May 13, 1952 W. E. SACKNER 2,596,292

PAD FOR UPHOLSTERY AND THE LIKE

Filed Aug. 30, 1948

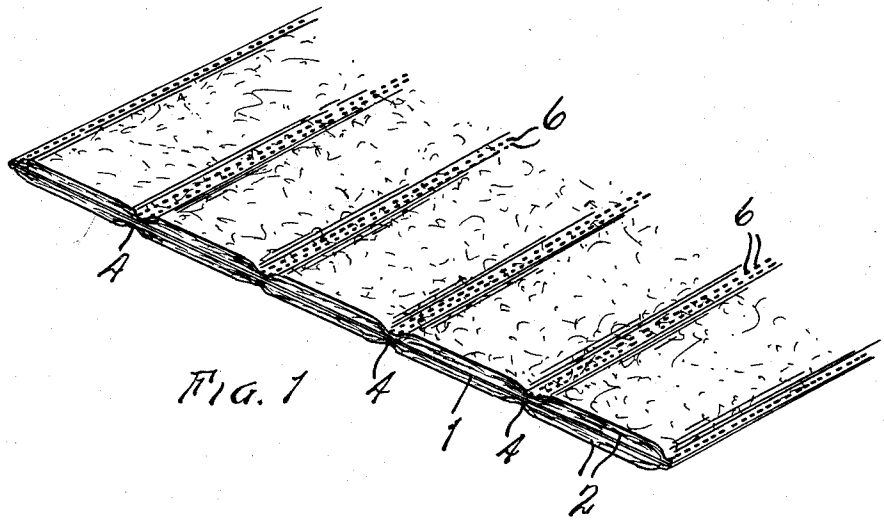

FIG. 1

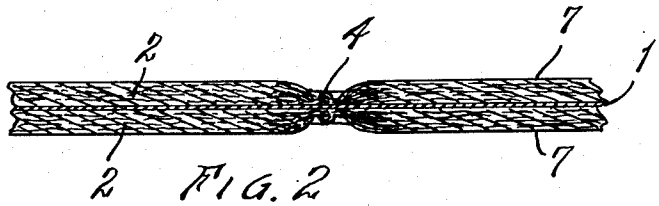

FIG. 2

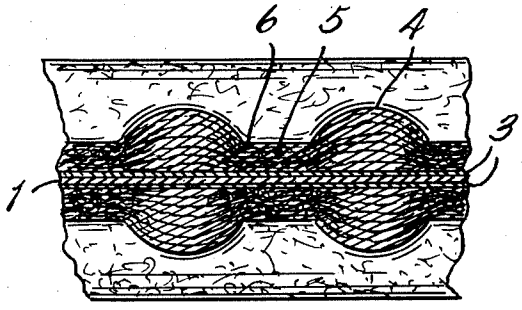

FIG. 3

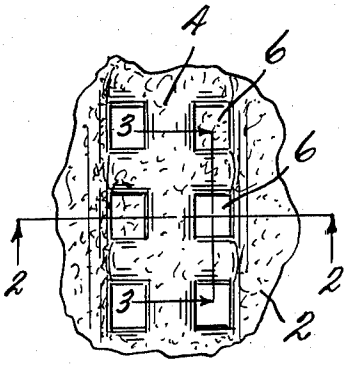

FIG. 4

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PAD FOR UPHOLSTERY AND THE LIKE

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7 Claims. (Cl. 255—184)

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This invention relates to improvements in pads for upholstery and the like and methods of manufacturing the same.

The main objects of this invention are:

First, to provide a pad adapted for use in upholstering furniture and automobile bodies and the like which may be economically produced, is light and at the same time has substantial resilience.

Second, to provide a pad of this character which does not require great care on the part of the upholsterer in handling and one in which the padding material is not likely to be displaced in handling.

Third, to provide a method of producing padding material of the character described which may be very economically practiced and which results in a superior product.

Objects relating to details and economies of the invention will appear from the description to follow. The invention is defined and pointed out in the claims.

A preferred embodiment of the invention is illustrated in the accompanying drawing, in which:

Fig. 1 is a fragmentary perspective view of padding embodying my invention, parts being shown conventionally for convenience in illustration.

Fig. 2 is an enlarged fragmentary sectional view on line 2—2 of Fig. 4.

Fig. 3 is an enlarged fragmentary sectional view on a line 3—3 of Fig. 4.

Fig. 4 is a fragmentary plan view illustrating details of the compressing and crimping of the padding material.

The embodiment of my invention illustrated in the accompanying drawing comprises a foundation sheet 1 desirably of strong paper, kraft paper being found satisfactory. On each side of this foundation sheet I mount a ply of padding material designated generally by the numeral 2, this padding material being of multiply creped cellulose tissue. Material on the market commonly designated as "cellulose wadding" is a desirable form of padding.

This is made up of multiplies or layers of very fine cellulose tissue, the fibers of which interlock somewhat but without resulting in any substantial strength.

The plies 1 and 2 are secured together by means of adhesive 3 shown greatly enlarged in Fig. 3, this adhesive binding the padding plies to the foundation sheet or ply, that is, the inner portions of the plies 2 are adhered to the sheet. To secure

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and anchor the padding plies to the foundation sheet I compress and crimp spaced parallel portions thereof as at 4 to interlock the fibers, as is indicated at 5 in Fig. 3. This is accomplished by means of press wheels having spaced teeth resulting in the compressed indentations 6 shown in dotted lines in Fig. 1 and in enlarged detail in Figs. 3 and 4. As shown in Figs. 1, 2 and 3, the indentations 6 are disposed inwardly of grooves which extend continuously longitudinally of the strips.

These compressed portions are adhesively secured to the foundation sheet and serve to anchor the edges of the uncompressed pad portions 7 and to hold the material thereof against substantial sliding or shifting when the pad is being handled or installed in upholstery. The rows of compressed crimps in the padding plies are preferably opposed and aligned as shown in Figs. 1 and 2.

In producing the material by the method of my invention the adhesive 3 is applied to the foundation sheet. The plies of padding are then laid on the adhesive covered sheet and the assembly fed between compressing and crimping rollers having spaced rows of teeth thereon providing the compressed rows or areas with the indentations or crimps 6 therein. These indentations or crimps retainingly interlock the fibers of the padding and the compressed portions are bonded by the adhesive to the foundation sheet. This results in a pad which, as stated, may be handled freely without danger of the padding becoming torn or displaced or bunched and this greatly facilitates the upholstering operations and makes it easily possible to provide a uniformly padded surface of large area.

The padding of my invention is well adapted for use in the upholstering of automobile bodies and furniture of various types.

I have illustrated and described a highly practical form or embodiment of my invention. While I prefer to use paper for the foundation ply, light fabric might be used and the structure still be quite economical. I have not attempted to illustrate the various modifications and adaptations I contemplate as it is believed that this disclosure will enable those skilled in the art to embody or adapt my invention as may be desired.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent, is:

1. A pad for upholstery and the like comprising an inner ply of paper and outer plies of cellulose wadding disposed on the sides of the inner ply

and adhesively secured thereto, the adhesive bond being such that the resilience of the outer plies is not substantially reduced, the outer plies having opposed parallel strips thereof crimped and compacted and adhesively secured to the sheet, each crimped and compacted strip providing a compacted groove extending continuously longitudinally of the strip and providing a series of compacted indentations disposed inwardly of the groove and extending longitudinally thereof, the series of compacted indentations inwardly of the grooves providing interlocking engagement of the fibers of the wadding to each other and embedding the fibers of the wadding in the adhesive on the opposite sides of the inner ply, the portions of the outer plies between the such strips constituting uncompressed parallel resilient sections having their edges anchored to the inner ply by the said compressed strips.

2. A pad for upholstery and the like comprising an inner foundation sheet ply and resilient outer plies of multiply cellulose tissue disposed on the sides of the inner ply and adhesively secured thereto substantially throughout, the outer plies having spaced parallel compressed strips, each strip comprising a series of closely spaced compacted indentations extending longitudinally of the strip, the wadding between successive indentations of the series being compressed inwardly of the plane of the outer surface of the ply of wadding, the compressed indentations retainingly interengaging the fibers of the outer plies, the portions of the outer plies between the strips constituting parallel resilient sections.

3. A pad for upholstery and the like comprising an intermediate sheet and cellulose wadding disposed on the sides of the intermediate sheet and adhesively secured thereto, the cellulose wadding having spaced parallel strips thereof compacted and crimped to interengage the fibers thereof, each compacted and crimped strip providing a series of compacted indentations extending longitudinally of the strip, the compacted strips being adhesively secured to the sheet, the portions of the wadding between the strips constituting resilient sections having their inner sides adhesively secured to the sheet and anchored at their edges by the said compacted and crimped strips.

4. A pad for upholstery and the like comprising a foundation ply of paper and a ply of cellulose wadding disposed on the side of the foundation ply and adhesively secured thereto, the adhesive bond being such that the resilience of the wadding ply is not substantially reduced, the wadding ply having spaced strips thereof crimped and compacted and adhesively secured to the foundation ply, each compacted and crimped strip providing a series of compacted indentations closely spaced longitudinally of the strip, the compacted indentations retainingly interlocking the fibers of the wadding to each other and embedding the fibers

of the wadding in the adhesive at the side of the foundation ply, the portions of the wadding ply between the such strips constituting resilient sections having their edges anchored to the foundation ply by the said crimped and compressed strips.

5. A pad for upholstery and the like comprising a foundation ply and a resilient padding ply of multiply cellulose tissue disposed on one side of the foundation ply and adhesively secured thereto substantially throughout, the padding ply having spaced compressed strips, each strip being provided with a plurality of closely spaced compacted indentations disposed along the length of the strip and retainingly interengaging the fibers of the padding ply, the portions of the padding ply between such strips constituting resilient sections.

6. In a pad for upholstery and the like, a foundation ply of fibrous material and a ply of cellulose wadding disposed on one side of the foundation ply, the wadding ply having spaced parallel strips thereof compacted and crimped, each compacted and crimped strip providing a groove extending continuously longitudinally of the strip and providing a series of compacted indentations disposed inwardly of the groove and extending longitudinally thereof, the series of compacted indentations inwardly of the groove facilitating interlockingly engaging the fibers of the wadding with each other, the compacted and crimped strips being anchored to the foundation ply, portions of the wadding between the spaced parallel strips constituting resilient sections having their edges anchored to the foundation ply by said compacted and crimped strips.

7. In a pad for upholstery and the like, a foundation inner ply of fibrous material and outer plies of cellulose wadding disposed on the opposite sides of the inner ply, the outer plies having parallel compacted strips, the compacted strips providing interlocking engagement of the fibers of wadding to each other, the compacted strips of both outer plies being anchored to the inner ply, the compacted strips of one outer ply being disposed in opposed relation to the compacted strips of the other outer ply to facilitate the production of a firm durable connection of the outer plies to each other, portions of the wadding between the spaced parallel compacted strips constituting resilient sections having their edges anchored to the inner foundation ply by said compressed strips.

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The following references are of record in the file of this patent:

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