

"Bed system"**Cross-Reference to Related Applications**

[0001] The present application claims priority from Australian Provisional Patent Application No 2023902331 filed on 21 July 2023, the contents of which are incorporated herein by reference in their entirety.

Technical Field

[0002] The present disclosure relates, generally, to bed systems. In particular, the present disclosure relates to bed systems for reducing pain and discomfort experienced during pregnancy.

Background

[0003] Beds of various designs and configurations for providing a comfortable and healthy resting or sleeping environment for women during pregnancy have a long history of development.

[0004] During pregnancy, women experience a heightened sense of pain. Seeking comfort and relief is paramount for the health of both the baby and the mother. The pain and discomfort can be multifactorial and is often exacerbated due to the inability for a woman to find a comfortable resting position on conventional mattresses. Pregnancy is a dynamic process; the individual resting position and posture which provides a woman with the optimum level of comfort may vary from one day to another. Therefore there is a need for a bed which is configurable to accommodate the needs of different women at various stages in their pregnancies.

[0005] In the past, this has led to the development of many types of mattresses comprising a suitably located central cavity to accommodate the distended abdomen. Earlier generations of adjustable beds have included features to accommodate variations in the size and orientation of the abdomen over time.

[0006] However, suboptimal alignment of a woman's spine may result depending on the position in which she lies on existing beds. This suboptimal spinal alignment may cause an uncomfortable and unhealthy resting or sleeping environment for the woman and/or the baby. Further, existing beds do not provide dynamic support while the woman moves during resting or sleeping, thereby contributing to the suboptimal alignment of the woman's spine and the unhealthy and uncomfortable resting or sleeping environment.

[0007] Any discussion of documents, acts, materials, devices, articles or the like which has been included in the present specification is not to be taken as an admission that any or all of these matters form part of the prior art base or were common general knowledge in the field relevant to the present disclosure as it existed before the priority date of each of the appended claims.

Summary

[0008] In an aspect of the present disclosure, there is provided a bed system, comprising:

- a mattress having a first end and a second end, the mattress defining an opening positioned between the first end and the second end;
- a support assembly associated with the opening, the support assembly comprising:
 - a pillow configured to substantially fill a horizontal extent and at least partially fill a vertical extent of the opening and to support a portion of a user's body located above the opening, the pillow being of adjustable height to facilitate adjustment of the extent to which the pillow fills the vertical extent of the opening; and
 - a suspension system associated with the pillow, the suspension system configured to respond to forces applied to the pillow by the portion of a user's body located above the opening.

[0009] The suspension system may comprise webbing. The suspension system may comprise a frame, the webbing being supported by the frame. The suspension system may comprise one or more suspension members, which may be conformable and/or resilient, extending between the pillow and the mattress or between the pillow and a base of the bed system that supports the mattress.

[0010] The suspension system may be a resilient suspension system that resiliently responds to the forces applied to the pillow by the portion of a user's body located above the opening. The resilient suspension system may comprise a resiliently deformable material. The resilient suspension system may comprise a resiliently deformable layer of foam.

[0011] The pillow may be of adjustable firmness. The pillow may be inflatable or comprise an inflatable portion to facilitate adjustment of the height and/or firmness of the pillow. An inflation pressure of the pillow or the inflatable portion may be controllable via an inflation control device. The inflatable portion may comprise an upper, head portion and a lower, neck portion. The pillow may comprise a non-inflatable portion, which may be located above and supported by the inflatable portion. The non-inflatable portion may comprise a cushioning material. The non-inflatable portion may be wedge shaped, being of greater depth at one of its ends than at the other of its ends. In some embodiments, the non-inflatable portion is non-removably connected to the inflatable portion, such as by being integral with the inflatable portion, and in other embodiments the non-inflatable portion is removably connected to the inflatable portion.

[0012] A stabiliser may extend at least partially around a lower portion of the pillow to stabilise the lower portion of the pillow.

[0013] The bed system may further comprise a base, and the mattress and the support assembly may be supported by the base. The base may comprise a platform for supporting the mattress member, the platform, and thereby the mattress, being reconfigurable between a plurality of configurations. The bed system may comprise an actuator for reconfiguring the platform between the plurality of configurations. The actuator may be pneumatically, hydraulically, or mechanically powered. The actuator may be controlled via a platform control device.

[0014] The mattress may define a recessed portion at the first end. A head pillow may be disposed on the recessed portion. A portion of the mattress at the first end may be removable to define the recessed portion.

[0015] A resilient cover may extend over a top end of the opening of the mattress.

[0016] Also disclosed herein is a method of use of the bed system as described in paragraph [0008] above, or of any of the embodiments thereof described in paragraphs [0009] to [0015] above, the method comprising adjusting the height of the pillow to adjust the extent to which the pillow fills the vertical extent of the opening, optionally via varying the extent of inflation of an inflatable portion of the pillow.

[0017] In another aspect of the present disclosure, there is provided a bed system, comprising:

- a base;

- a non-inflatable mattress disposable on the base, the mattress having a first end and a second end, the mattress defining an opening positioned between the first end and the second end;

- a support assembly associated with the opening, the support assembly comprising:

- a pillow configured to substantially fill the opening and to support a portion of a user's body located above the opening.

[0018] The bed system described in the previous paragraph may be combined with any of the features of the bed system described in paragraphs [0008] to [0015] above.

[0019] Throughout this specification the word "comprise", or variations such as "comprises" or "comprising", will be understood to imply the inclusion of a stated element, integer or step, or group of elements, integers or steps, but not the exclusion of any other element, integer or step, or group of elements, integers or steps.

Brief Description of Drawings

[0020] Embodiments of the disclosure will now be described by way of example with reference to the accompanying drawings, in which:

- Figure 1 shows a perspective view of an embodiment of a bed system;

- Figure 2 shows an exploded view of the bed system shown in Figure 1;

- Figure 3A shows a sectional view of the bed system shown in Figures 1 and 2;

- Figure 3B shows an enlarged view of the portion of Figure 3A encircled by circle E;

- Figure 4 shows a perspective view of an embodiment of a suspension system of the bed system shown in Figures 1-3B;

Figures 5A and 5B show perspective views of alternative embodiments of an adjustable pillow of the bed system shown in Figures 1-3B;

Figure 6 shows a perspective view of another embodiment of a bed system;

Figure 7 shows an exploded view of the bed system shown in Figure 6;

Figure 8 shows a sectional view of the bed system shown in Figures 6 and 7;

Figure 9 shows a perspective view of another embodiment of a bed system;

Figure 10 shows an exploded view of the bed system shown in Figure 9; and

Figure 11 shows a sectional view of the bed system shown in Figures 9 and 10.

Description of Embodiments

[0021] In the drawings, reference numeral 10 designates a bed system 10 comprising a mattress 12 having a first end 14 and an opposite second end 16, the mattress member 12 defining an opening 18 positioned between the first end 14 and the second end 16. A support assembly 19 is associated with the opening 18 of the mattress 12. The support assembly 19 comprises a pillow, comprising portions 20a, 20b, and a suspension system 22 configured to respond to forces applied to the pillow by the portion of a user's body located above the opening 18 of the mattress 12. For example, the suspension system 22 is configured to resiliently respond to and/or damp forces that are applied to the pillow 20a, 20b while the user moves on the mattress 12 during rest or sleep.

[0022] Figures 1-3B show one exemplary embodiment of the bed system 10. The bed system 10 comprises a base 24 that supports the mattress 12 and the support assembly 19. In the illustrated embodiment, the base 24 comprises a frame having two pairs of legs 26, each of which is connected by a cross member 28, with each cross member 28 being connected by a pair of spaced chassis members 30. In the illustrated embodiment, the legs 26, cross members 28 and chassis members 30 are formed from metal and are welded and/or fastenable together using, for example, screws and/or bolts. In other embodiments, the bed system 10 may omit the base 24 and may instead be used with the user's existing bed base or be placed directly on the user's floor for use.

[0023] The base 24 further comprises a platform 32 for supporting the mattress 12. The platform 32, and thereby the mattress 12, is reconfigurable between a plurality of configurations, for example, configuration to allow for the user to elevate their head and/or

feet. In the illustrated embodiment, the platform 32 comprises a plurality of panels 31 arranged in an end-to-end configuration and pivotally or hingedly rotatable relative to each other to facilitate reconfiguration of the platform 32. In the illustrated embodiment, the panels 31 have varying lengths, however, the panels 31 may be of the same length in other embodiments. The panels 31 may be formed from wood, metal, plastic, or any other suitable material.

[0024] The platform 32 defines an opening 33 aligned with opening 18 of the mattress 12, and is connected to the frame of the base 24 via one or more actuators 36. The actuators 36 facilitate reconfiguration of the platform 32 between its plurality of configurations. The actuators 36 are connected to a platform control device (not shown) operable by a user to control reconfiguration of the platform 32. The platform control device may be operable via a platform control panel (not shown) or via a remote control device (not shown). The actuators 36 may comprise one or more pneumatic, hydraulic or mechanical actuators, such as a mechanical scissor lift device. In other embodiments, the actuators 36 may be omitted and the platform 32 may be manually reconfigured between its plurality of configurations.

[0025] In some embodiments, the mattress 12 may be supported on the platform 32 without any attachment means, such that the mattress 12 is slideable on the platform 32. In other embodiments, the mattress 12 is attached to the platform 32 using, for example, adhesive or fasteners. In other embodiments, the platform 32 may be omitted from the bed system 10 and the mattress 12 may be attached instead to the base 24 or to a non-reconfigurable platform.

[0026] In some embodiments, the mattress 12 may be a foam mattress, comprising polyurethane foam or memory foam, optionally overlaid by a latex layer, and in other embodiments the mattress 12 may be a latex mattress. In some embodiments, the foam or latex mattress may be of uniform hardness and density or may be of graduated hardness and density. The graduation of hardness and density may be provided as a vertical graduation or a horizontal graduation across the mattress 12. In other embodiments, the mattress 12 may comprise a combination of foam or latex and fluid, such as water or air. For example, in some embodiments, the mattress 12 may comprise a fluid core surrounded by a cushioning layer of foam or latex, and, in other embodiments, the mattress 12 may comprise a foam or latex core surrounded by a pocket of water or air. In some embodiments, the mattress 12 may be inflatable.

[0027] The mattress 12 has one or more removable portion 38 at its first end 14 to define a recessed portion 40. The recessed portion 40 accommodates a head pillow (not shown) such that the height of the head pillow is comfortable for the user and reduces risk of injury to the user's neck or spine.

[0028] As best shown in Figure 4, the suspension system 22 comprises webbing 42 and a frame 44 supporting the webbing 42. The frame 44 is welded or attached to the chassis members 30 of the base 24 using fasteners.

[0029] The webbing 42 comprises resiliently deformable ribbon 46 arranged in a lattice. In other embodiments, the ribbon 46 may be arranged in a single direction.

[0030] The ribbon 46 may be attached to the frame 44 using fasteners, adhesive or may be wound around the frame 44 to attach the ribbon 46 to the frame 44 via frictional engagement. One or both ends of one or more ribbons 46 may be adjustable to increase or decrease tension in the one or more ribbons 46. The increasing or decreasing tension in the one or more ribbons 46 may be provided by a tuning device arranged at one or both ends of the one or more ribbons 46.

[0031] In other embodiments, the suspension system 22 may be in the form of an inflatable cushion having either an adjustable or non-adjustable inflation pressure, or of a foam insert having either adjustable or non-adjustable hardness and density.

[0032] In the illustrated embodiment, the pillow 20a, 20b is adjustable. In particular, the pillow portion 20a is inflatable and a height and/or firmness of the pillow, and especially of an upper, head portion of the pillow portion 20a, is adjustable by adjusting the inflation pressure of the pillow portion 20a. The bed system 10 further includes an inflation control device 48 connected to the pillow portion 20a such that an inflation pressure of the pillow 20a is controllable via the inflation control device 48. The control device 48 comprises an air pump 50 in fluid communication with pillow portion 20a via a fluid conduit 52. The air pump 50 is operable to introduce air into the pillow portion 20a to inflate the pillow portion 20a and to remove air from the pillow portion 20a to deflate the pillow portion 20a. In some embodiments, the air pump 50 is connected to a control panel (not shown) which enables a user to control the inflation pressure of the pillow portion 20a. The air pump 50 may instead

be operable via a remote control device (not shown) in other embodiments. In some embodiments, the control panel and the platform control panel discussed above are provided as a single panel, or the remote control device also allows the user to control the platform 32 in the manner discussed above.

[0033] The pillow portion 20b is removably disposed on the pillow portion 20a. The pillow portion 20b may be removed from pillow portion 20a by the user, for example to provide more freedom of movement during sleep or rest. In other embodiments, the pillow portion 20b may be attached to the pillow portion 20a in order to increase the resistance to user movement. In other embodiments, the pillow portion 20b may be omitted as the user may be able to sleep or rest directly on the pillow portion 20a.

[0034] The pillow portion 20b is generally shaped to complement the shape of the opening 18. In some embodiments, the pillow portion 20b has a shape or profile that is smaller than the opening 18 to provide the user with more freedom of motion during sleep or rest. In other embodiments, the pillow portion 20b may be the same size or larger than the opening 18 in order for the pillow portion 20b and the opening 18 to form an interference fit.

[0035] Configuring pillow 20a, 20b to finish closer to the upper end of the opening 18 provides increased support for the user and reduces a vertical distance that the user's abdomen travels into the opening 18, thus reducing a "falling effect" experienced by the user. The vertical extent of opening 18 may be substantially or completely filled by the pillow 20a, 20b such that the bed system 10 may be converted for use as a bed for non-pregnant users after the user's pregnancy has concluded. In some embodiments, the pillow 20a, 20b may be of a different size, shape or profile to that of the opening 18 in order to provide varying freedom of movement for the user during sleep or rest; for example, the shape or profile of the pillow portion 20b may be ovoid, circular, rectangular, or any other polygonal shape. It will be understood that the bed system 10 may comprise multiple pillow portions 20b of different heights, shapes and/or sizes for different stages of pregnancy or for use when the user is not pregnant.

[0036] The pillow portion 20b has a substantially flat upper surface 56 to evenly distribute forces applied by the user during sleep or rest and an angled lower surface 58. The angled lower surface 58 extends from a first end 60 having a greater height to a second end 62 having

a lesser height. The first end 60 therefore provides more resistance to compressive or downward force than the second end 62. This difference in resistance allows for the heavier, lower portion of the user's abdomen during pregnancy to be supported with a greater level of firmness than the lighter, upper portion of the user's abdomen during pregnancy. As shown in Figures 3A and 3B, when supporting a user, the first end 60 of pillow portion 20b compresses the corresponding end of pillow portion 20a more than the second end 62 of pillow portion 20b compresses the corresponding end of pillow portion 20a, which facilitates the first end 60 providing more resistance to compressive or downward force than the second end 62. In other embodiments, both the upper surface 56 and the lower surface 58 of the pillow portion 20b may be substantially flat or angled, and in other embodiments, the upper surface 56 may be angled and the lower surface 58 may be substantially flat.

[0037] The pillow portion 20b is resiliently deformable and may comprise memory foam to provide more viscoelasticity or latex to provide more elasticity. In other embodiments, the pillow portion 20b may instead comprise feathers or polyester instead of foam. The pillow portion 20b may comprise a uniform density and firmness in some embodiments, or a graduated density and firmness in other embodiments. The graduation of the firmness and density may occur in either a vertical or horizontal direction along the pillow portion 20b.

[0038] The bed system 10 further comprises a stabilising member 64 displaceable about the pillow portion 20a for stabilising the pillow portion 20a. One or more suspension members 21 extend between the pillow 20a, 20b and the mattress 12 or between the pillow 20a, 20b and the frame of the base 24. In the illustrated embodiment, the suspension members 21 are configured to receive the stabilising member 64 thereon. The stabilising member 64 being received on the suspension members 21 also provides additional support to the pillow 20a, 20b to inhibit the pillow 20a, 20b sliding due to movement of the user during sleep or rest. The stabilising member 64 is attached, directly or indirectly, to the frame of the base 24 (e.g., if indirectly, via the suspension system 22), or in some embodiments to the mattress 12 (e.g., if indirectly, via the suspension members 21), for example by welding, adhesion, or fastening using, for example, hook and loop fasteners, screws, nails, or by stitching. In some embodiments, the stabilising member 64 may be omitted. In some embodiments, the suspension members 21 are conformable and/or resilient and may replace or supplement the suspension system 22.

[0039] Two exemplary shapes and configurations of the suspension members 21 are shown in Figures 5A and 5B. The suspension members 21 of Figure 5A are smaller than those of Figure 5B, which provides a lighter construction; however, the suspension members 21 of Figure 5B provide a larger contact area for the stabilising member 64, thereby allowing for improved support. Ends 23 of the suspension members 21 can be connected to the mattress 12 or to the suspension system 22 or the frame of the base 24. The magnitude of support provided by the suspension members 21 can be adjusted by adjusting the tension in the suspension members 21 and/or by adjusting the surface area of the suspension members 21 (e.g., larger suspension members 21 such as those shown in Figure 5B may provide more support than smaller suspension members 21 such as those shown in Figure 5A).

[0040] The stabilising member 64 is in the form of a ring or collar having a profile conforming with the shape of the opening 18 and is configured to surround a lower, neck portion of the pillow portion 20a. The stabilising member 64 inhibits bending and buckling of the lower, neck portion of the pillow portion 20a, thereby providing increased support for the user's spine.

[0041] The bed system 10 further comprises an external bed frame 68 having a head portion 70, a foot portion 72, and a pair of side portions 74 which are fastened together and to the base 24 to form the external bed frame 68. In other embodiments, the head portion 70, foot portion 72, and pair of side portions 74 are welded together and to the base 24 to form the external bed frame 68.

[0042] Figures 6-8 show an alternative embodiment of a bed system 100. Like reference numerals refer to like features discussed above with respect to the bed system 10.

[0043] The bed system 100 comprises a non-adjustable platform 102 defining an opening 104, and which is attached to the base 24 via welding or fasteners. The bed system 100 may be placed within or attached to the user's existing bed frame if the user's bed frame is sized and/or configured to accommodate the bed system 100. The bed system 100 thereby provides a lighter construction with less moving parts than the bed system 10.

[0044] Figures 9-11 show an alternative embodiment of a bed system 200. Like reference numerals refer to like features discussed above with respect to the bed system 10.

[0045] The bed system 200 comprises a non-adjustable platform 201, which is attached to the base 24 via welding or fasteners. In the bed system 200, the mattress 12 comprises a mattress body 202 defining the opening 18, an upper mattress layer 204 disposable on the mattress body 202 and defining a through hole 206 with a profile aligning with the opening 18, and a head support layer 208 disposable on the mattress body 202 and adjacent the upper mattress layer 204. The upper mattress layer 204 has a greater thickness than the head support layer 208 in order to provide the same effect as the recessed portion 40 of the bed systems 10, 100 described above. Similarly with respect to the bed system 100, the bed system 200 may be placed within or attached to the user's existing bed frame if the user's bed frame is sized and/or configured to accommodate the bed system 200. The bed system 200 thereby provides a lighter construction with less moving parts than the bed system 10.

[0046] The suspension system 22 of the bed system 200 comprises a resiliently deformable layer of material 210 instead of the webbing 42. The resiliently deformable layer of material 210 comprises foam which suspends the pillow 20a, 20b in the opening 18. The pillow portion 20a comprises a suspension platform or sheet 212 instead of the suspension members 21 described above to provide an increased contact surface area for both the mattress 12 and the suspension system 22.

[0047] Other embodiments of the bed system 10, 100, 200 may omit the suspension system 22 and comprise an inflatable or non-inflatable mattress 12 disposable on a bed base, with a pillow comprising pillow portion 20a, and optionally also pillow portion 20b, receivable in an opening 18 of the mattress 12. Embodiments having a non-inflatable mattress may be more suitable as a permanent fixture in the user's home or in a medical environment as opposed to a bed system having an inflatable mattress, as embodiments with an inflatable mattress may require more maintenance and have a shorter life expectancy. Accordingly, embodiments having an inflatable mattress may be better suited for temporary rather than protracted or permanent use. Embodiment of the bed system described in this paragraph are able to be combined with any suitable features from the other embodiments of the bed system 10, 100, 200 described above.

[0048] In use, the bed system 10, 100, 200 is either assembled by a user or is received in an assembled state. The pregnant user lays down on the mattress 12 for rest or sleep on the user's side or stomach such that the enlarged portion of the pregnant user's abdomen is aligned with

the opening 18. During sleep or rest, the user may roll from their side onto their stomach or vice versa. During this movement, the suspension system 22 and/or the suspension members 21 suspend(s) the pillow 20a, 20b in the opening 18, such that support of the user via the pillow 20a, 20b is maintained while the user moves, but responds to forces applied by movement of the user, thereby imparting a feeling of weightlessness to the user. This provides increased comfort for the user during movement, which reduces the prevalence of the user waking up during sleep, and may facilitate improved spinal alignment.

[0049] The reconfigurability of the mattress 12 via the platform 32 further increases the comfort and safety of the user during movement. The adjustability of the inflation pressure of the pillow portion 20a allows the user to adjust a height of the cavity formed by the opening 18 and the top of the pillow 20a, 20b, which allows the bed system 10, 100, 200 to be used during all stages of the user's pregnancy. The stabilising member 64 inhibits excessive movement or sinking of the pillow 20a, 20b in the opening 18, thereby maintaining the user in a comfortable and safe orientation while moving during rest or sleep. Further, the recessed portion 40 allows for the user's spine to remain in a comfortable and safe alignment during rest or sleep.

[0050] It will be appreciated that any feature of the embodiments of the bed system 10, 100, 200 disclosed herein may be combined with any other suitable feature of the embodiments of the bed system 10, 100, 200 disclosed herein. It will be appreciated that the bed system 10, 100, 200 may be provided as an assembled product or as a kit for assembly.

[0051] It will be appreciated by persons skilled in the art that numerous variations and/or modifications may be made to the above-described embodiments, without departing from the broad general scope of the present disclosure. The present embodiments are, therefore, to be considered in all respects as illustrative and not restrictive.

CLAIMS:

1. A bed system, comprising:
 - a mattress having a first end and a second end, the mattress defining an opening positioned between the first end and the second end;
 - a support assembly associated with the opening, the support assembly comprising:
 - a pillow configured to substantially fill a horizontal extent and at least partially fill a vertical extent of the opening and to support a portion of a user's body located above the opening, the pillow being of adjustable height to facilitate adjustment of the extent to which the pillow fills the vertical extent of the opening; and
 - a suspension system associated with the pillow, the suspension system configured to respond to forces applied to the pillow by the portion of a user's body located above the opening.
2. The bed system of any one of the preceding claims, wherein the pillow comprises an inflatable portion to facilitate adjustment of the height of the pillow.
3. The bed system of claim 2, comprising an inflation control device for controlling an inflation pressure of the inflatable portion.
4. The bed system of claim 2 or claim 3, wherein the inflatable portion comprises an upper, head portion and a lower, neck portion.
5. The bed system of any one of claims 2 to 4, wherein the pillow comprises a non-inflatable portion.
6. The bed system of claim 5, wherein the non-inflatable portion is located above and supported by the inflatable portion.
7. The bed system of claim 5 or claim 6, wherein the non-inflatable portion comprises a cushioning material.
8. The bed system of any one of claims 5 to 7, wherein the non-inflatable portion is wedge shaped, being of greater depth at one of its ends than at the other of its ends.

9. The bed system of any one of claims 2 to 8, further comprising a stabiliser extending at least partially around a lower portion of the pillow to stabilise the lower portion of the pillow.
10. The bed system of any one of the preceding claims, wherein the suspension system comprises at least one conformable or resilient suspension member extending between the pillow and the mattress or between the pillow and a base of the bed system that supports the mattress.
11. The bed system of any one of the preceding claims, wherein the suspension system comprises webbing.
12. The bed system of claim 11, wherein the suspension system is a resilient suspension system that comprises resiliently deformable material.
13. The bed system of claim 10 or claim 12, wherein the suspension system comprises a resiliently deformable layer of foam.
14. The bed system of any one of the preceding claims, further comprising a base, wherein the mattress and the support assembly are supported by the base.
15. The bed system of claim 14, wherein the base comprises a platform for supporting the mattress; the platform, and thereby the mattress, being reconfigurable between a plurality of configurations.
16. The bed system of claim 15, wherein the platform defines an opening aligned with the opening of the mattress, the support assembly extending through the opening of the platform.
17. The bed system of any one of the preceding claims, wherein the mattress defines a recessed portion at the first end.
18. The bed system of claim 17, wherein a portion of the mattress at the first end is removable to define the recessed portion.

19. The bed system of any one of the preceding claims, further comprising a resilient cover extending over a top end of the opening of the mattress.
20. The bed system of any one of the preceding claims, wherein the mattress is a non-inflatable mattress.
21. A method of use of the bed system of any one of the preceding claims, comprising adjusting the height of the pillow to adjust the extent to which the pillow fills the vertical extent of the opening, optionally via varying the extent of inflation of an inflatable portion of the pillow.