Sept. 8, 1970 S. LERMAN 3,526,912

UPHOLSTERING STUFFING MEMBER

Filed May 8, 1968 2 Sheets-Sheet 1

FIG. 1

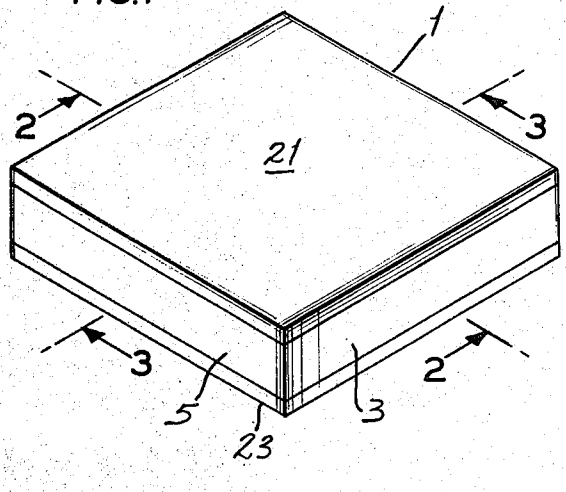


FIG. 2

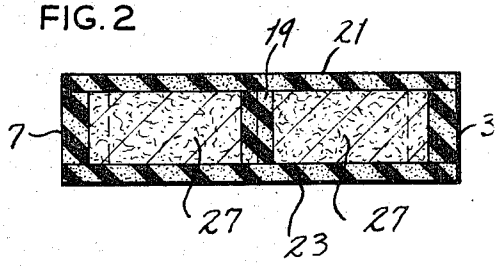


FIG. 3

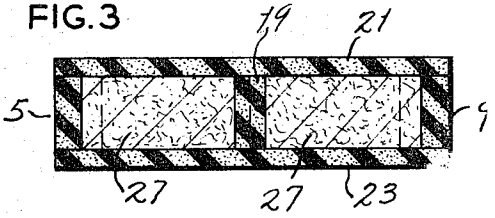


FIG. 4

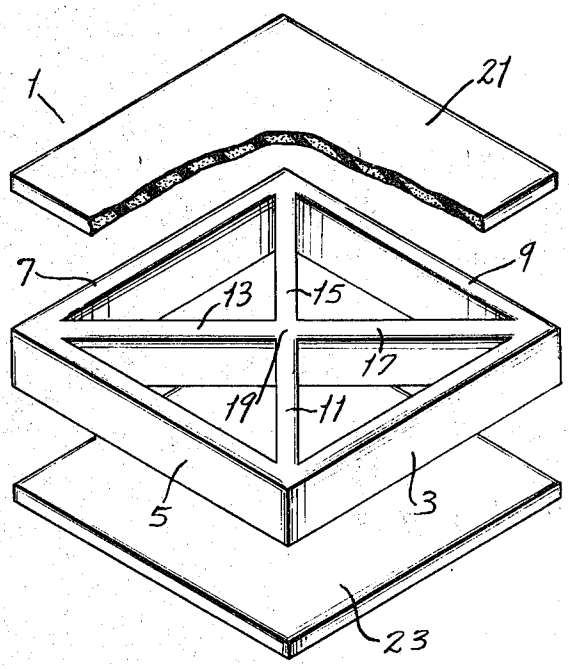
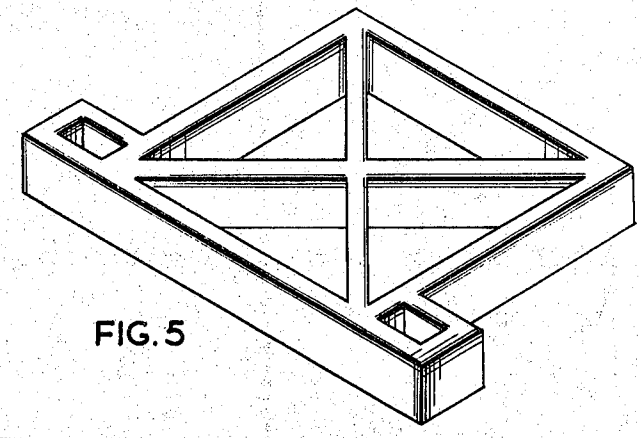


FIG. 5



INVENTOR

SAMUEL LERMAN

BY John D. Pope

ATTORNEY

Sept. 8, 1970 S. LERMAN 3,526,912

UPHOLSTERING STUFFING MEMBER

Filed May 8, 1968 2 Sheets-Sheet 2

FIG. 6

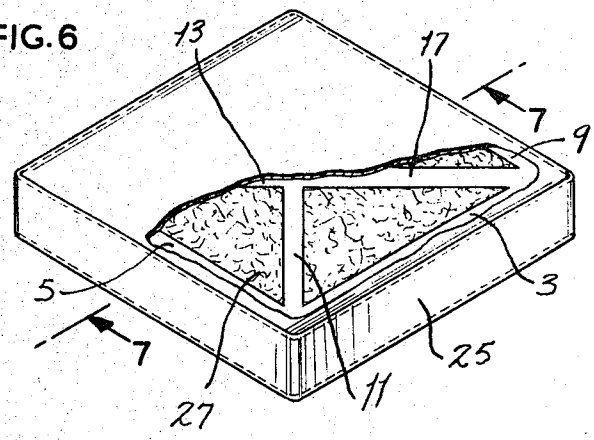
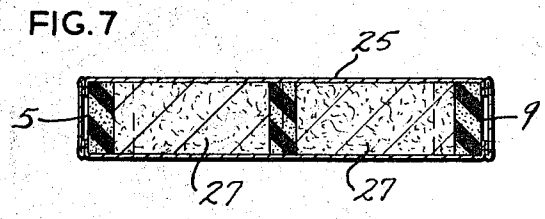


FIG. 7



INVENTOR

SAMUEL LERMAN

BY John D. Pope III

ATTORNEY

United States Patent Office 3,526,912 Patented Sept. 8, 1970

3,526,912

UPHOLSTERING STUFFING MEMBER

Samuel Lerman, St. Louis County, Mo., assignor to Milbern Company, St. Louis, Mo., a partnership consisting of Joseph G. Schwartz, Mildred Schwartz, Bernice Lerman, and Samuel Lerman

Filed May 8, 1968, Ser. No. 727,608
Int. Cl. A47c 27/14, 27/22
U.S. Cl. 5—355 6 Claims

ABSTRACT OF THE DISCLOSURE

This invention relates to a cushion designed for inclusion as part of the seat or back of upholstered furniture or as an independent unit. The cushion is constructed of an elastomeric foamed material frame, diagonal ribs of the same material crossing the frame, and resilient stuffing means within the frame. The entire unit is held together by sheets of the elastomeric material or by a fabric outer cover. Several of the units may be combined in a large furniture piece.

The present invention relates to an upholstering stuffing member and, more particularly, to a member which may serve as or form part of the seat or back of an upholstered piece of furniture.

Among the objects of the present invention may be noted the provision of an upholstering stuffing member which retains its shape after being used; to a member which resists deformation at the point of principal weight; and to a member of the type indicated which is inexpensive to manufacture and which is not deformed permanently after long use. Other objects and features will be in part apparent and in part pointed out hereinafter.

The invention accordingly comprises the constructions hereinafter described, the scope of the invention being indicated in the following claims.

In the accompanying drawings, in which several of various possible embodiments of the invention are illustrated:

FIG. 1 is a perspective view of the cushion or stuffing member of the present invention;

FIG. 2 is a sectional view taken along line 2—2 of FIG. 1;

FIG. 3 is a sectional view taken along line 3—3 of FIG. 1;

FIG. 4 is an expanded perspective view partially in section of the FIG. 1 unit showing the components separately;

FIG. 5 is another form of the stuffing member of the present invention;

FIG. 6 is still another form of the stuffing member; and

FIG. 7 is a sectional view taken along line 7—7 of FIG. 6.

Corresponding reference characters indicate corresponding parts throughout the several views of the drawings.

Various materials have been utilized as stuffers for upholstered furniture. Pillows stuffed with down were long considered the most desirable form of cushion, while kapok and other synthetic stuffing means have been utilized. Foam rubber has also been employed for this purpose.

According to the present invention a stuffing member for upholstered furniture is provided which is inexpensive to manufacture but is sturdy, retains its configuration even after long periods of use, and gives the desirable "loft" appearance of new furniture even after it has been in use for a considerable period of time. The stuffing member can present the soft, luxurious feel of feather stuffing yet retain the desired configuration and loft during use.

Referring now to the drawings, stuffing member 1 is constructed of frame panels 3, 5, 7, and 9, arranged in generally square or rectangular form. Intersecting each corner are ribs 11, 13, 15, and 17, which meet at 19. Cover sheets 21 and 23 sandwich the frame panels and ribs. Frame panels and ribs 3, 5, 7, 9, 11, 13, 15, and 17, as well as cover sheets 21 and 23, are formed of a cellular resilient elastomeric material which deforms under the application of force but which returns to its shape when the force is removed.

The frame panels and the ribs may be cut from a single piece of elastomeric material or if desired they may be formed separately and adhesively joined together. In either event, the scraps of the elastomeric material may be utilized as the resilient stuffing mentioned below.

The elastomeric material may be of many different types but it is preferred that it be one of the polyurethane foams which are frequently employed in the construction of furniture and other seating units. Such polyurethane foams may have a density range from about 1–10 lbs. per cubic foot and can be formed by reacting polymeric materials such as polyesters, polyesteramides, polyalkylene glycol, and other materials having a plurality of reactive hydrogen groups with organic polyisocyanates. The formation of these foamed polyurethane plastics is well known and need not be further described.

The areas between the frame panels and ribs are filled with resilient stuffing 27. This may consist of chicken feathers, goose feathers, down, kapok, polyester fibers, or fragments of polyurethane foam. These areas are filled so as to be fully occupied but not packed, cover sheets 21 and 23 are adhesively joined to the frame panels and ribs, and the stuffing member is ready for inclusion in the back or seat portion of upholstered furniture. In use, it is found that the ribs provide the greatest support at the point of principal weight, the stuffing member gives a loft appearance to the furniture in which it is included, and the furniture does not develop depressions or ridges during periods of use. When the weight of the user rests upon the stuffing member, it is supported firmly but softly. Yet, as soon as the weight is removed, the member promptly returns to its initial contour.

The return to their original configuration of frame panels 3, 5, 7, and 9, and ribs 11, 13, 15, and 17, plumps up resiliently stuffing 27. This is especially desirable where the stuffing is feathers or down.

The stuffing member of the present invention can be made in any desired form for furniture construction. FIG. 5 illustrates an alternate form in which the stuffing member is designed to be utilized in a chair cushion for a particular type chair.

In lieu of building the stuffing member into the furniture it may be separately upholstered and form a backing pillow or surface cushion for a furniture unit.

Still another form of the invention is shown in FIG. 6. The stuffing member of FIG. 6 is similar to the stuffing member of FIG. 1 except that cover sheets 21 and 23 have been replaced by a fabric covering 25. This fabric covering surrounds frame panels 3, 5, 7, and 9, ribs 11, 13, 15, and 17, and stuffing 27.

Fabric covering 25 may be muslin designed for serviceability where the stuffing member is to be built into a unit of furniture or it may be the upholstery material selected for the furniture unit.

In view of the above, it will be seen that the several objects of the invention are achieved and other advantageous results attained.

As various changes could be made in the above con-

structions without departing from the scope of the invention, it is intended that all matter contained in the above description or shown in the accompanying drawings shall be interpreted as illustrative and not in a limiting sense.

What is claimed is:

1. A cushion comprising a four-sided frame and ribs formed of cellular elastomeric material joined together to form a single unit; said ribs extending from the four corners of said frame and meeting at the approximate center thereof; resilient stuffing means filling the spaces between said ribs and said frame; and cover means including sheets above and below said frame and ribs; said frame, said ribs and said resilient stuffing means being sandwiched between said sheets.

2. A stuffing member according to claim 1 in which the elastomeric material is a polyurethane foam.

3. A stuffing member according to claim 1 in which the stuffing means is feathers.

4. A stuffing member according to claim 1 in which the elastomeric material is a polyurethane foam and the stuffing means is feathers.

5. A stuffing member according to claim 1 in which the frame and ribs are cut from a single piece of polyurethane foam.

6. A stuffing member according to claim 1 in which the stuffing means consists of fragments of polyurethane foam.

References Cited

UNITED STATES PATENTS

2,804,130	8/1957	Dunn	5—361 X
2,944,266	7/1960	Wertheimer	5—361 X
2,954,074	9/1960	Meyerhardt	5—361 X
3,222,698	12/1965	Levenson	5—361
3,325,834	6/1967	Lovette et al.	5—355
3,382,511	5/1968	Brooks	5—355

CASMIR A. NUNBERG, Primary Examiner

U.S. Cl. X.R.

297—452