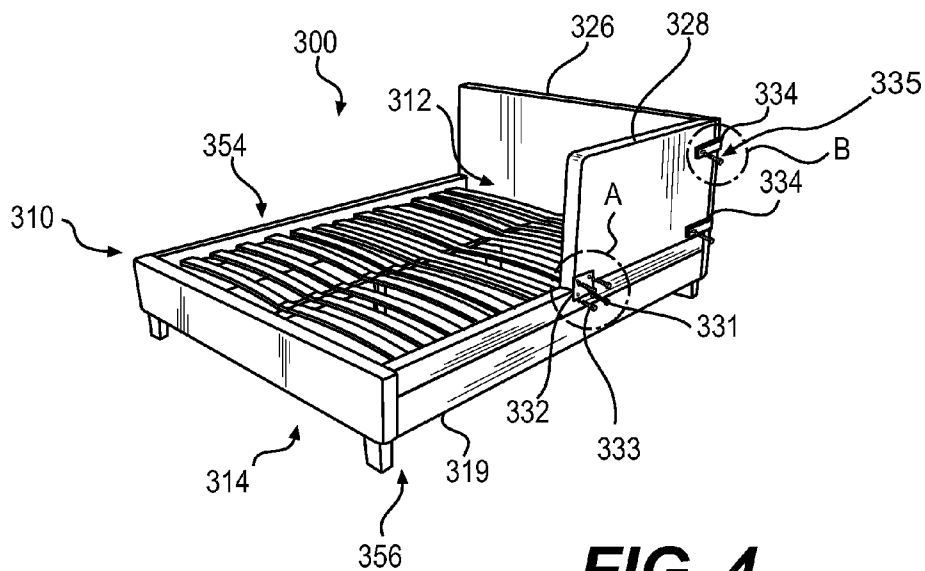
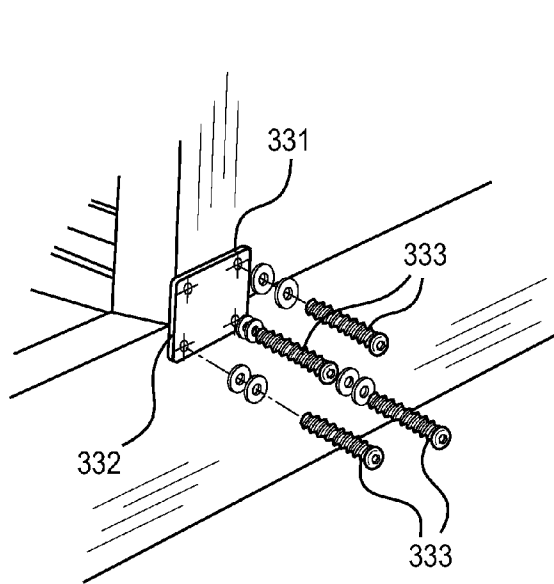


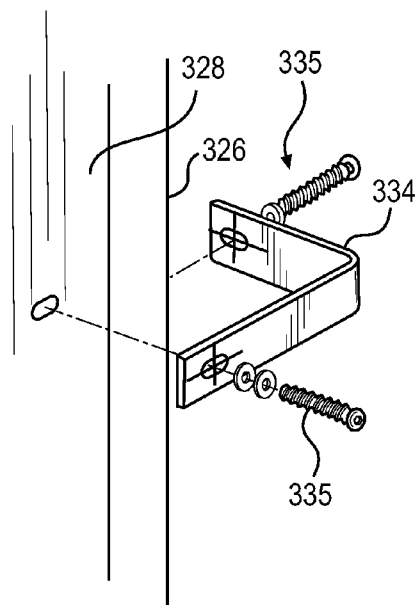
FIG. 3



**FIG. 4**



**FIG. 5**



**FIG. 6**

**BED ASSEMBLY**

TECHNICAL FIELD

[0001] The present disclosure relates generally to furniture assemblies, and more particularly, to bed assemblies exhibiting certain characteristics appropriate for use in room corner arrangements.

BACKGROUND

[0002] The size and layout of bedrooms can vary from dwelling to dwelling. Often times these characteristics limit the available options for installing a bed. In some cases, it is necessary, or preferred, that a bed be aligned adjacent a corner of a room. In such circumstances, it is sometimes desirable to have a barrier disposed between the wall and the head of the mattress to reduce the chance that the head of an occupant would strike the wall. Such a barrier could be used as a back support if the occupant wishes to sit upright in bed. Furthermore, since a bed may be moved from one dwelling to another during its useful life, it would be desirable for the bed to be reconfigurable so as to allow the barrier to be used in different orientations.

[0003] Accordingly, the present disclosure provides bed assemblies that address these issues.

SUMMARY

[0004] The present disclosure encompasses a bed assembly comprising a bed frame including a head end, a foot end, a first side and a second side, both disposed between the head end and the foot end, wherein the head end and the first side form a first head corner of the bed frame and the head end and the second side form a second head corner of the bed frame. The bed assembly also comprises a single corner barrier attached to the bed frame and extending upward therefrom, wherein the corner barrier is aligned adjacent one of the first and the second head corners of the bed frame, and wherein the corner barrier comprises a headboard extending along the head end of the bed frame, and a side panel extending along one of the first and the second sides from the head corner with which the corner barrier is aligned to an intermediate point between the head end and foot end. In one embodiment, the bed assembly the side panel is detachably connected to the headboard. In another embodiment, the sidewall is detachably connected to one of the first and the second sides. A fastener can be attached to both the side panel and one of the first and the second sides of the bed frame. Additionally, a fastener can be attached to both the side panel and the headboard of the corner barrier. In one embodiment, the headboard and the side panel form an enclosed corner extending upward from one of the first and the second head corners of the bed frame. In yet another embodiment, the single corner barrier comprises padding attached to a surface thereof. In still a further embodiment, the side along which the side panel extends is longer than the side panel.

[0005] The present disclosure also can encompass a bed assembly comprising a headboard having a lower section and an upper section, a first side rail connected to the lower section of the headboard, a second side rail connected to lower section of the headboard and aligned opposing the first side rail, and a side panel detachably mounted to one of the first and the second side rails. In such an embodiment, the side panel can extend upward from one of the first and the second side rails and is aligned adjacent the upper section of the

headboard. In such a bed assembly, the side rail to which the side panel is attached is a closed side and the opposing side rail is an open side. In another embodiment, the side rail to which the side panel is detachably mounted is longer than the side panel. Additionally, padding can be attached to at least one of the side panel and the headboard. Furthermore, the side panel can be connected to the headboard. In such an embodiment, a fastener can be provided connecting the side panel to headboard. Alternatively, a fastener can be provided connecting the side panel to one of the first and the second side rails.

[0006] The present disclosure also encompasses a bed assembly comprising a first side rail comprising a first top surface, a second side rail opposing the first side rail and comprising a second top surface, a mattress support disposed between the first side rail and the second side rail, a foot rail connected to the first and the second side rails, a headboard connected to the first and the second side rails where the headboard extends upward beyond the first and the second top surfaces of the first and the second side rails, and a side panel connected to the headboard and one of the first and second side rails where the side panel extends upward beyond the top surface of the side rail to which the side panel is connected. In such an embodiment, the side rail to which the headboard is connected can be disposed on a closed side of the bed assembly and the opposing side rail can be disposed on an open side of the bed assembly. Additionally, the side panel and the headboard can form a corner extending upward adjacent an end of one of the first and the second side rails to which the side panel is connected.

[0007] These and other aspects of the bed assemblies of the present disclosure are set forth in more detail in the detailed description below and the accompanying drawings that are briefly described as follows.

BRIEF DESCRIPTION OF THE DRAWINGS

[0008] FIG. 1 is a perspective view of a bed assembly encompassing aspects of the present disclosure.

[0009] FIG. 2 is a top view of the bed assembly of FIG. 1.

[0010] FIG. 3 is a perspective view of an alternative configuration of the bed assembly shown in FIG. 1.

[0011] FIG. 4 is a perspective view of another bed assembly encompassing aspects of the present disclosure.

[0012] FIG. 5 is a partial exploded view of a portion of the bed assembly shown in Section A of FIG. 4.

[0013] FIG. 6 is another partial exploded view of a portion of the bed assembly shown in Section B of FIG. 4

DETAILED DESCRIPTION

[0014] The present disclosure encompasses bed assemblies that include a corner barrier disposed adjacent one of the head corners of the bed frame. Such bed assemblies can be installed adjacent a corner of a room to allow for at least a partial barrier between the two walls of the room and the sleeping surface of the bed. An aspect of the present disclosure also encompasses bed assemblies with a detachably connected side panel that allows for the use of the corner barrier on either side of the bed, thereby allowing for a single bed assembly to be aligned in different corners of a room.

[0015] As used herein, the term “detachably mounted” refers to the connection of one part of the bed assembly to another part of the bed assembly in such a way that the parts can be detached and reattached as needed.

[0016] As used herein, the term “closed side” refers to the side of the bed assembly along which a side panel as described herein extends from the head of the bed assembly toward the foot of the bed assembly and which is on the opposing side of the bed assembly from the open side.

[0017] As used herein, the term “open side” refers to the side of the bed assembly along which no side panel as described herein extends and which is on the opposing side of the bed assembly from the closed side. The provision of an open side and a closed side in the embodiments of the present disclosure allows for access to the sleeping surface of the bed along substantially the entire length of the open side, while access to the sleeping surface from the closed side is partially obstructed by the side panel as described herein. The bed assembly of the present disclosure includes an open side and a closed side.

[0018] As shown in FIG. 1, a bed assembly 100 encompassing aspects of the present disclosure is shown. The bed assembly 100 comprises a bed frame 110 that includes a head end 112, a foot end 114, a first side 116, and a second side 118. The intersection of the head end 112 and the first side 116 forms a first head corner 120, while the intersection of the head end 112 and the second side 118 forms a second head corner 122. The first side 116 comprises a first side rail 117 and the second side 118 comprises a second side rail 119. Each of the side rails 117 and 119 extend from the head end 112 to the foot end 114 of the bed frame 110. The first side rail 117 includes a first top surface 121 and the second side rail 119 includes a second top surface 123. A foot rail 115 is provided at the foot end 114 of the bed frame 110 and extends between and is connected to the first side 116 and the second side 118. A mattress support 127 comprised of cross supports and length supports is disposed between the rails 117 and 119 and the foot rail 115.

[0019] A corner barrier 124 is provided on the bed assembly 100 set forth in FIG. 1. The corner barrier 124 extends upward above the bed frame 110 and at least partially encloses one of the two head corners 120 and 122. The corner barrier 124 comprises at least a portion of a headboard 126 and a side panel 128 that form an enclosed corner 138 extending upward from the second head corner 122 of the bed frame 110.

[0020] The headboard 126 is provided adjacent the head end 112 of the bed frame 110 and extends upward therefrom beyond the first and the second top surfaces 121 and 123 of the first and the second side rails 117 and 119. The headboard 126 extends along the head end 112 from the first head corner 120 to the second head corner 122. The headboard 126 includes an upper section 150 and a lower section 152. The first and the second side rails 117 and 119 are connected to the lower section 152 of the headboard 126. The upper section 150 of the headboard 126 and the side panel 128 can form the corner barrier 124, while the lower section 152 of the headboard 126 can cooperate with the first and second side rails 117 and 119 and the foot rail 115 to form the bed frame 110.

[0021] As shown in FIG. 1, a side panel 128 is disposed along the second side 118 of the bed frame 110. The side panel 128 extends from the second head corner 122 to an intermediate point 130 along the length of the second side rail 119. As shown in FIG. 1, the intermediate point 130 is less than halfway from the second head corner 122 along the length of the second side rail 119 to the foot end 114. The present disclosure encompasses side panels that extend to other intermediate points along the length of one of the sides

of the bed frame, but not the entire length of a side of the bed frame. Alternatively, a side panel can be provided that extends more than half the length between the head end and foot end of a bed frame encompassing aspects of the present disclosure. The bed frame 110 can support a mattress 50 as shown in phantom line in FIG. 1.

[0022] The side panel 128 is detachably mounted to the second side rail 119 above the second top surface 123. As shown in FIG. 1, the side panel 128 is detachably mounted to the second side rail 119 by a fastener 132 that connects the side panel to the second side rail 119. As shown in FIG. 1, the fastener 132 comprises a fastener plate 131 extending along a portion of both the side panel 128 and the second side rail 119. The fastener plate 131 is connected to both the side panel 128 and the second side rail 119 by a plurality of screws. Alternative fastener arrangements are encompassed by the present disclosure.

[0023] The side panel 128 is connected to the headboard 126 by fasteners 134. As shown in FIG. 1, the fasteners 134 include angle brackets aligned against a portion of each of the side panel 128 and headboard 126. Each angle bracket is attached by one or more screws to both the side panel 128 and headboard 126. Alternative fasteners connecting the side panel 128 to the headboard 126 are encompassed by the present disclosure. The side panel 128 and the headboard 126 can include padding on the inwardly facing sides 140 and 142.

[0024] FIG. 2 shows the bed assembly 100. The enclosed corner 138 of the corner barrier 124 is shown formed by the intersection of the headboard 126 and the side panel 128. The open side 154 of the bed assembly is open from the head end 112 to the foot end 114 above the first top surface 121 of the first side rail 117. The closed side 156 is partially obstructed between the head end 112 and the foot end 114 above the second top surface 123 of the second side rail 119 by the side panel 128.

[0025] In FIG. 3, an alternative configuration of the bed assembly 100 is shown. In this view, the side panel 128 is mounted along the first side 116, instead of the second side 118 as shown in FIG. 1. The side panel 128 is detachably mounted to the first side rail 117 above the first top surface 121. The side panel 128 forms an alternative corner barrier 224 with the headboard 126. The corner barrier 224 is aligned adjacent the first head corner 120 in FIG. 3, instead of the second head corner 122 as shown in FIG. 1. The side panel 128 extends from the head end 112 of the bed frame 110 along the first side 116 toward the foot end 114 and ends at an alternative intermediate point 230 along the first side rail 117.

[0026] The realignment of side panel 128 along first side 116 results in a new open side 254 and a new closed side 256 of the bed assembly. The new open side 254 corresponds to the second side 118, and the new closed side 256 corresponds to the first side 116.

[0027] FIG. 4 shows another bed assembly 300 encompassing aspects of the present disclosure. The bed assembly 300 comprises a bed frame 310 that includes a head end 312 and a foot end 314. A headboard 326 is disposed adjacent the head end 312 and forms part of the bed frame 310. The bed assembly 300 includes an open side 354 having no side panel extending above the side rail thereof and a closed side 356 having a side panel extending above the opposing side rail. Unlike the bed assembly 100 shown in FIGS. 1-3, the bed assembly 300 does not include padding on inwardly facing surfaces of the headboard 326 and the side panel 328. The side panel 328 is detachably connected to the side rail 319 by a

fastener 332. The fastener 332 includes a plate 331 that is aligned to cover a portion of a surface of the side panel 328 and the side rail 319. As shown in FIGS. 4 and 5, the plate 331 is connected to both the side rail 319 and the side panel 328 by screws 333. The screws 333 are received in holes formed in both the side panel 328 and the side rail 319.

[0028] FIGS. 4 and 6 also show the fasteners 334 that connect the side panel 328 to the headboard 326. The fasteners 334 include brackets that extend over a portion of both the side panel 328 and the headboard 326. The brackets are connected to the headboard 326 and side panel 328 by screws 335 that are aligned with openings formed in each of the headboard 326 and side panel 328.

[0029] In one embodiment of the present disclosure of the bed assembly 300, shown in FIG. 4, can include a side rail 319 that is configured to be installed one either a first or second side of the bed frame. In this embodiment, the side panel 328 is connectable at either end of the side rail 319 depending upon what side of the bed frame the side panel is installed so as to allow the side panel 319 to form a corner adjacent one head corner of the bed assembly 300. For example, the side rail 319 can be an unfinished rail that includes more than one plurality of holes formed therein to receive screws 333 therein when the side panel 328 is mounted at different ends of the side rail 319.

[0030] Other embodiments of the present disclosure encompass bed assemblies that each have a side panel integrally formed with one of the side rails of the bed frame to form a side barrier. In one of these embodiments, the side barrier can be configured to install on only one of the sides of the bed frame. In another embodiment, the side barrier can be configured to install on either side of the bed frame.

[0031] The bed assemblies 100 and 300 each include a side panel that can be used in at least two separate configurations. In each bed assembly, the side panel provided can be used on either side of the bed in order to form a corner barrier adjacent one of the head corners of the bed frame. In this way, a single bed assembly can be used in different locations within at different orientations adjacent corners of the room. In each case, the arrangement provides for a bed assembly with a closed side that that can be aligned along a wall and an open side provided access onto the bed.

[0032] While the corner barriers provided in the embodiments include one side panel cooperating with a single headboard, the present disclosure also encompasses corner barriers formed from multiple side panels or multiple headboards. In such embodiments, the multiple side panels can be aligned along one side of the bed assembly and cooperate to form a portion of the corner barrier. Likewise, multiple headboards can be aligned along the head of the bed but, individually, not extend from one side to another, but in combination can extend along the entire length of the head of the bed assembly. In this manner, the corner barriers of the present disclosure can comprise more than two cooperating sections.

[0033] Furthermore, while the side panels shown in the Figures are mounted above the top surfaces of the side rails, the present disclosure also encompasses side panels that extend below as well as above the side rails, but are aligned adjacent to one of the side rails to form a corner barrier in cooperation with the headboard.

[0034] The embodiments set forth herein are provided to illustrate, not limit, the scope of the present disclosure. Alternatives, variations, and modifications of the embodiments

described herein will be apparent to one of ordinary skill in the art are encompassed by the present disclosure.

What is claimed is:

1. A bed assembly comprising:

a bed frame including a head end, a foot end, a first side disposed between the head end and the foot end, and a second side disposed between the head end and the foot end, wherein the head end and the first side form a first head corner of the bed frame and the head end and the second side form a second head corner of the bed frame; and,

a single corner barrier attached to the bed frame and extending upward therefrom, wherein the corner barrier is aligned adjacent one of the first and the second head corners of the bed frame, and wherein the corner barrier comprises a headboard extending along the head end of the bed frame, and a side panel extending along one of the first and the second sides from the head corner with which the corner barrier is aligned to an intermediate point between the head end and foot end.

2. The bed assembly of claim 1, wherein the side panel is detachably connected to the headboard.

3. The bed assembly of claim 1, wherein the side panel is detachably connected to one of the first and the second sides.

4. The bed assembly of claim 1, further comprising a fastener attached to both the side panel and one of the first and the second sides of the bed frame.

5. The bed assembly of claim 1, further comprising a fastener attached to both the side panel and the headboard of the corner barrier.

6. The bed assembly of claim 1, wherein the headboard and the side panel form an enclosed corner extending upward from one of the first and the second head corners of the bed frame.

7. The bed assembly of claim 1, wherein the single corner barrier further comprises padding attached to a surface thereof.

8. The bed assembly of claim 1, wherein the one of the first and the second sides along which the side panel extends is longer than the side panel.

9. A bed assembly comprising:

a headboard having a lower section and an upper section; a first side rail connected to the lower section of the headboard and disposed on a first side of the bed assembly; a second side rail connected to lower section of the headboard, wherein the second side rail is aligned opposing the first side rail and disposed on a second side of the bed assembly; and,

a side panel detachably mounted to one of the first and the second side rails, wherein the side panel extends upward from one of the first and the second side rails, wherein the side panel is aligned adjacent the upper section of the headboard, and wherein the side of the bed assembly on which the side panel is detachably mounted is a closed side and the opposing side of the bed assembly is an open side.

10. The bed assembly of claim 9, wherein the side rail to which the side panel is detachably mounted is longer than the side panel.

11. The bed assembly of claim 9, further comprising padding attached to at least one of the side panel and the headboard.

12. The bed assembly of claim 9, wherein the side panel is connected to the headboard.



**13.** The bed assembly of claim **12**, further comprising a fastener connecting the side panel to headboard.

**14.** The bed assembly of claim **9**, further comprising a fastener connecting the side panel to one of the first and the second side rails.

**15.** A bed assembly comprising:

a first side rail comprising a first top surface;

a second side rail comprising a second top surface;

a foot rail connected to the first and the second side rails;

a headboard connected to the first and the second side rails,

the headboard extending upward beyond the first and the second top surfaces of the first and the second side rails;

and,

a side panel connected to the headboard and one of the first and second side rails, the side panel extending upward beyond the top surface of the side rail to which the side panel is connected, wherein the side panel is disposed on a closed side of the bed assembly and the closed side is opposed to an open side of the bed assembly, and wherein the side panel and the headboard form a corner extending upward adjacent an end of one of the first and the second side rails to which the side panel is connected.

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