March 14, 1967 H. H. LOVETTE 3,308,492

RECLINING OR SLEEPING EQUIPMENT

Filed Dec. 28, 1965

FIG. 1

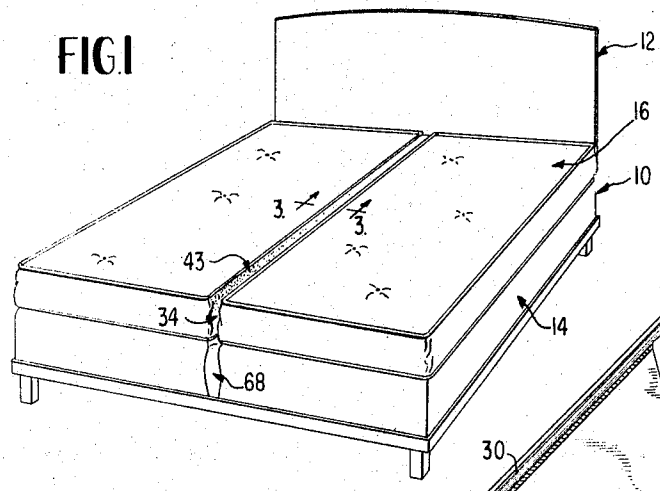


FIG. 2

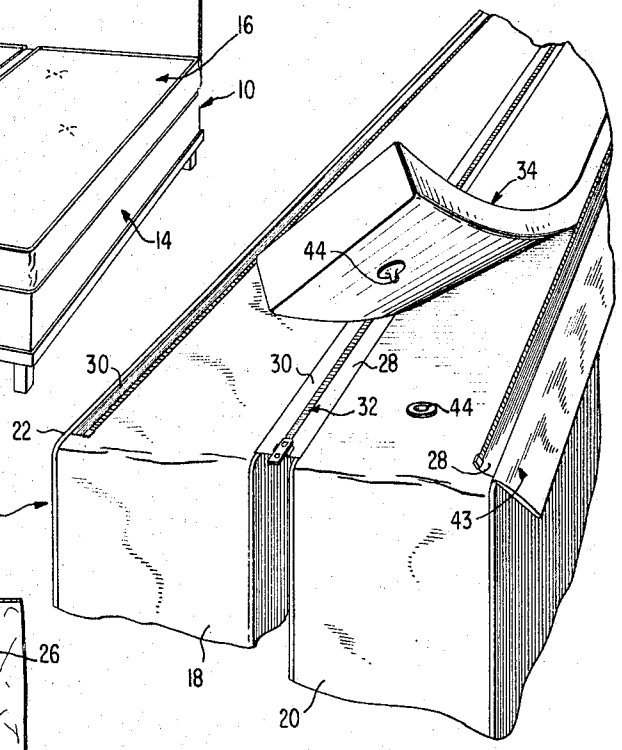


FIG. 3

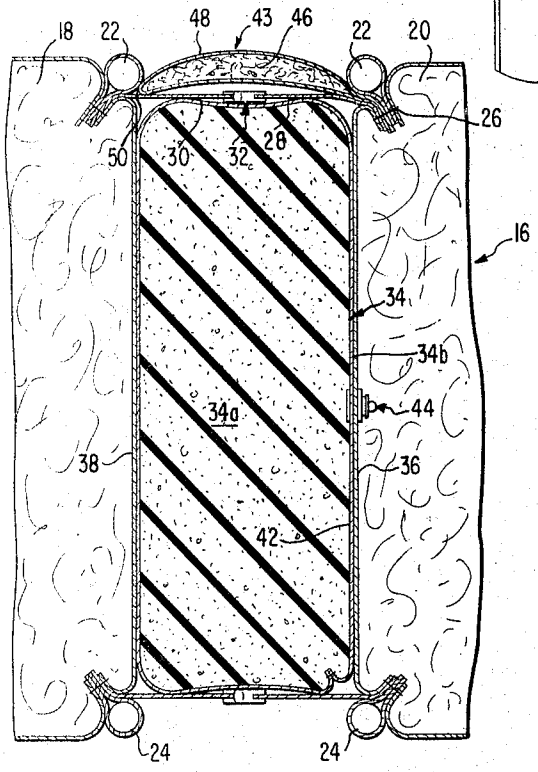
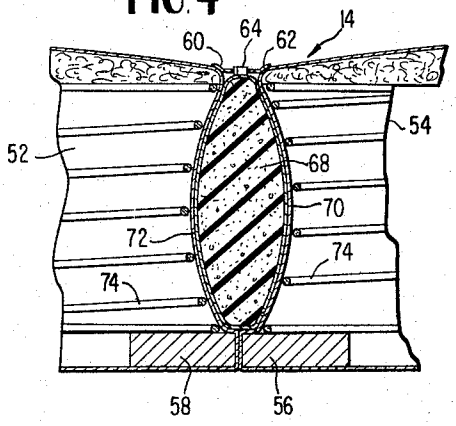


FIG. 4



INVENTOR
HENRY H. LOVETTE

BY Inmire and Smiley
ATTORNEYS

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RECLINING OR SLEEPING EQUIPMENT

Henry H. Lovette, 2431 English Road, High Point, N.C. 27260

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This invention generally appertains to novel improvements in reclining or sleeping furniture or equipment and more particularly relates to new and novel improvements in sleep equipment with the object of consolidating ease and convenience of handling and manipulating such equipment and comfort and restfulness of using such equipment.

Specifically, with respect to an exemplary environment of the present invention, it has become a common practice in the manufacture of bed units to produce queen or king sized beds which provide for the comfortable sleep of larger people. Such beds when constructed as single mattress and spring members have drawbacks because they are of such an outsize that they cannot be carried through door openings in dwellings and cannot be moved or turned by a single person.

Aware of this, the industry has resorted to the production of such beds in sections and, as an added sale and utilitarian feature, has made such beds in single or twin bed types which can be joined together to effect the desired queen or king sized bed assembly. Thus, it is conventional to provide a pair of similar sectional mattress units, each of which is usable in and of itself on twin sized beds, and to provide means for detachably or releasably securing the sectional mattresses together along their adjoining longitudinal edges. Further, it is known to produce box or other spring units as a pair of single size, separate spring units which can be arranged in side by side relationship and connected together by a releasable fastening means.

Such sectional mattress and spring units have the advantage that they can be separated into usable single bed types and can be easily manipulated through the doorways of a modern home and can be easily secured together so as to form a queen or king size bed unit.

However, the known sectional mattress and spring members or units have definite disadvantages, when they are connected together so as to function as an outsized bed unit, simulative of a queen or king sized bed. The main disadvantage is that the points of junction between the side by side mattresses and the side by side spring members cannot provide the same body support as the single mattress and spring members, and, furthermore, the adjoining edges of the side by side mattress units and the side by side spring units tend to sag, if any weight is applied thereon, as under the weight of a body lying thereon. Not only does this tendency to sag prevent the mattress units from providing the same support throughout their entire width and the spring units from providing the same support throughout their entire width, whereby comfortable sleep can be ensured to a person using the compositely oriented and organized units, but also, the tendency to sag under weight has a deleterious effect on adjoining side edges of the mattress and spring units and on the fastening means, which is used to join the adjoining sides of the mattress units together and the adjoining sides of the spring units together.

Accordingly, it is an important object of the present invention to overcome the foregoing disadvantages and to provide a queen or king size bed made up of sectional mattress and spring units which do not have any tendency to sag at their adjoining, connected side edges and whereby the joined mattress and spring units provide the same even support, over their entire width and length.

Another important object of this invention is to provide a detachable member, which can be readily and easily inserted between the adjoining sides of a pair of mattress units or a pair of spring units, such member being of a compressible nature so that it will fill the entire void between the mattress units and the spring units and will prevent any deleterious wear and tear on the fastening means connecting the mattress units together and the spring units together and will reinforce the adjoining side edges of such units and whereby the member will cooperate with the mattress units and the spring units to ensure a firm and even support throughout the entire width and length of the mattress and spring units.

Another important object of the present invention is to provide sectional mattresses which can be of twin bed size, and sectional box spring units which can be of similar twin bed size, whereby the mattresses and spring units can be used separately to form twin beds, and to provide means for joining the mattress units together and the box spring units together in such a manner that the result, as far as a person reclining or sleeping on the thus formed sleeping or reclining equipment, is the same as if a single, one-piece mattress and single, one-piece spring unit were employed to make up the outsized bed equipment.

Yet another object of the present invention is to provide a novel releasable connecting means between the units of the bed equipment in such manner as to avoid any contact therewith by the body of a user and to provide means located between the units and the fastening means in a manner to completely fill the void therebetween and to reinforce the adjoining sides of the mattress units and the spring units and to ensure that the upper supporting surfaces of the coacting spring units and mattress units are as one, in their overall lengthwise and widthwise support.

Another important object of the present invention is to provide a simple, compact and inexpensive means for joining mattress units and spring units together so that they may be used to form a queen or king sized bed.

The foregoing and ancillary objects are attained by this invention, the preferred embodiment of which are set forth in the following description and illustrated in the accompanying drawing wherein:

FIG. 1 is a perspective view of a king-sized bed unit constructed in accordance with the present invention;

FIG. 2 is a fragmentary, perspective view, on an enlarged scale, of the adjoining sides of sectional mattresses, showing the mattress sections in semi-detached relationship;

FIG. 3 is an enlarged fragmentary transverse, vertical sectional view taken substantially upon the plane indicated by the section line **3—3** of FIGURE 1, and showing the manner in which the two sectional mattresses are secured together at their upper and lower edges and illustrating the means whereby the mattresses are assembled together so as to provide a firm overall common support; and,

FIG. 4 is a detailed, fragmentary, transverse vertical cross-sectional view, illustrating the means whereby the spring units are joined together and whereby they are reinforced at their adjoining side edges by the same means, utilized in connection with the reinforcing of the sectional mattresses, as shown in FIG. 3.

Referring now more particularly to the drawings, and initially to FIGURE 1, a king-sized bed unit **10** is shown and includes a double bed type king-sized bedstead **12**, which supports a box spring unit **14**, constructed in accordance with the present invention. A sectional mattress **16**, constructed in accordance with the present invention, overlies the box spring unit **14**.

The mattress **16**, as shown in detail in FIGURES 2 and 3, is formed of two half size sectional mattresses or mattress units **18** and **20**, each of which is complete in

and of itself so as to function as a twin bed size mattress. The sectional mattresses 18 and 20 are independent units which may be disconnected from each other and utilized with twin sized bed frames or may serve as cot or bunk mattresses.

The sectional mattresses or mattress units 18 and 20 are provided with beadings 22 and 24 along their opposing upper and lower longitudinal edges. The beadings are formed as a part of the upper and lower longitudinal edges of the mattresses and are secured thereto by stitching 26, which also secures fabric flaps 28 and 30, the flaps having outer longitudinal adjoining edges which support a fastener means 32. The fastener means 32 can be of the conventional one-way type slide fastener, as shown, or can be of the two-way type slide fastener. Of course, it is understood that the fastener means may also be in the form of snap fasteners, buttons or laces. In any event, the fastener means 32 will be carried by the adjoining, cooperating edges of the flaps 28 and 30 which are secured to the upper and lower longitudinal edges of the sectional mattresses 18 and 20 and which are disposed so as to be positioned inwardly of the edge beadings 22 and 24.

A bolster member 34, which is formed of readily compressible material, is provided and is adapted to be interposed between the juxtaposed, spaced longitudinal sides 36 and 38 of the mattress sections 18 and 20, as shown in FIG. 3. The member 34, which is preferably of slender, rectangular cross sectional shape, is composed of a main body portion 34*a* of compressible material, such as multicellular foam or sponge rubber or multicellular foam plastic, encased in a fabric covering 34*b*, which is of the same material, color and design as the fabric covering for the mattress units and the flaps 28 and 30.

The bolster 34 is provided with means, cooperating with one of the sides or both of the adjoining sides of the mattress units 18 and 20, so as to secure it in place, prior to the establishing and connecting of the mattress units, into their coplanar relationship for forming the outsized mattress unit 16. In this respect, the side 42 of the bolster and the side 36 of the mattress section 20 are formed with cooperating snap fasteners 44.

The bolster member 34, when in position as shown in FIG. 3, will fill the void or space between the adjoining sides 36 and 38 of the side by side mattress sections 18 and 20 and will be compressed tightly therebetween, as the fasteners 32 are secured together.

As shown in FIG. 3, the upper or body supporting surface of the mattress unit 16 is provided with means that is adapted to overlie the fastener means 32 so that the fastener means 32, irrespective of its mechanical nature, will not come into contact with the body of a person lying on the mattress unit. In this respect, a protective flap 43 is provided and is secured at one end to one longitudinal edge of one of the mattress sections, as for example, the mattress section 20 by means of the stitching 26. Thus, the flap 43 is hingedly attached along one side edge to the longitudinal upper edge of one of the mattress sections. The flap 43 includes a mattress type stuffing 46, which forms the body thereof, and a fabric covering 48 which is identical to the fabric covering for the mattress sections and the bolster. The flap 43 is substantially arcuate in cross section and has a free, acutely curved side edge 50, which is adapted to underlie the beading 22 on the adjoining mattress section, as shown in FIGURE 3, so that the flap will be locked in position overlying the fastener means.

While flaps 43 will be provided for covering the fastener means 32, on both sides of the mattress unit 16, so that either side thereof can be used as the upper body supporting and contacting side, for the sake of simplicity only one flap has been shown in FIGURE 3.

As shown in FIGURE 4, the box spring unit 14 is composed of two individual separable box spring units 52 and 54. The bottom side rails 56 and 58 of the box spring units are adapted to abut each other, while the upper surfaces are spaced slightly apart and are connected by flaps 60 and 62, through the means of a slide fastener 64 or other detachable connecting means.

A bolster member 68, which is similar to the bolster 34, is interposed between the adjoining sides 70 and 72 of the spring units and, as shown in FIGURE 4, the bolster will be under vertical compression from the upper and lower surfaces of the joined box spring units 52 and 54, with the lower end of the bolster resting on the upper edges of the rails 56 and 58 and the upper end of the bolster lying under the joined fastener 64. This will cause the bolster to be compressed from its normal rectangular shape, with the bolster becoming bowed outwardly at its sides and having its sides entering into the adjoining sides of the spring units and reinforcing the border spring members 74.

Of course, the bolster member 68 can be provided, in association with one or both of the juxtaposed sides of the spring units, with means similar to the fasteners 44.

The mattress units 18 and 20 and the box spring units 52 and 54 can be used with twin bed size frames or bedsteads to form separate twin bed units, since each mattress unit and spring unit is formed as a separate entity. Or, the mattress units can be used separately as mattresses for other purposes. Obviously, the fastener means 32 or 64 will pose no interference with such use because of the manner in which such means is formed and connected to the units.

When the spring units 52 and 54 are to be used as a composite large size spring assembly, the spring units are positioned in side by side relation on the bedstead 12, for example, and the bolster member 68 is interposed between the juxtaposed sides 70 and 72 of the spring units. The bolster member 68 is compressed into the ovid shape, as shown in FIG. 4, and the fastener means 64 is closed, thereby securing the bolster member in place. In such position, the bolster member reinforces the immediate side spring members 74 and prevents the side edges of the spring units from sagging and also supports the connecting fastener means 64 for the spring units 52 and 54.

The mattress units 18 and 20 are brought together so that one of the fastener means 32 can join the adjoining longitudinal edges of the sides 36 and 38. The bolster 34 is then attached to one of the sides, for example, the side 36 by the snap fasteners 44. The mattress units are then placed in coplanar relation on the spring units, as shown in FIG. 1, and the then uppermost fastener means 32 is connected so as to overlie the bolster 34. The covering flap 43 is then brought over the uppermost fastener means and tucked in place under the beading 22.

While the best known form of the present invention has been described herein and illustrated in the accompanying drawing, other forms may be realized as come within the scope and spirit of the appended claims.

What is claimed is:

1. A reclining or sleeping equipment comprising at least two independent units which are compressible to a desired extent under body weight, said units having longitudinal sides adapted to be disposed in confronting, side by side, juxtaposed relation, said sides having upper and lower edges, releasable fastener means adjacent said upper and lower side edges joining said sides together in slightly spaced relation so as to assemble said units into a cooperating relationship with the units having coplanar upper supporting surfaces, and an inherently compressible member interposed between said sides and said fastener means and adapted to fill any void existing between the sides and fastener means to complement the upper supporting surfaces and reinforce the sides and prevent the upper edges of the sides from sagging under body weight whereby the upper supporting surfaces function as one in providing uniform support over their entire widths and lengths.

2. The invention of claim 1, wherein said member is of substantially thin rectangular cross-sectional shape and is of a length substantially equal to the lengths of the sides of the units and is of a depth substantially equal to the thickness of said units.

3. The invention of claim 1, wherein releasable connecting means is provided for attaching said member to the side of at least one of the units.

4. The invention of claim 1, wherein said fastener means includes flaps connected to the sides and having complementary free side edges and a mechanical fastening means carried by said free side edges.

5. The invention of claim 4, and including a covering flap adapted to overlie the flaps and the mechanical fastening means.

6. The invention of claim 5, wherein said covering flap is hingedly carried by the side of one of the units and means is provided for releasably securing the covering flap to the side of the other unit.

7. A bed mattress comprising a pair of mattress sections having longitudinal opposed sides provided with upper edge beadings, first releasable fastener means joining said opposed sides together in spaced relation and located adjacent and extending longitudinally along the lower edges thereof, second releasable fastener means joining said opposed sides together just below said beadings and disposing said beadings in spaced apart relation, an inherently compressible member interposed between said sides and extending between said fastener means, and a covering flap secured along the upper side of one of said sections just below the beading thereof and having an opposite free edge received beneath the beading of the other section.

References Cited by the Examiner

UNITED STATES PATENTS

1,784,294	12/1930	Kriege	5—357
2,247,667	7/1941	Rosberger	5—357
2,501,267	3/1950	Erikson	5—354
2,706,821	4/1955	Griggs	5—357
3,014,225	12/1961	Pink	5—352 X
3,157,889	11/1964	Chanko	5—352
3,204,259	9/1965	Gordon	5—357 X

FRANK B. SHERRY, *Primary Examiner.*

CASMIR A. NUNBERG, *Examiner.*