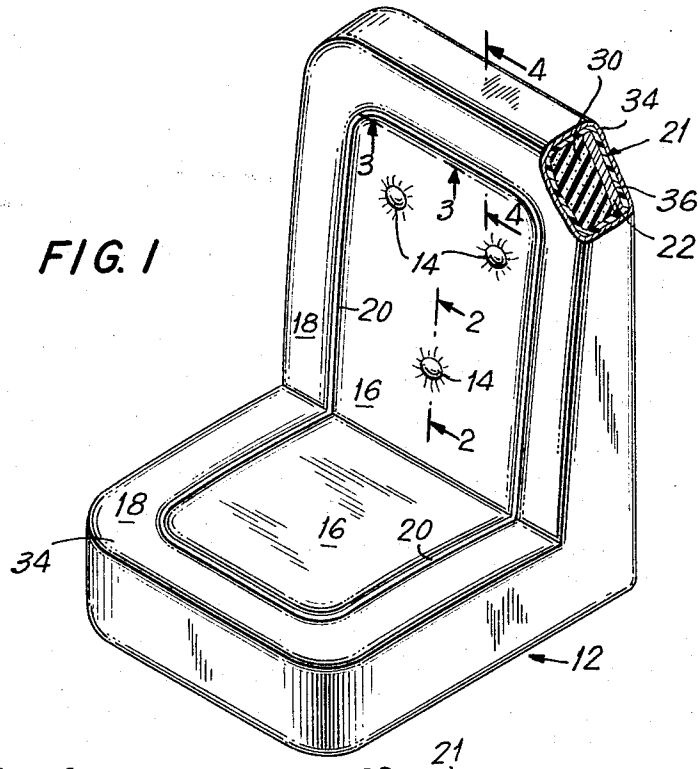
Aug. 16, 1966 S. BEREDAY 3,266,065

TUFTED UPHOLSTERY CUSHION

Filed Jan. 21, 1965 2 Sheets-Sheet 1

FIG. 1



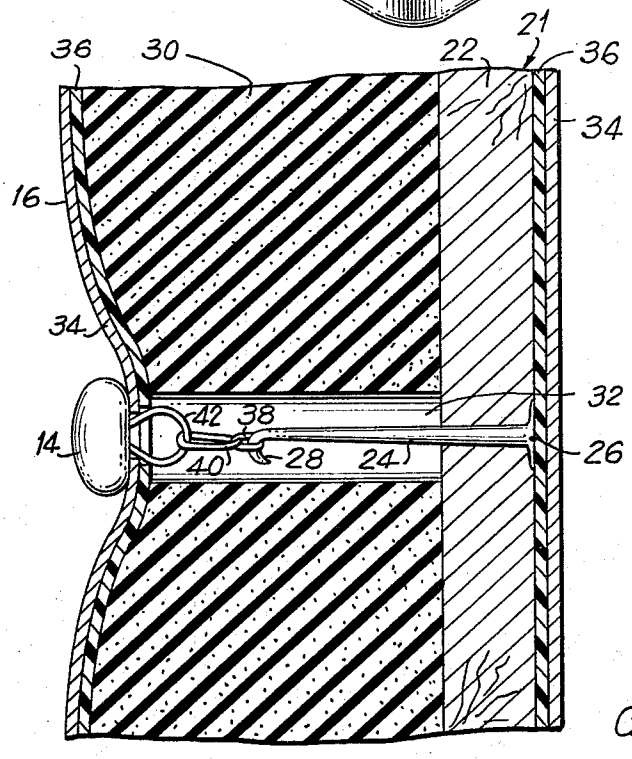


FIG. 2

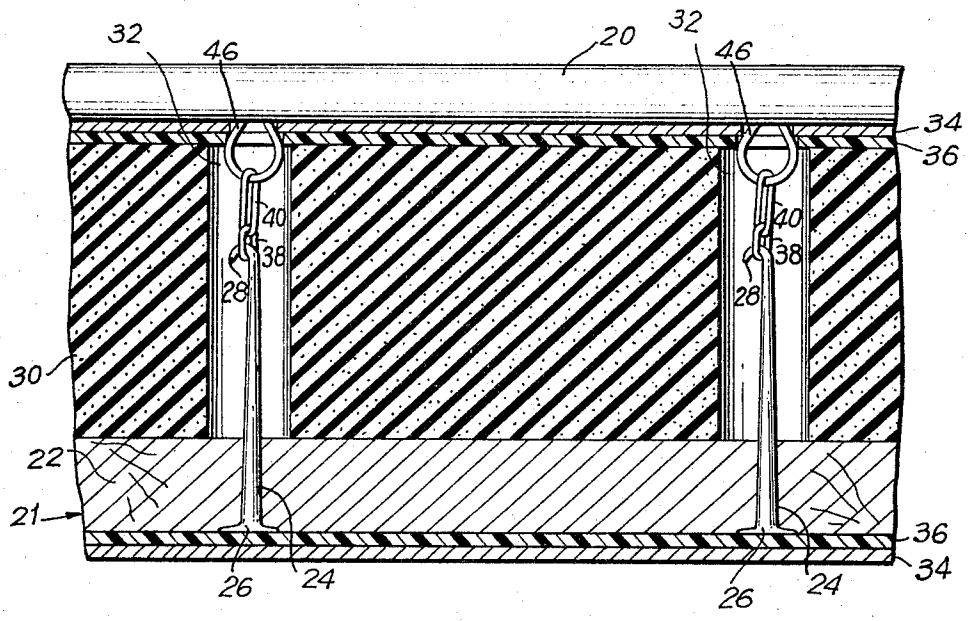
INVENTOR
SIGMUND BEREDAY
BY
Curtis, Morris & Safford
ATTORNEYS

Aug. 16, 1966 S. BEREDAY 3,266,065

TUFTED UPHOLSTERY CUSHION

Filed Jan. 21, 1965 2 Sheets-Sheet 2

FIG. 3



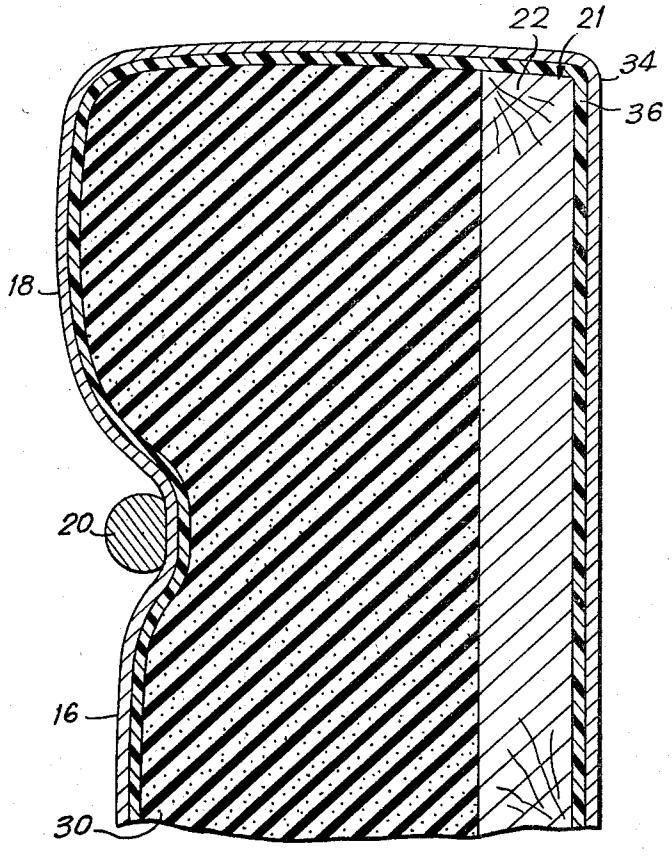


FIG. 4

INVENTOR
SIGMUND BEREDAY
BY
Curtis, Morris & Safford
ATTORNEYS

United States Patent Office 3,266,065 Patented August 16, 1966

3,266,065

TUFTED UPHOLSTERY CUSHION

Sigmund Bereday, 11 Suchville, Bayamon, Puerto Rico

Filed Jan. 21, 1965, Ser. No. 426,816
5 Claims. (Cl. 5—356)

This invention relates to resilient cushion construction, and more particularly to a unique fastening means and method especially adapted to be used in fastening anchoring such as tufting buttons, piping, ribing and welting on the back or seat cushions of upholstered furniture, motor car seats and the like, and to the novel products thus produced.

Anchoring members are normally used both for decorative purposes and to help maintain the upholstery covering, resilient padding, and frame of the resilient cushions of upholstered furniture in predetermined desired relationship with one another.

In the fastening of such anchoring members on furniture, it is highly desirable that simple assembly be possible. It is also of importance that the repair and replacement of such anchoring members be easily accomplished. The prior art discloses a number of methods for fastening such anchoring members to furniture cushions, for example in the U.S. Patents 1,873,607 to Lefevre and 1,907,732 to Burch. The complexity of the problems involved in methods for making such cushions and the need for improved methods are dramatized by the later U.S. Patents 2,780,818 to Gillin, 2,745,212 to Guzzino and 3,103,082 to Baermann wherein various methods for tufting are disclosed.

It is an object of the present invention to provide novel fastening means for use in making resilient upholstered seat elements.

It is a further object of the invention to provide novel tufting such as used in furniture.

It is still another object of the invention to provide cushions having recessed surfaces wherein said surfaces are maintained in place by applicant's novel fastening means.

It is an object of the present invention to provide novel means for fabricating upholstered seat elements for furniture.

It is a further object of the invention to provide a simplified method for making upholstered seat elements.

It is another object of the invention to provide a unique seat, back and arm construction utilizing the unique cushion structure mentioned above and described below.

Applicant has substantially attained these objectives by providing means for attaching anchor members to the frame by metal members, which may be nails or hooks inserted into a supporting frame of the cushion and nail-engaging means attached to anchor members.

The anchor members used in the seating elements of the present invention may comprise decorative buttons, ribbings, and the like. Normally, these anchor members will have an eye at the bottom thereof to facilitate their attachment to a longer, and preferably flexible, nail-engaging means such as string, or the like. The nail-engaging means may then terminate in either an eye or hook depending on the configuration of the terminal portion of the nail with which it is to be joined.

Conveniently, in the case where wood frames are utilized, the nail is in fact a wire nail which is driven through the wood frame to an appropriate distance before its pointed end is bent to form a hook or an eye.

The many objects and advantages of the present invention can best be understood and appreciated by reference to the accompanying drawings which show seat and back

elements incorporating a preferred embodiment of the invention and wherein:

FIGURE 1 is a perspective view of a novel chair seat and back, partially broken away to show the interior construction of the back cushion.

FIGURE 2 is a section taken on line 2—2 of FIGURE 1 showing the manner in which the decorative anchoring elements on the chair of FIGURE 1 are held in place.

FIGURE 3 is a section at the line 3—3 of FIGURE 1 showing the attachment of a ribbing or welt to the cushion frame to produce a decorative recess in the upholstery cover.

FIGURE 4 is a section taken on the line 3—3 of FIGURE 1 and showing the recessed or three-dimensional effect produced by the ribbing feature of the invention.

It is seen that seat **12** has decorative tufting buttons **14** positioned against the surface **16** of an upholstery cover which may be made of leather, plastic, fabric or other conventionally used material. Surface **16** is depressed somewhat below the peripheral surface **18** to make the seat more comfortable and also to enhance its appearance. Ribbing **20** is held snugly against the seat and tends to demark a boundary between surface **16** and **18**.

FIGURE 2 is a section taken on the line 2—2 of FIGURE 1 showing the unique construction whereby buttons **14** are advantageously held in place.

The seat frame **21** includes board **22** into which a nail **24** is driven until nail head **26** is substantially flush with board **22**, after which the nail ends are bent to form hooks **28**. Foam pad **30**, which may be a polyurethane foam, is positioned over the nail-studded frame. Holes **32** are cut in foam **30** to make the nails **24** accessible.

The seat is assembled by placing foam **30** to board **22**. Upholstery cover **34** is prepared by making an open-ended envelope of the covering material which is sewn on the inside seams and left in an inverted, i.e., inside-out, position. After a plastic interlayer **36** has been placed over the foam by slipping a plastic layer, which may be made of polyethylene, over the foam, the envelope of upholstery cover **34** is then slipped over interlayer **36**. Ordinarily, such a method of cushion assembly would be impractical because of the friction between, and adhering of, foam **30** and the upholstery cover. Thus, it was previously necessary to first place an unfinished envelope over the upholstery cover **34**, for example to leave the back side of the back rest cover off, and to fasten it by means of a separate tacking operation.

After covering **34** and plastic interlayer **36** have been positioned over frame **21** and foam **30**, buttons **14** are affixed to nail hooks **21** through a relatively small aperture in covering **34** by means of an eye **38** attached by a string **40** to button eye **42**.

It will be noted in FIGURE 1 and, perhaps more clearly in FIGURE 4, that surface **16** is lower than surface **18**. This result is brought about not by using different thicknesses of foam, but by utilizing ribbing **20** and the unique fastening system shown in FIGURE 3 to compress foam **30** along the perimeter defined by ribbing **20**.

Thus, frame board **22** is placed on the opposite side of foam **30** from which it is desired to place ribbing. Nails **24** are driven into board **22** and the ends of the nails are bent to form hooks as described above. However, instead of putting an individual decorative button on each hook as shown in FIGURE 2, each hook is attached, by a string **40**, to separate rib eyes **46**. This attachment is made while depressing foam **30** down further than was done when attaching buttons **14** shown in FIGURE 2. The foam is held in depressed position by the ribbing and forms a bucket-type of seat.

Fastening of the anchoring members is accomplished with relative ease compared to the fastening of anchoring members by prior methods. The foam 30 is depressed until hook 38 comes into view. Then eye 38 of string 40 is easily attached to hook 28. The foam is then allowed to rebound to the limit allowed by the button which is now firmly attached to the frame. Replacement of worn or broken anchoring members may be carried out similarly. Anchoring members have heretofore been tied at the opposite side of the padding from that on which the anchoring members are placed. Thus when one of the members so affixed required replacement obtaining access to the back of the padding was necessary and thus the complexity of the replacement operation was greater. Furthermore, to provide this access, the method of manufacturing was limited. For example, the structure shown in the drawings which is manufactured with particular economic advantage could not be so manufactured were any of the various old-fashion anchoring techniques used.

Plastic interlayer 36 may be a 0.001-inch thick film of polyethylene of the type conventionally known to the art as "slip-grade" film. This film not only improves the rebound qualities of the cushioning by reducing the friction between the foam and covering, but it also contributes materially to the ease with which the covering may be placed over the foam padding during assembly of the chair.

The plastic interlayer may be attached over the foam padding by any means and in any form. It is advantageous to form the interlayer into bags and slip it over the foam, or to wrap the foam with a sheet of the interlayer material. Furthermore, the interlayer may be coated on the inside of the upholstery cover or be on the surface of the foam cushion. Application of the slip-producing interlayer to the foam cushion may take place in a number of ways.

I claim:

1. An upholstered seat element comprising in combination a rigid frame member, a resilient pad adjacent to said frame member and having a hole extending therethrough said frame member having secured thereto an upstanding hook positioned within the hole of said resilient pad, an upholstery cover extending over said pad and secured to said frame member, said cover having an opening aligned with the hole of said pad, a readily replaceable anchoring member in contact with the external surface of said cover and having secured thereto connecting means extending through the opening in said cover into the hole in said pad for connecting said anchoring member to said hook, said anchoring member being attached to the upstanding hook on the frame by depressing the resilient pad and upholstery cover until the connecting means secured to the anchoring member is engaged over the hook and then releasing the depressed pad and cover, and the length of said connecting means being such that said anchoring member bears against said cover to compress the portion of said resilient pad near said anchoring member.

2. A seat element as defined in claim 1 wherein the connecting means between said hook and said anchor member comprises a loop of string.

3. A seat element as defined in claim 1 wherein said anchoring member is a tufting button.

4. A seat element as defined in claim 1 wherein said anchoring member is a welt.

5. An upholstered seat element comprising in combination a rigid frame member, a resilient pad adjacent to said frame member and having a plurality of holes extending therethrough, said frame member having secured thereto upstanding hooks positioned within the holes of said resilient pad, an upholstery cover extending over said pad and secured to said frame member, said cover having openings aligned with the holes in said pad, anchoring members in contact with the external surface of said cover and having secured thereto connecting means extending through an opening of said cover into a hole of said pad for connecting said anchoring element to one of said hooks, each of said anchoring members being attached to an upstanding hook on said frame by depressing the resilient pad and upholstery cover until the connecting means secured to the anchoring member is engaged over the hook and then releasing the depressed pad and cover, the length of said connecting means being such that said anchoring members bear against said cover to compress the portion of said resilient pad near said anchoring member.

References Cited by the Examiner

UNITED STATES PATENTS

811,366	1/1906	Boller	29—91.6
960,073	5/1910	Buser	29—91.4
1,873,607	8/1932	Le Fevre	5—356
2,238,550	4/1941	Blake et al.	5—356
2,288,130	6/1942	Forney	5—356
2,745,212	5/1956	Guzzino	5—356
2,801,682	8/1957	Fridolph	5—356
2,802,297	8/1957	Meyer	5—356
2,901,028	8/1959	Bottemiller	5—356

FOREIGN PATENTS

864,301	1/1959	Great Britain.

FRANK B. SHERRY, *Primary Examiner.*

C. A. NUMBERG, *Assistant Examiner.*