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COMBINED FRAME AND BACKREST-SUPPORT FOR CHAIRS

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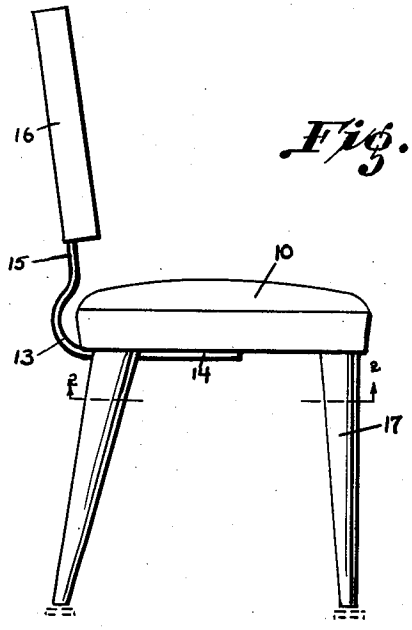


Fig. 1

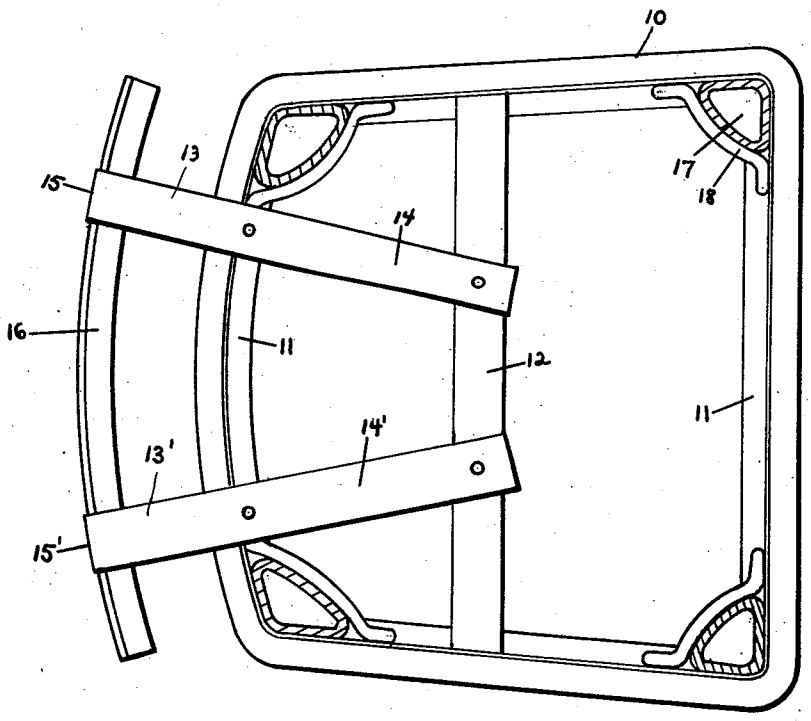


Fig. 2

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COMBINED FRAME AND BACK REST SUPPORT FOR CHAIRS

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3 Claims. (Cl. 155—197)

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The invention described herein, if patented, may be manufactured and used by or for the Government for governmental purposes, without the payment to me of any royalty thereon.

This invention relates to a chair, and more particularly, to a novel combination of a chair seat with bracing means and a backrest-support.

In the chair of the posture chair type, i. e., a chair having a seat and a backrest spaced from the seat and connected thereto by one or more backrest-supports, it is essential that the backrest-support be securely connected to the seat. Where the seat is of material possessing substantial thickness, such a wooden seat, the backrest-support may be conveniently bolted thereto or attached by a bracket. However, in a chair of modern type construction, utilizing a metal frame for the support of a seat cushion, such attachment of the backrest-support is not possible. To connect the backrest-support only to the frame is not practicable, as such connection is under considerable strain and tends to work loose in use.

My invention is intended to overcome this defect, and has among its objects:

1. A durable connection between a chair seat frame and a backrest-support.

2. An attachment for a backrest-support to a cushion seat which serves to strengthen and stiffen the seat cushions.

3. A chair seat and backrest-support connection which is concealed from view and thus does not detract from the appearance of the chair.

These and other objects of my invention will appear more fully in the following detailed description.

A chair in accordance with my invention essentially consists of a seat (preferably of the cushion type), a seat frame, a stiffening member supporting and bracing the seat, and a backrest-support having a horizontal portion in the plane of the seat and connected to the frame and the brace.

The appended drawings illustrate an embodiment of my invention by way of example.

Fig. 1 of the drawings is a side elevation of a chair in accordance with my invention; and

Fig. 2 is a sectional view taken along lines 2—2 of Fig. 1.

More particularly, reference numeral 10 denotes a chair seat which in the embodiment illustrated has approximately the outline of a trapezoid, but which may be of any other shape desirable for a chair seat. In a preferred embodiment of my invention, seat 10 is of shaped, covered sponge rubber; however, other conventional types of chair seat material are equally within the contemplation of my invention. Seat 10 is circumferentially supported by frame 11 (which in Figure 2 of the drawings is shown of one-

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piece construction) whose outline corresponds to the shape of the seat 10; while preferring metal as a structural material for the frame, I do not limit myself to the choice of this material therefor. An internal transverse brace 12, spaced from the front and rear portions of seat frame 10, and fixedly connected to the sides thereof and further supports and stiffens seat 10. A pair of backrest-supports 13, 13', each of which has a horizontal portion 14 (or 14') and a vertical portion 15 (or 15'), is connected to the chair by bolting, welding, or otherwise fixedly attaching their horizontal portions 15 (or 15') to brace 12, and to frame 11 rearwardly of the points of attachment to brace 12 and thus join the latter to the rear portion of frame 11. One free end of each backrest-support is thus beneath the chair seat 10, while the other free end extends above the seat rearwardly thereof and carries backrest 16. I do not wish to limit myself to a particular number of my L-shaped backrest-supports; while the appended drawings (and particularly Fig. 2 thereof) show a pair of backrest-supports 13, 13', a single backrest-support or three or more backrest-supports attached to the chair seat in the manner disclosed, are within the contemplation and scope of my invention.

Chair legs 17 are attached to frame 11 by means of corner braces 18. Any other means of attaching the legs to the frame, e. g., corner bolts may be substituted for this manner of attachment. The number and location of the chair legs do not form any part of my invention; in fact, a conventional single central vertical post, well known in posture chair construction, may be substituted for the illustrated leg construction; this conventional modified form is not illustrated in the drawings as it does not necessitate any deviation from the construction of the combined seat and backrest supports.

The preceding description of an embodiment of my invention clearly sets forth the simple, efficient, and inexpensive nature of my combination of chair elements. Changes in dimensions and proportions, without departing from the spirit of my invention will readily occur to the expert and are consequently intended to be included within the scope of my invention. I thus desire to be limited only by the appended claims.

I claim:

1. In a chair: a substantially quadrilateral one-piece seat-supporting frame, an internal stiffening member fixedly connected to said seat frame, and a backrest-supporting member fixedly connected to said stiffening member and rearwardly extending therefrom beyond and upwardly of the rear portion of said seat frame, said backrest-supporting member being fixedly connected to said rear portion of said frame; whereby a longitudinally and transversely internally

braced seat construction of great strength is provided.

2. In a chair: a substantially quadrilateral one-piece seat-supporting frame, an internal stiffening member fixedly connected to said seat frame, and a plurality of backrest-supporting members fixedly connected to said stiffening member and rearwardly extending therefrom beyond and upwardly of the rear portion of said seat frame, each of said backrest-supporting members being fixedly connected to said rear portion of said frame; whereby a longitudinally and transversely internally braced seat construction of great strength is provided.

3. In a chair: a substantially quadrilateral one-piece seat-supporting frame, an internal stiffening member spaced from the front and back portions of said seat frame and fixedly connected to and joining the sides of said seat frame, and a pair of substantially L-shaped backrest-supporting members, each of said backrest-supporting members having one of its free ends

fixedly connected to said stiffening member and rearwardly extending therefrom to and beyond the rear portion of said seat frame, the horizontal portion of each of said backrest-supporting members also being fixedly connected to said rear portion of said seat frame so as to join said internal stiffening member to said rear portion; whereby a longitudinally and transversely internally braced seat construction of great strength is provided.

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

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