H. H. LOVETTE

COMBINATION MATTRESS AND BED BOTTOM

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Fig. 1

Fig. 2

Fig. 3

Fig. 4

Fig. 5

INVENTOR

HENRY H. LOVETTE

ATTORNEYS.
This invention relates to a unitary supporting structure. More particularly, this invention relates to a unitary bed structure and an enclosure therefor whereby bedrails and slats of a conventional bed structure may be eliminated.

Bed structures of the prior art usually comprise a frame having rails and slats, a box spring positioned upon the frame and a mattress positioned, in turn, upon the box spring. This arrangement is subject to many inherent disadvantages.

Firstly, there is the problem of breakage of the slats resulting in sagging of the box spring and therefore the mattress. This, in turn, results in uneven support for an occupant of the bed structure and can even be harmful.

Furthermore, conventional bed structures have a tendency to collect dust in places inaccessible for cleaning and other similar purposes. Bed clothes come in direct contact with the frame and box spring of conventional bed structures whereby such bedclothes tend to accumulate dust. To eliminate this defect, some bed structures of the prior art provide covers. However, these covers are so constructed that they must be removed from the bed structure and then cleaned. This necessitates the purchase of at least two such covers so that when one is being cleaned another is available for use. If only one such cover is purchased, then, while it is being cleaned, the bed structure accumulates the very dirt and dust the cover is intended to prevent.

Moreover, conventional bed structures fail to provide some means for retaining bedclothes in restrained position with respect to other articles of bedclothing and with respect to the bed structure. Additionally, there is provided no means for maintaining the mattress in aligned relationship to the box spring and frame of a conventional bed structure resulting in inconvenient movement of the mattress with respect to the box spring during occupancy.

It is, therefore, an object of this invention to provide a unitary supporting structure and an enclosure therefor which will overcome all of the above objections.

It is a further object of this invention to provide a unitary bed structure and a cover therefor precluding direct contact between the bedclothes and the bed structure.

It is a still further object of this invention to provide a unitary bed structure and enclosure therefor that is substantially dustproof.

Still further, an object of this invention is to provide a casing for a bed structure comprising a frame and combined mattress and spring assembly that can easily be cleaned without removing the casing from the bed structure.

A still further object of the present invention is to provide a casing for a unitary structure that will maintain the frame and the mattress assembly in perfect alignment.

Still further, it is an object of this invention to provide a casing for a unitary bed structure having means for restraining movement of articles of bedclothing with respect to other such articles and with respect to the bed structure.

It is a still further object of this invention to provide a unitary bed structure and an enclosure therefor that eliminates the need for conventional bedrails and slats, thereby providing a structure that is extremely inexpensive and simple to manufacture, and provides a stronger and more rigid bed assembly.

The foregoing objects and others ancillary thereto are preferably accomplished in the following manner:

According to a preferred embodiment of this invention, a unitary bed structure is provided comprising, in combination, a rectangularly shaped frame having dimensions equal to the normal dimensions of the side rails of a bed when in position, means for mounting the said frame on the head and footboards of a bedstead in lieu of the usual rails, a mattress assembly of normal dimensions and of less dimension than and positioned upon said frame, an enclosure means for completely enclosing the mattress assembly and the frame.

The enclosure comprises a top portion enclosing the top and sides of the mattress assembly having an undersurface extending inwardly of the sides of said assembly between said assembly and said frame. The enclosure further comprises a bottom portion enclosing the sides of the frame having an upper surface extending inwardly of said sides between said frame and said assembly and connected to said undersurface. The said undersurface and upper surface together comprise a V-shaped inwardly extending fold whereby bedclothes may be restrained from movement with respect to each other and with respect to said bed structure. The bottom portion of the enclosure is extended around the lower edge of the sides of the frame and then upwardly along said sides and connected thereto. A cover encloses the open undersurface of said frame.

The novel features considered characteristic of the present invention are set forth with particularity in appended claims, said claims only being determinative of the scope of this invention. However, as to the invention itself, especially with regard to its organization, together with additional objects and advantages thereof, the same will best be understood from the following description of a specific embodiment when read in conjunction with the accompanying drawing, in which:

FIGURE 1 is an exploded perspective view of the unitary bed structure of the present invention;

FIGURE 2 is a plan view of said bed structure;

FIGURE 3 is an elevational view of said structure;

FIGURE 4 is a detailed cross-sectional view, in elevation, on an enlarged scale, taken along line 4—4 of FIGURE 3, and

FIGURE 5 is a detailed elevational view, drawn to an enlarged scale, of the bracket for mounting the unitary bed structure of the present invention on a bedstead.

Referring now to the drawing, there is illustrated a unitary bed structure and an enclosure therefor generally indicated by the reference numeral 19. Said bed structure 10 comprises a rectangular frame 12 constructed of two longitudinal members 14 and two transverse members 16. The frame 12 may be constructed of any suitable material such as metal or wood. The frame 12 is provided with conventional brackets 18, clearly illustrated in FIGURE 5, whereby said frame may be positioned between and removable attached to corner posts 17, having the usual bracket receiving slots 18', of head and foot boards 19, 19' of a conventional bedstead, the longitudinal members 14 substituting for the usual side rails of a bed. The frame 12 may comprise a conventional spring assembly and the specific structure thereof forms no part of the present invention other than the rigid rectangular frame that substitutes for and replaces the usual side rails and slats that usually are employed for supporting a spring. A conventional mattress assembly 20 is positioned upon the frame member 12. Details of the assembly 20 form no part of the present invention and further de-
description thereof is therefore not deemed necessary. The assembly 20 is of a normal mattress size and is smaller than frame 12. Any suitable means for supporting said assembly 20 is provided on the frame 12.

An enclosure or casing 22 is provided for completely enclosing the unitary bed structure 10 of the present invention. Said enclosure 22 may be fabricated of linen or other suitable cloth. The enclosure 22 comprises a top portion 24 which completely encloses the top 26 and the sides 28 of the assembly 20. An undersurface 30 extends inwardly from the sides 28 of the assembly 20 to a point disposed between the assembly 20 and the frame 12.

The enclosure 22 further comprises a bottom portion 32 enclosing the sides 14 and 16 of the frame 12. An upper surface 34 extends inwardly from the sides 14 and 16 of the frame 12 and is connected to the inner edge 36 of the undersurface 30, which edge 36 is conventionally perimetrical stitched. The undersurface 30 and the upper surface 34 together comprise a V-shaped inwardly extending fold 37 whereby articles of bedding may be tucked between the assembly 20 and the frame 12.

The bottom portion 32 is extended around and then upwardly along the inner surface of the sides 14 and 16 of the frame 12 and connected thereto as by any suitable fastening means. A cover 40, fabricated of any suitable cloth, extends between and is connected to the sides 14 and 16 of the frame 12. In this manner, dust is precluded from collecting underneath the frame 12. Provision is made in the enclosure 22 whereby the brackets 18 that mount the bed structure 10 of the present invention on a conventional bedstead may protrude therethrough.

As indicated above, the enclosure 22 may be fabricated of the usual ticking or other suitable material. It is noted, however, that the material used preferably is substantially non-stretchable. In this manner, when the enclosure 22 is pulled taut over the bed structure 10, the assembly 20 will be maintained in perfect alignment with the frame 12. It should be further noted that the space shown in the drawing between the assembly 20 and the frame 12 has been greatly exaggerated to clearly illustrate the inwardly extending fold 37. In actual practice, the undersurface 30 of the fold 37 is in direct contact with the upper surface 34 thereof, the assembly 20 resting directly upon the frame 12.

The manner of use of the unitary bed structure of the present invention is readily manifest from the foregoing description. There is therefore provided a unitary bed structure and an enclosure therefor which eliminates the need for bedrails and slats of conventional bed structures, and provides a stronger and more rigid bed assembly. Additionally, the mattress assembly of the present invention is maintained in perfect alignment with the frame thereof. Moreover, bedclothes will be restrained from movement with respect to each other and with respect to the bed structure. Furthermore, as the mattress is of normal size and shape, it can accommodate standard contour sheets.

Although I have shown and described a specific embodiment of the present invention, it should be apparent to those skilled in the art that the same may assume many modifications both in arrangement and detail. The present invention, therefore, is not to be restricted except insofar as is necessitated by the prior art and by the spirit of the appended claims.

I claim:

1. A unitary mattress and spring structure for assembly to head and foot boards to complete a bed without side rails and spring supporting slats, comprising in combination, a rectangularly shaped spring, a rectangularly shaped mattress supported on said spring, a unitary fabric casing enclosing said spring and mattress permanently holding them in fixed relation, said casing having a fold extending inwardly about the complete periphery of said mattress and between the mattress and spring for retaining articles of bed clothing in position with respect to one another and with respect to said mattress and spring, and brackets fixed to the corners of said spring outside said fabric casing and projecting outwardly for attachment to head and foot boards.

2. A unitary mattress and spring structure according to claim 1 wherein said fold is V-shaped, said V-shaped fold having an apex defining a continuous rectangular locus positioned completely within the border of said mattress and serving to maintain the spring and mattress in fixed alignment with one another and as a pocket for the lower edges of contour sheets and other articles of bed clothing.

3. A unitary mattress and spring structure according to claim 2 wherein said mattress is of a standard size and said spring is of substantially larger area and of a width approximately equal to the space between conventional side rails which they replace.

4. A unitary mattress and spring structure according to claim 2 wherein said fabric casing comprises a top panel covering said mattress, side panels enclosing said mattress, a V-shaped fold extending inwardly completely about the border of the mattress and connected to said side panels, further side panels surrounding said spring and a bottom panel covering the underside of the spring, said top and side panels and V-shaped fold being formed as one piece of fabric affixed along its lower edge to said spring.

5. In a bed without side rails and spring supporting slats the combination of a pair of conventional head and foot boards each having corner posts with a unitary mattress and spring structure, said unitary structure including a rectangularly shaped spring, a rectangularly shaped mattress supported on said spring, a unitary fabric casing enclosing said spring and mattress permanently holding them in fixed relation, said casing having a fold extending inwardly about the complete periphery of said mattress and between the mattress and spring for retaining articles of bed clothing in position with respect to one another and with respect to said mattress and spring, and brackets fixed to the corners of said spring outside said fabric casing and projecting outwardly for attachment to the corner parts of said head and foot boards.

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FRANK B. SHERRY, Primary Examiner.

CHANCELLOR E. HARRIS, Examiner.