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J. T. WOODS ETAL

3,517,963

CHAIR INSERT WITH UPHOLSTERED APPEARANCE

Filed Aug. 20, 1968

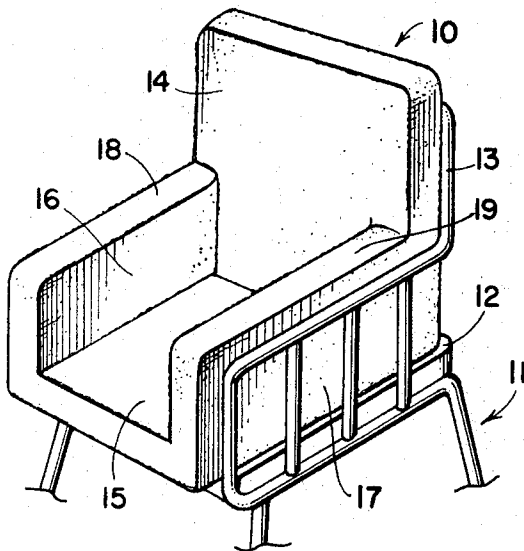


FIG. 1

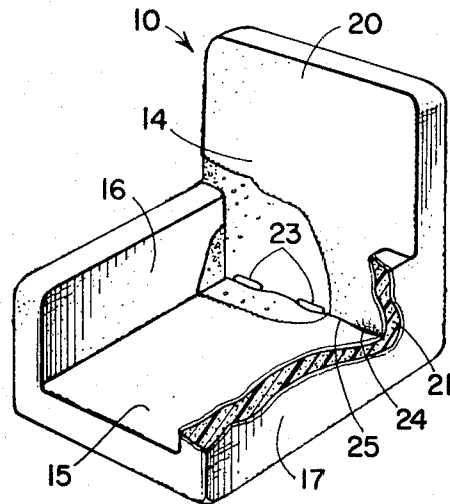


FIG. 2

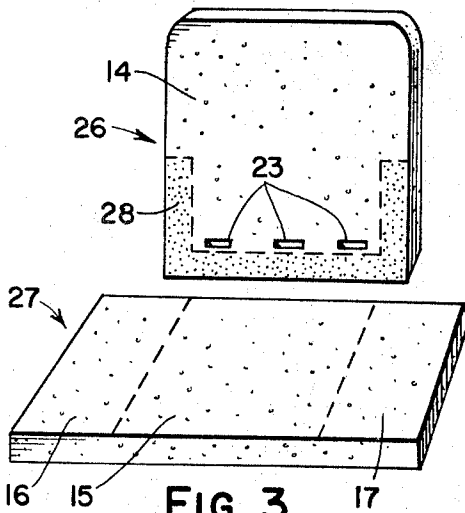


FIG. 3

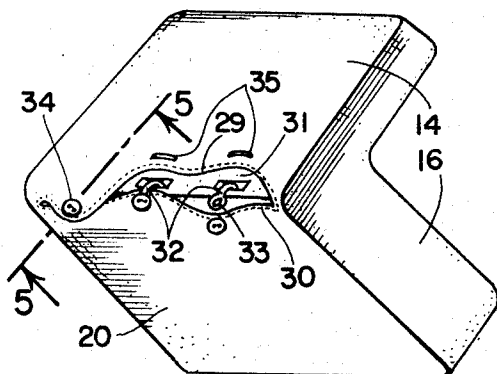


FIG. 4

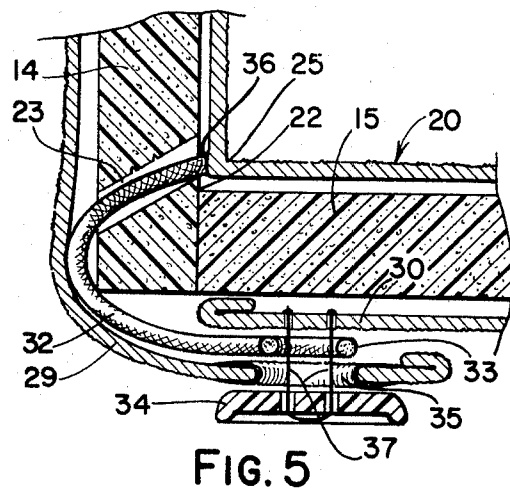


FIG. 5

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CHAIR INSERT WITH UPHOLSTERED APPEARANCE

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6 Claims

ABSTRACT OF THE DISCLOSURE

A chair insert has backrest, seating and opposing side sections constructed of resilient spongy material such as polyurethane foam that are enclosed within a form-fitting slipcover arranged to present a near upholstered appearance. Adjacent the junction where the backrest and seating sections join together the slipcover secures the ends of plural cords that extend through plural slots in the base portion of the backrest section. The cords are formed with fastening elements shaped for attachment with mating fastening elements secured to one of two slipcover margins that define an access opening. When the fastening elements are fastened together, the margins overlap to completely close the access opening and the slipcover material adjacent the backrest and seating junction is pulled taut to impart an upholstered appearance.

The present invention relates to an auxiliary seating structure and more specifically to a seat cushion contained in a slipcover.

BACKGROUND OF THE INVENTION

A well established approach to improve comfort for a person occupying a conventional seating structure is to position a seat cushion or backrest block in the seating structure. A typical seat cushion may include backrest and seating portions usually integrally united and contoured for positioning within a form-fitting covering. These seat cushions may be constructed of resilient spongy material such as polyurethane foam.

Another type of seating structure includes backrest, seating, and, opposing armrest portions joined together as an integral unit for use as an infant's seat for example. When conventional seating structures are contained in coverings, the coverings ordinarily are substantially permanently secured to the cushioning sections and therefore efforts to clean soiled spots are difficult.

When slipcovers are drawn over the cushioning sections, even though often purposely tailored to be form-fitting, they tend to stretch and pull away and become floppy. Such stretching and shifting around by the covering fabric causes the overall appearance to be unsightly.

BRIEF SUMMARY OF THE INVENTION

Briefly stated the present invention comprehends a comfortable resilient chair insert that may be conveniently and quickly positioned in an infant's chair or hospital patient's seating structure for example. The chair insert incorporates backrest, seating, and opposing side sections that are joined together to constitute a main body preferably constructed from resilient material such as polyurethane foam. The inner surfaces of the seating and backrest sections are joined together to define a junction. A form-fitting flexible slipcover has a pair of adjacent

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margins that define an access opening that may be pulled over the main body to substantially enclose it within the slipcover.

Attached to the slipcover is attachment means for pulling the slipcover fabric tightly against the junction to present an upholstered appearance. The attachment means may include a plurality of fastener arrangements characterized by cords secured to the slipcover fabric and which terminate in loops, and a plurality of buttons fixed to one of the slipcover margins. After the cords are tugged through corresponding slots formed through the base of the backrest section, first the loops are pulled over the buttons and then button holes formed in the other margin are pulled over the buttons.

BRIEF DESCRIPTION OF THE DRAWINGS

The numerous benefits and unique aspects of the present invention will be fully understood when the following detailed description is studied in conjunction with the drawings in which:

FIG. 1 is a perspective view showing the chair insert of the present invention placed within an infant's highchair;

FIG. 2 is a perspective partially sectional view showing how the form-fitting slipcover is placed on the resilient main body portions;

FIG. 3 is a perspective exploded view showing one arrangement in which the resilient main body may be constructed from two polyurethane foam blocks;

FIG. 4 is a perspective view showing how slipcover portions may be attached to one another to impart an overall upholstered appearance; and,

FIG. 5 is a sectional, detailed, partly exploded view taken along line 5—5 of FIG. 4.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring now to FIG. 1 the chair insert 10 of the present invention is shown, for purposes of illustration, positioned within a conventional infant's highchair 11. The chair insert 10 may be used in conjunction with other seating structures such as jumpers or small chairs used by infants and wheel chairs or other seats used by invalids or hospital patients. Chair 1 includes a seating platform 12 and an upstanding backrest section 14. Chair insert 10 includes a backrest section 14, seating section 15 and opposing side sections 16 and 17 defining armrest areas 18 and 19 on their tops, respectively.

FIG. 2 depicts a form-fitting slipcover 20 pulled tightly over the main body of chair insert 10. Slipcover 20 is preferably made from a suitable flexible material such as nubby textured cotton fabric sufficient to avoid skin irritations and rashes that otherwise could be suffered by the child upon squirming and being moved onto and from insert 10. A portion 21 of side section 17 is broken away to show that the main body material is a resilient spongy material such as polyurethane foam.

Backrest section 14 and seating section 15 are joined together to define a junction 22 extending between opposing side sections 16 and 17. The lower base zone of backrest section 14 is formed with a plurality of through slots 23, only two of which are shown. Slipcover fabric overlying a concealed slot, indicated by dimple or recess 24, holds slipcover 20 taut to constitute a neatly upholstered appearing seam 25.

FIG. 3 shows two blocks 26 and 27 of polyurethane foam plastic which may be assembled together to con-

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struct the main body of the chair insert. One section 26, primarily shaped to constitute the backrest section 14, is formed with three slots 23 extending completely through blocks 26. A U-shaped zone 28 indicates the zone that may be adhesively attached to the rearward edges of block 27 that define seating section 15 and opposing side sections 16 and 17. Opposing side sections 16 and 17 may be easily folded upwardly along the two dotted lines relative to intermediate or seating section 15. It should be understood that three or more polyurethane foam blocks may be used in constructing the main body portion of chair insert 10 and the disclosed arrangement is merely illustrative.

FIG. 4 depicts attachment means for firmly fitting slipcover 20 to the main body and pulling portions of slipcover 20 taut in order to impart a neat upholstered appearance. The attachment means includes three fastener arrangements which, viewing them from left to right, are completely fastened, partially fastened and completely unfastened, respectively. Slipcover 20 has a pair of adjacent margins 29 and 30 that define an access opening 31. Slipcover 20 is placed over the main body by pulling access opening 31 over the main body until it is substantially fully enclosed by slipcover 20. Each fastener arrangement of the attachment means includes a resilient cord 32 attached at an inner end to the slipcover fabric and which terminates at its other end in a loop 33. The cords 32 are drawn through corresponding slots 23 so that the loops 33 may be drawn over corresponding buttons 34 secured to margin 30. After this, button holes 35 formed in the other margin 29 are drawn over the buttons so that margin 30 underlies margin 29.

FIG. 5 is a detailed sectional view of the completely fastened fastening arrangement portion of the attachment means. The components of the fastening arrangement are exploded or expanded from one another in order to clearly illustrate their interrelationships. The inner end of cord 32 is firmly secured to a securement zone 36 of slipcover 20. The securement zone 36 coincides with upholstered appearing seam 25 and is located adjacent the junction 22 where backrest section 14 and seating section 15 are joined together. Cord 32 is tugged through slot 23 so that loop 33 may be pulled over button 34 to surround the button anchoring threads 37. A button hole 35 formed in margin 29 is then also drawn over button 34 to completely conceal the access opening and maintain slipcover 20 in a form-fitting arrangement. If desired similar attachment means could be incorporated along the junctions defined by the seating section 15 and opposing side sections 16 and 17 in order to create an enhanced upholstered appearance.

OPERATION

Keeping the above construction in mind it can be understood how many of the previously described disadvantages of prior art seat cushions are overcome or substantially eliminated by the present invention.

Initially, the polyurethane foam main body is shoved and manipulated through access opening 31 until slipcover 20 has been fully drawn over the main body. The plural cords 32 are tugged through their respective slots 23 so that loops 33 can be pulled over the buttons 34. After the buttons hole 35 have also been pulled over buttons 34, the slipcover fabric adjacent the backrest and seating junction will be shaped into a neat upholstered appearing seam 25.

Now fully assembled and prepared for use chair insert 10 may be placed on an infant's highchair 11 for example. When the infant occupies chair insert 10 he will be both elevated and cushioned. His weight will stress chair 10 insert so that side sections 16 and 17 will flex or fold slightly inwardly to surround and further protect him. Slipcover 20 will shield the polyurethane foam from deteriorating and possibly disintegrating upon protracted exposure to sunlight. The use of a nonsynthetic material

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such as nubby cotton fabric previously mentioned will allow proper ventilation so that moisture may be easily liberated from the foam. The nubby texturing of slipcover 20 provides a non-skid surface that will minimize slipping and rubbing that could irritate the infant's skin.

By constructing the main body of chair insert 10 from polyurethane foam, chair insert 10 will be able to return to its original desired shape when not occupied.

From the foregoing it will be evident that the present invention has provided a chair insert in which all of the various advantages are fully realized.

What is claimed is:

1. A chair insert comprising:

- (a) a backrest section;
- (b) a seating section joined to the backrest section, the inner surfaces of the seating and backrest sections defining a junction;
- (c) opposing side sections joined adjacent their rearward portions of the backrest section and adjacent their bottom portions of the seating section;
- (d) a form-fitting flexible cover including a pair of adjacent margins defining an access opening which may be drawn over said four sections to substantially enclose said four sections within the cover;
- (e) means defining plural slots formed through one of said sections defining said junction;
- (f) attachment means connected to the cover for pulling cover material tightly against said junction to present an upholstered appearance, the attachment means including:

- (f1) plural cords secured to the cover and terminating in first fastener elements; and
- (f2) plural second fastener elements coupled to at least one of the cover margins and dimensioned to be fastened with corresponding first fastener elements, the cords being dimensioned to extend through corresponding slots before the first and second fasteners are fastened together.

2. The structure according to claim 1 wherein when the first and second fastener elements are fastened together the cover margins will be drawn towards one another to at least partially close the access opening.

3. The structure according to claim 2, wherein the first fastener elements are loops, the second fastener elements on said one cover margin are buttons over which the loops may be drawn, and, the other cover margin defines plural button holes into which the buttons are inserted so said one margin underlies said other margin.

4. The structure according to claim 3, wherein the cords are three in number and are constructed of resilient material.

5. The structure according to claim 4, wherein the four sections are constructed of polyurethane foam material and the cover is constructed of a nubby textured cotton fabric.

6. A form-fitting covering for enclosing a seat cushion having backrest and seating sections that define a junction, the covering comprising:

- (a) a slipcover constructed of nubby textured cotton fabric;
- (b) a pair of slipcover adjacent margins defining an access opening which may be drawn over the seat cushion to enclose it within the slipcover;
- (c) three button holes defined by one said slipcover adjacent margin;
- (d) attachment means connected to the slipcover for pulling the slipcover fabric tightly against the junction to present an upholstered appearance, the attachment means including:
 - (d1) three resilient cords secured to the slipcover and terminating in loops; and
 - (d2) three buttons coupled to the other said slipcover adjacent margin and arranged so corresponding loops can be drawn over them;

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wherein, the cords are dimensioned to extend through corresponding slots formed through one of the seat cushion sections that defines said junction so that when the loops and button holes are positioned over the buttons then one slipcover margin as caused to at least partially underlie the other margin.

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