

Nov. 1, 1932.

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1,885,109

UPHOLSTERY

Filed June 8, 1928

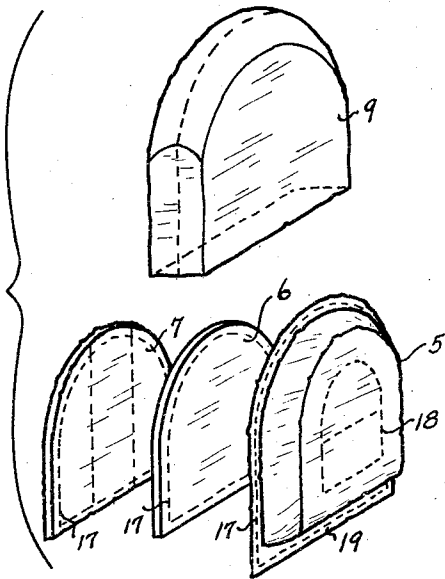


FIG. 1

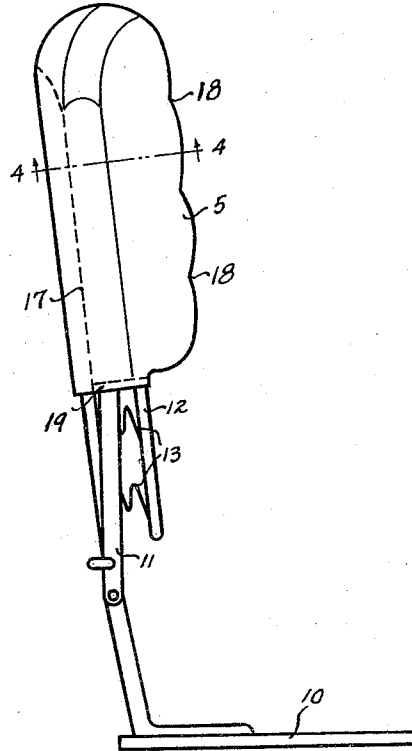


FIG. 3

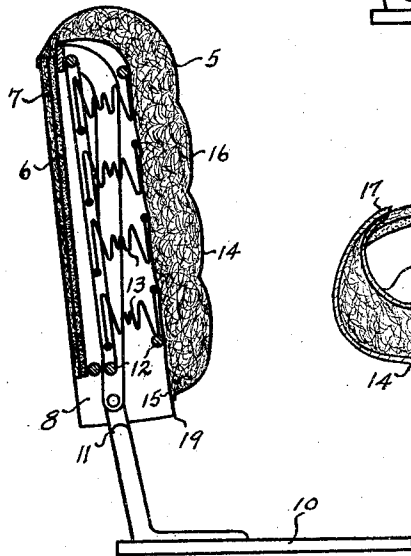


FIG. 2

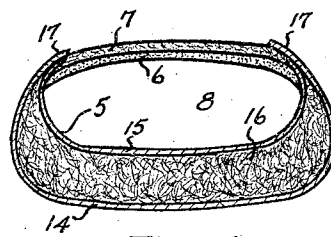


FIG. 4

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UPHOLSTERY

Application filed June 8, 1928. Serial No. 283,815.

In order better to indicate the advantages and objects of the present invention, a comparison may be drawn between the prevailing upholstery practice which involves a series of tedious, manual operations, performed in sequence at the upholstering shops, and my improved article which may be practically automatically formed at a place of manufacture of upholstery materials.

As typical of the present art and practices, the process involved in upholstering the back-frame of an automobile bucket seat, or auxiliary seat, may be taken as an example. In most cases, the back-frame of such a seat comprises a pair of upright metal members, with one or more cross pieces, supporting an assembly of springs. The upholstery is begun by cutting a fiber board to the size and shape of the seat back, and tacking tabs of cloth to the top and bottom of the board. These tabs are wrapped around convenient portions of the spring assembly and the metal frame, and the loose ends are tacked to the fiber board. By this means the fiber board is held in position. A piece of cloth of suitable width is then placed over the springs, and its edges tacked to the fiber board. A layer of cotton batting or other filler material is placed over the front of the spring assembly. Additional strips of filler, are laid upon the sides and ends of the spring assembly. This is followed by placing an additional piece of fabric over all of the filler material, the last named piece of fabric being likewise tacked to the fiber board. A sheet of cotton or other padding material is then mounted so as to cover the back of the fiber board. The present practice is to cover the springs, the filler material at the front and edges, the fiber board, and the back padding, with a finish cover formed as a slip, which is drawn over the entire assembly, and sewed across its bottom.

My improved upholstery unit, hereinafter described, eliminates all of the above mentioned operations, as only a single step is necessary to install a completed cushion pad, a piece of fiber board, and the padding for the rear of the assembly, all of which are as-

sembled and ready for the immediate reception of the finish cover.

The improvements in eliminating the recited steps, and the improved product thereby obtained, may be declared to constitute the objects of the present invention. Otherwise expressed, it is the object of this invention to provide a completely assembled unit, adapted as a foundation for cushions or upholstery, which unit obviates separately sewing and tacking together the component pieces of the upholstery, as well as eliminating separate means, such as the tacked strips of cloth, for securing such pieces to the rigid frame of the chair or other article to which the upholstery is fitted.

Further objects and advantages of the invention will be apparent from the drawing, considered in connection with the following detailed description of my invention.

It will be understood that the description herein set forth covers only a single executional embodiment of this invention, and relates to a particular application thereof. It will accordingly be understood that this invention may be practiced with respect to a great variety of upholstered articles, and is not confined in its application to the upholstered elements of automobile bodies; nor is it applicable only to upholstered pieces in which a spring assembly is employed in connection with the upholstering material. Obviously, many changes may be made in the described parts and their relation, without departing from the spirit and scope of the invention, as more particularly defined in the claims hereinafter set forth.

Referring to the drawing, Fig. 1 is an exploded view of a cushion pad of the envelope type, constructed in accordance with the present invention, and showing the parts of the upholstery unit in perspective; Fig. 2 is a central vertical section through the back of an automobile auxiliary seat, to which is applied a cushion pad of the envelope type, in accordance with the present invention; Fig. 3 is a side elevation of the cushion pad appearing in Fig. 1, showing it partly drawn over the back frame member and spring assembly of an automobile bucket seat; Fig. 4

is a section along line 4—4 of Fig. 3 and in which the thickness of the fabric is somewhat exaggerated, in order to more clearly show the relation of the parts of the assembly.

Referring by numerals to the drawing, the assembly consists essentially of a cushion or pad, indicated at 5, and intended in the present example to be placed on the front side of the vertical back portion of an automobile bucket seat. On the rear surface of the back portion, it is preferred to provide a comparatively stiff or rigid element 6, which may consist of fiber board, or the equivalent, to serve as a reinforcement to hold the pad in position, and to determine and preserve the shape of the unit. To provide a yielding surface for the fiber board, a padding element such as 7, may be mounted as shown. By the present invention, the cushion or pad 5, the fiber board 6 and padding 7 are manufactured and applied as a unit, and the parts of this unit are so related as to form an opening or space 8, of substantial size, inside the completed unit, (see Fig. 4). The recited parts are further so related as to form an envelope, opening at its lower end into the space 8, so that the enclosure may be drawn over the frame members and related portions of the structure to be upholstered. A finish slip 9, open at its lower end, may then be placed over the unit, to form a completely upholstered seat back. In lieu of forming an envelope consisting of cushion 5 and fiber board 6, the envelope may consist of a separate piece of fabric, say of the form of the finish slip 9, to the inside or outside of which is secured the cushion 5. If desired, a padding such as 7, may also be secured to the fabric, either inside or outside thereof. With such a construction, the fiber board or its equivalent may be attached to, or carried by the chair back; or such a device may be employed where the chair is of such construction that the fiber board is not required.

Although the particular type of seat-back shown in the example illustrated, forms no part of the present invention, it may be mentioned that such a structure usually consists of a seat base 10, to which is affixed a metal frame 11 consisting of a pair of side members so pivoted as to permit the seat back to be folded downwardly, and provided with an upper cross piece of arcuate form so as to impart the desired curved outline to the seat-back. Between the upright members of the frame 11, there is usually and preferably disposed a spring assembly 12, consisting of any desired number of coil springs 13. As shown in Fig. 2, the described envelope, or enclosure, consisting of the upholstery unit, is so formed as to enclose a part of the frame 11, and spring assembly 12.

By preference I construct the cushion or pad element 5, of a front fabric 14 and a back fabric 15, both of which are cut to substan-

tially the same outline and sewed together around a suitable filler material 16, along the seam line indicated at 17. The filling material for the cushion or pad 5 may consist of cotton batting, hair, moss, tow, sisal, palm fiber, jute, kapok, felt, or any other suitable filling material or if desired, may be in the form of a pneumatic cushion. By preference, the cushion element is filled more heavily at the top, so as to constitute a pad which is of inverted wedge shape, in section, since the upper part of the cushion will provide the padding for the upper edge or margin of the chair back, (see Fig. 2). In order to prevent the filler material from shifting inside the cushion, after a period of use, it is preferred to quilt the cushion as may be found necessary according to the filling material employed. In the example described, the cushion 5 is quilted as shown at 18.

The element 6, described as fiber board, may consist of any suitable, comparatively rigid or stiff material, of a thickness not too great to preclude sewing the other elements thereto along the seam line 17. Heavy paste-board, or other material may be used.

The padding 7, positioned next to the back of the fiber board may consist of a suitable thickness of filler material, preferably having a covering of tobacco cloth or the like. Where desired, the rear padding 7 may be glued or otherwise adhesively secured to the fiber board.

The construction and application of the described upholstery unit is thought to be apparent from the above description of parts and their relation. The fiber board is cut to conform in size and shape to the seat back to be upholstered; upon the fiber board is laid the piece of padding material, such as 7, which may be glued in place if desired. The padding 7 and fiber board are then securely sewed to the cushion or pad 5, along the seam lines indicated at 17. This sewing is preferably effected in a single operation, and secures the recited elements together near their margins, except at the bottom, which is left open until after the application of the completed unit to the chair back, or other structure to be upholstered. The resultant unitary, open ended upholstery structure forms an envelope of substantial depth at the front, and a stiff back covered with wadding or padding. The envelope is then drawn over the frame 11 and spring assembly 12 of the seat back. The front fabric 14 of the cushion 5 is preferably extended downwardly beyond the back fabric 15 thereof, so as to form a sewing edge 19. The assembly is then ready to receive the finish slip 9, preferably provided with a sewing tab extension (not shown), in the same manner as the front fabric 14 of the cushion. The sewing tabs of the cushion 5 and the finish slip 9 are together drawn tightly across the bottom of the spring assembly

and sewed to the back fabric of the finish slip, thus completing the upholstering of the seat back.

In lieu of the preferred practice of sewing the cushion and rear padding to the fiber board to form a unitary structure as described above, a great economy may be effected over the prevailing practice, by attaching marginal tabs of cloth (not shown), to the fiber board. With the fiber board in place, the tabs or strips may be wrapped around the spring assembly or frame, and their free ends tacked to the fiber board to position this element. Instead of forming the assembly as described above, so that it constitutes a slip or enclosure, the cushion 5 may be laid over the front surface of the springs. Since the cushion is provided with a substantial unpadded marginal portion, it provides a convenient tacking edge 19, which may be drawn about the outside margins of the spring assembly, and brought back to overlap the edges of the fiber board 6, and tacked thereto. In this case the rear padding element 7 may be positioned directly against the fiber board and tacked thereto at the same time as the cushion 5, or may be temporarily positioned and permanently secured in place upon application of the finish slip 9. A cushion, such as 5, provided with a portion which may be utilized as a tacking edge, constitutes of itself, a marketable article for application according to the method last described.

It will be seen that the last described method of tacking the cushion or pad 5 to the fiber board 6, eliminates, over the old method, the separate steps of tacking a spring covering cloth to the fiber board; eliminates placing the separate piece of cloth over the springs; and does away with any separate handling of the filler material, both at the front and around the sides of the spring assembly, as well as such tying as is ordinarily incident to the presence of the springs. Thus it is seen that the provision of the cushion or pad element alone, provided with a tacking edge such as 19, for securement thereof to the fiber board in the manner described, constitutes a novel article of manufacture which serves to eliminate several of the steps formerly necessary in upholstering seat backs of the class described.

With respect to the unitary structure, in the envelope form, it is apparent from the mode of its attachment, that this unit minimizes the time required for, and the labor and waste incident to, the several operations and separate parts in use under the prevailing practice; of no less importance is the vastly improved upholstery job resulting from the use of my improved unit.

It will be understood that the use of an envelope of finishing material, open at the bottom, constitutes in itself no part of the present invention. I may, however, secure

the finishing material to the cushion 5, the fiber board 6, and the rear padding 7, simultaneously, so as to secure the elements 5, 6, 7, and 9 together, by sewing in a single operation.

I claim as my invention:

1. A preformed upholstery unit for a chair back or the like, including a pad, a stiffening element of fibrous material marginally overlapped by and stitched to said pad in enclosing relation with a support between the pad and element, and means, carried by the pad and external to the support, for positioning the pad and stiffening element relative to each other, and on opposite sides of the support.

2. In an article of upholstery adapted to be secured, as a unit, to a support therefor, a pad, a pad-shaping element, secured to the pad to receive a support between the pad and element, an element extending from the margin of the pad, and adapted to be attached to the shaping element for retaining the pad and shaping element relative to the support.

3. An upholstery pad adapted to be applied as a preformed enveloping unit to be drawn over an article to be upholstered, the unit being formed of a fabric cover, a filling material therein adapted to extend over one side of the upholstered article, and a shaping member of relatively rigid, sheet material, engaging the opposite side of the article, a cushioning element on said shaping member, means associated with the cover, confining the filler at a distance inside a margin of the pad, and providing a fabric portion extending along the margin beyond the filling material, and securing said cover to the shaping member, so as to form a pocket therebetween.

4. A preformed upholstering pad constructed as a tubular unit of oval section, adapted to be drawn over a chair member, the unit being formed of front and rear elements of fibrous material, one of said elements including a fabric cover of double thickness, and a filler between the thicknesses thereof; an element of stiff sheet material, spaced substantially from intermediate portions of one of the fibrous elements, and forming therewith a preshaped, open end pocket for receiving the member to be upholstered; means associated with said cover for confining the filler at a distance inside the margin of the said covered element, and providing a portion between the filler and the margin thereof, and combined means including said last-named portion, for attaching said fibrous elements to opposite sides of the stiffening element and securing the unit in enveloping relation to the article to be upholstered.

5. In an upholstery unit adapted substantially to enclose and be supported by a portion of an article to be upholstered, a pad, a

fibrous stiffening element of relatively flat, rigid material, and stitching extending through, and securing said pad and stiffening element together in pre-shaped relation
5 to form a space therebetween to receive said supporting portion.

6. In an upholstery unit adapted to embrace, in self-supporting relation, a portion of an article to be upholstered, a pad and a
10 relatively stiff element of fibrous material secured to each other and positioned relative to the upholstered article by sewing together marginal portions of both the pad and element.

15 7. An upholstery unit including a relatively stiff element and a pad element on each side of the stiff element; said elements having marginal portions secured together to form a pocket between a pair of the adjacent
20 elements, for receiving a portion of an article to be upholstered.

8. An upholstery unit including a rigid element, a relatively thin pad on one side thereof, and a relatively thick cushion pad on
25 the opposite side thereof, said pads and element being stitched together along certain margins, the relatively thick pad and rigid element forming a case adapted to accommodate the frame of a chair back.

30 9. In an upholstery unit adapted to enclose a portion of an article to be upholstered, a cushion element, and a cushion holding element formed of a relatively rigid sheet of reinforcing material, secured to the cushion element;
35 one of said elements being sewed to, and preshaped by the other thereof, so as to embrace a side and a pair of the opposed margins of the portion to be upholstered.

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