CONVERTIBLE FURNITURE CONSTRUCTION

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ABSTRACT

The present invention provides a furniture construction, and an associated method of manufacture, that can be converted from a bed to a table and vice versa. According to one embodiment, the furniture construction includes a support structure, a bed frame movably connected to the support structure so that the bed frame can be rotated between an inoperative first position and an operative second position, and a table movably connected to the support structure so that the table can be adjusted between an operative first position and an inoperative second position. The bed frame and the table are structured such that when the bed frame is in the operative second position the table is in the inoperative second position, and when the table is in the operative first position the bed frame is in the inoperative second position.
FIG. 9
FIG. 45
CONVERTIBLE FURNITURE CONSTRUCTION

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application claims the benefit of U.S. Provisional Application No. 60/634,759, filed Dec. 9, 2004, and this application is a continuation-in-part of U.S. application Ser. No. 11/202,413, filed Aug. 11, 2005, which claims the benefit of U.S. Provisional Application No. 60/600,896, filed Aug. 12, 2004; U.S. Provisional Application No. 60/608,780, filed Sep. 10, 2004; U.S. Provisional Application No. 60/617,393, filed Oct. 8, 2004; and U.S. Provisional Application No. 60/617,391, filed Oct. 8, 2004.

BACKGROUND OF THE INVENTION

[0002] 1. Field of the Invention
[0003] The present invention relates to convertible furniture construction and, more particularly, to furniture construction that can be converted from a table or desk to a bed and vice versa.
[0004] 2. Description of Related Art
[0005] Tables and beds have become necessities. However, conventional tables and beds can occupy significant space, which can be limited. For example, in many apartments, offices, school dormitories, etc., there may not be enough room for both a bed and a table. In addition, even when sufficient room exists, tables (or, alternatively, desks) and beds can be costly, which can limit the ability of some purchasers to purchase these items. In other settings, such as an office, it may not be appropriate to have a bed openly displayed during the day, even though the occupant may be required to work late or sleep at the office on occasion. Thus, there is a need for a furniture construction that can function as both a desk or table and a bed.

BRIEF SUMMARY OF THE INVENTION

[0006] The present invention provides a furniture construction, and an associated method of manufacture, that can be converted from a bed to a table or desk and vice versa. As used herein, the terms “table” and “desk” are used interchangeably to refer to a relatively planar support surface. According to one embodiment, the furniture construction includes a support structure having a pair of end members. The furniture construction also includes a bed frame movably connected to the end members of the support structure so that the bed frame can be moved between an inoperative first position and an operative second position. In one embodiment, the inoperative first position of said bed frame is substantially vertical and the operative second position of said bed frame is substantially horizontal. The furniture construction includes a table movably connected to the end members of the support structure so that the table can be adjusted between an operative first position and an inoperative second position. The bed frame and the table are structured such that when the bed frame is in the operative second position the table is in the inoperative second position, and when the table is in the operative first position the bed frame is in the inoperative second position. Advantageously, the bed frame and the table are decoupled from one another to provide for flexibility as to how the two components are positioned, as well as to decrease the amount of force necessary to move each component from its operative position to its inoperative position, and vice versa, thereby providing greater ease of use and safety to the user. In one embodiment, the furniture construction includes at least one biasing mechanism to bias the table from the inoperative second position toward the operative first position. For example, the biasing mechanism can include a piston and cylinder assembly. In another embodiment, the furniture construction includes a locking mechanism to maintain the bed frame in a second operative second position. In still another embodiment, the bed frame is frictionally received between the table and the support structure.

[0007] According to another embodiment, the furniture construction includes a support structure having a pair of end members. The furniture construction also includes a bed frame comprising a pair of end members and a planar member extending therebetween, each of the end members of the bed frame being rotatably connected to one of the end members of the support structure so that the bed frame can be rotated between an inoperative first position and an operative second position. The furniture construction includes a table comprising a planar member, the planar member of the table being adjustable connected to each of the end members of the support structure so that the table can be adjusted between an operative first position and an inoperative second position. The bed frame and the table are structured such that when the bed frame is in the operative second position the table is in the inoperative second position, and when the table is in the operative first position the bed frame is in the inoperative second position.

[0008] According to yet another embodiment, the furniture construction comprises a support structure having a pair of end members defining a space therebetween. The furniture construction also includes a bed frame movably connected to the end members of the support structure so that the bed frame can be moved between an inoperative first position and an operative second position. The furniture construction includes a desk slidably disposed between the end members of the support structure so that the desk can be slid into and out of the space defined therebetween.

[0009] The present invention also provides a method of constructing a furniture construction. In one embodiment, the method includes providing a support structure having a pair of end members. A bed frame is movably connected to the end members of the support structure so that the bed frame can be rotated between an inoperative first position and an operative second position. In one embodiment, the inoperative first position of the bed frame is substantially vertical and the operative second position of the bed frame is substantially horizontal. A table is movably connected to the end members of the support structure so that the table can be adjusted between an operative first position and an inoperative second position. The bed frame and the table are structured such that when the bed frame is in the operative second position the table is in the inoperative second position, and when the table is in the operative first position the bed frame is in the inoperative second position.

[0010] According to another embodiment, the method comprises providing a support structure having a pair of end members defining a space therebetween. A bed frame is movably connected to the end members of the support structure so that the bed frame can be rotated between an
inoperative first position and an operative second position. A desk is slidably positioned between the end members of the support structure so that the desk can be slid into and out of the space defined between the pair of end members.

[0011] Thus, the present invention provides a furniture construction that can function as both a desk or table and a bed and that is structured to provide flexibility, ease of use and safety for the user.

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS

[0012] Reference will now be made to the accompanying drawings, which are not necessarily drawn to scale, and wherein:

[0013] FIG. 1 is a perspective view illustrating a furniture construction that can be converted from a table into a bed and vice versa, in accordance with one embodiment of the present invention, wherein the table is in the operative position and the bed is in the inoperative position;

[0014] FIG. 2 is a perspective view illustrating the furniture construction of FIG. 1 wherein the bed is in the operative position and the table is in the inoperative position;

[0015] FIG. 3 is a partial cross-sectional view of the furniture construction of FIG. 1 illustrating the structure of the table when the table is in the operative position;

[0016] FIG. 4 is a partial cross-sectional view of the furniture construction of FIG. 2 illustrating the structure of the bed when the bed is in the operative position;

[0017] FIG. 5 is a partial cutaway view of the furniture construction of FIG. 2 illustrating the structure of the bed when the bed is in the operative position and wherein the structure of the table is illustrated in dashed lines;

[0018] FIG. 6 is a partial cutaway view of the furniture construction of FIG. 1 illustrating the structure of the bed when the bed and table are both in the inoperative position and wherein the structure of the table is illustrated in dashed lines;

[0019] FIG. 7 is a partial cutaway view of the furniture construction of FIG. 1 illustrating the structure of the table when the table and bed are both in the inoperative position and wherein the structure of the bed is illustrated in dashed lines;

[0020] FIG. 8 is a partial cutaway view of the furniture construction of FIG. 1 illustrating the structure of the table when the table is in the operative position and wherein the structure of the bed is illustrated in dashed lines;

[0021] FIG. 9 is a partial cutaway view illustrating the end member of the table, according to one embodiment of the present invention;

[0022] FIGS. 10A and 10B are partial cutaway views illustrating a support for the table, according to one embodiment of the present invention.

[0023] FIG. 11 is a perspective view illustrating a furniture construction that can be converted from a table into a bed and vice versa, in accordance with another embodiment of the present invention, wherein the table is in the operative position and the bed is in the inoperative position;

[0024] FIG. 12 is a perspective view illustrating the furniture construction of FIG. 11 wherein the bed is in the operative position and the table is in the inoperative position;

[0025] FIG. 13 is a partial cross-sectional view of the furniture construction of FIG. 11 illustrating the structure of the table when the table is in the operative position;

[0026] FIG. 14 is a partial cross-sectional view of the furniture construction of FIG. 12 illustrating the structure of the bed when the bed is in the operative position;

[0027] FIG. 15 is a partial cutaway view of the furniture construction of FIG. 12 illustrating the structure of the bed when the bed and table are both in the inoperative position and wherein with the structure of the table is illustrated in dashed lines;

[0028] FIG. 16 is a partial cutaway view of the furniture construction of FIG. 11 illustrating the structure of the bed when the bed and table are both in the inoperative position and wherein with the structure of the bed is illustrated in dashed lines;

[0029] FIG. 17 is a partial cutaway view of the furniture construction of FIG. 11 illustrating the structure of the table when the table and bed are both in the inoperative position and wherein with the structure of the bed is illustrated in dashed lines;

[0030] FIG. 18 is a partial cutaway view of the furniture construction of FIG. 11 illustrating the structure of the table when the table is in the operative position and wherein with the structure of the bed is illustrated in dashed lines;

[0031] FIG. 19 is a perspective view illustrating a furniture construction that can be converted from a table into a bed and vice versa, in accordance with another embodiment of the present invention;

[0032] FIG. 20 is another perspective view illustrating the furniture construction of FIG. 19;

[0033] FIG. 21 is a frontal view illustrating the furniture construction of FIG. 19;

[0034] FIG. 22 is a perspective view illustrating the furniture construction of FIG. 19 assembled to form a table, according to one embodiment of the present invention;

[0035] FIG. 23 is a frontal view illustrating the furniture construction of FIG. 22;

[0036] FIG. 24 is a cutaway view illustrating the cable and chain routing of the furniture construction of FIG. 22, according to one embodiment of the present invention;

[0037] FIG. 25 is a cutaway, perspective view illustrating the cable and chain routing of the furniture construction of FIG. 22;

[0038] FIG. 26 is a perspective view illustrating the bed of the furniture construction of FIG. 19, in accordance with one embodiment of the present invention;

[0039] FIG. 27 is an exploded view illustrating the bed of FIG. 26;

[0040] FIG. 28 is a perspective view illustrating the table of the furniture construction of FIG. 19, in accordance with another embodiment of the present invention;

[0041] FIG. 29 is an exploded view illustrating the table of FIG. 28;
FIG. 30A is a perspective view of the desk back splash, in accordance with one embodiment of the present invention;

FIG. 30B is a top view of the desk back splash of FIG. 30A;

FIG. 30C is a side view of the desk back splash support of FIG. 30A;

FIG. 31A is a perspective view of a connector of the base member, in accordance with one embodiment of the present invention;

FIG. 31B is a top view of the connector of FIG. 31A;

FIG. 31C is a side view of the connector of FIG. 31A;

FIG. 32A is a perspective view of a base portion of an end member of the base member, in accordance with one embodiment of the present invention;

FIG. 32B is a top view of the base portion of FIG. 32A;

FIG. 32C is a side view of the base portion of FIG. 32A;

FIG. 33A is a perspective view of a top portion of an end member of the base member, in accordance with one embodiment of the present invention;

FIG. 33B is a top view of the top portion of FIG. 33A;

FIG. 33C is a side view of the top portion of FIG. 33A;

FIG. 34A is a perspective view of an end member of the bed frame, in accordance with one embodiment of the present invention;

FIG. 34B is a top view of the end member of FIG. 34A;

FIG. 34C is a side view of the end member of FIG. 34A;

FIG. 35A is a perspective view of a planar member of the bed frame, in accordance with one embodiment of the present invention;

FIG. 35B is a top view of the planar member of FIG. 35A;

FIG. 35C is a side view of the planar member of FIG. 35A;

FIG. 36A is a perspective view of a planar member of the table, in accordance with one embodiment of the present invention;

FIG. 36B is a top view of the planar member of FIG. 36A;

FIG. 36C is a side view of the planar member of FIG. 36A;

FIG. 37A is a perspective view of a handle, in accordance with one embodiment of the present invention;

FIG. 37B is a top view of the handle of FIG. 37A;

FIG. 37C is a side view of the handle of FIG. 37A;

FIG. 38 is a perspective view illustrating a furniture construction that can be converted from a desk into a bed and vice versa, in accordance with another embodiment of the present invention, wherein the desk is in the operative position and the bed is in the inoperative position;

FIG. 39 is a perspective view illustrating the furniture construction of FIG. 38 wherein the bed is being moved into the operative position;

FIG. 40 is a perspective view of the furniture construction of FIG. 38 illustrating the furniture construction when the bed is in the operative position;

FIG. 41 is a perspective view of the furniture construction of FIG. 40 illustrating the structure of the desk when the bed is in the inoperative position;

FIG. 42 is a perspective view illustrating a furniture construction that can be converted from a desk into a bed and vice versa, in accordance with another embodiment of the present invention, wherein the desk is in the operative position and the bed is in the inoperative position;

FIG. 43 is a perspective view illustrating the furniture construction of FIG. 42 wherein the bed is being moved into the operative position;

FIG. 44 is a perspective view of the furniture construction of FIG. 38 illustrating the construction when the bed is in the operative position, according to another embodiment of the present invention;

FIG. 45 is a perspective view of the furniture construction of FIG. 38 illustrating the structure of the desk when the bed is in the operative position, according to another embodiment of the present invention;

FIG. 46 is a perspective view illustrating a furniture construction that can be converted from a desk into a bed and vice versa, in accordance with another embodiment of the present invention, wherein the desk is in the inoperative position and the bed is in the operative position;

FIG. 47 is a perspective view illustrating furniture construction of FIG. 46 without a portion of the connector to thereby illustrate certain aspects of the crank mechanism; and

FIG. 48 is an exploded view illustrating the crank mechanism of FIG. 47.

DETAILED DESCRIPTION OF THE INVENTION

The present invention will now be described more fully hereinafter with reference to the accompanying drawings, in which some, but not all embodiments of the invention are shown. Indeed, these inventions may be embodied in many different forms and should not be construed as limited to the embodiments set forth herein; rather, these embodiments are provided so that this disclosure will satisfy applicable legal requirements. Like numbers refer to like elements throughout.

Referring to FIGS. 1 and 2, there is illustrated a furniture construction 9, according to one embodiment of the present invention. The furniture construction 9 comprises a support structure 10, a bed frame (also referred to herein as a “bed”) 20, and a table 30. The support structure
10 comprises a pair of end members 11 and, according to one embodiment, at least one connector or side member 12 extending therebetween. The connector 12 of the support structure 10 can include a second bed frame 20b extending between the pair of end members 11, as illustrated in FIGS. 1 and 2. According to other embodiments (not shown), the connector 12 can comprise drawers, shelving, a canopy, or one or more elongate members extending between the end members 11 to provide support. In other embodiment, lighting can be attached to or mounted within the connector 12. The connector 12 can be welded to the end members 11 and/or attached using suitable fasteners. The end members 11 can be constructed in a variety of configurations depending on the desired aesthetic appearance (e.g., tubular members having square, circular, oval, hexagonal, etc. cross-sectional configurations). In another embodiment (not shown), the support structure 10 of the furniture construction 9 comprises only a pair of end members 11 (i.e., with no connector 12 extending therebetween). The support structure 10 is structured to support the bed frame 20 and table 30 and can be constructed of any suitable material, including, without limitation, metal, plastic and/or wood.

[0079] According to one embodiment of the present invention, as illustrated in FIGS. 2 and 4-6, the bed frame 20 includes a pair of end members 21, a pair of lateral members 22 and a planar member or support 23 extending therebetween. The end members 21 and lateral members 22 can be welded together and/or attached using suitable fasteners. Similarly, the planar member 23 can be secured (although not required) to the end members 21 and lateral members 22 by welding or using suitable fasteners. In one embodiment, the bed frame 20 includes a plurality of slats 24 extending between the lateral members 22 that are structured to provide support to the planar member 23. The end members 21 and lateral members 22 can have a variety of configurations depending on the desired aesthetic appearance. The bed frame 20 is structured to support a predetermined amount of weight, including the weight of a mattress (not shown), as well as the weight of a person or persons sitting or sleeping on the bed frame. The end members 21 and lateral members 22 can be constructed of any suitable material, including metal, plastic and/or wood. The planar member 23 can comprise wood, metal, or plastic; or a wood, plastic or metal frame construction having slats, spring wire, canvas, a wire or fabric mesh or the like extending therebetween, as is well known to those skilled in the art. For example, the planar member 23 can comprise a standard box spring. According to one embodiment, as illustrated in FIG. 1, the underside 25 of the bed frame 20 can include an appropriate material 26, such as paneling, fabric or corkboard, that will conceal the bed frame when the bed frame is in the inoperative first position and that provides the user of the table 30 with a surface to post notes, pictures, etc. and/or that is aesthetically coordinated with the table or support structure 10.

[0080] The end members 21 of the bed frame 20 are rotatably attached to, and secured between, the end members 11 of the support structure 10 so that the bed frame can be rotated from the inoperative first position illustrated in FIG. 1 to the operative second position illustrated in FIG. 2, and vice versa. According to one embodiment, as illustrated in FIGS. 2 and 4-6, the end members 21 of the bed frame 20 are rotatably attached to, and secured between, the end members 11 of the support structure 10 using a pair of rotatable connectors 27. For example, the rotatable connectors 27 can comprise cylindrical members or shafts with suitable bearings structured to fit within corresponding apertures defined by the end members 21 of the bed frame 20 and the end members 11 of the support structure 10.

[0081] Preferably, at least one end member 11 of the support structure 10 includes a mechanism to assist the user in rotating the bed frame 20 from the inoperative first position illustrated in FIG. 1 to the operative second position illustrated in FIG. 2. For example, according to one embodiment, as illustrated in FIGS. 5 and 6, at least one end member 11 of the support structure 10 includes a pneumatic or hydraulic cylinder 14 that extends between the end member 11 of the support structure 10 and the end member 21 of the bed frame 20. The cylinder 14 can be secured to the end member 11 of the support structure 10 and the end member 21 of the bed frame 20 using suitable fasteners or by welding. The cylinder 14 assists the user in rotating the bed frame 20 from the inoperative first position illustrated in FIG. 1 to the operative second position illustrated in FIG. 2, and vice versa, by providing resistance against the weight of the bed frame 20 as the bed frame is rotated into, and away from, the operative position.

[0082] According to one embodiment of the present invention, as illustrated in FIGS. 1, 3, 4, 7 and 8, the table 30 includes a pair of end members 31, a pair of lateral members 32 and a planar member or support 33 extending therebetween. The planar members 31 and lateral members 32 can be welded together and/or attached using suitable fasteners. Similarly, the planar member 33 can be secured to the end members 31 and lateral members 32 by welding or using suitable fasteners. While not required, as illustrated in FIG. 1, the table 30 may also include a back splash 34, which can be secured to the planar member 31 and/or corresponding lateral member 32 by welding and/or using suitable fasteners. Although referred to herein as a “table,” as noted above, the planar member 31 can function as a desk or other work surface for the user of the furniture construction 9. The table 30 is structured to support a predetermined amount of weight. The end members 31, lateral members 32 and planar member 33 can be constructed of any suitable material, including, without limitation, metal, plastic and/or wood.

[0083] The end members 31 of the table 30 are slidably attached to, and secured between, the end members 11 of the support structure 10 so that the table can be slid from the inoperative second position illustrated in FIG. 2 to the operative first position illustrated in FIG. 1, and vice versa. According one embodiment, as illustrated in FIGS. 2, 7 and 8, the table 30 includes a pair of male support members 37, each of which slidably engages a corresponding female receptacle 38 attached to, and secured to, a corresponding end member 11 of the support structure 10.

[0084] Preferably, at least one end member 11 of the support structure 10 includes a mechanism, such as a biasing mechanism, to assist the user in sliding the table 30 from the operative first position illustrated in FIG. 1 to the inoperative second position illustrated in FIG. 2, and vice versa. For example, according to one embodiment, as illustrated in FIGS. 10A and 10B, at least one of the female receptacles 38 of the end members 11 of the support structure 10 can include a pneumatic or hydraulic cylinder 15 that connects the male support member 37 and the corresponding female
receptacle 38. In the illustrated embodiment, the cylinder 15 is shown mounted to the female receptacle 38 with the piston extending to the male support member 37. According to another embodiment, the cylinder 15 is mounted to the male support member 37 with the piston extending to the female receptacle 38. The cylinder 15 (and corresponding piston) can be secured to the male support member 37 and female receptacle 38 of the corresponding end member 11 of the support structure 10 by welding or using suitable fasteners. The cylinder 15 assists the user in sliding the table 30 from the operative first position illustrated in FIG. 1 to the inoperative second position illustrated in FIG. 2 and vice versa by providing resistance against (i.e., is biased against) the weight of the table as the table is slid into the inoperative position and operative position, respectively.

[0085] Referring to FIG. 9, the end members 31 of the table 30 each preferably define a groove 35 that is structured to receive the corresponding end member 21 of the table 20. When the bed frame 20 is in the operative second position and the table is in the inoperative second position, as illustrated in FIG. 2, each end member 21 of the bed frame 20 frictionally engages the corresponding groove 35 to thereby prevent the table from sliding from the inoperative second position to the operative first position.

[0086] Referring further to FIGS. 1 and 2, when the furniture construction 9 of the present invention needs to be used as a table 30 (as shown in FIG. 1), the bed frame 20 is rotated approximately 90 degrees from the operative second position illustrated in FIG. 2 to the inoperative first position illustrated in FIG. 1. As illustrated in FIG. 6, the bed frame 20 and the table 30 move independently of each other (i.e., the bed frame and table are not coupled together). Advantageously, decoupling the bed frame and the table from one another provides flexibility as to how the two components are positioned, as well as decreases the amount of force necessary to move each component from its operative position to its inoperative position, and vice versa, thereby providing greater ease of use and safety to the user. Thereafter, as illustrated in FIGS. 1, 7 and 8, the table 30 is lifted upwards such that the male support members 37 slide into the female receptacles 38. As illustrated in FIG. 1, the furniture construction 9 includes a locking mechanism 39, such as a pin configured to be received within an aperture, to maintain the table 30 in the operative first position.

[0087] Referring further to FIGS. 2 and 6-8, when the device of the present invention needs to be used as a bed 30 (as shown in FIG. 2), the table 30 is slid downwards into its inoperative second position such that the male support members 37 slide within the female receptacles 38. A predetermined amount of force preferably must be applied to the table 30 in order to move the table 30 from the operative first position. Once the table 30 is moved into the inoperative second position, the bed frame 20 can be rotated approximately 90 degrees from the inoperative first position illustrated in FIG. 1 to the operative second position illustrated in FIG. 2.

[0088] Referring to FIGS. 11 and 12, there is illustrated a furniture construction 90, according to another embodiment of the present invention. The furniture construction 90 comprises a support structure 110, a bed frame 120, and a table 130. The support structure 110 comprises a pair of end members 111 and, according to one embodiment, at least one connector or side member 112 extending therebetween. As noted above, the connector 112 of the support structure 110 can include a second bed frame 120 extending between the pair of end members 111. The connector 112 can be welded to the end members 111 and/or attached using suitable fasteners. The end members 111 can be constructed in a variety of configurations depending on the desired aesthetic appearance. In another embodiment (not shown), the support structure 110 of the furniture construction 90 comprises only a pair of end members 111 (i.e., with no connector 112 extending therebetween). The support structure 110 is structured to support the bed frame 120 and table 130 and can be constructed of any suitable material, including, without limitation, metal, plastic and/or wood.

[0089] According to one embodiment of the present invention, as illustrated in FIGS. 12 and 14-16, the bed frame 120 includes a pair of end members 121, a pair of lateral members 122 and a planar member 123 extending therebetween. The end members 121 and lateral members 122 can be welded together and/or attached using suitable fasteners. Similarly, the planar member 123 can be secured to the end members 121 and lateral members 122 by welding or using suitable fasteners. In one embodiment, the bed frame 20 includes a plurality of slats 124 extending between the lateral members 122 that are structured to provide support to the planar member 123. The end members 121 and lateral members 122 can have a variety of configurations depending on the desired aesthetic appearance. The bed frame 120 is structured to support a predetermined amount of weight, including the weight of a mattress (not shown), as well as the weight of a person or persons sitting or sleeping on the bed frame. The end members 121 and lateral members 122 can be constructed of any suitable material, including, without limitation, metal, plastic and/or wood. As discussed above, the planar member 123 can comprise wood, wire mesh or spring wire, canvas, or other materials that have sufficient strength. The slats can be formed of metal, wood, plastic, wire, rope, or other materials that have sufficient strength.

[0090] The end members 121 of the bed frame 120 are rotatably attached to, and secured between, the end members 111 of the support structure 110 so that the bed frame can be rotatable from the inoperative first position illustrated in FIG. 11 to the operative second position illustrated in FIG. 12, and vice versa. According to one embodiment, as illustrated in FIGS. 12 and 14-16, the end members 121 of the bed frame 120 are rotatably attached to, and secured between, the end members 111 of the support structure 110 using a pair of rotatable connectors 125. For example, the rotatable connectors 125 can comprise cylindrical members or shafts with suitable bearings structured to fit within corresponding apertures defined by the end members 121 of the bed frame 120 and the end members 111 of the support structure 110.

[0091] Preferably, at least one end member 111 of the support structure 110 includes a mechanism to assist the user in rotating the bed frame 120 from the inoperative first position illustrated in FIG. 11 to the operative second position illustrated in FIG. 12. For example, according to one embodiment, as illustrated in FIGS. 15 and 16, at least one end member 111 of the support structure 110 includes a pneumatic or hydraulic cylinder 114 that extends between the end member 111 of the support structure 110 and the end member 121 of the bed frame 120. The cylinder 114 can be
secured to the end member 111 of the support structure 110 and the end member 121 of the bed frame 120 using suitable fasteners. The cylinder 114 assists the user in rotating the bed frame 120 from the inoperative first position illustrated in FIG. 11 to the operative second position illustrated in FIG. 12 by providing resistance against the weight of the bed frame 120 as the bed frame is rotated into the operative position.

[0092] According to one embodiment of the present invention, as illustrated in FIGS. 11, 13, 17 and 18, the table 130 includes a pair of end members 131, a pair of lateral members 132 and a planar member or support 133 extending therebetween. The end members 131 and lateral members 132 can be welded together and/or attached using suitable fasteners. Similarly, the planar member 133 can be secured to the end members 131 and lateral members 132 by welding or using suitable fasteners. While not required, as illustrated in FIG. 11, the table 130 may also include a back splash 134, which can be secured to the planar member 131 and/or corresponding lateral member 132 by welding and/or using suitable fasteners. Although referred to herein as a “table,” the planar member 131 can function as a desk or other work surface for the user of the furniture construction 90. The table 130 is structured to support a predetermined amount of weight. The end members 131, lateral members 132 and planar member 133 can be constructed of any suitable material, including, without limitation, metal, plastic and/or wood.

[0093] The end members 131 of the table 130 are rotatably attached to, and secured between, the end members 111 of the support structure 110 so that the table can be rotated from the inoperative second position illustrated in FIG. 12 to the operative first position illustrated in FIG. 11, and vice versa. According one embodiment, the table 130 includes a pair of support members 137 that are rotatably attached to, and secured to, a corresponding end member 111 of the support structure 110 using rotatable connectors 138. As illustrated in FIG. 11, a pair of arms 135 are rotatably attached to each end member 131 of the table 130 using rotatable connectors 136a. As illustrated in FIG. 11, one of the arms 135 extends from the corresponding end member 131 of the table 130 to the respective support member 137 and is rotatably attached thereto, and secured thereto, using rotatable connector 136b. As illustrated in FIGS. 11, 13, 17 and 18, the other arm 135 extends from the corresponding end member 131 of the table 130 to the respective end member 111 of the support structure 110 and is rotatably attached thereto, and secured thereto, using rotatable connector 136c. Each support member 137 is rotatably secured to the corresponding end member 131 of the table 130 using a rotatable connector 139, as illustrated in FIG. 1. The rotatable connectors 136a, 136b, 136c, 138, and 139 can comprise or include cylindrical members or shafts with suitable bearings structured to fit within corresponding apertures defined by the corresponding arms 135, end members 131 of the table 130, support members 137 and/or the end members 111 of the support structure 110.

[0094] Preferably, at least one end member 111 of the support structure 110 includes a mechanism to assist the user in rotating the table 130 from the operative first position illustrated in FIG. 11 to the inoperative second position illustrated in FIG. 12. For example, according to one embodiment, as illustrated in FIGS. 17 and 18, at least one end member 111 of the support structure 110 can include a pneumatic or hydraulic cylinder 115 that extends between the end member 111 of the support structure 110 and the end member 121 of the bed frame 120. The cylinder 115 can be secured to the end member 111 of the support structure 110 and the end member 131 of the table 130 using suitable fasteners. The cylinder 115 assists the user in rotating the table 130 from the operative first position illustrated in FIG. 11 to the inoperative second position illustrated in FIG. 12 by providing resistance against the weight of the table as the table is rotated into the inoperative position.

[0095] Referring further to FIGS. 11 and 12, when the device of the present invention needs to be used as a table 130 (as shown in FIG. 11), the bed frame 120 is rotated approximately 90 degrees from the operative second position illustrated in FIG. 12 to the inoperative first position illustrated in FIG. 11. As illustrated in FIG. 16, the bed frame 120 and the table 130 move independently of each other (i.e., the bed frame and table are not coupled together). Thereafter, as illustrated in FIGS. 11, 17 and 18, the table 130 is lifted upwards such that the support members 137 rotate about the connectors 138 and 139 and the end members 131 of the table lift upwards and back via the arms 135, which rotate about the connectors 136a, 136b, and 136c. As illustrated in FIGS. 11 and 18, the rear of the end members 131 of the table 130 are configured to correspond to and mate with the rear of the support members 137. In this position, the support members 137 provide support to the end members 131, lateral members 132 and planar members 133 of the table 130 and resist movement of these components downward thereby maintaining the table in the operative first position. As illustrated in FIG. 11, the support members 137 can include a planar member 137a (such as corkboard or a similar material) that is exposed when the table 130 is in the operative first position to provide the user with a surface to fasten pictures, notes, etc. using thumb tacks or pushpins.

[0096] Referring further to FIGS. 12, and 16-18, when the device of the present invention needs to be used as a bed 40 as shown in FIG. 12, the table 130 is moved downwards into its inoperative second position such that the support members 137 rotate about the connectors 138 and 139 and the end members 131 of the table move forward and downwards via the arms 135, which rotate about the connectors 136a, 136b, and 136c. A predetermined amount of force preferably must be applied to the table 130 in order to dislodge or move the rear of the end members 131 of the table 30 from within the rear of the support members 137. Once the table 130 is moved into the inoperative second position, the bed frame 120 can be rotated approximately 90 degrees from the inoperative first position illustrated in FIG. 11 to the operative second position illustrated in FIG. 12.

[0097] Referring to FIGS. 46-48, there is illustrated a furniture construction 390, according to one embodiment of the present invention. The furniture construction 390 comprises a support structure 410, a bed frame (also referred to herein as a “bed”) 420, and a table 430. The support structure 410 comprises a pair of end members 411 and, according to one embodiment, at least one connector or side member 412 extending therebetween. The connector 412 of the support structure 410 can include a second bed frame 420b extending between the pair of end members 411, as illustrated in FIG. 46. According to other embodiments (not shown), the
connector 412 can comprise drawers, shelving, a canopy, or one or more elongate members extending between the end members 411 to provide support. In other embodiment, lighting can be attached to or mounted within the connector 412. The connector 412 can be welded to the end members 411 and/or attached using suitable fasteners. The end members 411 can be constructed in a variety of configurations depending on the desired aesthetic appearance (e.g., tubular members having square, circular, oval, hexagonal, etc. cross-sectional configurations). In another embodiment (not shown), the support structure 410 of the furniture construction 390 comprises only a pair of end members 411 (i.e., with no connector 412 extending therebetween). The support structure 410 is structured to support the bed frame 420 and table 430 and can be constructed of any suitable material, including, without limitation, metal, plastic and/or wood.

According to one embodiment of the present invention, as illustrated in FIG. 46, the bed frame 420 includes a pair of end members 421, a pair of lateral members 422 and a plurality of slats 424 extending between the lateral members 422. The slats are structured to provide support to a planar member (not shown), as discussed above in reference to furniture construction 9. The slats 424 can be secured (although not require) to the lateral members 422 by welding or using suitable fasteners. The end members 421 and lateral members 422 can be welded together and/or attached using suitable fasteners. The end members 421 and lateral members 422 can have a variety of configurations depending on the desired aesthetic appearance. The bed frame 420 is structured to support a predetermined amount of weight, including the weight of a mattress (not shown), as well as the weight of a person or persons sitting or sleeping on the bed frame. The end members 421 and lateral members 422 can be constructed of any suitable material, including metal, plastic and/or wood.

The end members 421 of the bed frame 420 are rotatably attached to, and secured between, the end members 441 of the support structure 410 so that the bed frame can be rotated from the inoperative first position, as illustrated in FIG. 1 with respect to furniture construction 9, to an operative second position illustrated in FIG. 46, and vice versa. According to one embodiment, as illustrated in FIGS. 2 and 4-6, the end members 21 of the bed frame 420 are rotatably attached to, and secured between, the end members 411 of the support structure 410 using a pair of rotatable connectors (such as is shown the rotatable connectors 27 shown in FIG. 2).

According to one embodiment of the present invention, as illustrated in FIG. 46, the table 430 includes a pair of end members 431, a pair of lateral members 432 and a plurality of slats 433 to support a planar member or support extending therebetween (as illustrated in FIG. 1 for furniture construction 9). The end members 431 and lateral members 432 can be welded together and/or attached using suitable fasteners. Similarly, the slats 433 can be secured to the lateral members 432 by welding or using suitable fasteners. Although referred to herein as a “table,” as noted above, the planar member can function as a desk or other work surface for the uses of the furniture construction 390. The table 430 is structured to support a predetermined amount of weight. The end members 431, lateral members 432 and slats 433 can be constructed of any suitable material, including, without limitation, metal, plastic and/or wood.

The end members 431 of the table 430 are slidably attached to, and secured between, the end members 411 of the support structure 410 so that the table can be slid from the inoperative second position illustrated in FIG. 46 to an operative first position, as illustrated in FIG. 1 for furniture construction 9, and vice versa. According one embodiment, as illustrated in FIG. 46, the table 430 includes a pair of male support members 437, each of which slidably engages a corresponding female receptacle 438 attached to, and secured to, a corresponding end member 411 of the support structure 410.

Preferably, at least one end member 411 of the furniture construction 390 includes a crank mechanism 445 to assist the user in sliding the table 430 from the operative first position illustrated in FIG. 1 to the inoperative second position illustrated in FIG. 46, and vice versa. For example, according to one embodiment, as illustrated in FIGS. 47 and 48, the crank mechanism 445 includes a mounting bracket 446 attached to the support structure 410 using suitable fasteners 447 or by welding. The crank mechanism 445 includes a housing 451 that contains a plurality of gears 448 (with corresponding bearings) configured to transmit rotary motion of the handle 449 to the flexible member 450, which can comprise a chain or belt. The flexible member 450 then rotates the gear 452 which is connected to a pair of pulley systems 454, each of which supports a flexible member 456 that is connected to a corresponding male support member 437. As illustrated in FIG. 47, the pulley systems 454 are connected through an elongate connector 458 (such as a rod). By turning the handle 449 clockwise, the flexible member 450 turns the gear 452 in a clockwise direction thereby causing each of the pulley systems 454 to retrieve the flexible connectors 456 which slides the male support member 437 into female receptacle 438. By turning the handle 449 counterclockwise, the flexible member 450 turns the gear 452 in a counterclockwise direction thereby causing each of the pulley systems 454 to release or pullout the flexible connectors 456. The weight of the desk then causes the male support member 437 to slide out of female receptacle 438.

The crank mechanism 445 assists the user in sliding the table 430 from the operative first position illustrated in FIG. 1 to the inoperative second position illustrated in FIGS. 46 and 47, and vice versa, by reducing the amount of force that must be applied by the user to slide the male support member 437 into and out of the female receptacle 438 of the corresponding end member 411.

Referring to FIGS. 19 and 22, there is illustrated a furniture construction 190, according to one embodiment of the present invention. The furniture construction 190 comprises a base member 210, a bed frame 220, and a table 230. The base member 210 comprises a pair of end members 211 and at least one connector or side member 212 extending therebetween. The connector 212 can be welded to the end members 211 and/or attached using suitable fasteners. According to one embodiment of the present invention, as illustrated in FIGS. 32A-32C and 33A-33C, the end members 211 of the base member can include a base portion 211a and an upper portion 211b, which can be welded together and/or attached using suitable fasteners. As illustrated in FIGS. 31A-31C, the connector 212 can included a notch or
cutout 213 structured to receive the upper portion 211b of the end member 211 so as to provide a smooth interface between the end members and the connector. The end members 211 can be constructed in a variety of configurations depending on the desired aesthetic appearance. The base member 210 is structured to support the bed frame 220 and table 230 and can be constructed of any suitable material, including, without limitation, metal, plastic and/or wood.

[0104] According to one embodiment of the present invention, as illustrated in FIGS. 26, 27, 34A-34C, and 35A-35C, the bed frame 220 includes a pair of end members 221 and a planar member or support 222 extending therebetween. The end members 221 and planar member 222 can be welded together and/or attached using suitable fasteners. In one embodiment, as illustrated in FIG. 27, the bed frame 220 includes a pair of brackets 223 that are used to secure the end members 221 to planar member 222. The end members 221 can have a variety of configurations depending on the desired aesthetic appearance. The bed frame 220 is structured to support a predetermined amount of weight, including the weight of a mattress (not shown), as well as the weight of a person or persons sitting or sleeping on the bed frame, and can be constructed of any suitable material, including, without limitation, metal, plastic and/or wood.

[0105] According to one embodiment of the present invention, as illustrated in FIGS. 28, 29, 30A-30C, and 36A-36C, and the table 230 includes a planar member 231. Although not required, as illustrated in the Figures, the table 230 may also include a back splash 232, which can be welded to the planar member 231 and/or attached using suitable fasteners. Although referred to herein as a “table,” the planar member 231 can function as a desk or other work surface for the user of the furniture construction 190. The table 230 is structured to support a predetermined amount of weight and can be constructed of any suitable material, including metal, plastic and/or wood, and all or a portion can be covered with glass, fabric, leather, etc.

[0106] As illustrated in FIGS. 20-23 and 26-27, the end members 221 of the bed frame 220 are rotatably attached to, and secured between, the end members 211 of the base member 210 using a pair of rotatable connectors 223 so that the bed frame can be rotated from the inoperative first position illustrated in FIG. 22 to the operative second position illustrated in FIGS. 19 and 20, and vice versa. For example, as illustrated in FIG. 27, the rotatable connectors 223 comprise cylindrical members or shafts with suitable bearings 224 structured to fit within corresponding apertures defined by the end members 221 of the bed frame 220 and the end members 211 of the base member 210.

[0107] Preferably, at least one end member 211 of the base member 210 includes a mechanism that can be used to rotate the bed frame 220 from the inoperative first position illustrated in FIG. 22 to the operative second position illustrated in FIGS. 19 and 20. For example, according to one embodiment, as illustrated in FIGS. 23-27, one end member 211 includes a rotatable handle 214 (such as the one illustrated in FIGS. 37A-37C) that is in operable communication with the rotatable connector 223 corresponding to the end member 211, such as through a chain 225 and sprocket 226 assembly, so that rotation of the handle in a counterclockwise direction rotates the bed frame 220 from the inoperative first position illustrated in FIG. 22 to the operative second position illustrated in FIGS. 19 and 20 and rotation of the handle in the clockwise direction rotates the bed frame from the operative second position illustrated in FIG. 19 to the inoperative first position illustrated in FIG. 22. In other embodiments, other types of mechanisms can be used, such as pulley and wire assembly, etc. In one embodiment, at least one of the end members 211 of the base member 210 can include a stop pin 227 to resist movement of the bed frame 220 past the horizontal plane of the operative second position.

[0108] Referring further to FIGS. 22-25, when the device of the present invention needs to be used as a table 230 (as shown in FIG. 22), the bed frame 220 is rotated approximately 90 degrees from the operative second position illustrated in FIG. 19 to the inoperative first position illustrated in FIG. 22, as described above. As illustrated in FIGS. 24 and 28, each end of the planar member 231 of the table 230 includes one or more guide members 233 (such as track rollers attached to the planar member using suitable brackets and fasteners) that are structured to slideably engage the end members 211 of the base member 210 within corresponding arcuate slots 215. Preferably, at least one end member 211 of the base member 210 includes a mechanism that can be used to move the table 220 from the inoperative second position illustrated in FIG. 19 to the operative first position illustrated in FIG. 22.

[0109] According to the embodiment illustrated in FIGS. 23-27 and 28-29, one end member 211 includes a rotatable handle 214 (such as the one illustrated in FIGS. 37A-37C) that is in operable communication with the table 230 through a pulley 233 and wire 234 assembly, so that rotation of the handle in a clockwise direction rotates the table from the inoperative second position illustrated in FIG. 19 to the operative first position illustrated in FIGS. 19 and 20. Rotation of the handle in the counter-clockwise direction rotates the bed frame from the operative first position illustrated in FIG. 22 to the inoperative second position illustrated in FIG. 19. In other embodiments, other types of mechanisms can be used, such as a chain and sprocket assembly, etc.

[0110] Referring to FIGS. 38 and 40, there is illustrated a furniture construction 290, according to one embodiment of the present invention. The furniture construction 290 comprises a support structure 310, a bed frame 320, and a desk 330. The support structure 310 comprises a pair of end members 311 and, according to one embodiment, at least one connector or side member 312 extending therebetween. The connector 312 of the support structure 310 can include shelving 314 and/or drawers 315 extending between the pair of end members 311. The connector 312 can be welded to the end members 311 and/or attached using suitable fasteners. The end members 311 can be constructed in a variety of configurations depending on the desired aesthetic appearance. In another embodiment (not shown), the support structure 310 of the furniture construction 290 comprises only a pair of end members 311 (i.e., with no connector 312 extending therebetween). The support structure 310 is structured to support the bed frame 320 and can be constructed of any suitable material, including, without limitation, metal, plastic and/or wood.

[0111] As illustrated in FIGS. 39 and 40, the bed frame 320 extends between the end members 311 of the support
structure 310. The bed frame 320 can comprise any of a number of substantially planar constructions, as are known to one of ordinary skill in the art, that are structured to support a predetermined amount of weight, including the weight of a mattress 321, as well as the weight of a person or persons sitting or sleeping on the bed frame. For example, the bed frame 320 can comprise a planar member formed of wood, metal, or plastic; or a wooden, plastic or metal frame construction having slots, spring wire, canvas, a wire or fabric mesh or the like extending therebetween. According to one embodiment, as illustrated in FIG. 38, the underside 322 of the bed frame 320 comprises or includes an appropriate material 323 such as paneling, fabric or corkboard that will conceal the bed frame when the bed frame is in the inoperative first position and that provides the user of the desk with a surface to post notes, pictures, etc. and/or that is aesthetically coordinated with the desk.

[0112] The bed frame 320 is rotatably attached to, and secured between, the end members 311 of the support structure 310 so that the bed frame can be rotated from the inoperative first position illustrated in FIG. 38 to the operative second position illustrated in FIG. 40, and vice versa. According to one embodiment, as illustrated in FIGS. 39 and 40, the bed frame 320 is rotatably attached to, and secured between, the end members 311 of the support structure 310 using a pair of rotatable connectors (not shown). For example, the rotatable connectors can comprise cylindrical members or shafts with suitable bearings structured to fit within corresponding apertures defined by the bed frame 320 and the end members 311 of the support structure 310.

[0113] According to one embodiment of the present invention, as illustrated in FIGS. 38 and 39, the desk 330 includes at least one pair of side members 331 and a planar member 332 extending therebetween. The side members 331 are structured to support the planar member 332. As illustrated in FIGS. 38 and 39, the desk 330 is configured so that its length corresponds generally to the distance L between the end members 311 of the support structure 310 and its width corresponds generally to the distance D from the front of the end members 311 to the underside 322 of the bed frame 320 so that the desk can be slid into and out of the space between the end members 11, as illustrated in FIGS. 38 and 39. According to one embodiment (not shown), each side member 331 can include one or more rollers or wheels mounted to the underside of the side member to assist the user in sliding the desk 330 into and out of the space between the end members 311. Although referred to herein as a “desk,” the planar member 332 can function as a desk or, when slid out of the space between the end members 311, as a table or other work surface for the user of the furniture construction 290, as illustrated in FIGS. 40 and 41. The desk 330 can be constructed of any suitable material, including, without limitation, metal, plastic, and/or wood, and all or a portion can be covered with glass, fabric, leather, etc.

[0114] According to one embodiment, as illustrated in FIGS. 38-41 and FIGS. 44 and 45, at least one of the side members 331 can be detachable from the desk 330. According to this embodiment, the desk 330 includes an additional support member 333 structured to support the corresponding end of the planar member 332. According to the embodiment illustrated in FIGS. 40 and 41, the detachable side member 334 is positioned adjacent the exterior side 335 of the support member 333. According to the embodiment illustrated in FIGS. 44 and 45, the detachable side member 334 is positioned adjacent the interior side 336 of the support member 333. Except for the differences in the position of the detachable side member 334, the furniture constructions 290 illustrated in FIGS. 38-41 and FIGS. 44-45 are the same. Preferrably, the side members 331 are configured with drawers 337 or doors 338a and shelving 338b for storage, etc., as is known by a person with ordinary skill in the art. Similarly, as illustrated in FIGS. 40 and 41 and FIGS. 44 and 45, the planar member 332 can include a pull-out surface 339 slidable mounted to the underside of the planar member 332. In the embodiment illustrated in FIGS. 42 and 43, the side members 331 are formed integrally with the desk 330.

[0115] Referring to FIGS. 38, 39 and 40, when the furniture construction 290 of the present invention needs to be used as a bed 320 (as shown in FIG. 40), the desk 330 is slid out of the space between the end members 311. Once the desk 330 is moved out of the space between the end members 311, the bed frame 320 can be rotated approximately 90 degrees from the inoperative first position illustrated in FIG. 38 to the operative second position illustrated in FIG. 40. In order to store the bed frame 320, the bed frame is rotated approximately 90 degrees from the operative second position illustrated in FIG. 40 to the inoperative first position illustrated in FIG. 38. The desk 330 can then be slid into the space between the end members 311, as illustrated in FIG. 38.

[0116] Many modifications and other embodiments of the inventions set forth herein will come to mind to one skilled in the art to which these inventions pertain having the benefit of the teachings presented in the foregoing descriptions and the associated drawings. Therefore, it is to be understood that the inventions are not to be limited to the specific embodiments disclosed but are to be included within specific terms are employed herein, they are not for purposes of limitation.

What is claimed is:

1. A furniture construction, comprising:
   a support structure having a pair of end members;
   a bed frame movably connected to said end members of said support structure so that said bed frame can be moved between an inoperative first position and an operative second position;
   a table movably connected to said end members of said support structure so that said table can be adjusted between an operative first position and an inoperative second position; and
   wherein said bed frame and said table are structured such that when said bed frame is in the operative second position said table is in the inoperative second position, and when said table is in the operative first position said bed frame is in the inoperative second position.

2. A furniture construction according to claim 1 wherein the inoperative first position of said bed frame is substantially vertical and the operative second position of said bed frame is substantially horizontal.

3. A furniture construction according to claim 1 further comprising at least one biasing mechanism structured to bias said table from the inoperative second position toward the operative first position.
4. A furniture construction according to claim 3 wherein said biasing mechanism comprises a piston and cylinder assembly.

5. A furniture construction according to claim 1 further comprising a locking mechanism to maintain said bed frame in second operative second position.

6. A furniture construction according to claim 1 wherein at least a portion of said bed frame is frictionally received between said table and said structure.

7. A furniture construction, comprising:
   a support structure having a pair of end members;
   a bed frame comprising a pair of end members and a planar member extending therebetween, each of said end members of said bed frame being rotatably connected to one of said end members of said support structure so that said bed frame can be rotated between an operative first position and an operative second position;
   a table comprising a planar member, said planar member of said table being adjustably connected to each of said end members of said support structure so that said table can be adjusted between an operative first position and an operative second position; and

wherein said bed frame and said table are structured such that when said bed frame is in the operative second position said table is in the inoperative second position, and when said table is in the operative first position said bed frame is in the inoperative second position.

8. A furniture construction according to claim 7 wherein the inoperative first position of said bed frame is substantially vertical and the operative second position of said bed frame is substantially horizontal.

9. A furniture construction according to claim 7 further comprising at least one biasing mechanism structured to bias said table from the inoperative second position toward the operative first position.

10. A furniture construction according to claim 9 wherein said biasing mechanism comprises a piston and cylinder assembly.

11. A furniture construction according to claim 7 further comprising a locking mechanism to maintain said bed frame in second operative second position.

12. A furniture construction according to claim 7 wherein at least a portion of one of said end members of said bed frame is frictionally received between said table and the corresponding one of said end members of said support structure.

13. A method of constructing a furniture construction, comprising:
   providing a support structure having a pair of end members;

movably connecting a bed frame to the end members of the support structure so that the bed frame can be rotated between an inoperative first position and an operative second position;

movably connecting a table to the end members of the support structure so that the table can be adjusted between an operative first position and an inoperative second position; and

wherein the bed frame and the table are structured such that when the bed frame is in the operative second position the table is in the inoperative second position, and when the table is in the operative first position the bed frame is in the inoperative second position.

14. A method according to claim 13 wherein the inoperative first position of the bed frame is substantially vertical and the operative second position of the bed frame is substantially horizontal.

15. A furniture construction, comprising:
   a support structure having a pair of end members defining a space therebetween;
   a bed frame movably connected to said end members of said support structure so that said bed frame can be moved between an inoperative first position and an operative second position; and

a desk slidably disposed between said end members of said support structure so that said desk can be slid into and out of the space defined therebetween.

16. A furniture construction according to claim 15 wherein the inoperative first position of said bed frame is substantially vertical and the operative second position of said bed frame is substantially horizontal.

17. A method of constructing a furniture construction, comprising:
   providing a support structure having a pair of end members defining a space therebetween;

movably connecting a bed frame to the end members of the support structure so that the bed frame can be rotated between an inoperative first position and an operative second position;

slidably positioning a desk between the end members of the support structure so that the desk can be slid into and out of the space defined between the pair of end members.

18. A method according to claim 17 wherein the inoperative first position of the bed frame is substantially vertical and the operative second position of the bed frame is substantially horizontal.

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