

PATENT SPECIFICATION (11)

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(54) SOFA BED WITH TV HEADREST

(71) We, LA-Z-BOY CHAIR COMPANY, a Corporation organised under the laws of the State of Michigan, United States of America, of 1284 N. Telegraph Road, Monroe, State of Michigan, United States of America, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention relates to a sofa bed provided with a TV head section and a rear bottom section, said TV head section and rear bottom section being substantially in a common horizontal plane when raised to a bed position, said TV head section being raised further when required to a viewing position, said bottom section being substantially horizontal when lowered into the storage area but with the TV head section raised to an upstanding position.

Reference may be had to United States patents 1095465, 1216443 and 1295840 to show television headrests forming the rear section of the foldable bed unit as well as United States patent 2691708 which discloses an extra angularly positionable frame; United States patent 2748398 discloses a head section pivoted to the sofa which is also true of United States patents 3516096 and 3710402 which disclose a TV rear head section which may be tilted at an angle to the planar bed sections.

According to the invention we provide a sofa bed comprising a sofa frame having a back, sides and a front board which forms a closed storage area, a foldable bed frame comprising pivotally interconnected rear headrest, rear bottom, intermediate, and front top sections all of which when folded together are received within said area, all said sections being substantially horizontal when unfolded, said rear headrest section extending upwardly when folded within the rear part of the storage area and the other sections when folded being disposed rearwardly of the front board with the intermediate section substantially vertical and the rear bottom and front top sections substan-

tially horizontal, the rear headrest section being pivoted to the rear of said rear bottom section, such rear bottom section being pivoted to the rear of said intermediate section, the front of said intermediate section being pivoted to the rear of said front top section, leg means pivoted to said bed frame for supporting the sections in substantially horizontal position when unfolded, removable plates at the opposite sides of the sofa frame, an arm at each side of the bed frame pivoted at its lower end to each said plate at the forward end thereof, a link at each side of said bed frame pivoted at its lower end to each said plate near the rear end thereof, linkage means connecting said arms and said links at their upper ends to said bed frame to movably support it on said removable plates, said linkage means including a two arm bellcrank lever at each side of the bed frame having the end of one arm secured pivotally between the rear headrest section and the rear bottom section, and pivot means joining the bellcrank lever near the corner between its two arms with the upper end of said link that is remote from said plate, and releasable locking means at each side of the bed frame for selectively holding the headrest section in a raised position at an angle to said rear bottom section when the bed frame is unfolded.

The invention will be further described by way of example with reference to the accompanying diagrammatic drawings wherein:

Fig. 1 is a broken plan view of the left hand side of a sofa bed embodying features of the present invention;

Fig. 2 is an enlarged broken view of the left hand portion of the structure illustrated in Fig. 1;

Fig. 3 is an enlarged, broken view of the righthand portion of the structure illustrated in Fig. 1;

Fig. 4 is a view of the sections of the bed frame illustrated in Fig. 1, with the bed sections folded into a position for storage within the storage area of the sofa which is illustrated in dash lines;

Fig. 5 is an enlarged view in elevation of the

structure illustrated in Fig. 2, with parts in bed position relative to the sofa frame;

Fig. 6 is a view in elevation of the structure illustrated in Fig. 3, when in raised open bed position to be disposed in extension of the structure illustrated in Fig. 5;

Fig. 7 is a reduced view of the structure illustrated in Figs. 5 and 6 showing the entire unit in bed position;

Fig. 8 is an enlarged view of the TV rear head section of the bed unit when supported in angular TV viewing position;

Fig. 9 is a view of the pair of hinged links which is pivotally connected to the TV rear head section shown in alignment with the rear bottom section when the bed sections are being folded; and

Fig. 10 is a view of the structure illustrated in Fig. 9, after the rear bottom section has been swung upwardly and rearwardly to start the movement of the TV rear head section to a right angle position to the rear bottom section so as to be in a substantially vertical position when stored in the back frame recess, as illustrated in Fig. 4.

The sofa frame 11, herein illustrated in dash line, supports a bed unit which is composed of four hinged sections which may be compactly folded and disposed within a storage area within the bottom of the sofa frame 11 below the top of a front board 18 thereof. A TV rear head section 13 is pivoted to the rear of a rear bottom section 14 which is pivoted to the rear of a vertical intermediate section 15 to which a front top section 16 is pivotally secured. The bed frame storage area is provided within the bottom of the sofa frame into which the folded bed sections are stored. Plates 19 are secured to the opposite ends of the sofa frame against the inside surface of the arm areas where they are releasably secured by the engagement of the bolt 21 (Fig. 5) within L-shaped slots 22 in the top ends of the plates. The entire folded bed unit and mechanism may be removed from the storage area by loosening the bolts 21 and sliding the plates 19 forwardly to release them from the sides after a plurality of retaining screws 23 have been removed.

The plates 19 have an arm 24 secured thereto on a pivot 25 with a plate 26 extending rearwardly approximately at right angles thereto, secured in position by rivets 27. A cross bar 28 joins the ends of the spaced plates 26 to provide stability thereto. A link 29 is secured by a pivot 31 to the plate 26, the opposite end having an aperture 32 in which a hook 33 of a coil spring 34 is secured. A hook 35 on the opposite end of the coil spring 34 is secured within a notch on the end of an arm 36 attached to the plate 19 by rivets 30A. The tension of the spring 34 assists in the folding and storage of the sections of the bed frame unit. A link 37 is secured to the plate 19 on a pivot 38 and, as illustrated in Fig. 8, is

shown in substantially parallel relation to the arm 24 to which it is connected by a link 40. The end of the link 37 is secured to the angular corner of a bell-crank link 41 by a pivot 39. The link 40 inter-connects the arm 24 and the link 37 in parallelogram relation to the pivots 25 and 38 to have them operate in substantially parallel relation to each other.

The bell crank link 41 has its upper end secured to a pivot 43 which connects the TV headrest section 13 to the rear bottom section 14 at the adjacent ends thereof. The TV rear head section 13 has a bracket 44 riveted thereto to extend downwardly therefrom and is connected by a pivot 45 to a link 46. The link 46 is secured by a pivot 47 to a link 48 which is secured intermediate its length by a pivot 49 to the arm 51 of the bell-crank link 41. The extending end 52 of the link 48 is secured by a pivot 53 to a link 54. The link 54 has a releasable securing mechanism 55 operated thereby which will be described in detail hereinafter.

Referring more particularly to Fig. 4 which shows the bed sections 13, 14, 15 and 16 in folded stored position, the grasping and lifting of the tubular cross member 56 rocks the foldable structure counter-clockwise substantially about the pivot 39 and moves the front top section 16 to about a 60° position and the TV headrest section toward a horizontal position beneath the back rail 57. This raises the front end of the bottom frame section 14 above the front board 18 of the sofa frame. Further upward and outward movement occurs on the link 37 and arm 24 which swing clockwise in unison through the interconnection by the link 40. A pivot 58 on the outer end of the arm 24 is connected to an end 59 of a swing plate 61 and is connected by a link 30 with the arms 51 of the bell crank links 41. The swing plate 61 is connected by a pivot 62 to a plate 63 which is secured to the rear bottom bed section 14 by rivets 64 and 65. The rivet 65 extends through an arcuate slot 66 in the swing plate 61. The opposite end of the swing plate 61 from the end 59 is secured by a pivot 67 to a link 68 the opposite end of which is secured by a pivot 69 to a supporting leg 71. The leg 71 is secured to a pivot 72 which interconnects the forward end of the rear bottom bed section 14 to the vertical section 15. When the sections 14, 15 and 16 are swung forwardly over the top of the front board 18, the leg 71 is pivoted forwardly to be disposed downward in alignment with the vertical intermediate section 15. A tubular cross member 73 inter-connects the two legs 71 so as to stabilise them when engaging the floor. A link 74 has a slot 75 through which a pivot 76 secured to the link 68 extends. The opposite end of the link 74 is secured by a pivot 77 to an arm 78 of a bellcrank 79 which is secured by a pivot 81 to the vertical intermediate section 15. The

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other arm 80 of the bellcrank 79 has its end secured by a pivot 82 to a link 83 which has its forward end secured by a pivot 84 to the front top section 16 of the bed unit.

5 A link 85 is pivoted to the vertical section 15 by a pivot 86, the opposite end of the link 85 has a pivot 87 secured thereto which slides within a slot 88 disposed within the rear bottom section 14. The pivot 87 moves within the slot 88 during the pivoting of the vertical bed section 15 relative to the rear bottom bed section 14. The plate 61 which has its end supported on the arm 24 swings in a counter-clockwise direction when the bed sections are moved to planar position. This moves the TV head section and the rear bottom section into horizontal position supported on the pair of legs 71. The raising of the front top section pivots the vertical section on the rear bottom section to be in planar relation therewith moving the pivot 87 in the rearward end of the link 85 forwardly in the slot 88 to move the link 85 to horizontal position. During the movement of the folded bed sections onto the legs 71 the link 74 is ineffective and no movement of the bellcrank 79 occurs. A leg 89 is secured by a pivot 91 to the forward end of the top bed section 16 which has an adjacent end secured to a link 92 by a pivot 93A. The rear end of the link 92 is secured by a pivot 94A to the vertical bed section 15, as illustrated in Fig. 4. The swinging of the front bed section to horizontal position has the link 92 operate the leg 89 into vertical position for supporting the forward edge of the front bed section 16. The pivot 93A is below the pivot 91 and out of alignment with the pivots 93A and 94A to have the link operable to swing the leg 89 to vertical position, as illustrated in Fig. 4.

The bellcrank 79 and links 74 and 85 lock the sections 14, 15 and 16 in the position illustrated in Fig. 4 for compressing the mattress which is folded between the top section 16 and bottom section 14 and retains it in seating position within the sofa frame. When the vertical and top sections 15 and 16 are swung outwardly on the pivots 72 and 90 at the ends of the vertical intermediate section 15, the lock formed by the bell-crank 79 and link 85 is released and all of the bed sections 13, 14, 15 and 16 are moved into a horizontal plane. After the four sections are swung to horizontal bed position, the bed sections may be folded by swinging the front bed section to a vertical position and then to a horizontal position swinging the vertical section into vertical position in which relation the links 74 and 85 and bellcrank 79 lock the top and bottom sections 14 and 16 from separating. The raising of the vertical section 15 swings the sections 14 and 16 therewith into an approximate 45° angle returning the legs 71 against the rear bottom section 14. The links 46 and 48 are moved into aligned

relationship with the finger 93, which extends beyond the pivot 47, engaging the projection 94 and prevents the pivot 47 from moving to over-toggle position relative to the pivots 45 and 49, as illustrated more specifically in Fig. 10.

As the two sections 14 and 16 are swung downwardly toward the rear of the storage area 19 in the sofa frame, the links 93 and 94 swing the TV rear head section to an angular position relative to the bed section 14. As the plate 61 is pivoted by the arm 24 and link 30, the links 46 and 48, in extension of each other, swing the TV rear head section to right angle position relative to the rear bottom bed section 14. The TV bed section 13 is moved upwardly into the back area beneath and behind the cross member 57 to assume a substantially vertical position, as illustrated in Fig. 4. This shortens the length of the two sections 14 and 16 so as to have the seating portion of the sofa from the front to the back as small as possible. When swinging the folded bed sections out of the storage area, the links 46 and 48 permit the TV rear head sections 13 to swing counterclockwise into a position in planar relation with the rear bottom section 14. As the folded bed sections are raised from the storage area of the sofa frame, the legs 71 are moved to a vertical position parallel with the vertical section 15. The swinging of the front top section 16 upward and forwardly first swings the vertical section 15 to horizontal position with the other bed sections. Further movement of the front bed section 16 moves it into horizontal position on the front legs 89 aligned with the vertical, rear and TV head sections. The mattress which rests upon the bed sections is not herein illustrated, but will fold between the sections when the sections are moved into the position illustrated in Fig. 4 in locked relation to each other.

When in planar position, the TV rear head section 13 may be raised to its stored position, as illustrated in Fig. 4, at substantially right angles to the bed section 14 and then moved counterclockwise substantially 45° to have the releasable locking mechanism 55 retain the TV head section 13 at an angle of approximately 45° for reading, viewing television and the like, thereafter the section 13 may be raised to vertical position to have the holding mechanism released to permit the rear head section 13 to be moved downwardly into parallel relation with the other bed sections. While the releasable mechanism may take many forms, such as those employed on chests, cabinets and the like for raising the lid and thereafter releasing the lid to close the chest or cabinet, the mechanism 55 herein illustrated embodies a slot 95 in the bellcrank link 41 with the link 54 having a star wheel 96 secured thereto by a pivot 97 which slides in the slot 95. When the bed section 13

is hinged clockwise, the link 48 pivots counterclockwise moving the pivot 53 and the link 54 downwardly thereby having the side of the angular recess 100 at the end of the star wheel 96 engage a pin 98 at the bottom of the slot 95 to cause the star wheel 96 to rotate into locked position. The star wheel 96 swings clockwise into a locked position to retain the bed section 13 at a 45° angle as illustrated in Fig. 8, when the star wheel moves into engagement with the bottom end of the rib 101. The raising of the bed section 13 to a vertical position thereafter lowers the star wheel 96 to permit it to again strike the pin 98 to have it swing clockwise against the rib 101, into vertical position, to permit its pivot 97 to move upwardly in the slot 95 as the bed section 13 is lowered into planar relation to the other bed sections 14, 15 and 16.

With this arrangement, the forward ends of the bottom and top sections 14 and 16 are supported on legs which are moved to vertical position as the sections are unfolded into bed relation. When all of the sections are in aligned horizontal position, the TV rear head section 13 may be raised to a 45° position and retained until released and again moved to a horizontal bed position. The folding of the four bed sections into a compact storage unit which is supported on a link 37 and arm 24 at the rear end permit them to be swung into the sofa storage area. A pair of pivotally joined links which are pivoted to the rear bed section 13 and to an actuating link, positively raises the TV rear head section into 90° relationship with the adjacent bed section 14 so that it can be moved into the back area for compact storage. The three sections 14, 15 and 16 are locked in storage position to form a seating area aligned with or below the top of the front board of the sofa frame.

Each of the bed sections have side members of angle shape which have tubes 28 extending thereacross and with similar tubes 105 across each of the ends of the bed sections 13 and 16. Sinuous springs 110 are stretched between the side members of the bed sections having a hook 112 at the ends which are secured in holes in the horizontal portion of the side angle members of the bed sections. The springs 110 have links 113 connecting the adjacent loops together in hinged relation. Links 114 are employed when the spaced loops are aligned with a cross tube 28 to pass therearound, as illustrated in Fig. 5. Wire extensions 111 are hooked to the endmost loops of the sinuous springs 110 with the outer ends 115 formed to extend within holes in the tubes 105 located across the ends of the end bed sections. The sinuous springs support the weight of the bed occupants when resting on the mattress without too much deflection and permit the sections to roll up into the compact form illustrated in Fig. 4 for storage purposes. It is to be understood

that other types of resilient support could be employed for the bed sections. The use of the sinuous spring strips for interconnection by links and stretched across the sides of the bed sections provide a restful deck which deflects a necessary amount when occupied.

WHAT WE CLAIM IS:—

1. A sofa bed, comprising a sofa frame having a back, sides and a front board which forms a closed storage area, a foldable bed frame comprising pivotally interconnected rear headrest (13), rear bottom (14), intermediate (15), and front top (16) sections all of which when folded together are received within said area, all said sections being substantially horizontal when unfolded, said rear headrest section (13) extending upwardly when folded within the rear part of the storage area and the other sections when folded being disposed rearwardly of the front board with the intermediate section substantially vertical and the rear bottom and front top sections substantially horizontal, the rear headrest section (13) being pivoted (43) to the rear of said rear bottom section (14), such rear bottom section being pivoted to the rear of said intermediate section (15), the front of said intermediate section being pivoted to the rear of said front top section (16), leg means pivoted to said bed frame for supporting the sections in substantially horizontal position when unfolded, removable plates (19) at the opposite sides of the sofa frame, an arm (24) at each side of the bed frame pivoted at its lower end to each said plate at the forward end thereof, a link (37) at each side of said bed frame pivoted at its lower end to each said plate near the rear end thereof, linkage means connecting said arms and said links at their upper ends to said bed frame to movably support it on said removable plates, said linkage means including, a two arm bellcrank lever (41) at each side of the bed frame having the end of one arm secured pivotally between the rear headrest section and the rear bottom section, and pivot means (39) joining the bellcrank lever near the corner between its two arms with the upper end of said link (37) that is remote from said plate, and releasable locking means (55) at each side of the bed frame for selectively holding the headrest section in a raised position at an angle to said rear bottom section when the bed frame is unfolded.

2. A sofa bed as recited in claim 1 wherein one arm of each bellcrank lever has a slot therein engaged slidably by part of said releasable locking means.

3. A sofa bed as recited in claim 1 or 2 wherein said plates (19) have L-shaped slots (22) near their forward ends, and headed elements (21) on said sofa frame sides from which the plates are removable.

4. A sofa bed as recited in claim 2, 130



is hinged clockwise, the link 48 pivots counterclockwise moving the pivot 53 and the link 54 downwardly thereby having the side of the angular recess 100 at the end of the star wheel 96 engage a pin 98 at the bottom of the slot 95 to cause the star wheel 96 to rotate into locked position. The star wheel 96 swings clockwise into a locked position to retain the bed section 13 at a 45° angle as illustrated in Fig. 8, when the star wheel moves into engagement with the bottom end of the rib 101. The raising of the bed section 13 to a vertical position thereafter lowers the star wheel 96 to permit it to again strike the pin 98 to have it swing clockwise against the rib 101, into vertical position, to permit its pivot 97 to move upwardly in the slot 95 as the bed section 13 is lowered into planar relation to the other bed sections 14, 15 and 16.

With this arrangement, the forward ends of the bottom and top sections 14 and 16 are supported on legs which are moved to vertical position as the sections are unfolded into bed relation. When all of the sections are in aligned horizontal position, the TV rear head section 13 may be raised to a 45° position and retained until released and again moved to a horizontal bed position. The folding of the four bed sections into a compact storage unit which is supported on a link 37 and arm 24 at the rear end permit them to be swung into the sofa storage area. A pair of pivotally joined links which are pivoted to the rear bed section 13 and to an actuating link, positively raises the TV rear head section into 90° relationship with the adjacent bed section 14 so that it can be moved into the back area for compact storage. The three sections 14, 15 and 16 are locked in storage position to form a seating area aligned with or below the top of the front board of the sofa frame.

Each of the bed sections have side members of angle shape which have tubes 28 extending thereacross and with similar tubes 105 across each of the ends of the bed sections 13 and 16. Sinuous springs 110 are stretched between the side members of the bed sections having a hook 112 at the ends which are secured in holes in the horizontal portion of the side angle members of the bed sections. The springs 110 have links 113 connecting the adjacent loops together in hinged relation. Links 114 are employed when the spaced loops are aligned with a cross tube 28 to pass therearound, as illustrated in Fig. 5. Wire extensions 111 are hooked to the endmost loops of the sinuous springs 110 with the outer ends 115 formed to extend within holes in the tubes 105 located across the ends of the end bed sections. The sinuous springs support the weight of the bed occupants when resting on the mattress without too much deflection and permit the sections to roll up into the compact form illustrated in Fig. 4 for storage purposes. It is to be understood

that other types of resilient support could be employed for the bed sections. The use of the sinuous spring strips for interconnection by links and stretched across the sides of the bed sections provide a restful deck which deflects a necessary amount when occupied.

WHAT WE CLAIM IS:—

1. A sofa bed, comprising a sofa frame having a back, sides and a front board which forms a closed storage area, a foldable bed frame comprising pivotally interconnected rear headrest (13), rear bottom (14), intermediate (15), and front top (16) sections all of which when folded together are received within said area, all said sections being substantially horizontal when unfolded, said rear headrest section (13) extending upwardly when folded within the rear part of the storage area and the other sections when folded being disposed rearwardly of the front board with the intermediate section substantially vertical and the rear bottom and front top sections substantially horizontal, the rear headrest section (13) being pivoted to the rear of said rear bottom section (14), such rear bottom section being pivoted to the rear of said intermediate section (15), the front of said intermediate section being pivoted to the rear of said front top section (16), leg means pivoted to said bed frame for supporting the sections in substantially horizontal position when unfolded, removable plates (19) at the opposite sides of the sofa frame, an arm (24) at each side of the bed frame pivoted at its lower end to each said plate at the forward end thereof, a link (37) at each side of said bed frame pivoted at its lower end to each said plate near the rear end thereof, linkage means connecting said arms and said links at their upper ends to said bed frame to movably support it on said removable plates, said linkage means including, a two arm bellcrank lever (41) at each side of the bed frame having the end of one arm secured pivotally between the rear headrest section and the rear bottom section, and pivot means (39) joining the bellcrank lever near the corner between its two arms with the upper end of said link (37) that is remote from said plate, and releasable locking means (55) at each side of the bed frame for selectively holding the headrest section in a raised position at an angle to said rear bottom section when the bed frame is unfolded.

2. A sofa bed as recited in claim 1 wherein one arm of each bellcrank lever has a slot therein engaged slidably by part of said releasable locking means.

3. A sofa bed as recited in claim 1 or 2 wherein said plates (19) have L-shaped slots (22) near their forward ends, and headed elements (21) on said sofa frame sides from which the plates are removable.

4. A sofa bed as recited in claim 2, 130



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5 said linkage means including a swing plate (61) pivoted (62) to each side of said rear bottom section (14), and pivot means (58) for securing one end (59) of each said swing plate to the upper ends remote from said plates of said arms (24) which are pivoted to said removable plates.

10 5. A sofa bed as recited in claim 1 or 2, including link means at opposite sides of the bed frame having one end connected to the pivot means (58) between said swing plates and arms and having the opposite end pivoted to said one arm (51) of the bellcrank lever (41), said bellcrank lever being secured to a pivot (43) between the headrest section and rear bottom section of the bed frame.

20 6. A sofa bed as recited in claim 5, including at each side of the bed frame a pair of pivotally interconnected headrest control links (46, 48) one of which is pivoted (49) to said one arm (51) of said bellcrank lever (41) and has an end portion extending beyond the pivot, brackets (44) extending downwardly from the headrest section, and pivots (45) securing the end of the other link of said interconnected pair of links to said bracket (44).

30 7. A sofa bed as recited in claim 6, wherein the pivotally interconnected links are provided with stop means (93, 94) to prevent the pivot (47) which interconnects them from moving into and beyond alignment with the pivots (45, 49) at the ends of said links.

35 8. A sofa bed as recited in claim 6, wherein each said releasable locking means (55) includes a locking link (54) pivoted (53) at one end to said end portion of said one of the pair of pivotally interconnected links, and connected slidably at its other end with said slot (95) in said bellcrank lever, and a releasable locking device (96) supported on said locking link which is effective for holding the headrest section in a raised angular position.

45 9. A sofa bed as recited in claim 8, wherein each said releasable locking device comprises a star wheel (96) which is pivoted (97) on the locking link, said pivot sliding within said slot in an arm of the bellcrank lever, a side of a recess (100) in the star wheel being engaged by a pin (98) adjacent to the bottom of said slot for angularly advancing the star wheel into a stop position, and a rib (101) on the bellcrank lever disposed parallel to said slot, the bottom end of said rib forming the stop for the star wheel for holding said headrest section in a raised angular position.

10. A sofa bed as recited in claim 9, wherein the raising of said headrest section moves each star wheel downwardly into parallel relation to the rib so that the pivot may move upwardly in said slot moving said star wheel along therewith to permit the headrest section to move to planar relation with the other bed frame sections.

65 11. A sofa bed as recited in claim 1, wherein link means (40) are provided for joining the links (37) and arms (24) which are pivoted to the removable side plates to maintain the links and arms in substantially parallel relation.

70 12. A sofa bed as recited in claim 6, wherein the linkage means supporting the bed frame is such that raising of the intermediate section at the rear of the front board of the sofa frame rocks the folded sections upwardly at the front and moves the headrest section counterclockwise into planar relation with the rear bottom bed section as the folded sections are advanced forwardly over the sofa frame front board.

80 13. A sofa bed as recited in claim 4, wherein said leg means includes a leg (71) pivoted to each side of the forward portion of the rear bottom section, links (68) between said legs and said swing plates (61), said pivoted arms (24) on the removable side plates rotating said swing plates (61) to move said links (68).

90 14. A sofa bed as recited in claim 13, wherein said leg means includes a leg (89) pivoted (91) at each side of the front top section (16) and a link (92) is provided having one end (94) pivoted to said intermediate bed section and the opposite end pivoted (93) to the leg (89) pivoted to the front top section.

95 15. A sofa bed as recited in claim 14, wherein spring means (34) are provided on said arms (24) which are pivoted to the removable side plates for balancing the bed frame sections when moved from substantially horizontal to folded storage position.

100 16. A sofa bed substantially as herein described and as shown in the accompanying drawings.

For the Applicants,
MATTHEW J. HADDAN & CO.,
Chartered Patent Agents,
Haddan House,
33 Elmfield Road,
Bromley, Kent BR1.