Nov. 16, 1948. M. D. SEECHE 2,454,220

MATTRESS

Filed June 4, 1947 2 Sheets-Sheet 1

Fig. 1.

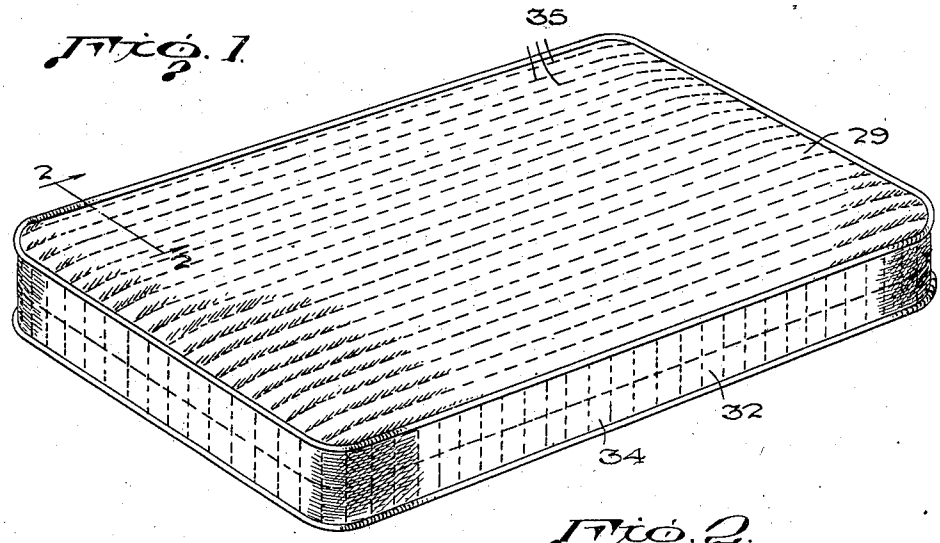
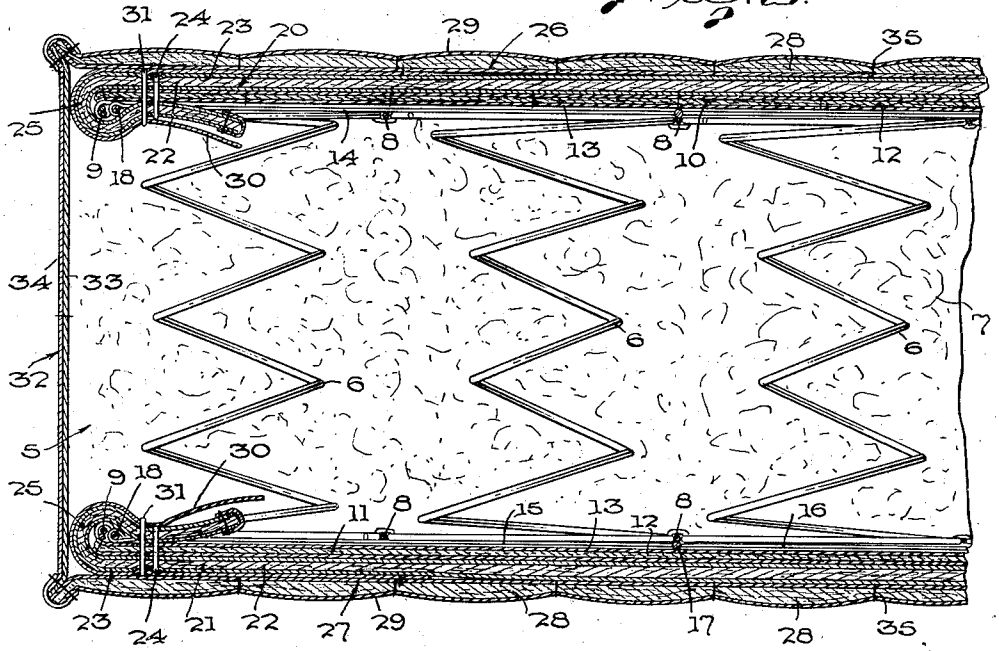


Fig. 2.



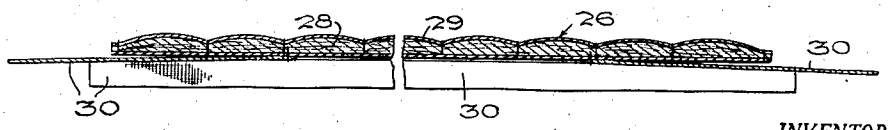


Fig. 5.

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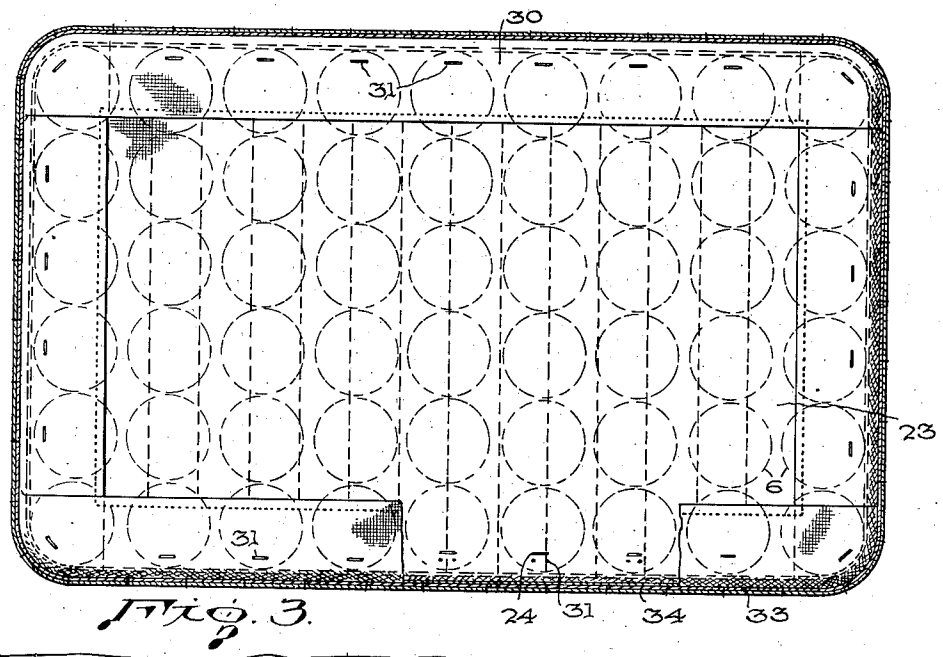


Fig. 3.

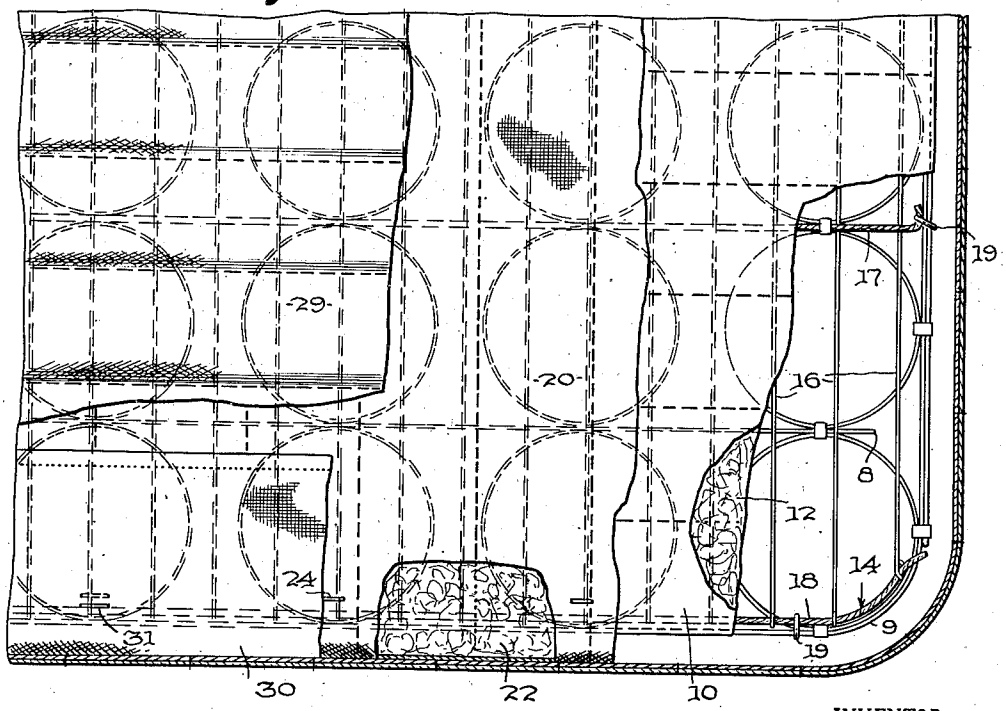


Fig. 4.

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Patented Nov. 16, 1948

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UNITED STATES PATENT OFFICE

2,454,220

MATTRESS

Maurice D. Seeche, Lawrence, Mass.

Application June 4, 1947, Serial No. 752,445

4 Claims. (Cl. 5—351)

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This invention relates to spring mattresses, and has as an object to improve generally upon mattresses of this type.

One specific object of the invention is to provide a spring mattress construction possessing all the advantages without any of the known disadvantages, of mattress of this general class.

Another specific object of this invention is to materially improve upon the well known "boxing" method employed in the construction of spring mattresses.

The mattress embodying the features of this invention is characterized by an improved method of securing the quilted pads to the inner-spring assembly, and by an improved method of uniting the outer or covering pads with the intervening covering or peripheral wall with one another, and with the inner assembly, whereby the outer covering is effectively prevented from working loose from the inner assembly.

The mattress of this invention is also characterized by a construction whereby the bordering wires of the inner spring assembly are not readily detected from the exterior of the mattress, and the coils of the inner spring assembly are effectively insulated from, and prevented from working through, the insulation pads into damaging contact with the outer pads or mattress covering.

The invention, together with the objects and advantages thereof, will be best understood from the following detailed description when read in reference to the accompanying drawings in which I have illustrated a presently preferred embodiment of the invention, and wherein:

Figure 1 is a perspective view of a mattress embodying the features of this invention;

Figure 2 is an enlarged fragmentary detail sectional view taken substantially on line 2—2 of Figure 1;

Figure 3 is a horizontal sectional view through the mattress, with parts in elevation;

Figure 4 is an enlarged fragmentary horizontal sectional view to illustrate certain details of construction; and

Figure 5 is a transverse sectional view through one of the outer quilted pads, showing the flaps secured to the inner side thereof.

Referring now to the drawings in detail, it will be seen that the reference numeral 5 indicates a filler-coil spring assembly. This assembly consists essentially of a plurality of coil springs 6 embedded in a filler 7 in the form of a mass of cotton batting or the like. These springs are

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connected to one another and to intervening supporting wires 8 and bordering wires 9.

The filler-coil spring assembly 5 is disposed between upper and lower insulating pads 10 and 11. These pads are each composed of a layer 12 of suitable material, as for example, cotton felt, to one face of which is secured, as by stitching thereto, a facing sheet 13 of muslin or like fabric.

Interposed between the filler-coil spring assembly 5 and the upper and lower insulation pads 10 and 11 are wire protector pads 14, 15. Each of these pads (14, 15) is composed of a plurality of wire strands 16, equidistantly spaced apart and trained through perforations in spacer strips 17 of spirally twisted lengths of paper or similar inexpensive material. At the ends thereof wires 16 have hook-like terminals clinched about bordering strips 18 similar to strips 17 but being imperforate. These protector pads 14, 15 are interposed between the facing sheets 13 of the insulation pads 10, 11 and the proximate upper and lower sides of the filler-coil spring assembly 5 (see Figure 2) and serve to prevent the coils 6 from working through the insulation pads. Hog rings or the like 19 serve to secure the pads 14, 15 to the coils 6 and bordering wires 9 and against displacement, (see Figures 2 and 4).

Upper and lower quilted pads 20 and 21 are disposed upon the insulation pads 10 and 11. Each of pads 20, 21 is composed of a layer 22 of cotton felt or other fibrous material to one face of which is secured, as by stitching, a facing sheet 23 of muslin. While protector pads 14, 15 and insulation pads 10 and 11 are substantially of the same width and length as the filler-coil spring assembly 5, quilted pads 20, 21 are of greater width and length so as to fold, at their marginal edges, over the edges of the pads 14, 15, 10 and 11. The folded edges of pads 20, 21 are then stapled as at 24 to the main body portions of the respective pads and thus form continuous rolls 25 along the upper and lower edges of the assembly 5, see (Figure 2). The rolls 25, thus formed, encase the bordering wires 9 of assembly 5 so that such wires are not readily detected by touch from the exterior of the mattress.

Disposed against the pads 20, 21 are upper and lower outer pads 26, 27. Each of these pads 26, 27 is substantially of the same width and length as the assembly 5, and is composed of a layer 28 of cotton felt or other fibrous material. To the outer face of the layer 28 is secured, as by stitching, a facing sheet of ticking 29.

Stitched to the inner faces of the pads 26, 27 are marginal flaps 30 in the form of strips of

muslin. These flaps 30 are folded over the rolls 25, aforementioned, and are secured in such folded condition by suitable fastening means, as for example, staples 31 (see Figure 2). By providing the flaps 30 and anchoring them in the manner just described the outer pads 26, 27 and the mattress as an entirety are effectively secured from working loose from the inner assembly 5. Other advantages of these features over the conventional method of "boxing" will presently be presented.

Completing the mattress structure is the intervening wall or fabric covering 32 that is secured to the marginal edges of the quilted outer pads 26, 27. Preferably the intervening covering 32 is quilted and comprises a layer 33 of cotton felt or other suitable fibrous material to which is secured, as by stitching, an outer sheet of ticking 34. The upper and lower edges of covering 32 are stitched to the marginal edges of outer coverings or pads 26, 27, and to edging tapes 35 to form conventional upper and lower beaded edges for the mattress, as shown. Also, preferably the marginal edges of pads 20, 21, have beaded edges, as shown to advantage in Figure 2.

From the foregoing it will be noted that in my improved mattress structure the peripheral wall or intervening covering 32 is united directly with the outer quilted pads 26, 27. This I am enabled to do by providing the pads 26, 27 with the flaps 30 and anchoring these flaps in engagement with the inner assembly 5 in the manner shown and above described. Such is a material and advantageous departure from the conventional method known in the trade as "boxing" and which consists of sewing flaps to the inner sides of the peripheral wall (wall 32) and then stitching, by hand, these flaps to the inner structure in an effort to prevent the peripheral wall (wall 32) from working sloppily away from the inner structure. My method of securing the flaps 30 to the outer pads 26, 27 and stapling the flaps thereto after folding them over the marginal edges of the inner assembly 5 at the top and bottom of the latter, not only insures keeping outer pads 26, 27 from working loose and shifting about, but also permits attaching the peripheral wall 32 directly to pads 26, 27, which in turn is effective for preventing the peripheral wall 32 from working away from the inner assembly 5. Thus a mattress embodying the features of this invention will be found to have a greater useful life or good condition than mattresses constructed in accordance with practice heretofore followed.

Another feature of my invention is that of having the stitching 35, securing the felt layers 28 to the tickings 29 of the respective outer pads 26, 27, extend in a general direction longitudinally of the mattress as shown in Figure 1. Apart from obvious structural advantages of this feature of the invention, the appearance of the completed article is materially enhanced. If desired, as is sometimes the practice, the rows of stitching securing the facing sheets 23 to the felt layers 22 of pads 20, 21 may extend transversely to the length

of the mattress; the stitching securing the facing sheets 13 to the layers 12 of insulation pads 10 and 11 may extend in a direction longtiudinally of the mattress; and the wires 16 of protector pads 14, 15 may extend transversely to the length of the mattress. Hence my mattress structure has all of the advantages considered to flow from that method of mattress structure which embodies the practice of having the rows of stitches of the successive pads extending transverse to one another, without the known disadvantages of that particular phase of mattress construction.

Although I have herein shown and described a preferred embodiment of this invention, it is to be understood that various changes may be made therein within the scope of the claims hereto appended.

What I claim is:

1. A mattress comprising an inner coil spring assembly, upper and lower pluralities of superimposed pads, an intermediate one of the pads of each of the pluralities having a marginal roll-edge embracing the proximate marginal edge of the coil spring assembly, flaps secured to the inner side of the outer-most pad of the respective pluralities and folded over the roll edge of the proximate intermediate pad, means securing the flaps in said folded position, and an intervening peripheral covering for the mattress secured for the entire thickness thereof at its edges to the edges of the outer-most pads for the entire thickness of the respective outer-most pads.

2. A mattress comprising two multiple pad units and an intervening coil spring assembly, and flaps on the inner side of the outermost pad of each of the pad units securing the pad to the proximate side of the coil spring assembly.

3. A mattress comprising two multiple pad units and an intervening spring assembly, each of the pad units including an outer pad having flaps secured to the inner side thereof, and means securing the flaps and the marginal edges of an inner one of the pads of each unit folded inwardly over the edge of the proximate side of the spring assembly.

4. A mattress comprising two multiple pad units and an intervening coil spring unit, flaps on the inner side of the outer-most pad of each of the pad units securing the pad to the proximate side of the coil spring assembly, and an intervening peripheral covering for the mattress secured for the full thickness thereof at its edges to the edges of the outer-most pads for the full thickness of the respective outer-most pads.

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