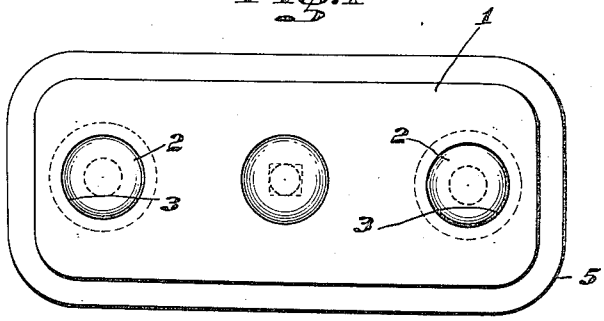
Nov. 16, 1937. W. D. RICH 2,098,975

FURNITURE PAD

Filed Feb. 18, 1936

Fig. 1



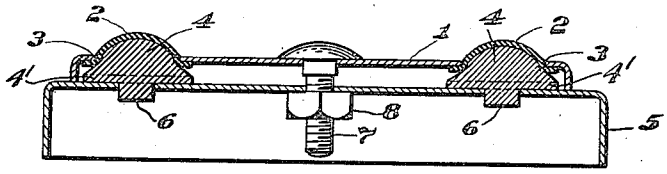


Fig. 2

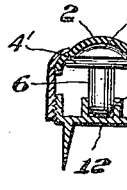


Fig. 3

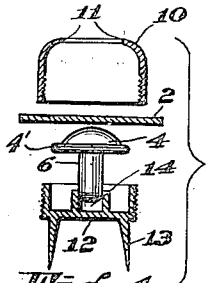


Fig. 4

INVENTOR:
Willis D. Rich
BY John L. R. Hayes
ATTORNEY

Patented Nov. 16, 1937 2,098,975

UNITED STATES PATENT OFFICE

2,098,975

FURNITURE PAD

Willis D. Rich, Hingham, Mass.; Louise B. Rich administratrix of said Willis D. Rich, deceased

Application February 18, 1936, Serial No. 64,483

5 Claims. (Cl. 45—137)

The invention relates to an improvement in furniture pads.

The essential object of the invention is to provide a pad assembly in which a flat disk, or piece, of rubber, leather, or any other strong flexible material of sufficient softness and wear resisting quality, may be employed to form the pad, or pad surface, without the necessity of any special tools, or tooling, and in such manner as to admit of easy disassembly for renewal of the pad as occasion requires.

The invention can best be seen and understood by reference to the drawing, in which—

Fig. 1 shows in plan a pad embodying the invention.

Fig. 2 is a cross vertical section of Fig. 1.

Fig. 3 is a cross section of a modified embodiment of the pad; and

Fig. 4 shows in cross section the several parts of the pad of Fig. 3, in dis-associated relation.

Referring to the drawing:

1 represents the setting in which the pad cushion 2 is set as a protruding member through an opening 3 in the setting. The setting 1 consists of a metal plate, and in Figs. 1 and 2 of the drawing this plate is shown having two openings, thus providing a setting for two cushions and forming two pads.

The cushion 2 consists normally of a flat disk, or piece, *a* (as in Fig. 4), of rubber, or equivalent material, leather, or artificial leather, or any other material of sufficient strength and softness coupled with wearing quality, as will provide a proper pad, or pad surface.

The cushion is made to protrude through the opening 3 in the setting by means of a stud 4, having a flanged portion 4^1, backing the cushion and over the face of which stud the cushion is stretched. The body of the stud 4 is smaller than the opening in the setting to permit of its passage through the opening and at the same time carry with it the pad forming cushion. The flanged portion 4 of the stud is larger than the opening in the setting. The disk, or piece, *a*, from which the cushion is formed is larger than the flanged portion of the stud. The stud 4 rests upon a base 5 on which the stud is localized with relation to the opening in the setting by a shank 6 on the under side of the stud extending through an opening in the base.

The stud is made to protrude through the opening 3 in the setting, carrying the cushion with it, by clamping the setting and base together by a bolt 7 passed downwardly through the setting and through the base where the end of the bolt is secured by a tightening nut 8.

The general operation is as follows:

When the nut is first tightened, and upon the initial protrusion of the stud through the opening in the setting, some stretch of the cushion will take place over the face of the stud, the disk, or piece, *a*, which forms the cushion then being distorted into a more or less cup-shape. As the tightening of the bolt and nut continues the flange 4^1 on the stud will begin to approach that portion of the setting around the opening in it. This will tend to bend the edge of the cushion outwardly into a more or less parallelism with the setting. The protrusion of the stud through the opening in the setting then continuing the cushion will begin to hug more tightly over the face of the stud owing to the draw of the cushion around the edge of the opening, the edge of the cushion then being substantially parallel with the setting. This operation will continue until the flange of the stud acts to bind the edge of the cushion against the setting, thus holding the cushion securely in place all around its edge. This occurs when the stud has about reached the limit of its protrusion, the slight further protrusion of the stud on further tightening of the parts acting to complete the final stretch of the cushion over the face of the stud, and this stretching takes place when the edge of the cushion is held fixed.

The relative size of the disk, or piece, *a*, from which the cushion is made and the length of the stud will determine the amount which the cushion rises above the face of the setting.

The stud 4, its flange 4^1, and shank 6, are made of metal, all preferably cast, or formed, in one integral piece.

In Fig. 3 where a modified embodiment of the pad is shown, the setting 10 is oval, or thimble shaped, with an opening 11 in its end. The setting 10 turns on a cup-shaped base 12, with which it has threaded connection, the setting turning down on this base. The base is an attachable member, being provided with prongs 13, by which its attachment is secured to any object requiring a pad. The normally flat rubber piece, or disk, *a*, forming the cushion, and the stud 4, are substantially the same as in the construction first described. The shank 6 of the stud fits within a socket 14 formed on the base, thus localizing the stud with relation to the opening in the setting. On turning down the setting the stud and cushion will be made to protrude through the opening in the setting the cushion then becom-

ing stretched over the face of the stud and becoming bound around the opening in the setting when the parts become finally tightened the same as before. To accomplish this end the setting need be turned down with considerable force and, accordingly, to facilitate this turning the setting around its bottom edge is preferably made hexagonal in shape.

I claim:

1. A furniture pad comprising a setting having an opening through it, a cushion having edge engagement with the setting around the opening in it and protruding through said opening to rise above the setting, a flanged stud backing said cushion, the flange forming portion of the stud bearing against that portion of the cushion having edge engagement with the setting as aforesaid, the body of the stud protruding in part through said opening in the setting and over the face of which protruding portion of the stud said cushion is stretched, said cushion comprising normally a flat piece of cushion forming material larger than the flanged portion of said stud, the flanged portion of said stud being larger than the opening in the setting, the body of the stud being sufficiently smaller than the opening in the setting to carry the cushion with it when the body is projected through said opening, and means for forcing the stud to engage, in its flange forming portion, that portion of the cushion having edge engagement with the setting around the opening in it and to project, in its body portion, through the opening in the setting thereby distorting and carrying the cushion with it whereby the edge portion of the cushion will be bound to the setting and the projecting body portion thereof stretched over the face of said projecting body portion of the stud.

2. A furniture pad comprising a setting having an opening through it, a cushion having edge engagement with the setting around the opening in it and protruding through said opening to rise above the setting, a flanged stud backing said cushion, the flange forming portion of the stud bearing against that portion of the cushion having edge engagement with the setting as aforesaid, the body of the stud protruding in part through said opening in the setting and over the face of which protruding portion of the stud said cushion is stretched, said cushion comprising normally a flat piece of cushion forming material larger than the flanged portion of said stud, the flanged portion of said stud being larger than the opening in the setting, the body of the stud being sufficiently smaller than the opening in the setting to carry the cushion with it when the body is projected through said opening, a base backing said setting, and means connecting said setting and base to forcibly approach one another for forcing the stud to engage, in its flange forming portion, that portion of the cushion having edge engagement with the setting around the opening in it and to project, in its body portion, through the opening in the setting thereby distorting and carrying the cushion with it whereby the edge portion of the cushion will be bound to the setting and the projecting body portion thereof stretched over the face of said projecting body portion of the stud.

3. A furniture pad comprising a thimble-shaped setting having an opening through it, a cushion having edge engagement with the setting around the opening in it and protruding through said opening to rise above the setting, a flanged stud backing said cushion, the flange forming portion of the stud bearing against that portion of the cushion having edge engagement with the setting as aforesaid, the body of the stud protruding in part through said opening in the setting and over the face of which protruding portion of the stud said cushion is stretched, said cushion comprising normally a flat piece of cushion forming material larger than the flanged portion of said stud, the flanged portion of said stud being larger than the opening in the setting, the body of the stud being sufficiently smaller than the opening in the setting to carry the cushion with it when the body is projected through said opening, a cup-shaped base backing said setting, and means forming a threaded connection between the setting and base for forcing the stud to engage, in its flange forming portion, that portion of the cushion having edge engagement with the setting around the opening in it and to project, in its body portion, through the opening in the setting thereby distorting and carrying the cushion with it whereby the edge portion of the cushion will be bound to the setting and the projecting body portion thereof stretched over the face of said projecting body portion of the stud.

4. In a furniture pad as specified in claim 2, means for localizing the stud on the base with relation to the opening in the setting.

5. In a furniture pad as specified in claim 3, means for localizing the stud on the base with relation to the opening in the setting.

WILLIS D. RICH.