Nov. 28, 1933. W. B. MATHEWSON 1,936,726

IMPLEMENT FOR APPLYING TUFTING BUTTONS TO MATTRESSES OR THE LIKE

Filed Jan. 24, 1933

Fig. 1.

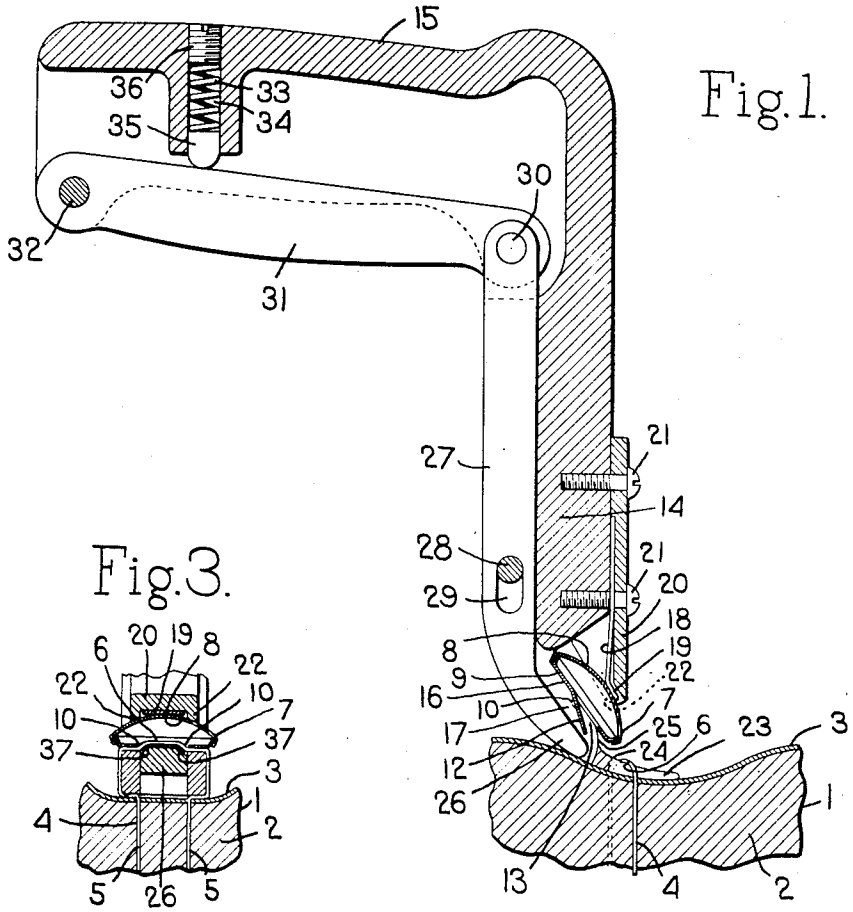


Fig. 3.

Fig. 4.

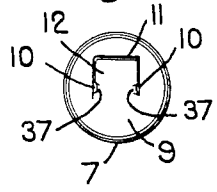


Fig. 2.

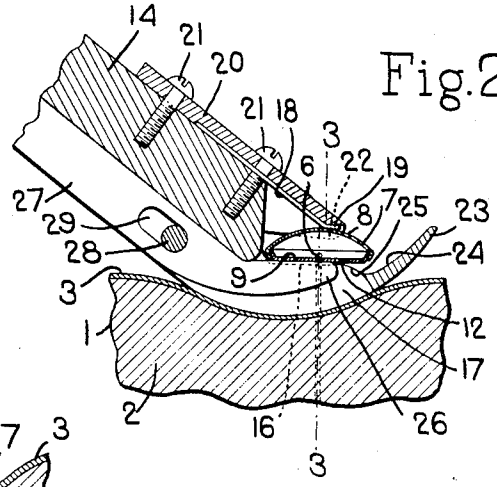
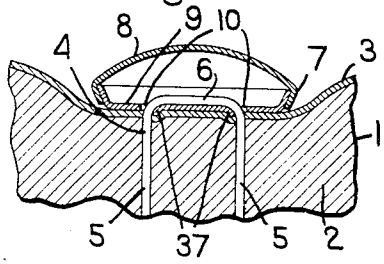


Fig. 5.



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IMPLEMENT FOR APPLYING TUFTING BUTTONS TO MATTRESSES OR THE LIKE

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6 Claims. (Cl. 45—138)

One common way of tufting mattresses and similar articles is to insert in the mattress individual loops of tufting cord or tufting tape at the points where the tufts are to be located and subsequently to attach tufting buttons to the portions of the tufting loops which are exposed on the exterior of the mattress. This operation of attaching the tufting buttons to the loops of tufting cord has usually been done by hand.

One of the objects of the present invention is to provide a novel implement by which these tufting buttons can be rapidly and securely attached to the loops of tufting cord.

In order to give an understanding of the invention, I illustrated in the drawing a selected embodiment thereof which will now be described, after which the novel features will be pointed out in the appended claims.

In the drawing:

Fig. 1 is a sectional view of a button-attaching device embodying my invention and showing the initial operation of attaching the button.

Fig. 2 is a fragmentary sectional view showing the completion of the operation of attaching the button.

Fig. 3 is a section on the line 3—3, Fig. 2.

Fig. 4 is an under side view of the button.

Fig. 5 is a fragmentary sectional view through the mattress and button showing the button as it has been applied to the tape.

In the drawing, 1 indicates a portion of a mattress, 2 being the filling of the mattress and 3 the ticking.

4 indicates a loop of tufting cord or tufting tape which is inserted through the mattress and to which the button is to be attached. These loops are so inserted in the mattress that the two sides or legs 5 of each loop are separated from each other, with the result that the bend or end 6 of each loop will be exposed on the exterior surface of the mattress. In tufting a mattress, the tufting buttons are secured to this exposed portion 6 of the loop of tufting cord.

7 indicates a tufting button to be attached to the exposed portion 6 of the loop 4. The tufting button herein shown has the convex front portion 8 and the flat rear portion 9, said front and rear portions being secured together at the periphery of the button in any usual way. The rear portion 9 of the button is provided with a cord-receiving passage adapted to receive the portion 6 of the loop of tufting cord or tape and the button shown is provided with an open throat leading to this passage. The cord-receiving passage is constituted by two openings or apertures 10 formed in the back portion 9 of the button and through which the cord is threaded when the button is finally attached to the loop 4. The normally open throat is provided for by making the back of the button with the U-shaped slit 11 extending from one opening 10 to the other and then bending the portion 12 bounded by said slit outward with relation to the back of the button, as best seen in Fig. 1. This forms an open throat 13 between the tongue and the back of the button which leads to the cord-receiving passage 10.

The button-inserting implement here illustrated comprises means for supporting the button, a finger adapted to be inserted into the loop and having means associated therewith to guide the loop into the passage 10 through the open throat 13, combined with means for closing the throat by pressing the tongue 12 into substantially the plane of the back of the button. This operation firmly locks the button to the loop.

Said button-applying implement is formed with a body portion 14 which carries at one end the button-supporting means and said finger, and also with a handle portion 15, which is shown as extending at right angles from the body portion, said handle portion and body portion having a general L shape. The body portion 14 is formed at one end with a button-receiving seat 16 on which the button rests. This button-receiving seat is provided with an opening 17 in which the tongue 12 is received when the button is in place on the seat. The button is retained on the seat by a button-retaining spring 18 which is shown as a leaf spring secured at one end to the body portion 14 and having its end 19 bent slightly and of a shape to bear against the top of the button. Associated with the spring is a cap member 20 which is secured to the body portion 14 by means of suitable screws 21. The shank of the spring 18 is confined between the cap member 20 and the body portion 14 and said spring is retained in place by one of the screws 21.

This cap member extends beyond the body portion and its end overlies the button-receiving seat 16. Said cap portion is formed at each edge with the flange 22 which provides a backing for the button when the button is being locked to the cord or tape by the operation of bending the tongue 12 into the plane of the back portion of the button, as will be presently described.

The body portion 14 is formed at its extremity with a curved finger 23 which extends beyond the seat portion 16 and which is adapted to be inserted underneath the portion 6 of the loop, as

shown in Fig. 1. The upper edge 24 of this finger merges into a guiding surface 25 formed at the front end of the seat portion 16, said guiding surface operating to guide the portion 6 of the loop into the throat of the button, as will be presently described.

In using the device, a button with the projecting tongue 12 and open throat 13 is placed on the button-receiving seat 16, with the tongue 12 occupying the opening 17 as shown in Fig. 1, said button being yieldingly held to the seat by the spring-retaining member 18 which engages the convex front face of the button. The point 23 of the implement is then inserted beneath the portion 6 if the loop of tufting cord or tape and the finger is forced through the loop, during which operation the implement is turned slightly from the position shown in Fig. 1 to that shown in Fig. 2. During this operation the portion 6 of the loop is guided over the upper face 24 of the finger 23 and over the guiding surface 25 through the open throat 13 of the button and into the cord-receiving passage 10. This operation applies the button to the loop of the cord.

The implement is provided with means for locking the button to the cord by bending the tongue 12 into the plane of the back of the button, thereby closing the throat 13. For this purpose the body portion 14 of the implement is provided with a clamping jaw 26 adapted to engage the tongue 12, together with means for moving said jaw from the position shown in Fig. 1 to that shown in Fig. 2, by which movement the jaw engages the tongue and forces it into the plane of the back of the button, this closing the throat 13. This jaw 26 is carried on the end of a slide 27 which is slidably mounted on the body portion 14 and is guided in its sliding movement by means of a pin 28 carried by the body portion and operating in a slot 29 formed in the slide. The end of the slide is pivotally connected at 30 to one end of a lever 31 which operates in a slot formed in the front of the handle, said lever being pivoted to the handle at 32. 33 indicates a spring which is received in a srping-receiving chamber 34 formed in the handle and which bears against a follower 35 that engages the back side of the lever 31. The spring is retained in the chamber by means of a screw plug 36.

This spring normally holds the jaw 26 in its inoperative forward position shown in Fig. 1.

In the operation of the device after the button is placed in position in the implement, as above described, and the implement has been manipulated to carry the portion 6 of the loop through the throat 13 into the cord-receiving passage 10, then the operator presses on the lever 31 with the fingers of the hand which grasps the handle portion 15, thereby moving the slide 27 upwardly in Fig. 1 and causing the jaw 26 to engage the tongue 12 and bend the latter back into the opening in the back of the button from which said tongue was struck, as shown in Figs. 2 and 3. The button is thereby positively locked to the loop.

In making the openings 10, the sides of the tongue 12 are preferably deformed slightly, as shown at 37, so as to provide a rounded edge for engagement with the cord or tape.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is:

1. A device for applying tufting buttons to loops of tufting cord in a mattress and the like, said device having means for holding a button formed with a cord-receiving passage and an open throat leading to said passage, a finger to enter a loop of tufting cord and guide said loop through said throat into said passage, and means to close the throat, thereby to lock the cord in the passage.

2. A device of the class described having means for holding a button formed with a cord-receiving passage and a tongue projecting from said button and forming therewith an open throat leading to the passage, means to spread a loop of tufting cord and guide said loop through said throat into said passage, and means to bend the tongue relative to the button, thereby to close said throat.

3. A device of the class described having means for holding a button formed with a cord-receiving passage and a tongue projecting from said button and forming therewith an open throat leading to the passage, a finger to enter a loop of tufting cord and guide said loop through said throat into said passage, and means to bend the tongue relative to the button, thereby to close said throat.

4. A device of the class described having a seat for receiving a tufting button formed with a cord-receiving passage and an open throat leading thereto, a spring for yieldingly holding said button on said seat, means to spread a loop of tufting cord and to guide said loop through said throat into said passage, and means to close the throat, thereby to lock the cord in the passage.

5. A device of the class described having means for holding a button formed with a cord-receiving passage and a tongue projecting from said button and forming therewith an open throat leading to the passage, means to spread a loop of tufting cord and guide said loop through said throat into said passage, and a tongue-closing jaw to engage said tongue and bend the latter into a position to close said throat.

6. A device of the class described comprising a body portion and a handle portion, said body portion having a button-receiving seat to receive a button formed with a cord-receiving passage and an open throat leading thereto, means to retain a button on said seat, a loop-opening finger adapted to enter a loop of tufting cord and guide said loop through said throat into said passage, a movable jaw carried by the handle portion for closing the throat and means on the handle for actuating the jaw.

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