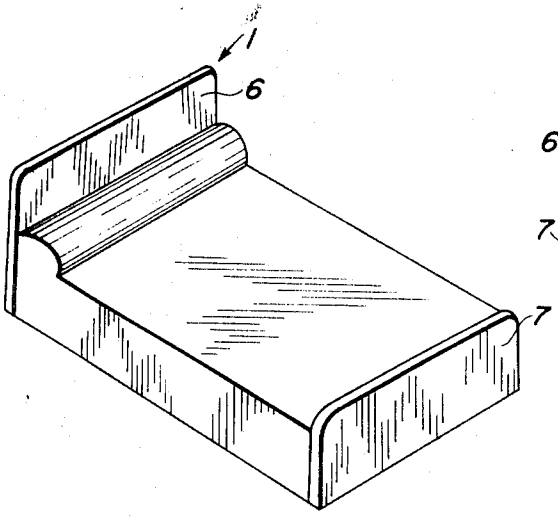
Nov. 23, 1971 G. E. FITZGERALD 3,621,497

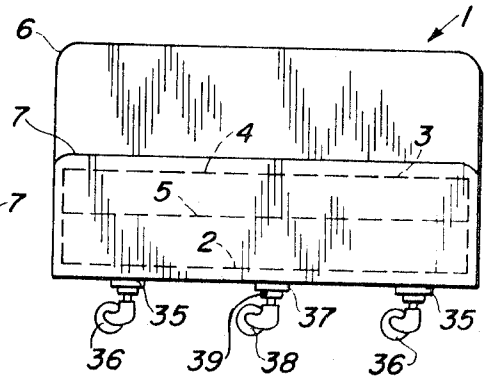
BED FRAMES

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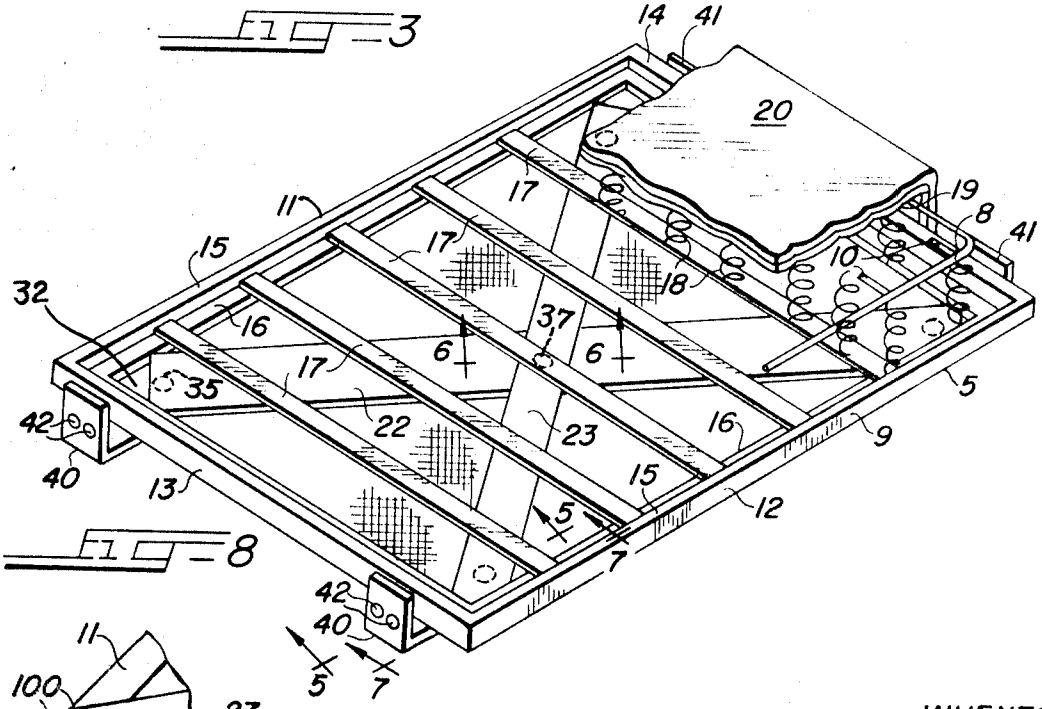
FIG—1



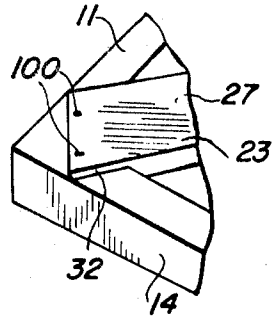
FIG—2



FIG—3



FIG—8



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BED FRAMES

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FIG. 4

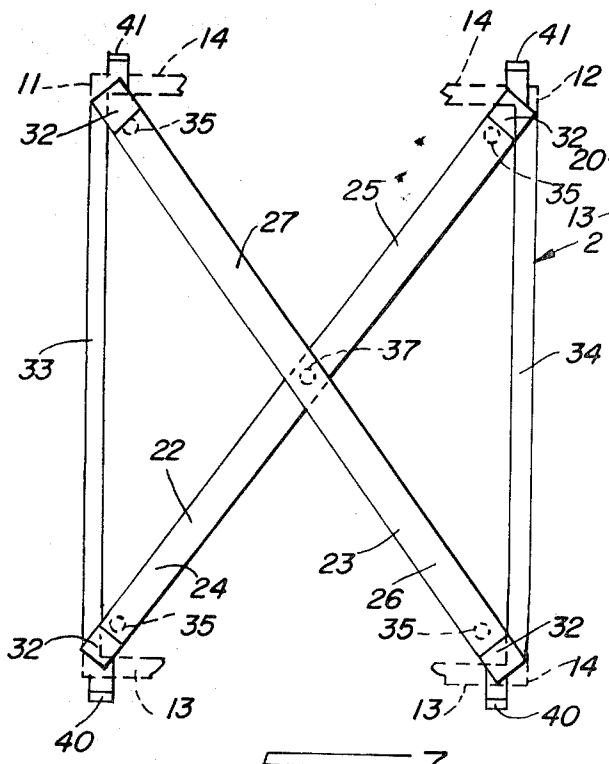


FIG. 5

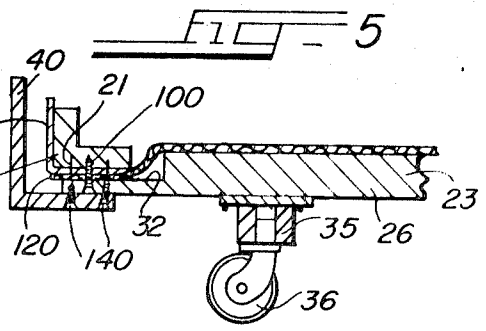


FIG. 6

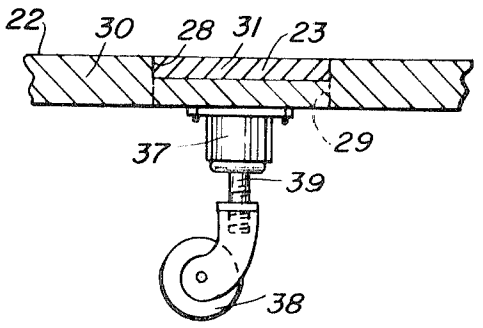


FIG. 7

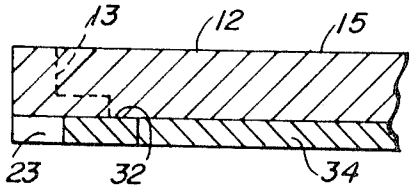


FIG. 9

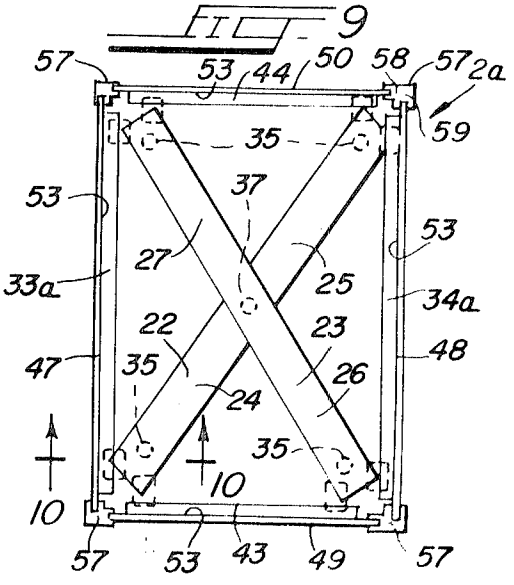
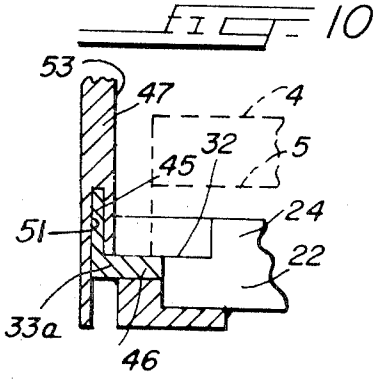


FIG. 10



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3,621,497

BED FRAMES

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U.S. Cl. 5—131 9 Claims

ABSTRACT OF THE DISCLOSURE

A bed frame which may constitute a separate unit, or an integral part of a box spring, and the like, and embodying supporting members which are positioned to supportingly underlie, at an acute angle, all of the cross slats of a box spring mounted thereon.

BACKGROUND OF THE INVENTION

The present invention relates to bed frames.

It is a primary object of the present invention to afford a novel bed frame.

It is another object of the present invention to afford a novel bed frame unit which may be used, separately, as a bed frame, or which may form an integral part of a box spring, and the like.

In beds heretofore known in the art, a frame has been commonly used to support that portion of the bed on which the person lies, and which will hereinafter be referred to as the body-supporting unit. In such beds, the body-supporting unit has commonly embodied a spring unit mounted directly on, and supported by the bed frame, with padding in the form of a mattress disposed on top of the spring unit.

For the past several years, a spring construction which has been commonly used, and which has gained great popularity, is of the type known in the trade as a "box spring." Box springs heretofore known in the art have commonly had upper and lower frames extending around the peripheries of the tops and bottoms thereof, respectively, with spaced supporting members extending across the respective frames, and with coil springs disposed between the upper and lower frames to yieldingly hold the frames in vertically spaced relation to each other. In such box spring constructions, at least certain of the coil springs have been directly connected at their tops and bottoms to the supporting members extending across the upper and lower frames, respectively.

In box springs heretofore known, the lower frame member commonly has been made of wood, and the supporting members to which the lower portions of the coil springs have been attached have comprised wooden slats mounted on and attached to the wooden frame and extending thereacross in parallel relation to each other in a direction perpendicular to the length of the box spring. Such box springs, also, commonly embody a reinforcing slat extending the length thereof in underlying relation to the longitudinal center portion of the cross slats to add reinforcing support for, and reduce sagging of the cross slats.

The primary purpose of a bed frame, of course, is to afford the basic support or foundation for the body-supporting unit of the bed. Such bed frames heretofore known in the art for supporting body-supporting units embodying box springs commonly have had two parallel side rails extending the length thereof, with the "head" and "foot" ends of the side rails interconnected by a headboard and a footboard, respectively, or, if such headboards and footboards are not used, by respective end rails. Commonly, all such rails are made of iron or steel, with the side rails having an "angle-iron" type of

transverse cross-section, with inwardly projecting lower flanges for supportingly engaging the side members of the lower supporting frame of the box spring. Supporting legs, having casters, are commonly afforded at each corner of bed frames heretofore known, or on the headboards or footboards attached to the bed frames, for supporting the body-supporting unit in elevated position relative to the underlying supporting surface, such as the floor.

A primary problem encountered with respect to box-spring beds heretofore known in the art has been sagging of the cross slats and, therefore, of the box spring and the entire body-supporting unit. In an effort to alleviate this problem, bed frames heretofore known in the art have commonly embodied cross rails or slats extending between the outer ends of the side rails of the bed frame, and, in some instances, particularly in beds embodying headboards and footboards, intermediate cross slats, which extend between the frame side rails are provided. In most instances, such cross rails are loosely mounted and have extended between the side rails of such frames, in perpendicular relation to the side rails. In some instances, particularly in the wider beds such as, for example, those commonly referred to in the trade as "queen size" beds, the bed frames have embodied intermediate rails extending lengthwise of the bed frame, between the end rails thereof and mid-way between the side rails. In this latter type of construction, the stresses placed on the cross slats of the box spring by a person lying on either side of the longitudinally extending intermediate rail of the frame, is substantially the same as a person lying on a bed wherein the side rails are spaced apart the same distance as that between the intermediate rail and the adjacent side rail.

Heretofore, such cross rails might be made of metal, such as steel, or the like, or be in the form of wooden slats, or the like. Also, such cross rails might be fixedly secured to the outer rails supporting them, or they might be loosely mounted thereon.

Bed frames of the type heretofore known in the art commonly have had several inherent disadvantages, such as, for example, requiring the assembling of a plurality of separate parts in order to fully assemble a bed; affording a construction wherein the support afforded to the box spring is dependent upon the judgment of the person assembling the bed and positioning the intermediate cross rails; affording a construction wherein the transverse support for the box spring may be relatively readily reduced by the dislodging of one of the intermediate cross rails on the bed frame; and affording a construction wherein the transverse support for the box spring may be so ineffective that a person or persons lying on the body-supporting unit may cause the box spring to undesirably sag, and, in fact, to sag to such an extent that one or more of the cross slats in the box spring may be broken.

It is an important object of the present invention to overcome such disadvantages.

Another object of the present invention is to afford a novel bed frame which is effective to operatively support the body-supporting unit of a bed in such a manner as to insure against excessive sagging of the body-support unit being occasioned by a person or persons reclining thereon in any position.

Another object of the present invention is to afford a novel bed frame which is effective to directly support the cross slats of a box spring, and the like, in a novel and expeditious manner.

Yet another object of the present invention is to afford a novel bed frame wherein the body-support unit is effectively supported by supporting members of the bed

frame which extend at an acute angle to the length thereof.

An object ancillary to the foregoing is to efford a novel bed frame wherein the supporting portion thereof for the body-support unit of a bed is substantially X-shaped.

A further object of the present invention is to eliminate the necessity for embodying in box springs, longitudinally extending central supports for the cross slats.

Another object of the present invention is to afford a novel bed frame which may be built into a box spring as an integral part thereof.

Another object of the present invention is to afford a novel box spring.

Yet another object of the present invention is to afford a novel bed frame which is practical and efficient in operation, and which may be readily and economically produced commercially.

Other and further objects of the present invention will be apparent from the following description and claims and are illustrated in the accompanying drawings which, by way of illustration, show preferred embodiments of the present invention and the principles thereof and what I now consider to be the best mode in which I have contemplated applying these principles. Other embodiments of the invention embodying the same or equivalent principles may be used and structural changes may be made as desired by those skilled in the art without departing from the present invention and the purview of the appended claims.

DESCRIPTION OF THE DRAWINGS

In the drawings:

FIG. 1 is a perspective view of a bed embodying the principles of the present invention;

FIG. 2 is an end elevational view of the bed shown in FIG. 1, looking from the foot end thereof;

FIG. 3 is a fragmentary, top perspective view of the assembled box spring and bed frame embodied in the bed shown in FIG. 2;

FIG. 4 is a top plan view of the bed frame shown in FIG. 3;

FIG. 5 is a detail sectional view taken substantially along the line **5—5** in FIG. 3;

FIG. 6 is a detail sectional view taken substantially along the line **6—6** in FIG. 3;

FIG. 7 is a detail sectional view taken substantially along the line **7—7** in FIG. 3;

FIG. 8 is a fragmentary, bottom perspective view of the upper left corner of the bed frame and box spring shown in FIG. 4;

FIG. 9 is a plan view somewhat similar to FIG. 4 but showing a modified form of the present invention; and

FIG. 10 is a detail sectional view taken substantially along the line **10—10** in FIG. 9.

DESCRIPTION OF THE EMBODIMENTS SHOWN HEREIN

A bed **1**, embodying the principles of the present invention is shown in FIGS. 1 to 8, inclusive, of the drawings to illustrate the presently preferred embodiment of the present invention.

In general, the bed **1**, FIGS. 1 and 2, shown in the drawings embodies a bed frame **2** on which is supported a body-supporting unit **3** consisting of a mattress **4** and a box spring **5**, with a headboard **6** and a footboard **7** attached to the "head" and "foot" end of the bed frame **2**, respectively.

The box spring **5**, FIG. 3, embodies an upper supporting frame or border rod **8** and a lower supporting frame **9** disposed in vertically spaced relation to each other. The upper supporting frame **8** is substantially rectangular in shape and defines the outer periphery of the upper portion of the box spring **5**. It may be made of any suitable material, such as, for example, steel rodding.

Reinforcing members **10**, which also may be made of suitable wire or steel rods, and the like, extend transversely across the upper supporting frame **8** in parallel spaced relation to each other.

The lower supporting frame **9** of the box spring **5** is also rectangular in shape, and is substantially complementary in size and shape to the upper supporting frame **8**. It preferably is made of wood and embodies two oppositely disposed, substantially parallel elongated side members **11** and **12**, and two end members **13** and **14** extending between, and secured to opposite ends of the side members **11** and **12** in substantially parallel relation to each other, at the head end and foot end of the box spring **5**, respectively.

The side members **11** and **12** of the lower supporting frame **9** are substantially L-shaped in transverse cross section, each embodying an outer, substantially vertically extending flange **15** and a lower, substantially horizontally extending flange **16** extending inwardly from the lower edge portion of the flange **15**, FIG. 3. A plurality of cross slats **17** extend transversely across the lower supporting frame **9** in substantially parallel spaced relation to each other, the opposite end portions of the cross slats **17** resting on the lower flanges **16** of the respective side rails **11** and **12**, and being secured thereto by suitable means such as nails or staples, not shown. Preferably, the cross slats **17** are disposed vertically below respective reinforcing members **10** of the upper supporting frame **8** in parallel relation thereto.

A plurality of compression coil springs **18** are disposed between the upper supporting frame **8** and the lower supporting frame **9** to thereby yieldingly hold these frames in vertically spaced relation to each other. In the box spring **5** shown in the drawings, the lower end portions of all of the coil springs **18** rest upon, and are secured to cross slats **17**, and the upper end portions of all of the coil springs **18** are engaged by and secured to reinforcing members **10**. As will be appreciated by those skilled in the art, this is a common form of construction for box springs heretofore known in the art. Also, as will be appreciated by those skilled in the art, certain box springs heretofore known also have embodied additional coil springs disposed between the springs directly engaged with the reinforcing members of cross slats, with the additional coil springs operatively connected to adjacent coil springs, such as the coil springs **18**, which are directly connected to the reinforcing members and cross slats. The particular arrangement of the coil springs **18**, wherein each spring is mounted on a cross slat **17**, is shown herein merely by way of illustration and not by way of limitation, and other arrangements of coil springs, including disposing additional coil springs between the coil springs **18** may be used without departing from the purview of the present invention.

As is common in the art, the box spring **5** shown in the drawings, embodies a pad **19** disposed in overlying, covering relation to the upper supporting frame **8**, and a cover member **20** disposed in covering relation to the pad **19** and extending downwardly along the outer faces of the elongated members **11–14** and inwardly along the bottom faces thereof, where it is connected to the bottom of the elongated members **11–14** by suitable means such as nails or staples **21**, as shown in FIG. 5. Preferably, a dust shield **120**, made of suitable material, such as, for example, muslin, is disposed across the lower face of the lower supporting frame **9** in covering relation thereto, and is secured to the bottom of the elongated members **11–14** by suitable means such as the aforementioned nails or staples **21**, FIG. 5.

The above set forth description of the box spring **5** also applies to box springs heretofore known in the art. In addition, box springs heretofore known in the art have commonly embodied a central supporting member secured to and extending between the end members thereof corresponding to the end members **13** and **14**, in underly-

ing relation to the longitudinal center portions of the cross slats, in supporting relation to the latter. The present invention eliminates the necessity for such a member, as will be discussed in greater detail presently.

The bed frame 2, FIGS. 2, 3 and 4, embodies two substantially straight, elongated supporting members 22 and 23 connected together at their longitudinal center portions in a substantially X-shape, FIG. 4, to thereby afford two legs 24 and 25 on the supporting member 22 extending from opposite sides of the supporting member 23 toward the head and foot end of the supporting frame 2, respectively, and two legs 26 and 27 on the supporting member 23 extending from opposite sides of the supporting member 22 toward the head and foot end of the supporting frame 2, respectively. The upper face of the longitudinal center portion of the supporting member 22 has a recess 28 formed therein, and, similarly, the lower face of the supporting member 23 has a recess 29 formed therein, FIG. 6. The recesses 28 and 29 are of such width that the supporting members 23 and 22, respectively, may be received therein with a snug, but freely slidable fit, and preferably are of such depth that when the supporting members 22 and 23 are disposed in assembled relation to each other, with the respective recessed portions interengaged, the upper faces or surfaces 30 and 31 of the main body portions of the supporting members 22 and 23, respectively, are disposed in substantially uniplanar relation to each other. Recesses 32, which are substantially rectangular in shape and extend across the width of the supporting members 22 and 23 are formed in the upper faces of the outer end portions of each of the legs 24–27 for a purpose which will be discussed in greater detail presently.

The supporting members 22 and 23 may be made of any suitable material, such as, for example, iron or steel, and may be secured together by any suitable means such as welding. They are disposed in such position relative to each other that, when the supporting frame 2 is disposed in operative supporting relation to the lower supporting frame 9 of the box spring 5, the corners of the lower supporting frame 9 at the head end thereof defined by the intersection of members 11 and 13 and the members 12 and 13 rest on the recessed portions 32 of the legs 24 and 26, respectively, and the corners of the lower supporting frame 9 at the foot end thereof, defined by the members 11 and 14 and the members 12 and 14, respectively, rest on the recessed portions 32 of the legs 27 and 25 respectively, as shown in broken lines in FIG. 4, and as shown with respect to the members 11 and 14 in FIG. 8. The recesses 32 are of such depth that when the lower supporting frame 9 of the box spring 5 is thus disposed in operative position on the supporting members 22 and 23, the upper faces of the lower flanges 16 of the side members 11 and 12 of the lower supporting frame 9 are disposed in uniplanar relation to the upper faces 30 and 31 of the supporting members 22 and 23 of the bed frame 2. With this construction, when the box spring 5 is disposed in the aforementioned operative position on the supporting members 22 and 23, the supporting members 22 and 23 extend diagonally across the box spring 5 at acute angles to the cross slats 17 thereof, in underlying, direct supporting engagement with the cross slats 17. This, it will be seen, affords highly effective, positive support against sagging of the cross slats 17 and, therefore, against sagging of the box spring 5.

In box springs presently in commercial production, the members of the lower supporting frame corresponding to the members 11–14 commonly are of relatively small cross section, such as, for example, having a width and depth of two inches. Normally, the span between the head and foot ends of such box springs is quite substantial, such as, for example, in the nature of seven feet. Thus, to insure adequate support for the side members 11 and 12 of the box spring 5 against the heavier stresses which might be placed upon them, such as, for example, by a person sitting on the side of the bed 1 mid-way between the head and foot thereof, I prefer to embody in the suporting frame 2, two side rails 33 and 34 which extend between the adjacent outer end portions of the legs 24 and 27 and the legs 26 and 25, respectively, FIG. 4. The side rails 33 and 34 may be made of any suitable material, such as, for example, steel rod or steel plate, and may be secured to the supporting members 22 and 23 by any suitable means, such as, for example, welding. The side rails 33 and 34 are so disposed on the supporting members 22 and 23 that the upper faces thereof are disposed in uniplanar relation to the upper faces of the recesses 32 on the legs 24–27, as illustrated with respect to the side rail 34 in FIG. 7. Also, the side rails 33 and 34 are so disposed on the supporting members 22 and 23 that when the box spring 5 is disposed in the aforementioned operative position on the supporting members 22 and 23, the side rails 33 and 34 are disposed in directly underlying, parallel relation to the side members 11 and 12 of the lower supporting frame 9 and, thus, are in direct supporting engagement therewith.

Supporting legs 35, preferably in the form of casters having caster wheels 36, project downwardly from the outer end portions of each of the legs 24–27, inwardly of the recesses 32, FIGS. 4 and 5. The legs 35 preferably are disposed in inwardly spaced relation to the outer extremities of the outer ends of the legs 24–27 a distance not substantially less than six inches and not substantially more than fifteen inches, and, preferably, substantially eight inches. With this construction, it will be seen that the legs 35 are disposed in inwardly spaced relation to the outer edges of the bed 1, when the latter is in fully assembled position, to thereby protect against the stubbing of toes there-against, and, also, to hide the legs 35 when the bed is being viewed by a person in normal upright standing or sitting position.

In addition to the legs 35, a central leg 37 is preferably embodied in my novel bed frame 2. This latter leg 37 also is preferably in the form of a caster embodying a caster wheel 38, and preferably projects downwardly from the lower face of the supporting member 22 at the mid-point of the intersection of the supporting members 22 and 23. In the preferred form of the leg 37, the caster wheel 38 is threaded onto a suitable stud 39 so that the length of the leg 37 is readily adjustable.

With this construction it will be seen that the box spring 5 in the assembled bed 1 is effectively supported by the bed frame 2, in a manner which is highly effective to protect against sagging of the box spring 5.

Also, it will be seen that with the legs 35 and 37 constituted and arranged as shown herein, the supporting members 22 and 23 of the bed frame 2 are supported in a manner wherein the supporting legs for the bed frame are effectively concealed beneath an assembled bed. Also, the legs 35 and 37 are constituted and arranged in a manner effective to further enhance the strong, positive support of the box spring 5 by the supporting members 22 and 23.

It will be remembered that the bed 1 shown in FIGS. 1 to 7 of the drawings embodies a headboard 6 and a footboard 7. Two brackets or adapter plates 40 are mounted on the ends of the legs 24 and 26, and two brackets or adapter plates 41 are mounted on the outer ends of the legs 27 and 25. The brackets 40 and 41 may be made of any suitable material, such as, for example, steel, and are removably connected to the supporting members 22 and 23 in any suitable manner, such as, by screws or bolts 140 shown in FIG. 5. The brackets 40 and 41 are of a type well known in the art, and the headboard 6 and the footboard 7 may be mounted thereon in any suitable manner, such as, for example, by screws or bolts inserted through openings 42 in the brackets 40 and 41 into the headboard 6 and the footboard 7, respectively.

In assembling the bed 1, the box spring 5, if desired, merely may be placed on the bed frame 2 without secur-

ing it to the latter, the lower supporting frame **9** fitting around the inner edges of the recesses **32** sufficiently snugly to prevent dislodgment of the box spring **5** from the supporting members **22** and **23**. However, I prefer that when the bed **1** is in fully assembled condition, the box spring **5** is releasably secured in operative position to the bed frame **2** by suitable means such as bolts or screws **100**, extending through the recessed portions **32** of the legs **24–27** into the bottom of the lower supporting frame **9**, as illustrated with respect to the leg **26** in FIG. 5, and with respect to the leg **27** in FIG. 8. If desired, this may be performed at the location where the bed is being assembled, with the box spring **5** and the bed frame **2** being manufactured and sold as separate units. However, it is one of the advantages of the present invention that the bed frame **2**, if desired, may be embodied as an integral part of the box spring **5**, with the supporting members **22** and **23** secured to the bottom of the lower supporting frame **9**, such as by the bolts or screws **100**, during the manufacture of the box spring **5**.

With this latter construction, it will be seen that if desired, the caster wheels **36** and **38** may be inserted into position in the supporting members **22** and **23** during the manufacture of a box spring embodying such supporting members **22** and **23**. However, preferably, the caster wheels **36** and **38** are removable portions of the legs **35** and **37** and may be shipped loose with such a box spring and inserted into operative position in the supporting members **22** and **23** when the bed is being assembled.

Thus, it will be seen that in addition to affording a novel bed frame, the present invention affords a novel box spring construction wherein the bed frame may be incorporated as an integral part thereof so that no assembling of the box spring to the bed frame are required of a customer receiving the same.

In FIGS. 9 and 10 a modified form of the bed frame illustrated in FIGS. 1–8 is shown, with parts which are the same as parts shown in FIGS. 1–8 being indicated by the same reference numerals, and with parts which are similar, but have been substituted for parts shown in FIGS. 1–8, being indicated by the same reference numerals with the suffix *a* added.

The bed frame **2***a* shown in FIGS. 9 and 10 embodies the two supporting members **22** and **23** of the bed frame **2** shown in FIGS. 1–8 with the legs **35** and **37** attached thereto for supporting the same.

Two side rails **33***a* and **34***a* are secured to the outer ends of the legs **24** and **27** and of the legs **26** and **25**, respectively, and two end rails **43** and **44** are secured to the outer ends of the legs **24** and **26** and the legs **27** and **25**, respectively, at the head and foot ends, respectively, of the frame **2***a*. Like the rails **33** and **34** of the bed frame **2**, the rails **33***a* and **34***a* are disposed in parallel relation to each other, and the end rails **43** and **44** of the bed frame **2***a* are disposed between the side rails **33***a* and **34***a* in substantially parallel relation to each other.

The rails **33***a*, **34***a*, **43** and **44** are substantially L-shaped in cross section, each embodying an outer, substantially vertically projecting flange **45** and a lower inwardly projecting flange **46** extending substantially horizontally from the lower edge portion of the flange **45**, as illustrated in FIG. 10 with respect to the side rail **33***a*. The rails **33***a*, **34***a*, **43** and **44** are secured to the supporting members **22** and **23** in such position that the upper faces of the flanges **46** thereof are disposed in uniplanar relation to the upper faces of the recesses **32** formed in the outer end portions of the legs **24–27**.

The bed frame **2***a* is preferably of such construction that when a box spring, such as the box spring **5**, is mounted in operative position thereon with the corners of the lower supporting frame **9** disposed on the upper faces of the recessed portions **32** of the legs **24–27**, the members **11–14** of the lower supporting frame **9** rest on the upper faces of the flanges **46** of the rails **33***a*, **34***a*, **43** and **44**, respectively, inwardly of the flanges **45**, as illustrated somewhat diagrammatically in broken lines in FIG. 10.

Four elongated, substantially straight panels **47**, **48**, **49** and **50** are mounted on the rails **33***a*, **34***a*, **43** and **44**, respectively, in parallel juxtaposition to the outer faces thereof. The lower edge portions of each of the panels **47–50** has a recess **51** formed in the lower face and extending the full length thereof. The recesses **51** are of such width that the lower end portions of the panels **47–50** may be slipped downwardly over the upper edges of the flanges **45** of the rails **33***a*, **34***a*, **43** and **44**, respectively, with the flanges **45** disposed in the respective recesses **51** with a snug, but freely slidable fit, to thereby removably support the panels **47–50** from the rails **33***a*, **34***a*, **43** and **44**, respectively.

The panels **47–50** preferably are of such width that when they are mounted in operative position on the rails **33***a*, **34***a*, **43** and **44**, they project downwardly below the bottoms of the supporting members **22** and **23**, so as to conceal the same and project above the supporting members **22** and **23** a sufficient distance that the junction between the mattress **4** and the box spring **5** of the body-supporting unit **3**, is disposed below the upper edge portions of the panels **47–50**, as indicated in broken lines in FIG. 10, to thereby conceal the outer side faces of the box spring **5**.

Preferably, corner pieces **57** having perpendicularly disposed recesses **58** and **59** therein are mounted on the adjacent ends of each adjacent pair of the panels **47–50** so as to conceal the junction thereof. The corner pieces **57** have a length equal to the width of the panels **47–50** and afford trim pieces, decorating the corners afforded by the junctions of the panels **47–50**.

With this construction, it will be seen that, if desired, the box spring **5** may be hidden from view to thereby render it unnecessary to hide the same by means of a spread, or skirts, or the like, as is now the common practice, as is well known in the art.

The panels **47** may be made of any suitable material, such as, for example, wood, sheet metal, such as aluminum, or a suitable plastic material such as, for example, polyethylene. The outer faces of the panels **47–50** may be decorated in any desired manner. For example, they may have a natural wood finish, a simulated wood finish, a painted surface of a desired color, or, if desired, they may be covered with a suitable fabric covering, not shown. Thus, the panels **47–50** not only serve to hide the box spring **5** from view, but may be used for decorative purposes. Being readily removable, the panels **47–50** may be quickly and easily changed, if desired, to match the same to changes in the decor of the other furnishings, and the like. Also, the panels **47–50** afford members which may be quickly and easily cleaned, and in units embodying fabric coverings, such coverings may be quickly and easily replaced, if desired.

It will be seen that with the bed frame **2***a* constructed in the manner disclosed herein, it could also be used without the panels **47–50**, the box spring then being concealed from view, if desired, by suitable means such as a suitable skirt or spread in the manner heretofore well known in the art.

In addition, it will be seen that, if desired, the bed frame **2***a* may embody brackets similar to the brackets **40** at either the head or foot end thereof, or both, for attaching a headboard or footboard, respectively, to the supporting frame **2***a*.

From the foregoing it will be seen that the present invention affords a novel bed frame.

Also, it will be seen that the present invention affords a novel box spring construction.

Thus, while I have illustrated and described the preferred embodiments of my invention, it is to be understood that these are capable of variation and modification, and I therefore do not wish to be limited to the precise details set forth, but desire to avail myself of such

changes and alterations as fall within the purview of the following claims.

I claim:

1. A bed frame for supporting a box spring including a lower supporting frame, and a plurality of slats extending across and supported on said supporting frame,

(a) two elongated members,

(b) said elongated members adapted to extend across said slats at an acute angle to the length of the latter, and

(c) support means secured to said elongated members inwardly of the ends thereof in recessed relation to the lower marginal frame and extending downwardly from said elongated members in supporting relation thereto, said elongated members being adapted to be disposed intermediate said slats of said lower supporting frame and said support means for load transmission therebetween.

2. A bed frame as claimed in claim 1 wherein said two elongated members cross each other intermediate their ends to form a generally X shape.

3. A bed frame as defined in claim 2 in which:

(a) said support means comprise legs projecting downwardly from each of said elongated members in inwardly spaced relation to the outer ends of said elongated members.

4. A bed frame as defined in claim 3 and in which:

(a) said support means include another leg projecting downwardly from said elongated members at the point of crossing thereof.

5. In a bed having a box spring including a lower supporting frame and longitudinal and transverse side walls extending about the periphery of said supporting frame, and a bed frame disposed in underlying supporting relation to said lower supporting frame, decorative panels secured to said bed frame in closely spaced overlying relation to said side walls of said box spring, said panels including longitudinal panels overlying the longitudinal side walls of said box spring and at least one transverse end panel overlying at least one transverse side wall thereof.

6. In a bed as claimed in claim 5 wherein said panels have a width greater than the width of said side walls of said box spring.

7. In a bed as claimed in claim 5 wherein said panels include corner sections connecting said longitudinal panels to said transverse panel.

8. A bed frame as claimed in claim 1 wherein said frame includes two elongated substantially parallel members connected between opposing pairs of said ends of said first elongated members and adapted to underlie said lower supporting frame in supporting relation thereto, said first elongated members being disposed in load transmitting relation between said elongated substantially parallel members and said supporting means.

9. A bed including a box spring having a lower supporting frame and a plurality of slats extending across and supported on said supporting frame, a frame for supporting said box spring including two elongated members, said elongated members extending across said slats at an acute angle to the length of the latter, support means secured to said elongated members inwardly of the ends thereof in recessed relation to said lower supporting frame and extending downwardly therefrom in supporting relation thereto, said elongated members being disposed intermediate said slats of said lower supporting frame and said support means in load transmitting relation therebetween, and said frame being connected to said lower supporting frame to form an integral box spring and frame unit.

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