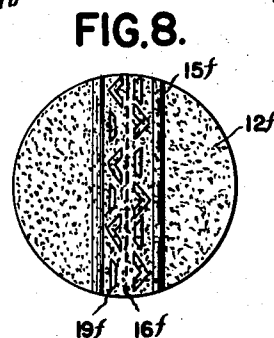
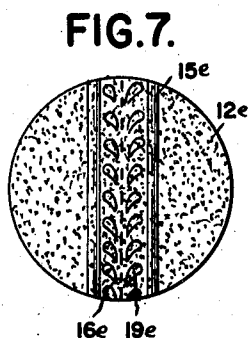
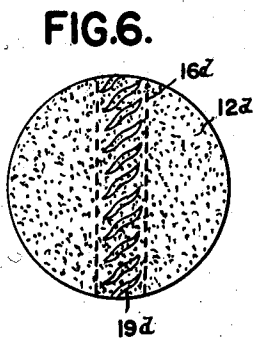
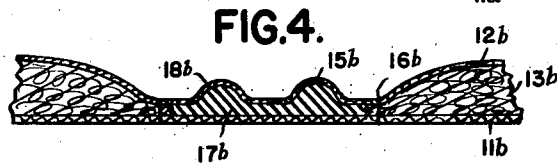
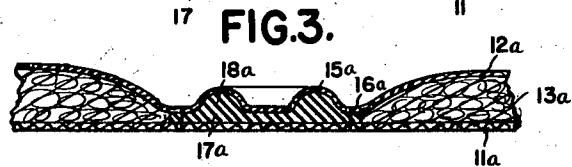
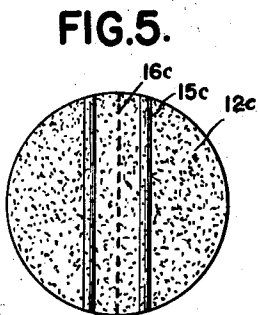
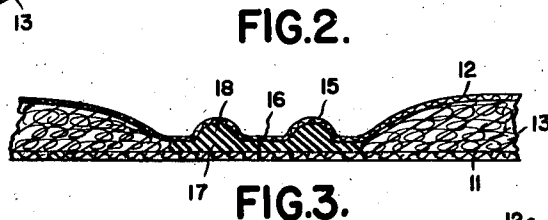
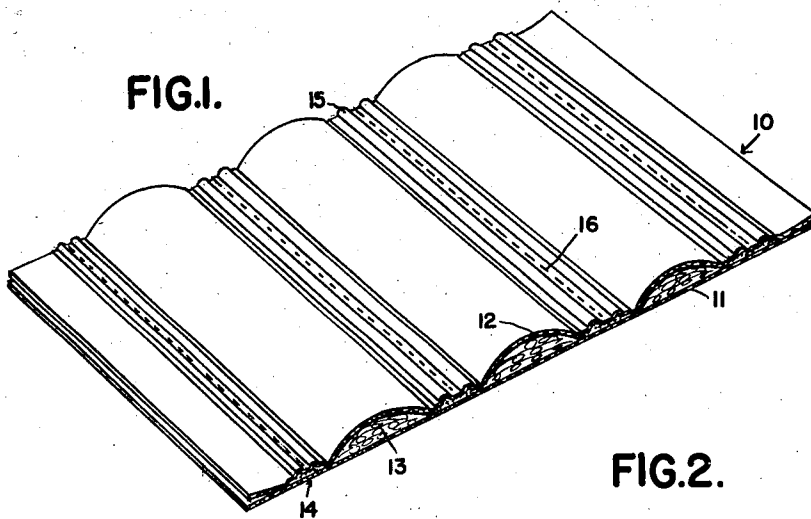


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J. R. MILLAR
UPHOLSTERY MATERIAL
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UPHOLSTERY MATERIAL

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7 Claims. (Cl. 154—54)

The present invention relates to an upholstery product and more particularly to a stuffed pleated upholstery characterized by composite seams.

It has in the past been proposed to form pleats in upholstery material comprising opposed fabrics, and to insert or otherwise provide padding material in the pleats thus formed. Pleats have been provided by sewing seams straight through the fabrics, by nesting the fabrics to provide seam ridges which were subsequently sewed transversely, or by any other modified sewed seams.

Efforts have been made to render the sewed seams attractive in appearance and to this end seams have been formed in various decorative designs. This has been done in some instances by interrupting a seam and connecting it by diagonal seams to adjacent seams.

Mention is made of this to call attention to the fact that it has long been an aim and object in the art to provide seams which combine practical utility with a decorative or attractive appearance.

According to the teachings of the present invention, a composite seam is formed, and by this I refer to a seam which is the result of a special vulcanized bonding and a sewing operation.

The vulcanized bond, briefly described, results from the interposition of a narrow strip of uncured rubberous material between and directly abutting the opposed fabrics which go to make up the upholstery material. The padding material which fills the pleats thus formed, is introduced either before, during, or after either seam forming operation. One or both of the fabrics, along the strip of rubberous material, are then deformed by the application of heat and pressure to produce an ornamental design, and at the same time a permanent vulcanized bond is produced between the fabrics.

One or more sewed seams are then provided, located and organized relative to the design previously formed so as to cooperate therewith and contribute to the ornamental appearance of the composite seam. The sewed seam may be provided centrally along the band which will, in such case, be formed symmetrically to its central portion. Alternately, a pair of sewed seams may be provided along the edges of the formed band, either through the edges of the rubberous strip, or just beyond the edges of said strip.

In any case, the sewing is designed to contribute to the appearance of the band as a whole, and in addition, it cooperates to strengthen the seam. As is known, a sewed seam after long wear sometimes tears through a fabric, or the thread forming the seam becomes broken. In my improved arrangement, the sewed seam strengthens the vulcanized bond, and in like

manner the vulcanized bond takes much of the strain from the sewed seam and lengthens its effectiveness.

It is accordingly an object of the present invention to provide a composite sewed and vulcanized seam.

It is a further object of the present invention to form upholstery material having a composite seam of the type set forth.

It is a further object of the present invention to provide stuffed pleated upholstery having pleats provided by a composite seam as set forth herein.

It is a further object of the present invention to provide a decorative seam formed by a vulcanized bond in which at least one fabric is vulcanized into a pleasing design, and a sewed seam in combination therewith, cooperating therewith to enhance the appearance, and in which the sewed and vulcanized bond mutually support each other.

Other objects of the invention will be apparent as the description proceeds, and when taken in conjunction with the accompanying drawing, in which

Fig. 1 is a perspective view of an upholstery element embodying my present invention;

Figs. 2 to 4 are fragmentary sections through different composite seams all embodying my invention; and

Figs. 5 to 8 are enlarged fragmentary top elevations of different illustrative composite seams embodying my invention.

In Fig. 1 I have illustrated my invention as applied to upholstery material of the type adapted for use in automotive seats and backs although it is capable of application in many fields, as is evident.

The cushion indicated generally at 10 comprises a sheet 11 of backing material, and a sheet 12 of trim or upholstery material. Composite seams 14 are provided forming or defining intervening pleats, and the pleats are stuffed or filled with padding material which may be cotton or other material of like or similar properties.

The seams 14 present an attractive appearance due to ridges or risers 15 which preferably are symmetrically disposed to one or more rows of sewing 16. In order to provide the risers 15, a thin ply 17 of rubberous material, in the form of a narrow strip, is interleaved between fabrics 11 and 12, and has at least one surface deformed to provide riser portions 18 of resilient rubberous material. The rubber strip is permanently vulcanized to both fabrics 11 and 12.

It is desired to emphasize at this time that the material 17 is a strong but flexible rubber. It is elastic, and in use, as will be evident, will stretch and permit strain to be placed on the sewed seam. Due to its resiliency however, it

reduces the strain on the thread employed in the sewed seam, and thus lengthens its useful life. Upon the failure of either the vulcanized bond or the sewed seam, the other will serve adequately to preserve the seam.

The vulcanized bond has been found to be permanent for all practical purposes, and I have thus provided an article which is at once more durable as well as more attractive in appearance than was previously known.

In Fig. 2 the fabrics 11 and 12 are interconnected by rubber strip 17, risers 15 being provided by corresponding beads or risers 18 being formed in strip 17. Padding 13 is provided between adjacent seams. A line of sewing 16 is intermediate risers 15, symmetrically placed thereto, and adapted at once to enhance the appearance of the composite seam and to strengthen the same.

In Fig. 3 the fabrics 11a and 12a have interleaved padding material 13a, and the seam has beads or risers 15a and sewed seams 16a. The rubber strip 17a has beads or risers 18a formed therein and is vulcanized to the fabrics. In this figure two rows of stitching 16a are provided adjacent to and passing through the strip 17a.

The arrangement of Fig. 4 is similar, fabrics 11b and 12b having padding material 13b received in the pleats, and having risers or beads 15b. The sewing is provided in two seams 16b, in this case just beyond the edge of the strip 17b.

In Fig. 5 the fabric 12c is shown in elevation and has straight risers 15c. The sewing 16c is intermediate risers 15c, and the composite seam is symmetrical about the line of sewing 16c.

A somewhat different arrangement is shown in Fig. 6, in which the fabric 12d is decorated and secured to the other fabric by parallel lines of sewing 16d. Between lines 16d, discrete beads or risers 19d are provided by appropriate deformation of the rubber strip (not shown). In this case the sewed seams 16d may be through the rubber strip or not, as desired and as illustrated respectively in Figs. 3 and 4.

Figs. 7 and 8 illustrate further decorative effects, the fabrics 12e and 12f bearing straight risers 15e and 15f, discrete risers 19e and 19f, and central sewed seams 16e and 16f respectively.

In Figs. 2 to 8, it is to be recalled that the beads or risers in the cloth are due to corresponding beads or risers formed in the rubber strip, and that in all cases the fabrics are vulcanized to the fabrics.

It will be understood that the designs shown are merely illustrative and that any arbitrary or fanciful design may be adopted.

The foregoing detailed description has been given for clearness of understanding only, and no unnecessary limitations should be understood therefrom, but the appended claims should be construed as broadly as permissible in view of the prior art.

What I claim as my invention is:

1. A stuffed, pleated cushion comprising a cover fabric, a backing fabric, said cover fabric formed to provide pleat fullnesses, padding material in said pleat fullnesses, said fabrics being united along lines intermediate said pleat fullnesses, strips of flexible rubber along said lines vulcanized to both said fabrics, and sewed seams extending along said strips.

2. A stuffed, pleated cushion comprising a cover fabric, a backing fabric, said cover fabric formed

to provide pleat fullnesses, padding material in said pleat fullnesses, said fabrics being united along lines intermediate said pleat fullnesses, strips of flexible rubber along said lines vulcanized to both said fabrics, the faces of said strips being formed into decorative designs, and said cover fabric conforming to said designs, and sewed seams extending along said strips.

3. A stuffed, pleated cushion comprising a cover fabric, a backing fabric, said cover fabric formed to provide pleat fullness, padding material in said pleat fullness, said fabrics being united along lines adjacent said pleat fullness, a strip of flexible rubber along said lines vulcanized to both said fabrics, the face of said strip being formed into a decorative design, and said cover fabric conforming to said design, and a sewed seam extending along said strip, said sewed seam extending through said strip.

4. A stuffed, pleated cushion comprising a cover fabric, a backing fabric, said cover fabric formed to provide pleat fullnesses, padding material in said pleat fullnesses, said fabrics being united along a line intermediate said pleat fullnesses, a strip of flexible rubber along said line vulcanized to both said fabrics, the face of said strip being formed into a decorative design, and said cover fabric conforming to said design, and a sewed seam extending through said strip and symmetrically located with respect to said design.

5. A stuffed, pleated cushion comprising a cover fabric, a backing fabric, said cover fabric formed to provide pleat fullness, padding material in said pleat fullness, said fabrics being united along a line adjacent said pleat fullness, a strip of flexible rubber along said line vulcanized to both said fabrics, the face of said strip being formed into a decorative design, and said cover fabric conforming to said design, and a pair of sewed seams extending through said strip adjacent the edges thereof.

6. As a new article of manufacture, a stuffed pleated upholstery cushion comprising a cover fabric, a backing fabric, said cover fabric being formed to provide with said backing fabric a plurality of pleat fullnesses, padding material in said pleat fullnesses, said fabrics being united along lines intermediate said pleat fullnesses, strips of flexible rubber along said lines located between said fabrics and vulcanized to both of said fabrics, said strips of rubber being of sufficient thickness to receive a substantial embossment and being embossed on the surface adjacent said cover fabric, said cover fabric overlying said strips conforming to said embossment so as to exhibit a decorative design, and sewed seams uniting said fabrics and extending through said strips of rubber.

7. As a new article of manufacture, a stuffed pleated upholstery cushion comprising a cover fabric, a backing fabric, said cover fabric being formed to provide with said backing fabric a plurality of pleat fullnesses, padding material in said pleat fullnesses, said fabrics being united along lines intermediate said pleat fullnesses, strips of flexible rubber along said lines located between said fabrics and vulcanized to both of said fabrics, said strips of rubber being of substantial thickness, and sewed seams uniting said fabrics and extending through said strips of rubber.

JOHN R. MILLAR.