Dec. 18, 1928. 1,695,736

W. B. MATHEWSON

MATTRESS AND METHOD OF SIDE STITCHING THE SAME

Filed Dec. 28, 1923 2 Sheets-Sheet 1

Fig.1.

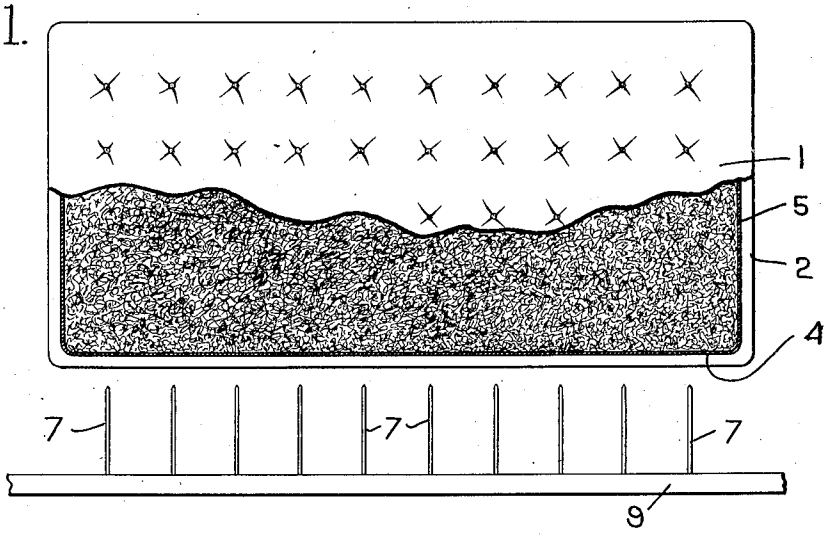


Fig.2.

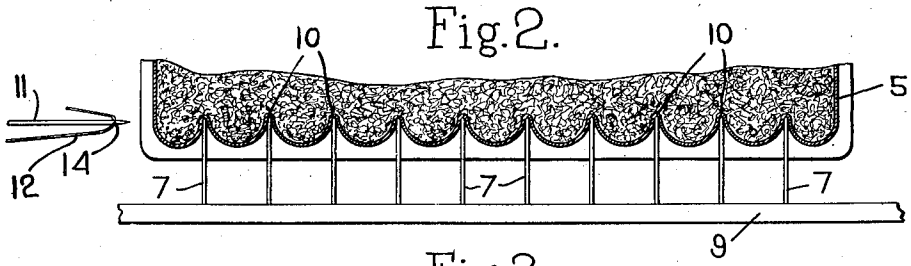


Fig.3.

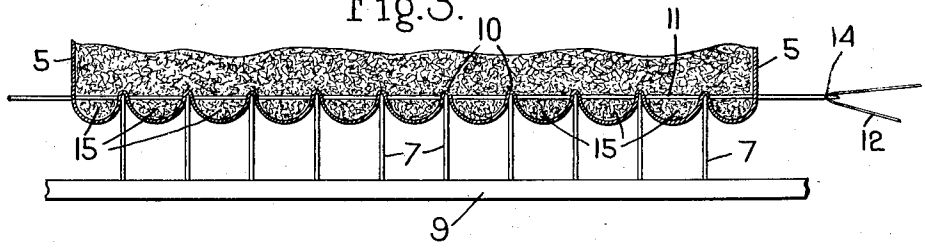


Fig.4.

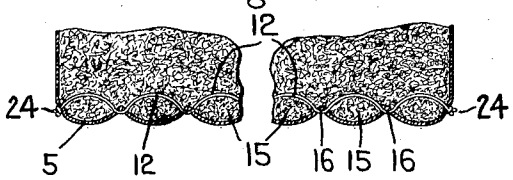
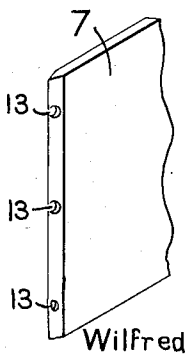


Fig.5.



Inventor.
Wilfred B. Mathewson
by Heard Smith & Tennant.
Attys.

Dec. 18, 1928. 1,695,736

W. B. MATHEWSON

MATTRESS AND METHOD OF SIDE STITCHING THE SAME

Filed Dec. 28, 1923 2 Sheets-Sheet 2

Fig. 6.

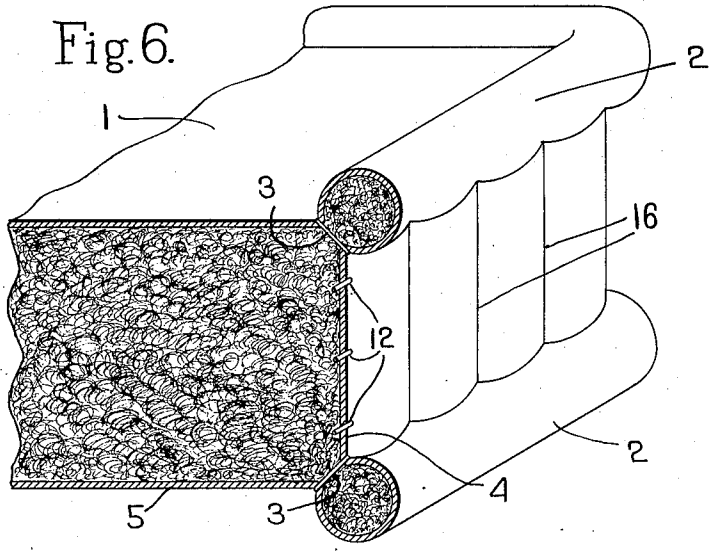


Fig. 7.

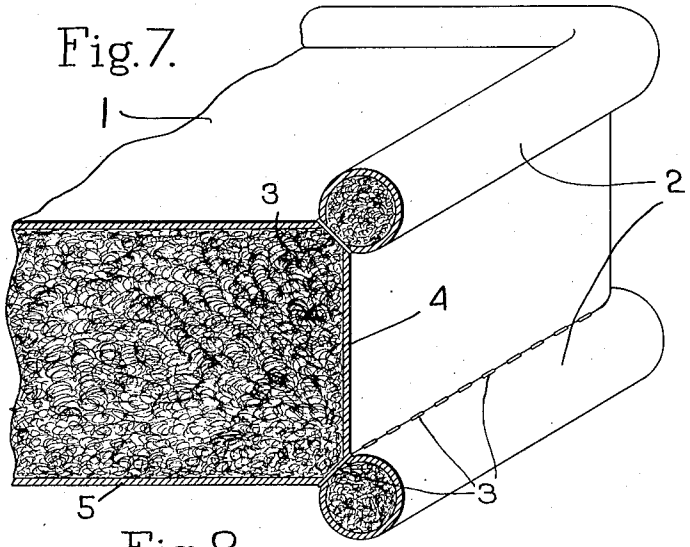
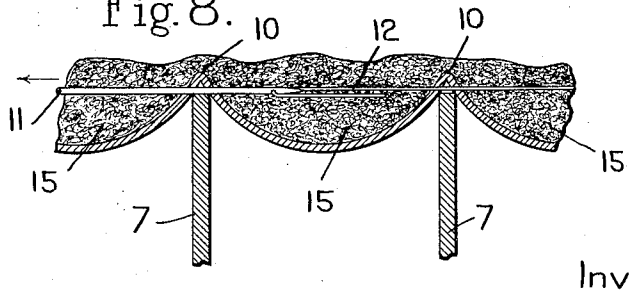


Fig. 8.



Inventor.
Wilfred B. Mathewson
by Heard Smith & Tennant.
Attys.

Patented Dec. 18, 1928. 1,695,736

UNITED STATES PATENT OFFICE.

WILFRED B. MATHEWSON, OF NORTH WEYMOUTH, MASSACHUSETTS, ASSIGNOR TO SIMMONS COMPANY, OF KENOSHA, WISCONSIN, A CORPORATION OF DELAWARE.

MATTRESS AND METHOD OF SIDE STITCHING THE SAME.

Application filed December 28, 1923. Serial No. 683,180.

This invention relates to a novel mattress and a novel method of stitching the side edges thereof so as to give them a scalloped or fluted shape and appearance such as is embodied in the mattress known to the trade as the "Imperial edge mattress." The process consists in forming a plurality of separate indentations in the mattress edge and then inserting a cord or length of twine through the indented portion of the mattress in such a way that the twine will intersect the indentations near the inner extremities thereof.

In forming the indentations the stuffing or filling of the mattress is crowded into the bulging portions of the mattress between the indentations so that when the twine is inserted it passes back of the mattress filling in the bulging portions and then passes through the ticking near the inner ends of the indentations. After the twine has been thus inserted it is drawn taut and anchored at its ends to the ticking and the result will be a fluted or scalloped mattress edge of the so-called "Imperial type." Since the twine is anchored to the ticking at the separated points where the indentations were formed and passes around some of the mattress filling between such anchoring points this causes the ticking to be drawn inwardly at the points where the cord is anchored and to bulge outwardly at points between the anchoring points. This method of stitching thus gives the desired Imperial edge and at the same time it operates to preserve the shape of the mattress edge and prevent it from slumping as it is used.

In order to give an understanding of my invention I have illustrated in the drawings one way of practicing the invention which will now be described after which the novel features will be pointed out in the appended claims.

Figs. 1, 2 and 3 are views showing the various steps in the process of side stitching the mattress;

Fig. 4 is a fragmentary sectional view showing the construction after the mattress is completed;

Fig. 5 is a fragmentary perspective view of one of the indenting blades;

Fig. 6 is a sectional perspective view showing a portion of a mattress which has been side stitched according to my improved method;

Fig. 7 is a similar view of the mattress before the side stitching is performed;

Fig. 8 is an enlarged sectional view showing the manner in which the cord or thread is drawn through the indented mattress;

As stated above one feature of this invention relates to a method of side stitching the edge faces of mattress to give them the fluted or scalloped shape and appearance commonly known as the "Imperial edge," and illustrated in Fig. 6. The mattress shown in said figure comprises a mattress body 1 having the usual roll edges 2 which are formed in some suitable way as by means of stitching 3 inserted across the corners of the mattress.

One purpose of the present invention is to provide a novel method of giving the side edges 4 of the mattress the fluted appearance shown in Fig. 6 wherein the portions of the ticking 5 are drawn inwardly at separated points as shown at 6, the portions of the ticking between the inwardly-drawn portions swelling or bulging outwardly to give the desired fluted appearance.

The improved method by which this result is attained consists in forming a plurality of indentations in the side face 4 of the mattress and then drawing one or more cords or lengths of twine through the mattress in such a way that they cross the indentations and thus pass through the ticking adjacent the innermost limit of each indentation.

The indentations may be formed in various ways without departing from the invention. One convenient way is to use indenting blades which are pressed against the mattress edge thereby forming the desired indentations.

In Fig. 1 a mattress 1 is shown having the roll edge 2 but having the side face 4 plain or non-indented as shown in Fig. 7. The first step of indenting the sidge edge 4 is performed by a plurality of indenting blades 7 which are herein illustrated as carried by a support or holder 9. These blades 7 preferably have a width substantially equal to the width of the side face 4 of the mattress and they are suitably spaced apart. Said blades 7 are pressed against the side face 4 of the mattress as shown in Fig. 2 thus forming the indentations 10 in said side face 4. While these indentations are retained a cord or thread 12 is inserted through the fabric parallel to the edge 4 and in such position that it will cross or intersect the indentations thus

passing through the ticking at the inner extremities of each indentation as seen in Fig. 3. Such cord may be inserted or drawn through the mattress in various ways without departing from the invention. One convenient way is to make use of a needle 11 which is of a length equal to that of the mattress and which is inserted through the indented edge of the mattress and by means of which the cord 12 is drawn into place.

In order that the blades 7 may not interfere with the insertion of the needle the edges of the blades are provided with notches 13 through which the needle passes as it is inserted, these notches acting as a guide for the needle. Since the ticking 5 is carried around the edge of each blade 7 the insertion of the needle through the notches 13 will cause the needle to pass through the ticking at the inner extremity of each indentation as shown best in Fig. 8, the needle passing behind portions 15 of the mattress filling between the indentations.

As herein illustrated the needle 11 is shown as having an eye at its point and the operation of drawing the cord 12 through the mattress may be accomplished either by first threading the needle and then forcing the threaded needle through the mattress and through the notches 13 thus carrying the cord into place, or it may be accomplished by first inserting the needle through the mattress as shown in Fig. 3 and then threading the needle and pulling the needle back thereby to draw the cord into place. In either event the cord or twine inserted will pass around the portions 15 of the mattress filling and through the ticking at the points 16 as shown in Figs. 4 and 8.

After the cord has been properly located in the mattress the ends of the cord may be anchored to the matress in any suitable way as by means of knots 24. After the cord has thus been secured in place the indenting blades may be withdrawn after which the mattress side face assumes the shape shown in Figs. 4 and 6. The cord 12 thus passes around the portions 15 of the mattress filling and is anchored to the ticking at the points 16 where it passes through the latter. The tension on the cord draws the ticking inwardly at the points 16 and causes the mattress edge to bulge or swell slightly between the points 16 thus giving the desired fluted or scalloped appearance.

One or more such cords 12 may be used in each edge of the mattress as desired. In the construction shown the blade is provided with three notches 13 thus permitting the insertion of three separate cords. The number of cords 12 thus inserted will depend something on the thickness of the mattress and the shape which it is desired to give to the edge.

I have above illustrated the invention as applied to making a mattress with a scalloped edge in which the scallops or flutes extend vertically or transversely of the length of the mattress. My invention, however, is not limited to making the scallops in this position as it would be possible to make the edge of the mattress with scallops extending longitudinally thereof by using indenting blades that extend the length of the edge 4 rather than transversely thereto and by inserting the stitching transversely through the mattress instead of longitudinally. In such case a tied loop of twine may be used instead of a single knotted cord.

In a mattress which is made in accordance with the above-described process the cord 12 extends substantially parallel to the top and bottom faces of the mattress. In other words, substantially all points of each cord 12 are the same distance from either the top or the bottom face of the mattress. The advantage of this construction is that the tension on the cord which draws the ticking inwardly at the point 16 and maintains the indentations is exerted in a direction substantially at right angles to the edge face of the mattress so that the indentations will be accurately preserved.

I claim:

1. The process of side stitching a mattress which consists in indenting the side of a filled mattress at a plurality of separated points simultaneously so as to form a row of indentations and inserting a length of twine through the mattress body longitudinally of said row of indentations and in such position so as to cross each indentation near its inner end.

2. The process of side stitching a mattress which consists in indenting the mattress at a plurality of separated points simultaneously and while the indentations are maintained, inserting a plurality of cords through the mattress filling longitudinally of the row of indentations and so as to cross the inner end of each indentation.

3. The process of side stitching mattresses which consists in forcing a plurality of indenting blades against the side of a filled mattress thereby forming a plurality of indentations therein and inserting a cord in a straight line through the mattress longitudinally of the row of indentations and across the inner end of each indentation.

4. The process of side stitching a mattress which consists in indenting the side of a filled mattress at a plurality of separated points thereby producing bulging portions between the indentations and then inserting a length of twine longitudinally of the row of indentations and in such position as to cross each indentation near its inner end, whereby the length of twine is anchored to the ticking at the points where it crosses the indentations and passes around some of the filling between adjacent indentations.

5. The process of side stitching a mattress which consists in forming a plurality

of indentations in the side of a filled mattress with the inner end of the indentations in alignment with each other, inserting a needle through the body of the mattress longitudinally of the row of indentations and in such a position that the needle passes through the ticking at the inner end of each indentation and then drawing a stay cord or length of twine through the mattress by means of the needle.

6. A mattress having a plurality of indentations in its side face and a cord for maintaining said indentations, which cord is anchored to the ticking of said side face only and at the apex of each indentation, the portions of the cord between the points of anchorage extending through the mattress filling between the indentations and all portions of said cord having substantially the same distance from either the top or bottom of the mattress.

7. A mattress having a plurality of indentations in its side face which are maintained by a cord situated in a plane substantially parallel to the top and bottom faces of the mattress and anchored to the ticking at said side face only and at the apices of the indentations, the portion of the cord between the points of anchorage extending through the mattress filling between the indentations.

8. The process of side stitching a filled mattress which consists in indenting at separate points the side of a previously-filled mattress and inserting a cord through the mattress and filling thereof so as to intersect each indentation with the portion of the cord between indentations passing through the mattress filling.

In testimony whereof, I have signed my name to this specification.

WILFRED B. MATHEWSON.