Feb. 17, 1942. S. KRIS 2,273,273

RESILIENT SEAT SUPPORT

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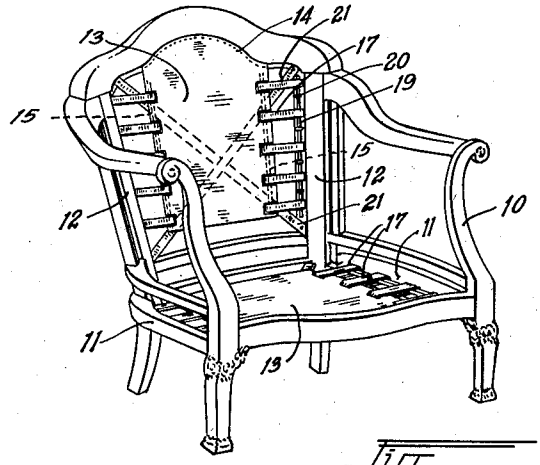


Fig. 1.

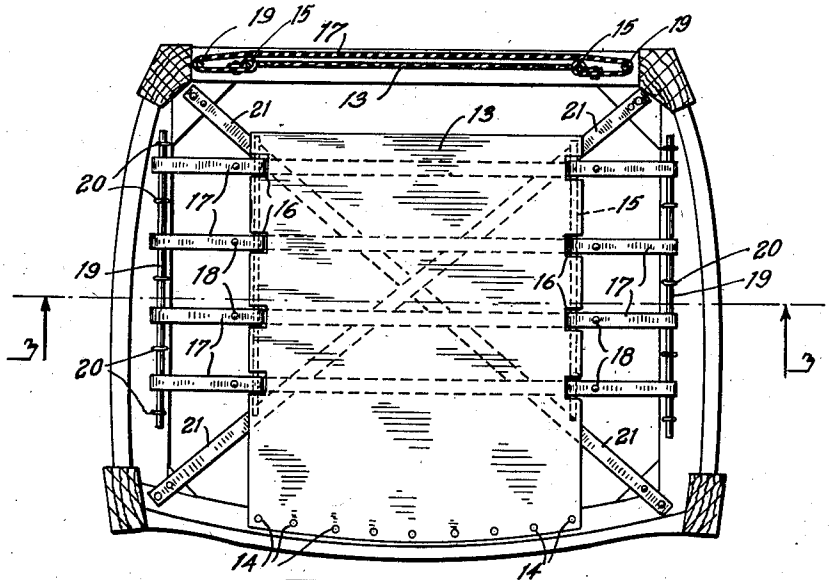


Fig. 2.

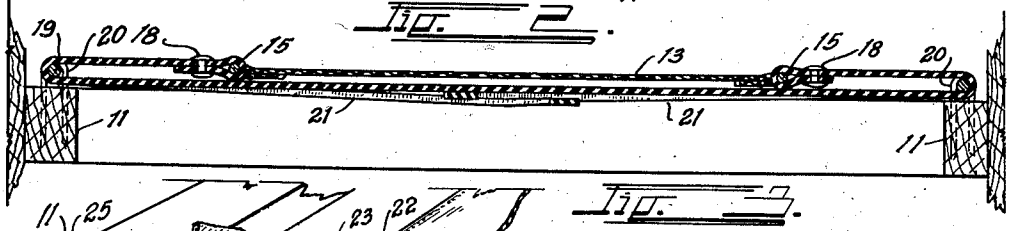


Fig. 3.

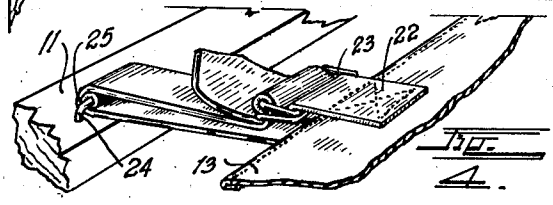


Fig. 4.

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RESILIENT SEAT SUPPORT

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5 Claims. (Cl. 155—179)

This invention relates to a resilient cushion support for furniture and while more particularly adaptable for use in supporting the seat cushions of chairs, davenports, and similar articles, it will also be found valuable for supporting the back and arm portions of similar articles of furniture.

The principal object of the invention is to provide an exceedingly simple and economical structure which will occupy but little space, which will be light in weight, and which will eliminate all metallic springs of any nature in the cushion support.

Other objects of the invention are to provide a construction of this character which can be applied to any of the present furniture frames without changes therein; which will be noiseless in use; which will not wear or tear the cushions; and which will not require lining or covering.

Other objects and advantages reside in the detail construction of the invention, which is designed for simplicity, economy, and efficiency. These will become more apparent from the following description.

In the following detailed description of the invention reference is had to the accompanying drawing which forms a part hereof. Like numerals refer to like parts in all views of the drawing and throughout the description.

In the drawing:

Fig. 1 illustrates a typical chair frame with the invention applied thereto;

Fig. 2 is an enlarged, horizontal cross section through the chair illustrating the invention applied to the seat portion thereof;

Fig. 3 is a still further enlarged cross section, taken on the line 3—3, Fig. 2; and

Fig. 4 is a fragmentary, perspective view illustrating an alternate method of attaching the supporting straps to the seat support.

In the drawing, a typical chair frame is indicated at 10 with its seat framing members at 11 and its back framing members at 12. The improved cushion support employs a sheet of fabric 13, preferably of a rugged material such as canvas, one edge of which is permanently tacked or otherwise secured to the frame, as shown at 14. When used for a seat cushion support the attachment is made to the front framing member of the seat frame 11, as shown in Fig. 2. When used as a back cushion support, the upper edge of the sheet is attached to the upper framing member of the back frame 12.

The invention is similar whether applied to the seat or back and for convenience it will be described applied as a seat cushion support.

The two opposite sides of the sheet 13 are hemmed about two metallic rods or wires 15 and the sheet is notched at spaced-apart points, as indicated at 16, for flexible rubber straps 17. Loops are formed in the extremities of the straps by means of rivets 18, or in any other desired manner, to form loops through which the wires 15 pass.

An attachment rod 19 is secured to each side of the seat frame 11, such as by means of staples 20. The straps 17 extend from one of the wires 15 outwardly around one of the rods 19, thence across beneath the sheet 13 to the other rod 19, thence inwardly to attachment with the other wire 15.

Thus, each strap is a single, continuous member forming a support at both sides of the seat frame 11. These straps are preferably formed of heavy resilient tread stock rubber which will support a comparatively great weight and yet will be freely resilient.

Two diagonal rubber straps 21 are attached at the corners of the seat frame and extend across each other diagonally beneath the sheet 13. These straps not only add additional resilient support to the seat but also serve to prevent swinging or swaying of the seat. The usual seat cushion is placed directly on the flexible sheet 13.

Furniture with this invention applied is very soft, yielding and comfortable and since there are no metallic springs, all noise and tearing of the fabric is eliminated. The depth usually required for cushion springs has also been entirely eliminated so that a very neat, flat supporting structure is obtained.

If the sheet is permanently attached to the frame at one side as illustrated, it will be in its proper position and will not shift while in use.

In Fig. 4 an alternate method of attaching the straps to the seat support is illustrated. In this form canvas or fabric tabs 22 are stitched or otherwise secured to the edge of the sheet 13. These tabs carry two elongated, self-locking buckle loops 23. The extremities of the rubber straps are passed through the two loops 23 thence turned back through one of the loops, as illustrated, to lock the extremities of the strap. With this arrangement, a tension adjustment can be had at all times. For instance, if a more firm support is desired for the seat, the extremities of the straps are simply drawn through the self-locking loops to increase the tension therein.

In the form of Fig, 4, an alternate method of securing the straps to the chair frame members is illustrated. In this form the rods 19 are

eliminated and the straps are secured by means of specifically designed staples **24** carrying rollers **25** around which the straps are passed.

The function and operation of the alternate form is similar to the previously described form.

While a specific form of the improvement has been described and illustrated herein, it is desired to be understood that the same may be varied, within the scope of the appended claims, without departing from the spirit of the invention.

Having thus described the invention, what is claimed and desired secured by Letters Patent is:

1. A cushion support for furniture comprising: a sheet of flexible material; means for securing one edge of said sheet to the frame of a piece of furniture, and flexible straps each consisting of a single length of material extending from one side of said sheet outwardly to said frames thence across said frame beneath the sheet to the other side of said frame, thence inwardly to the other side of said sheet.

2. A cushion support for furniture comprising: a sheet of flexible material; means for securing one edge of said sheet to the frame of a piece of furniture; and a plurality of parallel, spaced-apart, resilient straps, each strap extending across the bottom of said sheet to the frame at each side thereof, thence extending inwardly to the side edges of said sheet.

3. A furniture cushion supporting structure comprising: a rigid frame; a rod extending along each side of said frame and secured thereto; a flexible sheet of material within said frame; and a plurality of flexible straps extending outwardly from each side of said sheet around said rods, thence across the bottom of said sheet.

4. A furniture cushion supporting structure comprising: a rigid frame; a rod extending along each side of said frame and secured thereto; a flexible sheet of material within said frame; a plurality of flexible straps extending outwardly from each side of said sheet around said rods, thence across the bottom of said sheet; and diagonal, flexible straps extending from the corner of said frame across each other beneath the bottom of said sheet.

5. A furniture cushion supporting structure comprising: a rigid frame; a rod extending along each side of said frame and secured thereto; a flexible sheet of material within said frame; a plurality of flexible straps extending outwardly from each side of said sheet around said rods, thence across the bottom of said sheet; diagonal, flexible straps extending from the corner of said frame across each other beneath the bottom of said sheet; and wires hemmed into the side edges of said sheet to which said straps attach.

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