Oct. 9, 1956 C. V. JORDAN 2,765,814

TEXTILE LABELS

Filed May 12, 1953 2 Sheets-Sheet 1

Fig. 1.

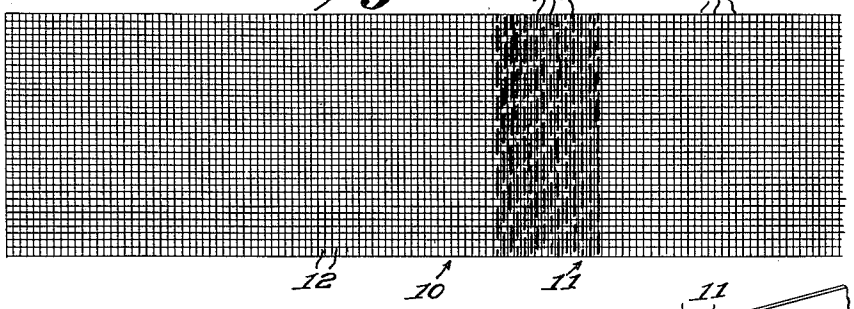


Fig. 2.

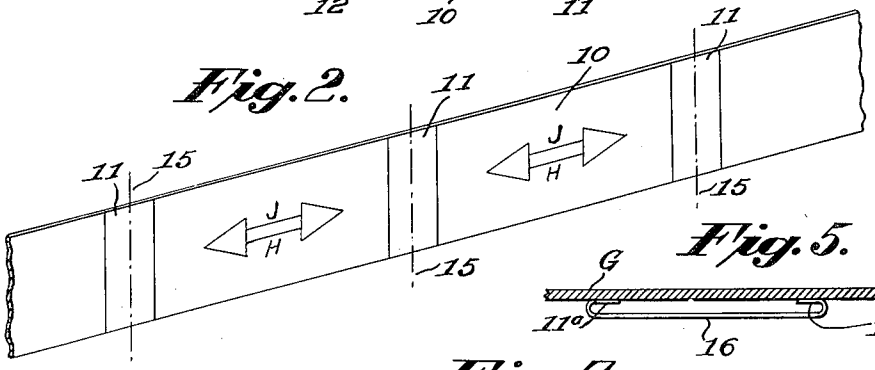


Fig. 5.

Fig. 3.

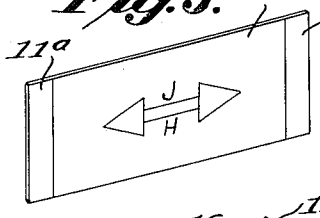


Fig. 7.

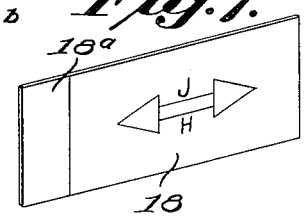
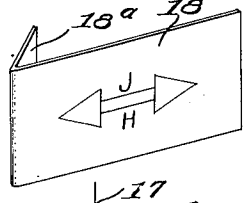


Fig. 8.



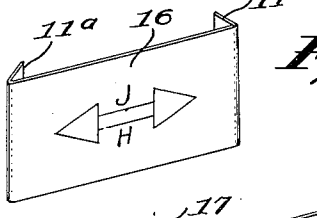


Fig. 4.

Fig. 6.

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Fig. 10.

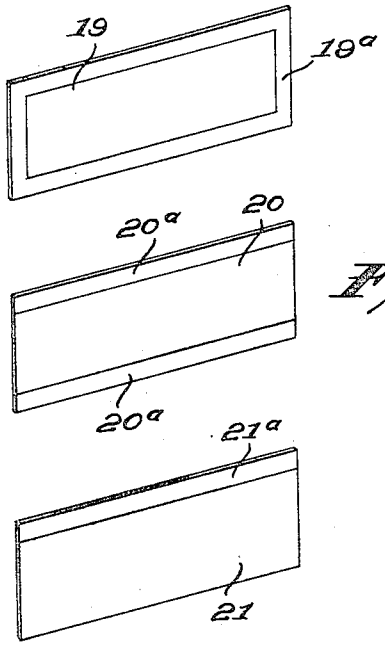


Fig. 12.

Fig. 13.

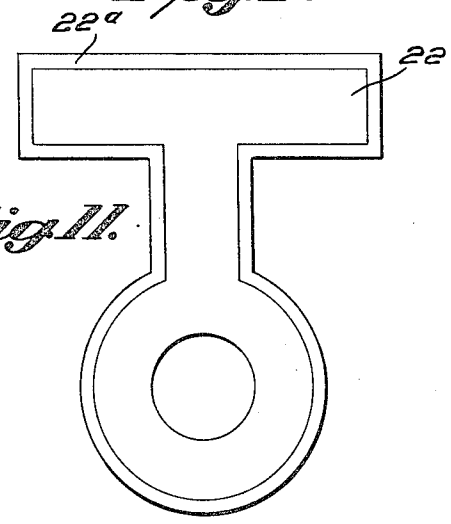


Fig. 11.

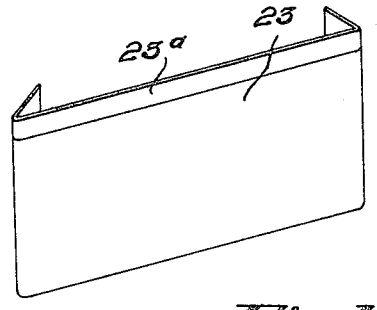


Fig. 14.

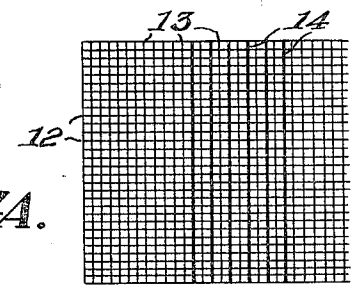
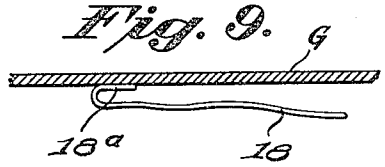


Fig. 14A.

Fig. 9.



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TEXTILE LABELS

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Application May 12, 1953, Serial No. 354,551

4 Claims. (Cl. 139—426)

This invention relates to a textile label. The invention is more particularly concerned with textile articles in the form of strips or ribbons, adapted for division into sub-strips, or panels, for use as labels or decorative adjuncts of wearing apparel, when attached thereto. The invention also embraces such sub-strips, panels, or labels, per se.

Labels and similar adjuncts of wearing apparel are commonly attached to articles of wearing apparel by securing or stitching marginal portions or edges thereof to the garment. The result is satisfactory, from a decorative view point, but rather costly to the manufacture because of the time and skill required to complete the process.

In efforts to reduce the expense of sewing or stitching such adjuncts to wearing apparel, manufacturers have experimented with labels coated with adhesive materials, such labels usually being cut from sheets or strips that have previously been coated with such adhesive materials. None of such labels have been wholly satisfactory, since they have a tendency to stiffen, and distort the fabric to which they are attached.

The above unsatisfactory conditions were recognized by Clifford Jordan, who obtained Patent No. 2,531,631, November 28, 1950, on a textile label designed to overcome the above noted objections to previous forms of labels. The above noted patent discloses the basic idea of the present invention in that it provides an elongated textile strip divisible into sections or labels. The strip in accordance with such patent is provided with rectangular areas of heat and pressure adhesive at regularly spaced intervals lengthwise thereof, and in the production of labels, such strip is transversely severed in lines centrally of said adhesive areas thereby providing individual labels having opposite end marginal portions thereof coated with the adhesive and in the application of such labels the adhesive coated marginal portions were turned back for adherence to a garment leaving the face of the label clear of any securing means.

The labels provided in accordance with the teachings of this patent were satisfactory and wholly overcome the above noted objections to previous labels. It has been found, however, that the labels of said patent were worthy of improvement to the extent of the elimination of adhesive for the reason that the processing of such coated labels could not be economically done in small lots due to the set-up required on the coating equipment.

It is accordingly a primary object of this invention to provide label forming textile strips having intermittently spaced apart areas provided with heat and pressure sealable thermoplastic threads woven thereinto, such as filaments of a synthetic linear condensation polyamide or the like, whereby upon severance of such strips centrally of said areas or at one side of same, individual labels are provided with heat and pressure sealable thermoplastic threads or filaments in opposite end or one end marginal areas thereto.

While it is appreciated that the use of thermoplastic cellulose derivative threads have been used as sealing agents in labels such as is disclosed in Patent No. 2,294,518, issued to Meyer Sperber, such threads required a solvent which is messy, uncertain, and a health or safety hazard.

Furthermore, Sperber obviously had no visualization of the use of his method for a cut and folded label such as that of the present invention. It is accordingly a further object of the invention to provide a label having a heat and pressure sealable marginal area composed of thermoplastic threads woven into the face of the label.

Other objects and advantages of the invention will become apparent in the course of the following detailed description, taken in connection with the accompanying drawings, wherein:

Fig. 1 is a fragmental plan view of a segment of a label forming strip showing one of the several spaced areas in which thermoplastic thread is woven into the strip;

Fig. 1A is a fragmental view corresponding to Fig. 1 and depicting a modified embodiment of the invention in connection with the weaving of the weft thermoplastic threads with respect to the regular warp threads.

Fig. 2 is a perspective view of a section of the novel label forming strip and showing several of the longitudinally spaced thermoplastic sealing areas therein;

Fig. 3 is a perspective view of an individual label as severed from the strip shown in Fig. 2;

Fig. 4 is a perspective view showing the sub-strip or label having its thermoplastic bearing marginal end portions folded rearwardly to a position for attachment to a garment;

Fig. 5 shows a fragment of a garment or wearing apparel in section with the label of Fig. 4 attached thereto;

Fig. 6 is a perspective view corresponding to Fig. 2 but showing an alternative embodiment of the invention;

Fig. 7 is a perspective view of a sub-strip or label as severed from the strip shown in Fig. 6;

Fig. 8 is a perspective view of the label of Fig. 7 with its marginal end portion folded rearwardly for attachment to a garment or article of apparel;

Fig. 9 shows a fragment of a garment or article of apparel in section with the label of Fig. 8 attached thereto;

Fig. 10 is a perspective view of a sub-strip or label having marginal portions adjacent all four edges thereof provided with the thermoplastic threads;

Fig. 11 is a perspective view similar to Fig. 10 but wherein the label is provided with thermoplastic threads in only the two opposite side marginal portions thereof;

Fig. 12 is also a perspective view similar to Figs. 10 and 11 wherein the thermoplastic area is disposed adjacent one side only of the label;

Fig. 13 is a plan view of an emblem showing the application of the present invention thereto; and

Fig. 14 is a perspective view corresponding to Fig. 4 but wherein the label is additionally provided with a thermoplastic area adjacent one side margin thereof.

Referring now in detail to the drawings, and first to Figs. 1 and 2 thereof, there is shown a strip or ribbon **10** of natural synthetic fibrous composition, such as cotton, silk or other fabric. The strip, in common with that disclosed in said Jordan patent is provided with areas **11** disposed at spaced apart intervals along its length and which areas are engageable with the articles of apparel in a manner as will later appear. The areas **11** may be rectangular and spaced apart irregularly or equally as desired during manufacture.

At this point, it may be stated that the strip **10** in common with previous label structure is woven with warp threads **12**, and woof or weft threads **13**, and has front and rear faces. An additional woof design forming thread (not shown) is laddered across one face of

the strip and woven through to the opposite face at the intervals of any desired design which appears on the front face. Furthermore, the design forming woof thread, not shown, jumps the areas **11** by a single carrying strand, although any arrangement of this feature may be provided.

In accordance with the referred to Jordan patent, the areas **11** are coated with an adhesive. In accordance with the present invention, however, these areas are provided with thermoplastic threads **14** which as shown in Fig. 1 are laddered into the fabric of the strip with what is known as "floats" on the front face thereof. However, such thermoplastic threads or polyamide filaments may be disposed on both faces of the strip in laddered form as shown or woven as are the woof threads **13**.

The strip **10** provided with the woven thermoplastic filler thread areas **11** is severed along transverse lines **15** disposed centrally of the areas in the provision of individual labels or sub-strips **16** (Fig. 3) having opposite end marginal portions **11a** and **11b** which comprise thermoplastic threads **14**.

In the application of the label **16** to a garment designated G in Fig. 5, the said marginal portions **11a** and **11b** are folded rearwardly as in Fig. 4 and thereafter such portions are engaged with the garment G and adhered thereto under the action of heat and pressure only.

The arrangement not only avoids the use of adhesive or solvents but further provides an attached label whose visible face bears no indication of the securing means.

An alternative embodiment of the invention is shown in Fig. 6 wherein the fabric strip **10** is secured on the transverse lines **17** which are disposed at corresponding edges of the thermoplastic areas **11** whereby labels of the form shown in Fig. 7 are provided upon severing the strip **10** on said lines **17**.

The sub-strip or label **18** shown in Fig. 7 is provided with a single thermoplastic area **18a** adjacent one end thereof and which area is of the width of the areas **11** in strip **10**.

In the attachment of this form of label **18** to a garment G (Fig. 9) the portion **18a** is folded rearwardly as in Fig. 8 and which is engaged with the garment and attached thereto under the action of heat and pressure. A further modified form of label **19** is shown in Fig. 10 whereby the thermoplastic area **19a** extends around the entire label in a relatively narrow band and which may be exposed on either the front or rear face thereof. If exposed on the rear face the label may be attached without any folding back of the thermoplastic marginal area. With this arrangement or a straight cut arrangement and no folding, the label design and the greater exposed filament area are both uppermost. Of course when the plastic thread is woven uniformly on both sides, then the label design may be uppermost with either side.

A still further embodiment of the label is shown in Fig. 11 wherein the label **20** is provided with a thermoplastic area **20a** adjacent the two opposite side margins thereof and which also may be exposed on either the front or rear face thereof.

A still further embodiment is shown in Fig. 12 wherein the label **21** is provided with a single thermoplastic area **21a** adjacent one side margin and exposed on either the front or rear face or both faces thereof.

The invention further has adaptability to various odd shaped articles such as woven or embroidered chevrons,

monograms or emblems such as indicated at **22** in Fig. 13. The emblem **13** may be provided with a thermoplastic area including its entire rear face, or a continuous marginal thermoplastic area **22a** may be provided and visible from either the front or rear face thereof.

The form of label **23** shown in Fig. 14 is similar to that of Figs. 3 and 4 but is additionally provided with a thermoplastic area **23a** along its top or bottom edge, or both. The purpose of this particular embodiment of the label is to facilitate the application of customer's labels which may readily be applied to the thermoplastic area **23a** when the label **23** has already been factory applied.

The embodiment of Figure 1A illustrates a single over and under weaving of the weft thermoplastic thread or filament with respect to each of the warp threads **12**. Also each thermoplastic thread **14** replaces one of the regular fill or weft threads **13**, so that there are fewer weft threads **13** at each section filled in or completed by the weaving therein of the thermoplastic threads **14**.

While I have disclosed several embodiments of the invention, the basic principle thereof resides in the provision of marginal thermoplastic areas whereby the labels are capable of being attached to garments under the action of heat and pressure only and in the total absence of adhesives or solvents.

What I claim as new and desire to secure by Letters Patent is:

1. A woven label comprising a single ply woven fabric with a front and rear face having label indicia on the front face thereof and at least one offset marginal area forming part of the front face adjacent the label indicia, said marginal area being intended to be hidden, and thermoplastic threads interwoven with the fabric of said marginal area to thereby form said marginal area, said thermoplastic threads being exposed primarily on the front face of the marginal area and having the characteristic of becoming adhesive when subjected to heat and pressure only to secure the label to a surface by said marginal area.

2. The woven label as described in claim 1 wherein the said offset marginal area is adapted to be reversibly foldable and adapted to have the front face thereof secured by heat and pressure to a surface underlying the rear face of said label.

3. The woven label described in claim 1, wherein the said thermoplastic threads of the marginal area are woven along opposite surface edges of the label.

4. The woven label described in claim 1, wherein said marginal area is formed along one side edge only of the label.

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