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SPINE SUPPORT

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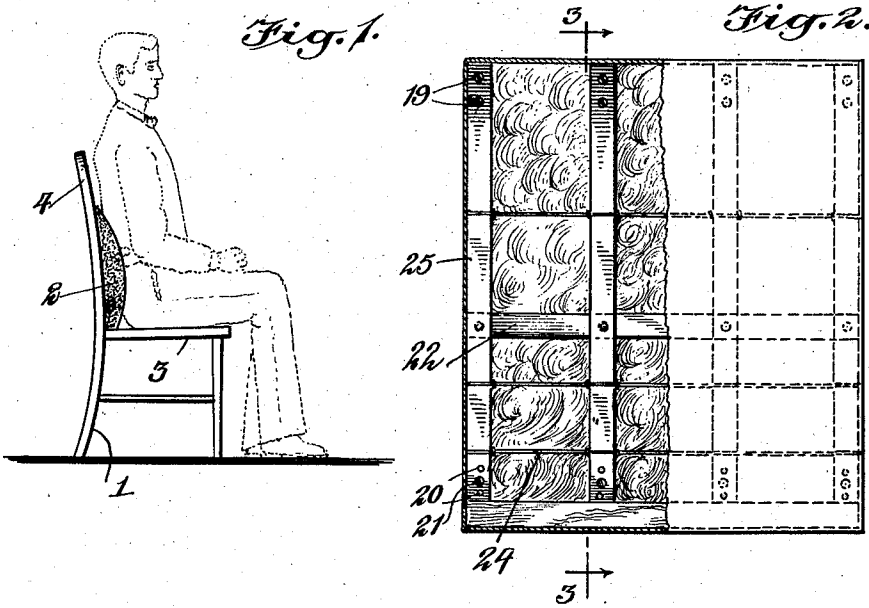


Fig. 3.

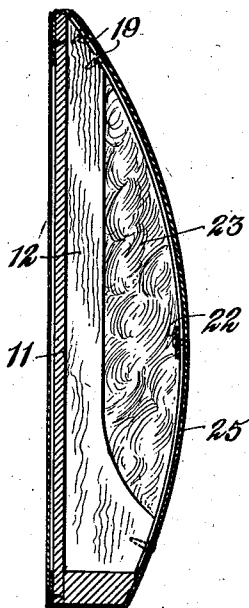


Fig. 4.

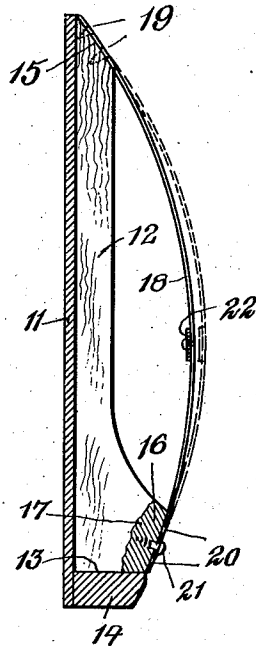
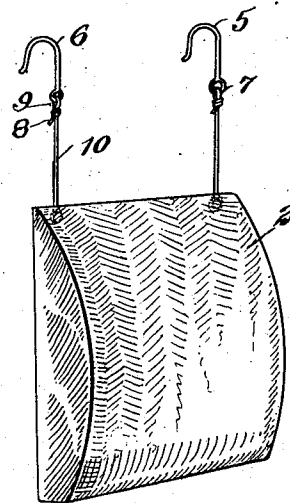


Fig. 5.



WITNESSES
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SPINE SUPPORT.

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This invention relates to spine supports and has for an object to provide an improved construction wherein a desirable support is provided, capable of arrangement in chairs, sofas or other places, whereby a proper support to the back or spine of a person may be had.

Another object of the invention is to provide a support for the back or spine, wherein supporting means are presented which may be adjusted to fit different sized persons and different shaped spines.

A still further object of the invention is to provide a spine support which may be loosely placed in a chair of conventional shape and design or may be suspended from the upper part of the chair so as to engage and properly support the spine, principally at what is commonly known as the small of the back.

In the accompanying drawing—

Figure 1 is a side view of a chair, with a support embodying the invention applied thereto, the chair and support being shown in connection with a figure in dots, illustrating the contact with the spine.

Figure 2 is an enlarged front view of the support shown in Figure 1, certain parts being broken away for better illustrating the construction.

Figure 3 is a sectional view through Figure 2 on line 3—3.

Figure 4 is a view similar to Figure 3 but showing the filling eliminated and showing how the flexible members may be adjusted.

Figure 5 is a perspective view on a reduced scale, illustrating how the support may be carried on the back of a chair, sofa or other article.

Referring to the accompanying drawing by numerals, 1 indicates an ordinary chair of the stiff back variety, and 2 a support resting on the seat 3. Where the person is too large or small, or for some other reason, the support 2 is not properly located for engaging the curvature in the back immediately above the hips, the support may be raised and supported from the upper part of the back 4 of the chair. In Figure 5, hooks 5 and 6 are shown which are adapted to hook over the back 4, said hooks being connected with the support 2 by suitable flexible members or cords 7 and 8. The cords are preferably slipped through suitable eyes 9 in the respective hooks and secured by a suitable knot 10. By untying the knot 10, the

effective length of the cord may be adjusted so that the support 2 will be held at the desired height. In the drawing, the chair 1 is shown but it is evident that a different kind of a chair, sofa or other article could receive the support 2 and could be supported thereby loosely by hooks 5 and 6 or if desired, could be embedded and form part of the sofa or other support. This is particularly true where upholstered chairs or sofas are to be supplied with a support 2. Regardless of the place where the support 2 is to be used, the construction is as shown in Figures 2, 3 and 4.

From these figures, it will be observed that the support 2 is provided with a back 11, which is preferably stiff, or which is preferably formed of some light wood. A plurality of wooden braces 12 are also provided and secured by screws or otherwise to the back 11. Preferably, each of these braces is provided with a short flat section 13 against which the bottom plate 14 rests, said bottom plate being secured by screws or otherwise to the braces 12 and to the back 11. There have been shown four braces 12 in the drawing, but it will be evident that a greater number might be used or even a less number. As shown in Figure 2, there is a brace 12 at each end of the back 11 and two spaced evenly between the ends. Each of the braces 12 is provided with an inclined upper spring receiving section 15 and an inclined spring receiving section 16 at the lower end. The section 16 is the outer surface of a projecting portion 17. Associated with each of the braces 12 is a spring 18, which is a flat spring, and which at the upper end, is preferably secured in place by one or more screws 19. At the lower end, the spring 18 is provided with a number of apertures 20 and said apertures being adapted to receive a screw 21. The provision of these apertures permits a longitudinal adjustment of the spring 18 and, consequently, causes the same to bow to a greater or less extent, according to which aperture the screw 21 is fitted into. In case a greater bowing action is desired, screw 21 is removed, spring 18 bowed to the position shown in dotted lines in Figure 4 and then the screw 21 passed through the lowermost aperture 20 back into its socket or usual place in the extension 17. This will hold the spring bowed to a greater extent so as to accommodate a greater curvature of the back. The aim is to have the bow of spring

18 such as to substantially fit the small of the back whereby an efficient bracing and supporting action is secured. Preferably, a transverse flat spring 22 is riveted or otherwise rigidly secured to all of the springs 18 as shown in Figure 2. This holds the springs against accidental shifting and assists in holding the packing 23 in place. Suitable metallic or textile straps or cords 24 are also secured to the springs for holding the packing 23 in place. This packing may be cotton, hair or other suitable packing as desired. Under some circumstances, the packing is completely eliminated and the springs are used to present the only support.

It is, of course, evident that the spine support may be made in different sizes to fit different sized persons, while the adjustment of the springs 18 readily permits an adjustment to fit different curvatures of spines. After the parts have been once adjusted, they are usually left in this position continually. After the parts have been assembled and the springs 18 adjusted as desired, a covering 25 of leather or other material is stretched over the springs 18 which may be termed the front, over the sides and also over the back. This covering of leather, fabric or other material, may be held in place by tacks or other securing means. Where the device is used on upholstered chairs or sofas, preferably the covering 25 is of material matching in color and general appearance with the upholstery.

What I claim is:

1. A spine support, comprising a back, a plurality of bracing members connected with the back, each of said bracing members hav-

ing a beveled upper end and a projecting lower end, said projecting lower end having an inclined section, a flat spring for each of said bracing members, said flat springs at their ends fitting flatwise against the beveled sections at the top and bottom, means for adjusting each of said springs independently for varying the degree of permanent bowing of the spring, and covering means for covering said springs, back and bracing members.

2. A spine support, comprising a stiff back, a plurality of bracing members connected with said back on one face thereof, each of said bracing members having a bevelled upper end and a projecting lower end, a flat spring for each of said bracing members, said flat springs at their ends fitting flatwise against the bevelled sections at the top and the projecting lower ends at the bottom, and means for adjusting each of said springs independently for varying the degree of permanent bowing thereof.

3. A spine support, comprising a back, a plurality of bracing members secured to the back and extending from the top to the bottom thereof, each of said bracing members having a projecting lower end, one of said projecting lower ends having an inclined section, a flat spring for each of said bracing members, each flat spring at its end fitting flatwise against the respective tops of said bracing members and against said inclined sections, and means for adjusting each of said springs independently for varying the degree of permanent bowing thereof, said means acting to connect the springs to the bracing members.

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