May 22, 1934. W. B. MATHEWSON 1,960,118

METHOD OF TAPING MATTRESSES

Filed July 30, 1932

Fig.1.

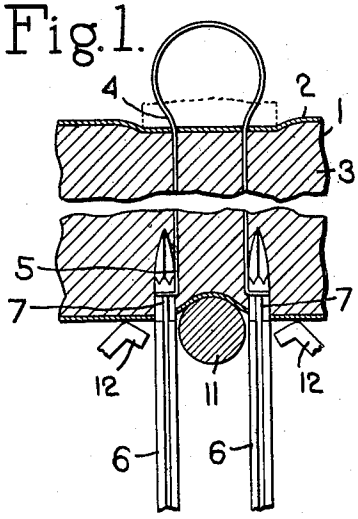


Fig.2.

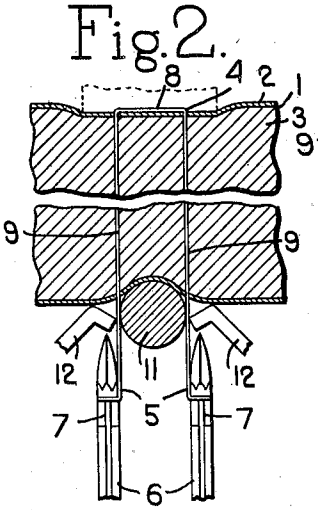


Fig.3.

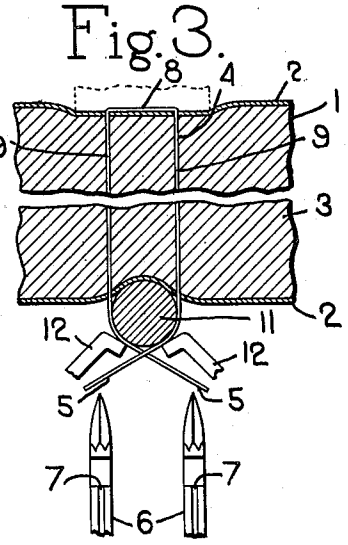


Fig.4.

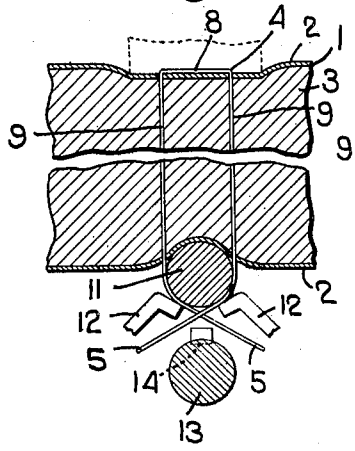


Fig.5.

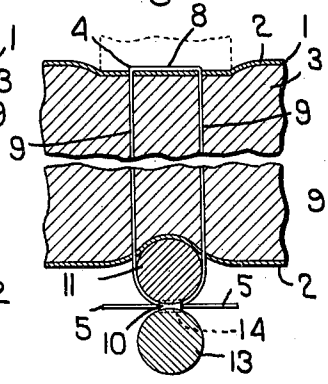


Fig.6.

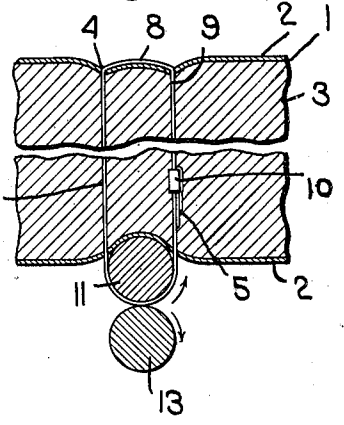
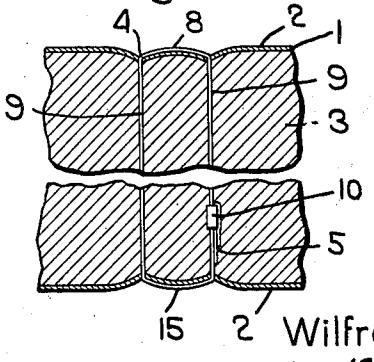


Fig.7.



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

Patented May 22, 1934 1,960,118

UNITED STATES PATENT OFFICE

1,960,118

METHOD OF TAPING MATTRESSES

Wilfred B. Mathewson, North Weymouth, Mass., assignor to United Mattress Machinery Co. Inc., Quincy, Mass., a corporation of Maine

Application July 30, 1932, Serial No. 626,869

4 Claims. (Cl. 112—3)

This invention relates to a method of taping mattresses and has for its object to provide a novel method for accomplishing this end by which the ends of the tying tape which are secured together are located within the body of the mattress instead of being exposed on either surface thereof.

In carrying out my invention the two ends of a tying tape of a proper length are drawn through the mattress at spaced points and said ends are then connected together in some suitable way on the exterior of the mattress after which the tying tape, which is then in the form of a loop, is reeved through the mattress so as to carry the point where the two ends of the tape are connected through the ticking of the mattress and into the body thereof.

In order to give an understanding of the invention I have illustrated in the drawing more or less diagrammatically one way in which the method may be practised and which will now be described after which the novel features will be pointed out in the appended claims.

Figs. 1, 2, 3, 4, 5, and 6 are fragmentary sectional views illustrating different steps in the process of taping a mattress embodying the present invention;

Fig. 7 is a fragmentary sectional view showing a portion of the mattress after it is taped.

In the drawing 1 indicates generally a portion of a mattress, said mattress having the usual ticking 2 and the filling 3. In carrying out my improved method I first provide a tape 4 of suitable length and then draw the two ends 5 of the tape through the mattress 1 at spaced points as shown in Figs. 1 and 2. This step may be accomplished by suitable means and as shown in said Figs. 1 and 2 I provide two needles 6 which are adapted to be thrust through the mattress and are provided with suitable tape-gripping means 7 for gripping the ends 5 of the tape. These needles 6 may be thrust up through the mattress and then caused to grip the ends 5 of the tape after which the needles may be withdrawn from the mattress as shown in Fig. 2 which will result in drawing the two ends 5 of the tape 4 through the mattress at spaced points thereby leaving a portion 8 of the tape on the upper surface thereof, other portions 9 of the tape extending through the mattress. At this time the tape has a general U shape, the portion 8 constituting the bridge of the U and the portions 9 the legs thereof. The next step in the process is to secure together the two ends 5 of the tape on the under side of the mattress and this may be done in any suitable or approved way. I have illustrated herein means by which the ends 5 of the tape can be secured together by a metallic fastener shown at 10.

After the two ends 5 of the tape have been drawn through the mattress as shown in Fig. 2 said ends are then released from the needles 5 and placed in crossing relation as shown in Fig. 3 and the fastener 10 is then applied and clinched to the crossing ends to fasten them together. In the drawing there is illustrated a roll 11 situated beneath the mattress and on which the mattress rests, said roll being also situated between the needles 6 and, therefore, between the portions 9 of the tape after it has been drawn through the mattress as shown in Fig. 2.

Two wipers are shown at 12 which may be manipulated to engage the ends 5 of the tape after they have been released from the needles 6 and force said ends into the crossing relation shown in Fig. 3, said ends crossing each other below the roll 11.

So far as this invention is concerned the fastener 10 may be applied to the crossed ends 5 in various ways. I have, however, shown a cylindrical member 13 which is provided with a recess 14 to receive a fastener device 10. Said member may be moved relative to the roll 11 as shown in Fig. 5 thereby causing the fastener 10, which may be in the form of a staple or other suitable fastening device, to be clinched to the ends 5 of the tape at the point where they cross. In this operation the fastener 10 is pressed between the roll 11 and the member 13 thereby causing it to be firmly clinched to the crossing ends 5. This step of the operation is indicated in Fig. 5.

At this point in the operation the tape 4 will be in the form of a closed loop with the point at which the ends of the tape are fastened together on the outside of the mattress and beneath the roll 11. The next step in the operation is to reeve the tape in the form of the closed loop through the mattress so as to cause the fastener device 10 to pass through the lower ticking 2 into the body of the mattress as shown in Fig. 6.

This operation may be carried out in various ways but is illustrated as being performed by giving rotative movement to the roll 11 and the member 13 is shown by the arrows in Fig. 6.

The tape 4 is gripped between these two rolling parts 11 and 13 and the friction of the parts against the tape causes the tape to be reeved through the mattress which will shift the position of the fastening device 10 from a position outside of the mattress to a position within the mattress.

At this time the rolls 13 and 11 may be with-

drawn thereby leaving the mattress taped and in the condition shown in Fig. 7.

I claim:

1. The method of taping a mattress which consists in gripping the two extremities of a previously cut length of tape and drawing them through the mattress at spaced points, passing said ends around a roller with which the mattress is in engagement, fastening the ends together so as to produce frictional engagement between the tape and the roller and then rotating the roller to reeve the tape through the mattress and to carry the fastening device through the ticking into the body of the mattress.

2. The method of taping a mattress which consists in gripping the two extremities of a length of tape and drawing said extremities through the mattress at spaced points by applying a pulling strain thereto, securing the ends of the tape together on the side of the mattress from which the extremities emerge and then reeving the tape through the mattress to cause the point where the ends are secured toegther to be drawn through the ticking and into the body of the mattress.

3. The method of taping a mattress which consists in gripping the extremities of a length of tape and drawing said extremities simultaneously through the mattress at spaced points by applying a pulling strain thereto, securing the ends of the tape together on the outside of the mattress and then reeving the tape through the mattress to cause the point where the ends are secured together to be drawn through the ticking and into the body of the mattress.

4. The method of taping a mattress which consists in placing the mattress in contact with a roller, gripping the two extremities of a previously cut length of tape and drawing them through the mattress on opposite sides of the roller, crossing the ends of the tape around the roller and in frictional engagement therewith, securing the crossed ends together and rotating the roller and thereby causing the tape to be reeved through the mattress to a sufficient extent to the point where the ends are fastened together through the ticking and into the body of the mattress.

WILFRED B. MATHEWSON.