March 14, 1972 HIROSHI NAKANISHI 3,649,399

METHOD IN TAILORING OF PREVENTING ONE SIDE OF CLOTH FOLDED BACK FROM BEING UNFOLDED

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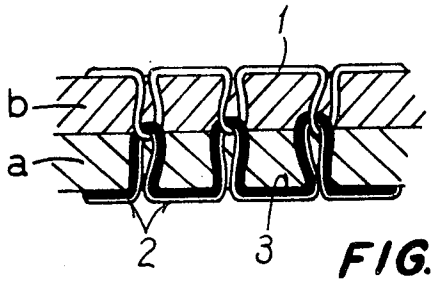


FIG. 4

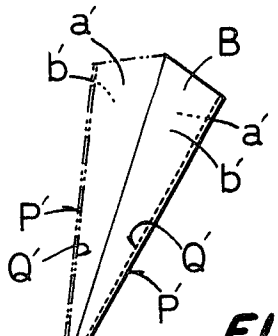


FIG. 1

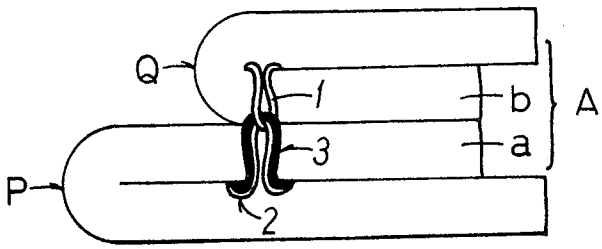
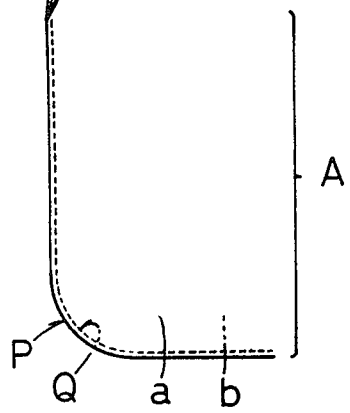


FIG. 5



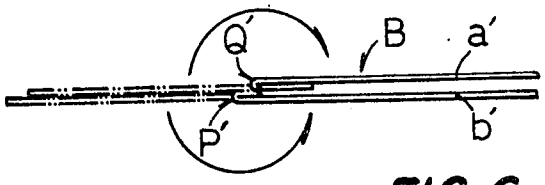


FIG. 6

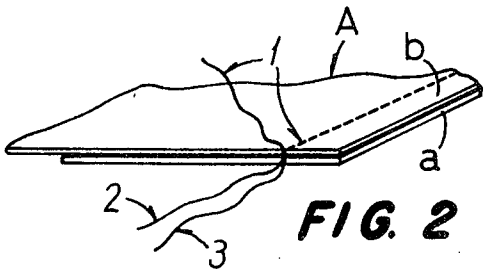


FIG. 2

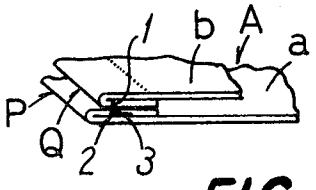


FIG. 3



FIG. 7

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METHOD IN TAILORING OF PREVENTING ONE SIDE OF CLOTH FOLDED BACK FROM BEING UNFOLDED

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Int. Cl. B32b 7/08
U.S. Cl. 156—93 6 Claims

ABSTRACT OF THE DISCLOSURE

This method of preventing one side of cloth folded back from being unfolded may be used in the tailoring of men's suit jackets. The method uses a synthetic resin fiber thread which has a low melting point. The cloths are sewn together by means of this fiber thread. They are then folded and heat is applied to the fold. The resin fiber melts, bonding the cloths and effecting a permanent fold.

The present invention relates to methods of tailoring.

In tailoring a suit, the method generally used to prevent the lapel from unfolding is as follows: The upper and under pieces of cloth are sewn together, they are folded back upon each other, and the hem is manually "star-stitched." Star-stitching is a special sewing technique which is performed by hand-labor. This is a troublesome process requiring a good deal of skill, and its use significantly increases tailoring coats. Moreover, the star-stitched portion tends to swell out. Such swelling is particularly a problem with cloth made of fine fibers. If the swelling occurs in the hem of the portion of the suit body below the first button, the suit begins to look unseemly. This condition has been generally thought by those skilled in the art to be unavoidable.

It is the objective of the present invention to dispense with manual stitching in preventing the folded lapel from being unfolded; improve efficiency of tailoring work; reduce costs; and prevent the swelling of cloth heretofore encountered in the star-stitched portion of the hem from the suit lapel to the undermost part of the body.

In accordance with the present invention, a method is provided for preventing the unfolding of cloth. The method is particularly adapted to the folding back and retention of the lapels in men's suits. Two layers of cloth are placed against each other so that surfaces destined for exposure face one another. The cloths are then sewn together, preferably on a sewing machine, with three threads. Two of the threads are of regular material, such as cotton. The third thread is of a low melting point plastic resin fiber. The cloth is folded, for example, by being folded back upon itself and heat is applied, for example, by a heating flat-iron. The fiber resin threads melt, binding the cloths together and fixing them in their folded position.

Other objectives of the present invention will be apparent from the detailed description of a preferred embodiment of the method of the present invention, taken in conjunction with the accompanying drawings. The accompanying drawings show the method, in tailoring, of preventing one side of cloth which is folded back from becoming unfolded.

In the drawings:

FIG. 1 is a top plan view showing the lapel and the body of a garment;

FIG. 2 is a perspective view showing how the hem of the body is sewn;

FIG. 3 is an enlarged perspective view of the portion of the body lower than the top button (first button), formed by two pieces of cloth sewn together and folded back;

FIG. 4 is an enlarged sectional view of the portion where two pieces of cloth are sewn together, as shown in FIG. 2;

FIG. 5 is an enlarged front view of the sewn cloth of FIG. 3;

FIG. 6 is a front view of the finished lapel showing the two pieces of cloth sewn together and folded back; and

FIG. 7 shows what is commonly called star-stitching.

Each piece of cloth has a right side and a back side. The right side means that surface of the cloth which is intended to be exposed to view. The back side means that surface of the cloth which is intended to be hidden from view. According to this invention, as shown in FIG. 2, cloth *b* is placed over a cloth *a* so that the right side of cloth *a* and the right side of cloth *b* face each other. Cloths *a* and *b* are then sewn together to form cloth *a*, *b*, using an upper thread **1**, an under thread **2**, and a second under thread **3**. The threads **1** and **2** are of the usual thread material such as cotton. The thread **3** consists of a synthetic resin fiber **3** which has a melting point below the temperature at which cloths *a* and *b* scorch or burn. Synthetic resin fibers having a melting point of 60–70° C. have been found satisfactory. The synthetic resin fiber may be expansible (netlike), filament-like in the form of a wide film, or formed by twisting a plurality of fibers. Examples of resins which may be employed are polyvinylchloride and ionomer resins.

If a straight line sewing machine is used, the synthetic resion fiber thread **3** and the under thread **2** can be wound together on a bobbin or placed in a case such as a bobbin case so as to permit free rotation. If a double loop sewing machine using a looper, or other special kind of machine is used, a synthetic resin fiber thread **3** and the under thread **2** can be twisted around each other or put together side by side, or be in the form of a single unitary thread having low melting point resin fiber filaments and filaments of natural fiber, such as cotton, or filaments of a high melting point synthetic resin, such as nylon, or the cotton thread may be coated with the low melting point resin.

After the cloths *a* and *b* are sewn together, they are folded back as shown in FIG. 3 at the portions marked P, Q and P′, Q′. The top surface of cloth *a*, *b* of the body A, as shown in FIG. 1, is called *a′*. The bottom surface of cloth *a*, *b* of body A, as shown in FIG. 1, is called *b′*. The lapel B is folded slantingly, as shown in FIG. 1, so that (1) the bottom surface *b′* of cloth *a*, *b* of the body A becomes the top surface of cloth *a*, *b* of lapel B; (2) the top surface *a′* of cloth *a*, *b* of the body A becomes the bottom surface of cloth *a*, *b* of lapel B; (3) the top fold line P of the body A of cloth *a*, *b* becomes the bottom fold line P′ of cloth *a*, *b* of the lapel B; and (4) the bottom fold line Q of cloth *a*, *b* of the body A becomes the top fold line Q′ of cloth *a*, *b* of lapel B. The fabric is then ironed using a heating flat iron. The application of heat causes the synthetic resin fiber thread **3** to melt. The melted synthetic resin penetrates cloths *a* and *b*, and causes these cloths to adhere to each other, thus affording a permanent fold.

Cloths folded by means of this invention never swell out. More specifically, this invention prevents the folded part from being unfolded in the portion of the hem from the lapel to the undermost part of the body. The use of this method will result in considerable saving of time and labor and will substantially decrease tailoring costs. Moreover, as a result of this invention, the under thread

is coated with the melting material of fiber 3. This coating serves to prevent the under thread 2 from being weakened by absorption of moisture, thereby strengthening the under thread and insuring that the under thread will never break earlier than the upper thread.

I claim:

1. A method of preventing at least one side of a fabric cloth having a plurality of layers which have been folded from becoming unfolded comprising the steps of placing two layers of fabric one on the other, sewing said two layers together with at least one thread from one side and with at least two threads from the other side, one of said two threads being a synthetic resin thread having a low melting point, folding each layer back upon itself to form a four layer fabric cloth in which the outer two layers are unsecured to the sewn together layers, applying sufficient heat to melt said synthetic resin fiber thread such that the said outer two layers become bonded to the sewn together layers to form a four layer cloth.

2. A method as in claim 1, wherein said syntheic resin fiber has a melting point within the range 60–70° C.

3. A method as in claim 1, wherein said synthetic resin fiber is polyvinylchloride.

4. A method as in claim 1, wherein said synthetic resin fiber is an ionomer resin.

5. A method as in claim 1, wherein said synthetic resin fiber is twisted around an under thread to form said under thread assembly.

6. A method as in claim 1, wherein said synthetic resin fiber is a thread which is side by side with an under thread.

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U.S. Cl. X.R.

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