Oct. 16, 1951 R. A. CRAMER 2,571,209

CHAIR SEAT CUSHION

Filed May 19, 1947

Fig. 1

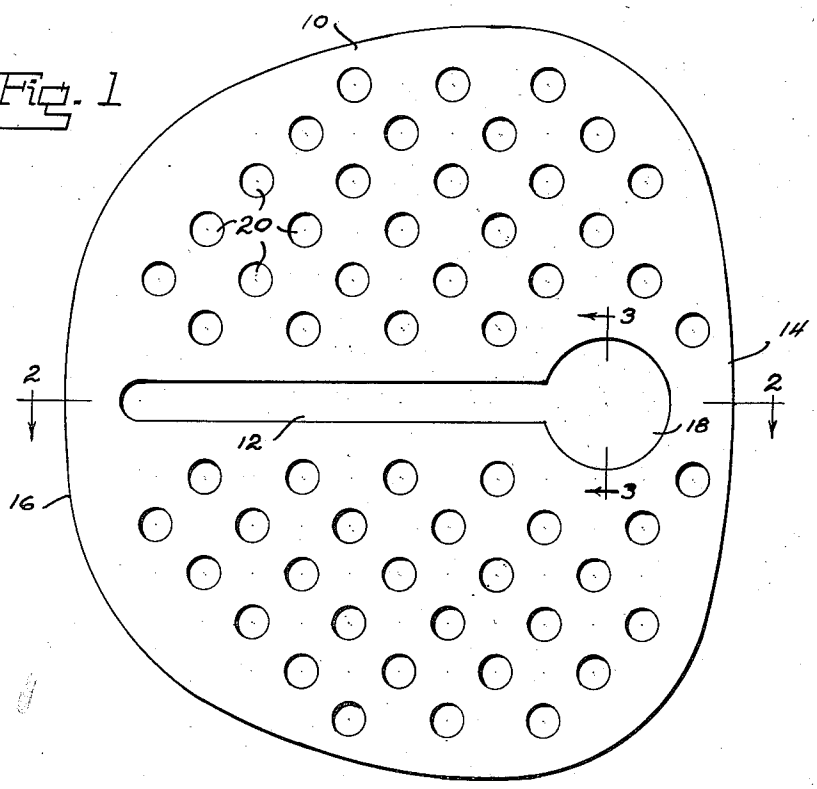


Fig. 2

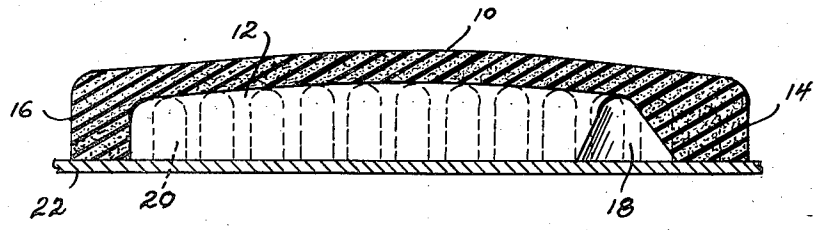
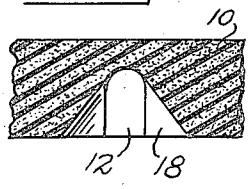


Fig. 3



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CHAIR SEAT CUSHION

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2 Claims. (Cl. 155—179)

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This invention relates to chair cushions for use with chair seats, and more particularly to a resilient cushion which is so constructed and arranged as to be exceedingly comfortable when in use.

The principal object of the present invention is to provide a new and improved chair seat cushion arranged in such a manner as to provide a comfortable support for the human body and at the same time to avoid the creation of any uncomfortable and possibly injurious pressure conditions upon the nerves, blood vessels, etc. located within the crotch area.

A further object of the invention is to provide a chair seat cushion comprised wholly of latex foam, sponge rubber or other similar resilient material, which is constituted by a one-piece, unitary pad, so constructed and arranged as to avoid the pressure conditions referred to.

A still further object is to provide a resilient cushion of the foregoing character wherein the under surface of the cushion is provided with certain cut-away or relieved areas, thus securing a seat member which is readily deformable to conform to the body of the user, and avoid the creation of uncomfortable pressure conditions.

Other objects and novel features of the invention will appear more fully from the following detailed description when taken in connection with the accompanying drawing illustrative of one form of the invention. It will be expressly understood however, that the drawing is utilized for purposes of illustration only, and is not designed as a definition of the limits of the invention, reference being had for this purpose to the appended claims.

In the drawing, wherein similar reference characters refer to like parts throughout the several views:

Fig. 1 is a bottom plan view of a chair seat cushion embodying the principles of the present invention;

Fig. 2 is a transverse sectional view of the cushion taken substantially along line 2—2 of Fig. 1, and

Fig. 3 is a fragmentary sectional view taken along line 3—3 of Fig. 1.

In the usual type of resilient chair seat cushion heretofore employed, the cushion has been formed of resilient material such as a sponge rubber composition or a latex foam, and the top and bottom surfaces thereof have been substantially flat and unbroken. With such prior constructions, it has been found, that with the cushion in use, the material of the cushion has a

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tendency to deform and flow laterally and upwardly into the crotch area, due to the pressure caused by the weight of the occupant. This causes an uncomfortable and unnatural pressure upon areas of the lower pelvic region.

By the present invention, the aforesaid uncomfortable pressures are avoided by relieving a portion of the under surface of the seat cushion to form a centrally positioned channel or slot extending from a point adjacent the front edge of the cushion toward the rear edge thereof.

Referring more particularly to the drawing, the invention is illustrated therein as comprising a chair seat cushion 10 which in plan, is shaped in accordance with the shape of the conventional chair seat. Preferably, the cushion is made of latex foam, although it will be understood that any suitable resilient material such as a sponge rubber composition may be employed.

As shown in Figs. 1 and 2, the under surface of the cushion 10 is relieved or cut-away to form a centrally-arranged channel or slot 12, extending from a point adjacent the front edge 14 to a point adjacent the rear edge 16 of the cushion. As will also be observed from Fig. 2, the depth of the slot is less than the thickness of the cushion so that the top surface of the latter is unbroken. If desired, the front end of the slot 12 may terminate in an enlarged well or cavity 18, in order to provide a greater relief of pressure conditions at the forward portion of the crotch area when the cushion is in use. In the form shown, it will be seen that the under surface of the cushion is also provided with a plurality of spaced-apart wells 20 which terminate short of the top surface, this construction having been found to increase the effectiveness and comfort of the cushion when in use.

In operation, it will be understood that the cushion 10 is mounted upon a suitable chair seat or seat plate 22, and covered with a suitable type of cover, not shown. Thereafter, when the occupant is seated upon the cushion, it will be understood that the latex foam of the cushion deforms and flows laterally. Due to the slot construction 12, this lateral flow of the cushion material is permitted, without any tendency of the material to bunch-up and flow upwardly in the central portion of the cushion. Thus all uncomfortable and unnatural pressure conditions in the crotch area are entirely eliminated.

While it is contemplated that the chair cushion disclosed herein may be formed by molding in molds shaped to provide the wells 20, slot 12 and

cavity 18, it will be understood that other methods may be employed, if desired. It will also be understood that various modifications of the invention will readily appear to those skilled in the art, without departing from the spirit of the invention. Reference will therefore be had to the appended claims for a definition of the limits of the invention.

What is claimed is:

1. As an article of manufacture, a chair seat cushion comprising a body of latex foam corresponding in size and shape with the seat of an ordinary chair, the upper surface of said body being substantially flat and unbroken, the under surface of said body being provided with a cut-away portion defining an open slot arranged midway between the side edges of the body, said slot throughout its length extending from the under surface of the body upwardly but terminating short of the upper surface of the body to leave a body portion of substantially uniform thickness between the upper surface of the body and the top of the slot, and said slot terminating short of the front and rear edges of the body and being provided with an enlarged well at its front end, the slot providing a substantial area allowing lateral flow of the latex foam to prevent bunching and upward flow of the latex foam in the central portion of the body under the pressures created by a person seated on the cushion.

2. As an article of manufacture, a chair seat cushion comprising a body of latex foam corresponding in size and shape with the seat of an ordinary chair, said body having opposite side edges, opposite front and rear edges, a flat under surface, and a substantially flat and unbroken upper surface, said under surface being provided

with a cut-away portion defining an open slot arranged midway between said side edges, said slot throughout its length extending from the under surface of the body upwardly but terminating short of the upper surface of the body to leave a body portion of substantially uniform thickness between the upper surface of the body and the top of the slot and said slot terminating short of the front and rear edges of the body, the body providing a cushioned support for a seated person and the slot being relatively narrow and providing an area allowing lateral flow of the latex foam to prevent bunching and upward flow of the latex foam in the central portion of the body under the pressures created by the seated person.

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REFERENCES CITED

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

UNITED STATES PATENTS

Number	Name	Date
682,871	Hogan et al.	Sept. 17, 1901
1,756,713	Vernet	Apr. 29, 1930
2,232,646	Stone et al.	Feb. 18, 1941
2,237,475	Church	Apr. 8, 1941
2,314,046	Kalter	Mar. 16, 1943
2,343,996	Perry	Mar. 14, 1944
2,384,713	Varma	Sept. 11, 1945

FOREIGN PATENTS

Number	Country	Date
388,472	Great Britain	Mar. 2, 1933
755,030	France	Sept. 4, 1933
768,163	France	May 14, 1934