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Fitzgerald et al.

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[54] **BED**

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[51] **Int. Cl.** **A47c 19/00**

[58] **Field of Search** ..... 5/131, 279 R, 280, 5/286, 304, 288, 305, 310, 285, 282 R; 248/188, 235, 241

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[57] **ABSTRACT**

A bed having a box spring including a base frame with transverse slats, and an interengaged spring support frame including a central hub and non-parallel support runners extending from the hub in supporting engagement with the transverse slats of the base frame. Downwardly directed legs are secured to the runners intermediate their ends to support the bed upon the floor.

In one form of the invention, vertical side panels connected to the box spring base frame overlie side surfaces of the box spring.

26 Claims, 10 Drawing Figures

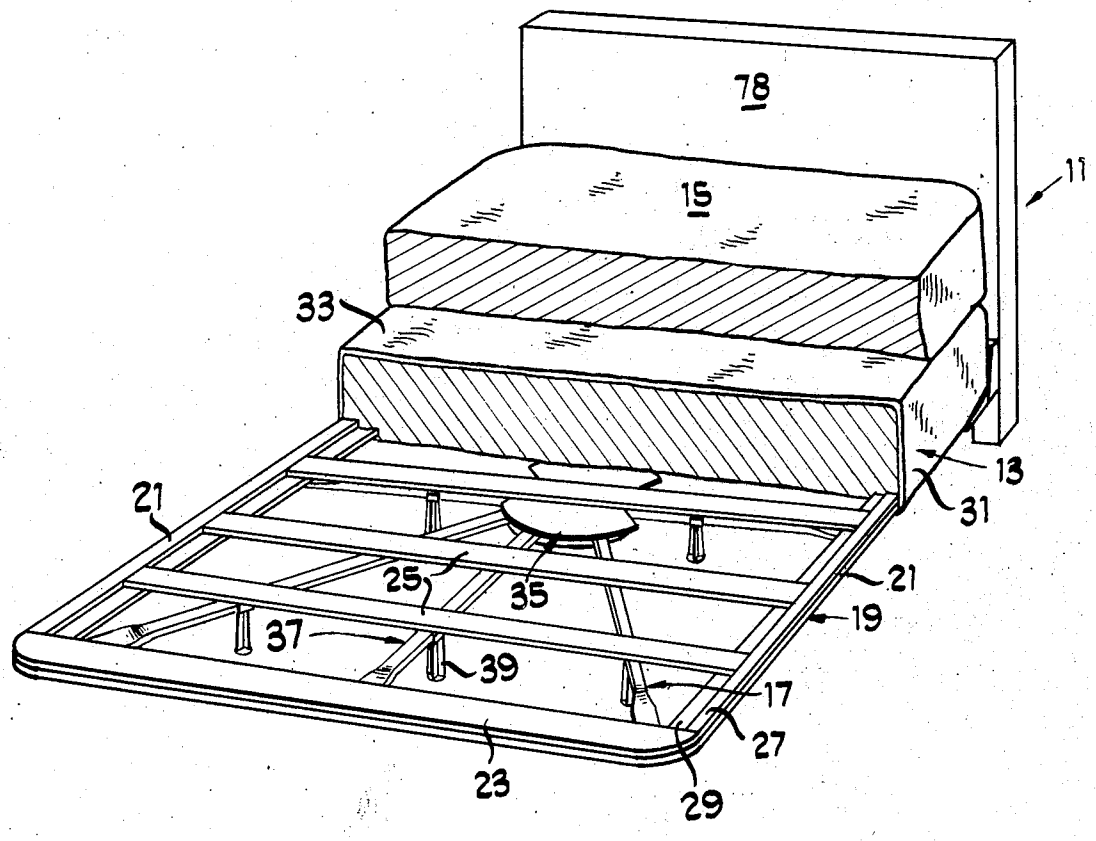


Fig 1

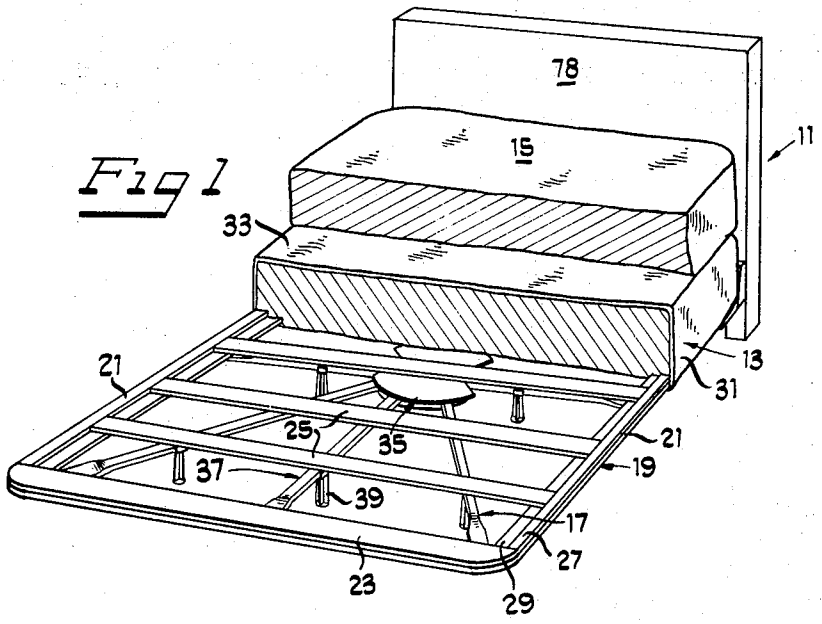


Fig 6

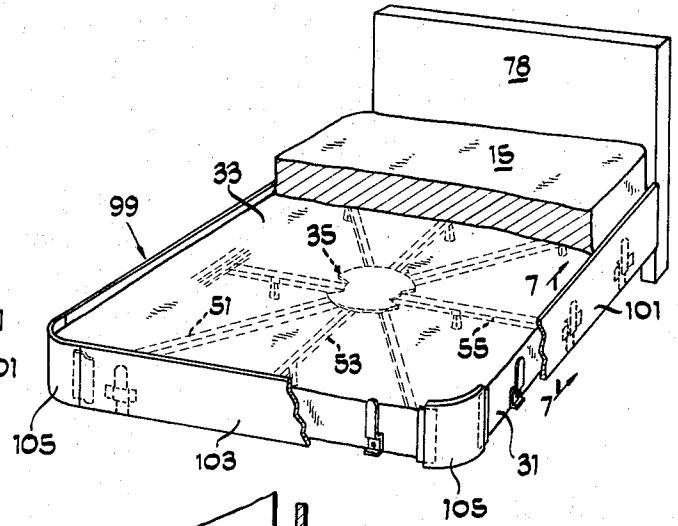


Fig 7

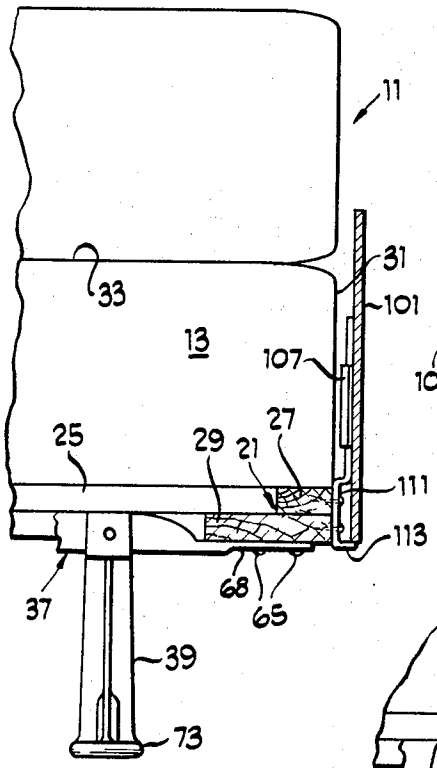
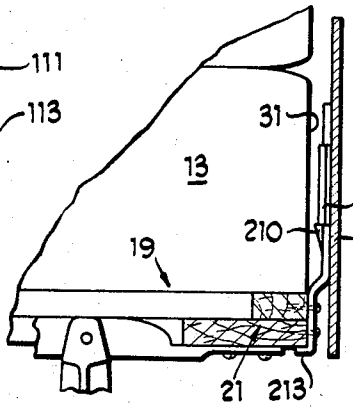


Fig 9



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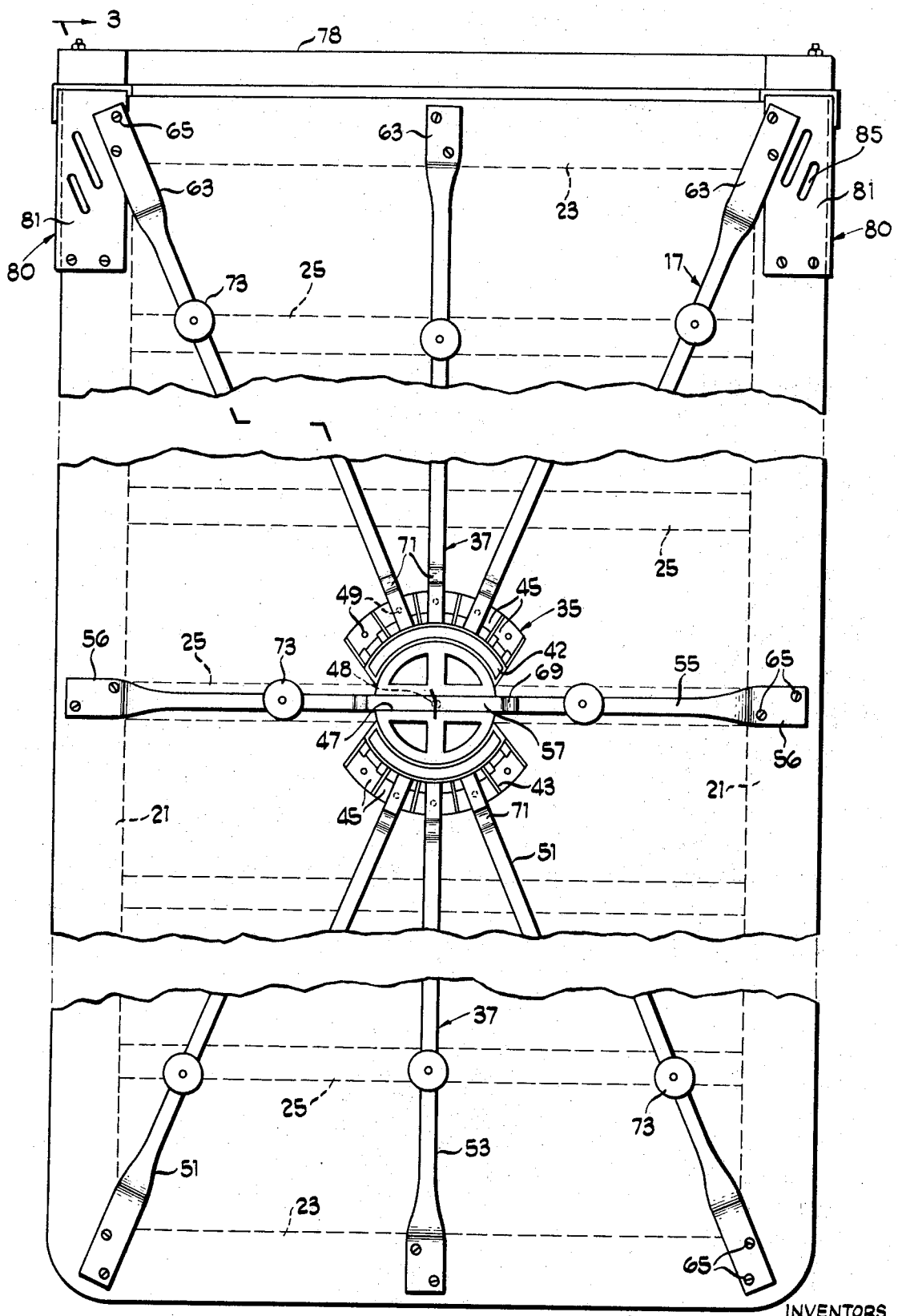
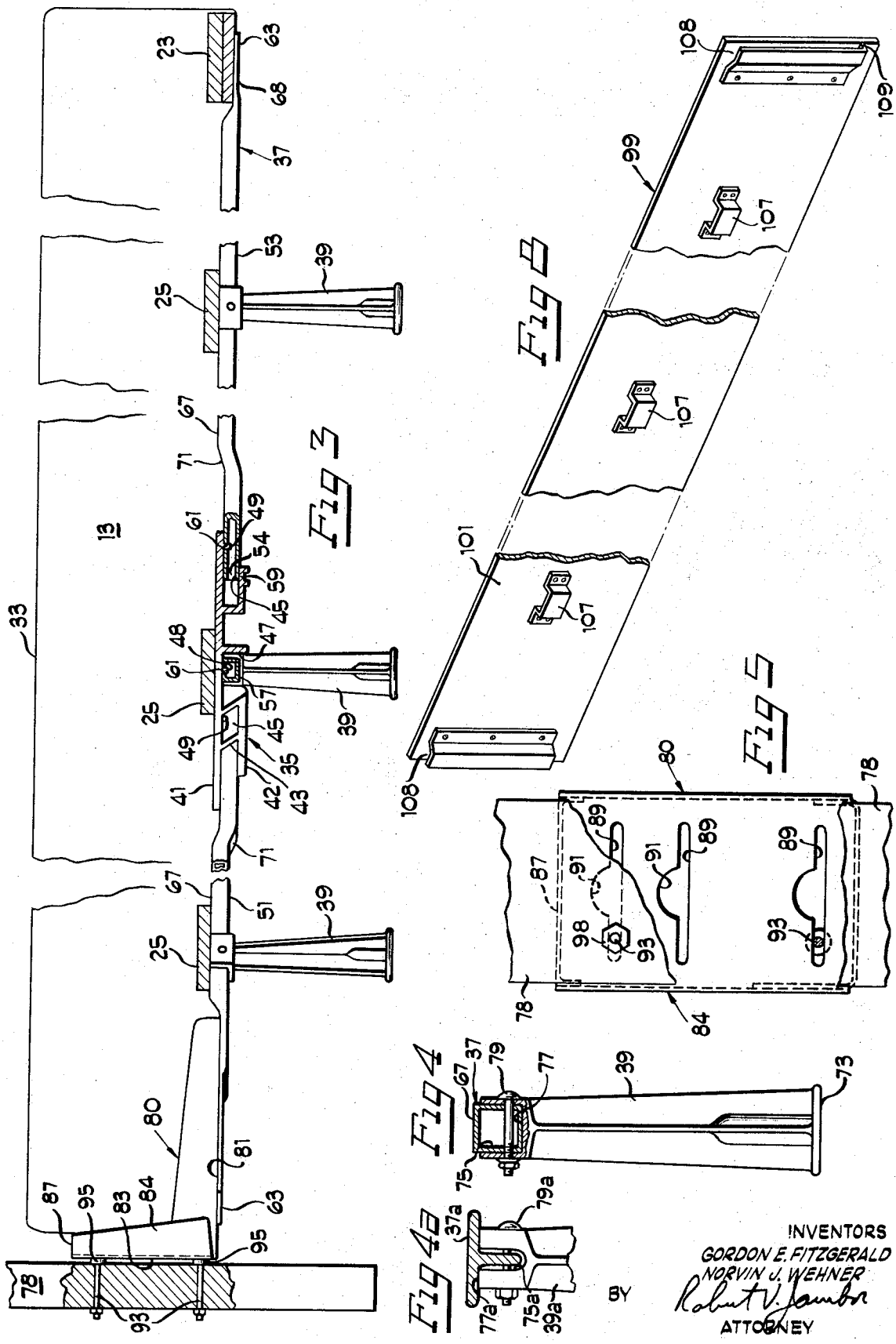


Fig 2

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Fig 3
Fig 4
Fig 4a
Fig 5
Fig 6
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BED

BACKGROUND OF THE INVENTION

This invention relates to beds. More particularly, it relates to beds having a box spring including a base frame, and an interengaged spring support frame having non-parallel support runners.

BED invention is an improvement in the invention disclosed and claimed in co-pending application for U.S. Letters Pat., Ser. No. 884,217, entitled "BED FRAME", filed Dec. 11, 1969 now U.S. Pat. No. 3,621,497, by Gordon E. Fitzgerald.

In that application, a bed is disclosed having a box spring support frame which optimizes the support provided for the box spring base frame. It includes non-parallel supporting members disposed in supporting relation to the cross slats of the base frame. Legs disposed intermediate the ends of the non-parallel supporting members carry the bed load to the supporting floor.

With the above arrangement, the load placed upon the cross slats is minimized, and the tendency of the spring base frame to sag is significantly reduced. The recessed position of the legs further provides a more positive support for the cross slats of the box spring base frame as opposed to conventional bed frames which support only the side rails of the base frame. Also, the possibility of injury due to bodily contact with the frame legs is minimized. In addition, the invention disclosed in the prior application eliminates the need for a longitudinal center rail in the box spring base frame.

The present invention possesses all of the advantages of the invention to the prior co-pending application and, in addition, provides additional advantages. The bed of the present invention includes a box spring support frame which provides maximum support for the cross slats of the spring base frame. It provides for utilization of support runners of minimum length and, therefore, maximum strength. Cross slat sag is effectively eliminated due to greater support.

Assembly of the spring unit support frame is simplified making assembly of an integrated box spring and supporting frame commercially practicable. Application of the spring support frame to conventional box springs is also simple and economical. Heretofore, metal bed frames were used independently with the box spring placed on it. With this system, the metal frame becomes attached and an integral part of the box spring construction. This results in much greater "product integrity" due to the combined strength of the components.

The present invention possesses the further advantage in that the box support frame is readily adjustable to all box spring sizes within only a minimum substitution of frame components.

Accordingly, the principal object of the present invention is to provide an improved form of bed, including a box spring and a box spring support frame having non-parallel support runners.

SUMMARY OF THE INVENTION

Very generally, the present invention is directed to a bed, including a box spring having a base frame with transverse slats, and an interengaged spring support frame. The spring support frame includes a central hub and non-parallel support runners extending from the hub in supporting engagement with the transverse slats.

Depending legs are connected to the support runners intermediate the runner ends.

In one embodiment of the invention, vertical decorative panels connected to the base frame are disposed in overlying relation to the side surfaces of the box spring. Another form includes headboard mounting brackets having planar flanges and outwardly directed mounting fasteners.

DESCRIPTION OF THE DRAWINGS

FIG. 1 is a partially broken away, perspective view of a bed incorporating the principles of the present invention.

FIG. 2 is a partially broken away bottom view of the bed of FIG. 1.

FIG. 3 is a fragmentary sectional view on a slightly enlarged scale, taken along the line 3—3 of FIG. 2, illustrating certain features of the invention.

FIG. 4 is a fragmentary, elevational view, partially in section, of a portion of the apparatus of FIG. 1.

FIG. 4a is a fragmentary, elevational view, partially in section, of a slightly modified form of the invention.

FIG. 5 is a fragmentary, elevational view on an enlarged scale showing another portion of the apparatus of FIG. 1.

FIG. 6 is a perspective view partially in section of a slightly modified form of the invention.

FIG. 7 is a fragmentary, sectional view of the apparatus of FIG. 6, taken generally along the lines 7—7 of that FIGURE.

FIG. 8 is a perspective view of a portion of the apparatus of FIG. 6.

FIG. 9 is a fragmentary, sectional view of a still further modification of the invention.

DETAILED DESCRIPTION

Referring now to the drawings, there is shown in FIGS. 1 to 5 an embodiment of a bed illustrative of the principles of the present invention.

The bed, generally designated 11, includes a box spring 13 supported upon the floor by an interengaged box spring support frame 17. The box spring 13 supports a conventional mattress 15.

Specifically, and as best seen in FIGS. 1 and 3, the box spring 13 includes a base frame 19 having longitudinal side rails 21, transverse end rail 23, and cross slats 25.

The longitudinal side rails 21 are of a generally L shaped cross-section and include vertical and horizontal portions 27 and 29. Opposite ends of each cross slat 25 are supported upon the horizontal portions 29 of the longitudinal side rails 21 and are retained in position by appropriate fasteners such as nails or staples. The transverse end rails 23 are of a generally rectangular shaped cross section.

The remainder of the box spring 13 is of conventional construction, including the usual springs (not shown), supported upon the cross slats 25, and other structural members (not shown). The box spring defines vertical side surfaces 31 which extend about the side rails 21 and end rails 23, and a generally planar top surface 33 upon which is supported the mattress 15.

The vertical side surfaces 31 and top surfaces 33 of the box spring 13 are covered with any suitable material, usually cloth, such as ticking. The under surface of the base frame 19 is also covered to prevent ingress of

dust and dirt. Any suitable material may be used, such as muslin.

As seen in FIG. 1, the box spring support frame 17 is interengaged with the base frame 19 in supporting relation to the spring unit. This frame includes a central hub 35, a plurality of non-parallel support runners 37, and depending support legs 39 connected to the runners intermediate their ends.

The hub 35 and non-parallel support runners 37 underlie and are in supporting contact with the undersurface of the cross slats 25. All vertical loads applied to the box spring unit are transferred directly from the cross slats to the interengaged support frame 17 at the support runners 37. These loads are, in turn, transferred to the floor through the legs 39.

The central hub 35 includes a contact plate 41 and a reaction plate 42 in the form of segmented rings. These plates are connected in parallel spaced-apart relation by webs 43 to define two sets of radially directed pockets 45. Intermediate the two sets of pockets is formed a transverse connecting slot 47. A locating boss 48 is provided within the slot 47.

The contact plate 41 is provided with a plurality of locating bosses 49, each one of which is aligned with one of the pockets 45.

In the embodiment illustrated, the non-parallel support runners 37 comprise diagonal runners 51, longitudinal runners 53, and a transverse clamping runner 55.

These runners are the load-bearing members of the box spring support frame 17, and are constructed from suitable material such as aluminum or steel in the form of hollow tubing or solid structural beams. The runners of the illustrated embodiment are formed of hollow tubing and are of square, cross-section. They may, however, be of circular or other suitable cross-section. They may also take the form of a solid beam having a channel, T, or other suitable cross-section.

The diagonal and longitudinal runners 51 and 53 each include an open end 54 disposed in one of the radially directed pockets 45 of the central hub 35. Each includes a bottom engagement surface 59 in contact with the reaction plate 42 to retain the runner within the pocket 45. An aperture 61 is provided adjacent the open end 54 of each diagonal and longitudinal runner. This aperture assists in location of the runner within the pocket and prevents accidental withdrawal.

The opposite ends of the diagonal and longitudinal runners 51 and 53 include flattened portions 63 which underlie the longitudinal side rails 21 or transverse end rails 23 of the base frame 19. Suitable fasteners 65 such as screws secure the flattened portion to the base frame through appropriately formed apertures in the flattened portion.

The transverse clamping runner 55 includes flattened end portions 56 which underlie and are secured to longitudinal side rail 21 of base frame 19. It further includes a central clamping section 57 disposed within the clamping slot 47 of the central hub 35 to clamp the central hub into engagement with the undersurface of at least one of the cross slats 25. An aperture is provided in the clamping section 57 which receives the boss 48.

The runners 37 each include an upper contact surface 67 which is disposed in supporting engagement with the cross slats 25 of the base frame 19 which are not in contact with the contact plate 41. The transverse clamping runner includes a pair of bends 69, and each of the diagonal and clamping runners 51 and 53 include a bend 71 to accommodate the thickness of the contact plate 41 of the central hub 35. The bend in the diagonal runner 51 is best seen in FIG. 3. The bend formed in the remaining runners is similar to that illustrated for the diagonal runner.

Similarly, the flattened end portions 56 and 63 of the runners 55 and 37 are formed in a direction away from the upper contact surface 67, to accommodate the thickness of the horizontal portion 29 of the longitudinal side rails 21 and transverse end rail 23. The surface of the runners 37 opposite the upper contact surface includes a formed offset 68 at each of the flattened end portions to provide adequate support strength.

The bends 69 and 71, and the manner of forming the end portions 56 and 63 of the runner 37 insures maximum supporting contact between the upper contact surface 67 and the undersurface of the cross slats 25 of the base frame 19. Also, use of the central hub 35 and interconnecting runners 37 minimizes the length of each separate runner without sacrificing load-bearing capacity.

The legs 39 are connected to the non-parallel runners 37 intermediate their end portions. The legs are then disposed inwardly of the outer periphery of the bed 11, as defined by the longitudinal side rail 21, and transverse end rail 23 of the base frame 19. In this position, maximum support for the load-bearing runner is provided and the possibility of bodily injury from accidental contact with the legs is greatly reduced.

The legs may be made of any suitable material, such as plastic. Each includes a lower pad 73 adapted for contact with the floor surface. The pad is formed to allow easy sliding upon the floor to accommodate easy movement of the bed. If desired, caster wheels could be utilized. Each leg includes an aperture extending vertically upwardly from the pad 73 adapted to receive a snap-in swivel caster.

As best seen in FIGS. 3 and 4, the upper end of each leg includes a channel-shaped notch 75 having a bottom contact surface 77 in supporting contact with the associated runner 37. Apertures are provided in the portions of the leg defining the channel-shaped notch and in the runner 37. Suitable fasteners such as bolts 79 are disposed within the apertures to secure the legs to the runners. The apertures are positioned such that the clamping load of the fasteners is for the most part absorbed by the bottom wall of the runner 37. The fasteners 79 are sized to overlie the bottom wall of the runner.

The contact between the bottom contact surface 77 and runner 37 insures effective load transfer to the legs 39. This relationship also prevents canting or swaying when the bed is subjected to transverse loading. In addition, the fasteners 79 are not subjected to any vertical load, and the possibility of breakage at the fastening aperture is minimized.

In the illustrated embodiment, the notch 75 is of a generally square cross-section to accommodate the square runners 37. Modification of the cross-section of the runners would necessitate modification of the notch 75. For example, in FIG. 4a there is illustrated a modified runner and leg construction. Runners 37a are provided having a generally T-shaped cross-section. Legs 39*a* are secured to the runners in the manner illustrated in FIGS. 1 to 5, and retained in position by fasteners 79a.

Each leg includes a notch 75*a* sized to receive the depending portion of the associated T-shaped runner. The legs include contact surfaces 77*a* in load-bearing contact with the undersurface of the horizontal portion of the T-shaped runner. This provides for direct transfer of the load to the legs 39*a* and prevents canting or swaying of the legs in response to non-vertical loading.

Assembly of the bed 11 is normally accomplished with the box spring 13 in the inverted position. The spring support frame 17 is first assembled onto the base frame 19 in interengaged relation. The support legs 39 are then connected to the spring support frame 17. The integrated unit is then placed into its normal position and made ready for use as by placement of a mattress 15 upon the box spring 13.

To assemble the box spring support frame 17 into interengaged relation with the box spring 13, the central hub 35 is first secured into position underlying the centermost cross slat or slats of the base frame 19. This is accomplished by placing the contact plate 41 of the central hub 35 in contact with the centermost slats 25. The transverse clamping runner is then positioned within the clamping slot 47. The boss 48 is engaged with the aperture in the central clamping section 57 of the runner 55 and the flattened end portions 56 are secured to the longitudinal side rails 21 by fasteners 65. This also places the upper contact surface 67 of the transverse clamping runner 55 in supporting engagement with the undersurface of the centermost slat 25. The contact plate 41 of the central hub 35 is thus also maintained in supporting engagement with the undersurface of the centermost cross slats.

Engagement of the central clamping section 57 of the runner 55 with the clamping slot 47 maintains the contact plate 41 of the central hub 35 in contacting relation with the centermost slat or slats 25 and also prevents movement of the hub longitudinally of the bed. Engagement of the boss 48 with the aperture in the central clamping section 57 prevents transverse movement of the hub.

The diagonal and longitudinal runners 51 and 53 are then connected to the hub in pockets 45. The open end 58 of each runner is inserted into one of the pockets until the aperture 61 is aligned with the boss 49 associated with the sprocket. The runners are then positioned such that the bottom contact surfaces 59 are in contact with and supported by the reaction plate 42 of the hub 35, and the bosses 49 are in engagement with the apertures 61.

The flattened portions of the opposite ends of the runners are then secured to the side rails 21 or transverse end rails 23 to secure the runners into position with their upper contact surfaces 67 in supporting engagement with the undersurfaces of the cross slats 25. The legs 39 are attached to the support runners 37 intermediate their ends to complete the assembly procedure.

The pockets 45 of the hub 35 are arranged such that the hub may be used on all bed sizes. It is only necessary to place diagonal runners 51 of correct length into the proper angularly directed pockets. It is contemplated that in twin size beds, no longitudinal runners will be necessary. The same is true of king size beds which are formed of two twin sized units.

All vertical loading of the box spring 13 is transferred by the internal spring elements to the cross slats 25, side rails 21 and transverse end rails 23. The entire load is then transferred directly to the base frame support runners 37 and then to the supporting legs 39. The intimate supporting engagement of the runners 37 and cross slats 25, and position of the legs in underlying relation to the applied load, provide maximum support for the box spring 13. Under normal reclining use, the side rails 21 and transverse end rails 23 are subjected to only minimal loading and cantilevered loads upon the base frame members are reduced to a minimum. Under normal reclining use, any tendency of the box spring base frame to sag, a common problem in present commerically available box springs, is effectively precluded.

The box spring 13 and spring support frame form an integral unit. It is desirable, therefore, in many applications to preassemble the box spring 13 and box spring support frame 17 at the point of manufacture. The legs 39 may be separately packaged with the fasteners 71 and assembled onto the frame by the consumer for the purpose of reducing shipping space requirements. Further, the interengaged box spring 13 and box spring frame 17 form an integral unit of exceptional strength. This assembly may be used in conjunction with said rail beds or conventional bed frames to provide an extremely durable bed able to withstand extreme loads without base frame sag or other damage. Significant packaging, inventory and distribution cost svings would be realized with this system and the consumer is required to perform only minimal assembly tasks. savings

Also shown in the embodiment of FIGS. 1 to 5 is an arrangement for attachment of a headboard 78 utilizing brackets 80. The headboard 78 is not, however, an essential element of the box spring and spring support frame arrangement just described. The headboard 78 and brackets 80 may be deleted or the headboard attached by other means without departing from the spirit and scope of the invention in its broadest sense.

Each bracket includes a pair of planar flanges 81 and 83 disposed at generally right angles to each other. A cross flange 84 provides additional structural rigidity. The planar flange 81 of each bracket is disposed in underlying relation to an end of one of the longitudinal side rails 21 at the head end of the box spring 13. The bracket 80 is secured to the base frame 19 by fasteners such as screws which extend through appropriately formed apertures in the flange 81. This flange also includes slots 85 which accommodate the fasteners 65 securing flattened end portions 63 of the diagonal runners 51 to the base frame 19.

The planar flange 83 extends generally vertically upwardly adjacent to the headboard 78, parallel to the transverse side surface 31 of the box spring. This flange includes a stop 87 which maintains a predetermined spacing between the planar flange 83 and the side surface 31. All flanges are welded to form a single rigid unit or the entire bracket may be drawn to shape from one piece of metal.

As seen in FIG. 5, the flange 83 includes a plurality of horizontal slots 89 each having an enlarged bolt receiving opening 91.

The headboard 78 is secured to the brackets 80 by carriage bolts 93 disposed within slots 85. The bolts 93 include head portions disposed adjacent the surface of the planar flange 83 facing the box spring side wall 31, and bolt shanks which extend outwardly of the slots 85.

The head portions are sized to allow passage through the enlarged central openings 91, but to prevent pas-

sage through the slots **89.** The shanks of the bolts **93** include squared portions disposed within the slots to prevent rotation of the bolts. Clips **95** retain the bolts in position prior to attachment of the headboard.

The headboard includes appropriately formed apertures to receive the bolts **93.** Nuts **98** connected to the bolts **93** urge the headboard into engagement with the flanges **83** of the brackets **80** to secure the headboard into position.

Turning now to the embodiment shown in FIGS. **6, 7** and **8,** there is illustrated a bed **11** constructed in accordance with the principles of the present invention having certain additional advantageous features.

The bed **11** includes a box spring **13** and a box spring support frame **17** substantially as shown and described in connection with the embodiment of the invention shown in FIGS. **1** to **5.**

In addition, the bed **11** includes a decorative panel **99** disposed in closely spaced overlying relation to side walls **31** of the box spring **13.**

The decorative panel **99** may be made of any suitable material such as plastic, wood, metal or pressed board. They may be decoratively finished or covered with suitable material, such as cloth, fur or the like.

The vertical height of the panels is such that they conceal the base frame **13** and substantially the entire vertical extent of the side walls **31** of the box spring **13.**

The decorative panels **99** of the illustrated embodiment include longitudinal panels **101,** transverse panel **103** and corner sections **105.** As seen in FIG. **8,** the longitudinal panels **101** and transverse panel **103** each include brackets **107** on the surface of the panel facing the side walls **31** of the box spring. In addition, each includes an elongated slot defining flange **108** adjacent each vertical edge of the panel and connected to the surface facing the box spring side wall. These flanges include a stop **109** at the lowermost end of the flange.

The panels **101** and **103** are removably retained upon the box spring **13** by hangers **111.** The hangers are secured to the longitudinal side rails **21** as illustrated and transverse end rail **23** (not shown) of the spring base frame **19** by suitable fasteners such as screws **112.** The hangers are vertically elongated and include upper portions extending through the brackets **107.** They additionally include horizontally extending flanges **113** which support the panels in proper alignment with the side walls **31** of the box spring **13.**

The corner sections **105** are preformed. They may be made of a single element or may be formed of separate pieces secured together. Each section includes vertical ends which slide within the slots defined by flanges **108.** The corner sections are retained in proper vertical alignment by the stops **109.**

The panels **99** may be easily assembled onto the box spring **13** by sliding the brackets **107** onto the hangers **111.** Contact between the lower horizontal edge of the panels with the flange **113** positions the panels in proper overlying connecting relation to the box spring side walls **31.** The vertical ends of the corner sections **105** are then slid into the slots formed by the end flanges **108** until the lowermost edge contacts the stops **109.**

In FIG. **9** there is shown a slightly modified arrangement for positioning and retaining the panels **101** and **103** in closely spaced overlying relation to side walls **31** of the box spring **13.**

In this embodiment the hangers **111** secured to the base frame **19** by suitable fasteners include an inwardly directed bottom flange **213.** This flange is disposed in underlying engagement with either the longitudinal side rail **21,** as illustrated, or the transverse end rail **23,** not shown. This engagement positions the hangers with respect to the base frame **19.**

Each of the hangers **111** further includes a tab **210** which protrude inwardly toward the box spring side wall **31.** The brackets **107** are free to slide downwardly upon the hangers until they engage the tabs **210.** This engagement positions the panels **101** and **103** with respect to the hangers and provides proper overlying relationship between the panels and the side walls **31** of the box spring **13.**

As can be seen, an improved form of bed has been provided, including a box spring and an interengaged box spring support frame having non-parallel support runners. In addition, there is provided an improved arrangement for attachment of a headboard to the box spring and for attachment of decorative panels secured to the box spring in overlying relation to the vertical side walls. These various features may also be applied with equal advantage to other forms of furniture, such as sofas or the like.

Various features of the present invention have been particularly shown and described. However, it must be appreciated that numerous modifications may be made without departing from the scope of the invention.

What is claimed is:

1. A bed including a box spring having a base frame with transverse slats, an interengaged box spring support frame including a hub, non-parallel support runners extending therefrom in supporting contact with said transverse slats intermediate the ends of said slats, and means connected to said runners supporting said box spring support frame.

2. A bed as claimed in claim **1** wherein said means supporting said box spring support frame includes support legs depending from said runners.

3. A bed as claimed in claim **2** wherein each said runner includes at least one of said legs and said legs are connected to said runners intermediate the ends thereof.

4. A bed as claimed in claim **2** wherein said hub is disposed generally centrally of said base frame and said support runners extending therefrom include longitudinal runners extending longitudinally of said base frame, a transverse runner extending transversely of said base frame, and diagonal runners extending diagonally of said base frame.

5. A bed as claimed in claim **4** wherein said hub defines a plurality of pockets, and said longitudinal and diagonal runners include ends disposed in said pockets and supported therein and opposite ends secured to said base frame.

6. A bed as claimed in claim **5** wherein said base frame includes a pair of longitudinal side rails supporting said cross slats, said hub defines a transverse locating slot, and said transverse runner includes opposite ends secured to said longitudinal side rails and a central locating section disposed within said slot to retain and position said hub.

7. A bed as claimed in claim **6** wherein each said longitudinal and diagonal runner includes one of said legs connected thereto intermediate the ends thereof and said transverse runner includes a leg connected thereto

between said hub and each end thereof, said legs being disposed inwardly of the periphery of said base frame.

8. A bed as claimed in claim **7** wherein each said leg defines a notch receiving said runner, and includes a contact surface in supporting contact with said runner.

9. A bed as claimed in claim **5** wherein each said runner includes an upper contact surface, said runners being formed such that the upper contact surfaces of the portions of said runners intermediate said portions connected to said base frame and said portions connected to said hub are in supporting contact with said cross slats of said base frame.

10. A box spring support frame for a bed having a box spring including a base frame with transverse slats, said box spring supporting frame including a hub and non-parallel support runners extending therefrom adapted to be disposed in direct supporting relation to the transverse slats of the base frame.

11. A box spring support frame as claimed in claim **10** wherein said frame additionally includes means connected to said runners supporting said box spring support frame.

12. A box spring support frame as claimed in claim **11** wherein said means supporting said box spring support frame includes support legs depending from said runners.

13. A box spring support frame as claimed in claim **12** wherein each said runner includes one of said legs and said legs are connected to said runners intermediate the ends thereof.

14. A box spring support frame as claimed in claim **12** wherein said support runners extending generally radially of said hub include longitudinal runners adapted to be disposed longitudinally of the base frame of the box spring, a transverse runner adapted to be disposed transversely of the base frame and diagonal runners adapted to be disposed diagonally of the base frame.

15. A box spring support frame as claimed in claim **14** wherein said hub defines a plurality of pockets and said longitudinal and diagonal runners include ends disposed in said pockets and supported therein and opposite ends adapted to be secured to the base frame of the box spring.

16. A box spring support frame as claimed in claim **15** wherein said hub defines a transverse locating slot and said transverse runner includes opposite ends adapted to be secured to the base frame of the box spring and a central locating section disposed within said slot to retain and position said hub.

17. A box spring support frame as claimed in claim **15** wherein each said longitudinal and diagonal runner includes at least one of said legs connected thereto intermediate the ends thereof and said transverse runner includes a leg connected thereto between said hub and each end thereof.

18. A box spring support frame as claimed in claim **17** wherein each said leg defines a notch receiving said runner, and includes a contact surface in supporting contact with said runner.

19. A box spring support frame as claimed in claim **16** wherein each said runner includes an upper contact surface, said runners being formed such that said upper contact surfaces of the portions of said runners intermediate said portions adapted to be connected to said base frame and the portions connected to said hub are in supporting contact with the cross slats of the base frame.

20. A bed as claimed in claim **1** wherein said base frame defines longitudinal sides and transverse ends and said bed includes headboard mounting brackets connected to said base frame at one transverse end thereof, said brackets each include a planar flange underlying said base frame and secured thereto, and a planar flange generally perpendicular to said first flange, and disposed in spaced facing relation to said transverse end, said perpendicular planar flanges defining a plurality of elongated slots each including an enlarged bolt receiving opening, and carriage bolts, having head portions sized to pass through said enlarged openings of said slots and prevent passage through said slots, disposed in said slots and extending outwardly thereof away from said bed and being adapted to receive and retain said headboard.

21. A bed as claimed in claim **1** wherein said box spring includes longitudinal and transverse vertical side walls extending about the periphery of said base frame, said bed further including generally vertical decorative panels secured to said base frame in closely spaced overlying relation to side walls of said box spring, said panels including longitudinal panels overlying the longitudinal side walls of said box spring, at least one transverse end panel overlying at least one transverse side wall thereof, and corner sections connecting said longitudinal and transverse panels.

22. A bed as claimed in claim **21** wherein each said panel includes a plurality of brackets secured to a side thereof facing a side wall of said box spring, and hangers secured to said base frame slidably received within said brackets to connect said panels to said bed.

23. A bed as claimed in claim **22** wherein said hangers include horizontal flanges extending away from said base frame in underlying supporting engagement with said panels to vertically position said panels with respect to said hangers and with respect to said side walls of said box spring.

24. A bed as claimed in claim **22** wherein said hangers include horizontal flanges extending in underlying engagement with said base frame to position said hangers with respect thereto, said hangers further include tabs engaging said brackets to position said panels with respect to said side walls of said box spring.

25. A bed as claimed in claim **22** wherein said longitudinal and transverse panels include slot forming end flanges along each vertical end thereof and said corner sections are slidably received within said slots.

26. A bed including a box spring having a rectangular base frame with transverse slats and a box spring support frame, said support frame including:

a. a hub having upper and lower plate means separated by vertical support webs; and

b. non-parallel support runners extending radially from between said upper and lower plates of said hub to said frame and being attached to said frame, said runners having bends therein extending upwardly for the depth of said upper plate so as to be in supporting contact with portions of said slats, and of sufficient number to extend toward each corner of said rectangular frame. The above amendments are made without prejudice.

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