

Mar. 27, 1923.

1,450,102.

W. B. MATHEWSON.

ROLL EDGE MATTRESS AND METHOD OF MAKING THE SAME.

FILED JUNE 2, 1920.

2 SHEETS—SHEET 1.

Fig. 1.

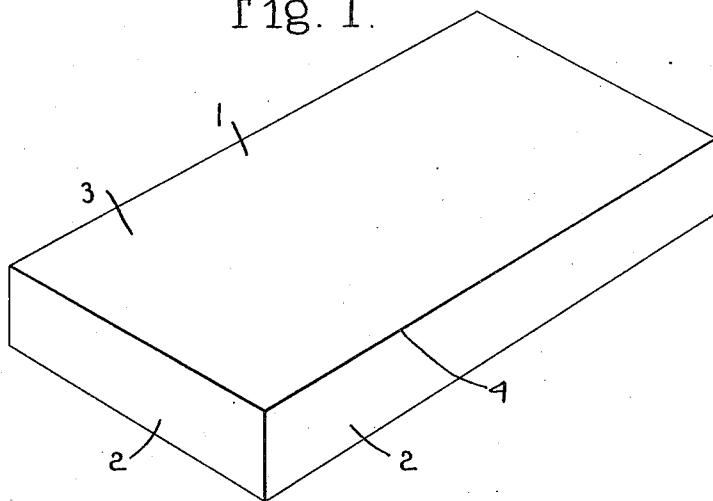


Fig. 2.

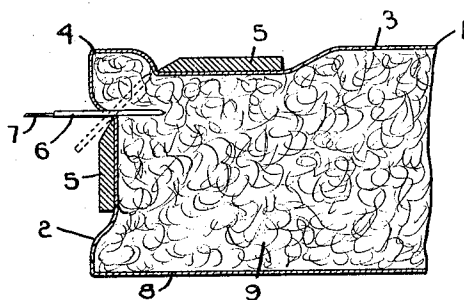
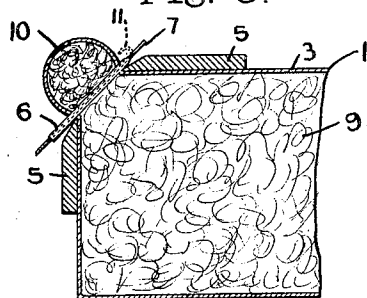


Fig. 3.



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

Mar. 27, 1923.

1,450,102.

W. B. MATHEWSON.

ROLL EDGE MATTRESS AND METHOD OF MAKING THE SAME.

FILED JUNE 2, 1920.

2 SHEETS--SHEET 2.

Fig. 4.

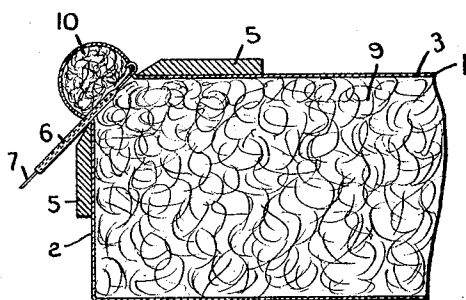


Fig. 5.

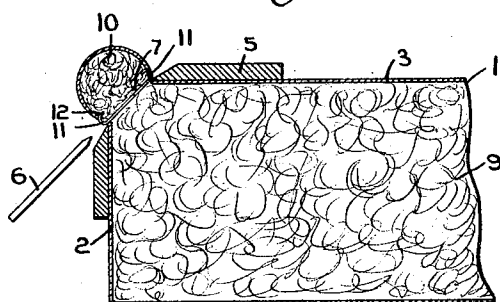


Fig. 6.

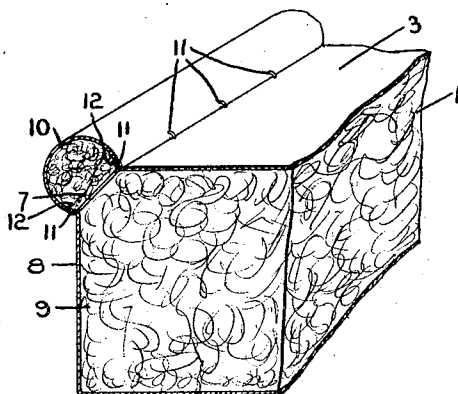
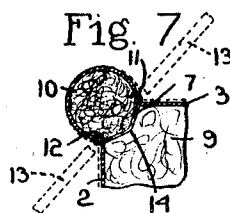


Fig. 7



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

UNITED STATES PATENT OFFICE.

WILFRED B. MATHEWSON, OF NORTH WEYMOUTH, MASSACHUSETTS.

ROLL-EDGE MATTRESS AND METHOD OF MAKING THE SAME.

Application filed June 2, 1920. Serial No. 385,985.

To all whom it may concern:

Be it known that I, WILFRED B. MATHEWSON, a citizen of the United States, residing at North Weymouth, county of Norfolk, State of Massachusetts, have invented an Improvement in Roll-Edge Mattresses and Methods of Making the Same, of which the following description, in connection with the accompanying drawing, is a specification, like characters on the drawing representing like parts.

This invention relates to roll edge mattresses and method of making the same and has for one of its objects to provide a roll edge mattress having a novel means for retaining the roll edge formation in the mattress, and also to provide a novel method of forming the roll edge and inserting the fastening devices or holding means which retain the roll edge shape. The fastening devices which I prefer to employ are in the form of lengths of wire which are inserted diagonally through the edge of the mattress and the ends of which are bent over to engage the mattress cover or ticking. In practicing my improved method, I insert into the side of the mattress, and in a direction perpendicular to the side face, a plurality of tubular needle-like elements, each carrying a fastening wire, and then swing said needles into an angular position thereby crowding some of the filling firmly into the edge of the mattress to produce the roll edge, after which the needles are continued through the mattress thereby carrying the fastening devices through the mattress. The needles are then withdrawn and the ends of the fastening devices are bent over into hook shape thereby to engage the exterior of the mattress cover, said fastening devices thus acting to maintain the roll edge shape.

In order to give an understanding of my invention, I have illustrated in the drawings more or less diagrammatically one manner in which the invention may be practiced.

In the drawings, Fig. 1 indicates a mattress when it has first been stuffed and before the roll edge is formed;

Figs. 2, 3, 4 and 5 are sectional views showing the various steps in the process of forming the roll edge in accordance with my invention;

Fig. 6 is a sectional perspective view showing the completed mattress.

Fig. 7 shows a different embodiment of the invention.

Referring first to Fig. 6, which shows a mattress made in accordance with my invention, 1 indicates a mattress body having the ticking or cover 8 and the filling 9. The roll edge of the mattress is indicated at 10 and this is held in its desired shape by means of wire-fastening members 7 which extend diagonally through the edge of the mattress and which have their ends bent over to form hook portions 11, the points 12 of which re-enter the cover or ticking 8. There may be as many of these wire-fastening members as desired along the edge of the mattress. The method by which these are inserted is illustrated in Figs. 1 to 5 inclusive.

In Fig. 1 I have shown a mattress which has just been stuffed and which has the side faces 2 extending at substantially right angles to the top face 3 and the corresponding bottom face. In order to produce the roll edge along any corner edge, as, for instance, the corner edge 4, I first apply pressure to the side face 2 and top face 3 at a slight distance back from the edge 4, as shown in Fig. 2, by means of clamping plates or pressure plates 5. This operation results in bulging the edge 4 somewhat. When the mattress is in this condition a plurality of tubular needle-like elements 6 are inserted into the mattress through the side 2 above the clamping member 5 and in a direction substantially perpendicular to the side 2. Each needle-like member 6 is tubular, as stated above, and carries within it a length 7 of wire which is to constitute one of the fastening means for retaining the roll edge shape.

After the needles have been inserted, as shown in Fig. 2, they are swung down into the dotted line position and are then advanced so as to carry them clear through the edge of the mattress, as shown in Fig. 3. The turning of the needles from the full to the dotted line position, Fig. 2, will crowd some of the filling 9 up into the edge 4 and will make the rounded or roll edge desired and will also firmly pack the material in this edge so as to make a hard and solid roll edge. I will preferably employ a sufficient number of needles to extend the whole length of the edge 4 so that at one operation all the needles are inserted and then turned into the dotted line position, Fig. 2, thereby simultaneously producing the roll edge throughout its entire length.

The advancing of the needles into the posi-

tion shown in Fig. 3 results in carrying the fastening members 7 through the edge of the mattress, and after this has been done the wires are advanced slightly so as to carry the ends thereof beyond the ends of the needles. The projecting ends of the wires are then bent into the hook shape shown at 11 in dotted lines Fig. 3, and the needles are then partially withdrawn, as shown in Fig. 4. This withdrawing movement of the needles carries the wires backwardly by friction until the hooks 11 engage the mattress. The needles are then completely withdrawn, as shown in Fig. 5, the wires are cut to the proper length, and the other ends of the wires are bent into hook shape.

After the ends of the members have been thus given their hook shape, as shown in Fig. 5, then the clamping members 5 can be removed and the points 12 of the hook portions 11 can be caused to re-enter the ticking 8, as shown in Fig. 6. This may be done either by subjecting said ends to pressure or by the natural expansion of the ticking after the pressure of the clamping plates 5 is removed. In either event, the ends of each fastening member become anchored in the ticking, and said fastening members serve to securely retain the roll edge shape on the mattress.

In Fig. 6 a construction is shown in which the fastening members 7 are straight. If it is desired to give the roll edge some elasticity, I propose to bend the fastening members 7 slightly between their ends, as shown in Fig. 7. After the wires have been inserted and the ends bent over, as shown in Fig. 5, then the bent-over ends 11 of the wires may be subjected to end pressure between two jaws 13, as shown in Fig. 7, such end pressure operating to bring the hook ends 11 toward each other and thus form a bend 14 in the wire-fastening 7. This manner of making wire fastenings provides a more or less elastic roll edge, for if any strain comes on the roll edge, the wires will tend to straighten slightly and thus relieve the strain. This construction may be of advantage where there is danger that the hooks 11 will be drawn through the mattress. The subjecting of the hooks 11 to pressure between the jaws 13 also assists in embedding the points 12 of the hooks into the mattress.

I claim:

1. A mattress having a roll edge and provided with a plurality of separate wire fastening members extending diagonally across the edge, each fastening member comprising a single strand of wire having both of its

ends bent over into hook shape, with the points re-entering the ticking of the mattress.

2. A mattress having a roll edge and provided with a plurality of wire fastening members extending diagonally across said edge, each fastening member comprising a single length of wire having its ends projecting beyond the ticking on opposite sides of the roll edge, both ends being bent over into hook shape, and the points of the both hooks re-entering the ticking of the mattress.

3. The steps in the method of making a roll edge mattress which consists in forming the mattress with a roll edge, and then inserting separate lengths of wire diagonally through said roll edge and bending both ends of each wire length backwardly into hook shape, so that the points of the hook re-enter the ticking of the mattress.

4. The method of making a roll edge mattress which consists in subjecting the side and top faces of the mattress to pressure thereby bulging the mattress at the corner, inserting tubular needle members, each carrying a wire-fastening, into one of the compressed faces of the mattress in a direction at right angles thereto, then swinging said needles into diagonal position thereby forcing the filling of the mattress firmly into the edge, advancing the needles through the edge of the mattress thereby carrying the wire fastenings through said edge, withdrawing the needles and bending both ends of each fastening member over into hook shape.

5. The method of making a roll edge mattress which consists in subjecting the edge and side faces of the mattress to pressure thereby to cause the corner to bulge, compressing the filling of the mattress into said corner, inserting separate lengths of wire diagonally through the corner, and bending both ends of each length over into hook shape and causing the points thereof to re-enter the mattress.

6. The steps in the method of making a roll edge mattress which consists in forming the mattress with a roll edge, inserting lengths of wire diagonally through said roll edge, bending the ends of each wire over into hook shape and then subjecting the hook ends to pressure thereby to force the points thereof into the mattress and produce a bend in the body of said wires.

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

WILFRED B. MATHEWSON.