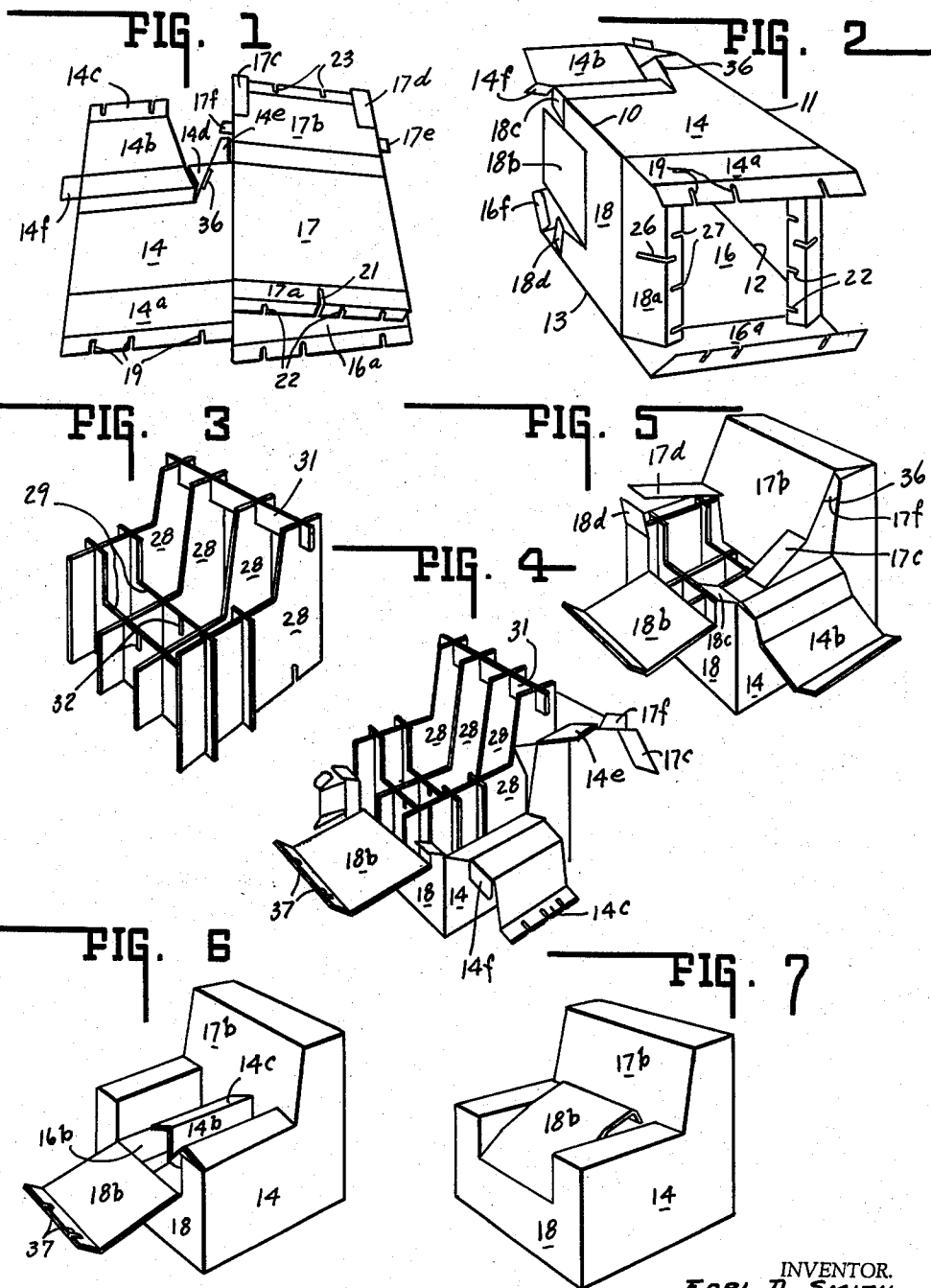


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CHAIR STRUCTURE  
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## CHAIR STRUCTURE

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This invention relates generally to chair structures, and in particular to a chair structure which can be assembled from foldable, light weight material, such as fibreboard or the like.

In my Letters Patent No. 2,707,514, entitled "Chair Construction," there is disclosed and claimed a form of light weight fibreboard chair. The assembled construction of the patent is characterized by exposed flaps and staple heads. It is necessary to cover the assembled chair structure with a suitable fabric slip cover to hide or mask the flaps and staple heads. Further, the assembly of the patented structure requires the use of staples, adhesive tape and the like.

The concept of the present invention provides a chair structure which, when assembled, is characterized by the absence of exposed flaps, staples, adhesive tape or the like and therefore requires no masking fabric slip cover. Further, the chair structure of the present invention can be folded, accordion-like, and shipped or stored in a relatively small, flat container, reassembly of the chair requiring merely the folding of its panels along scored fold lines without the use of adhesive tape, staples or other fasteners.

It is the primary object of the present invention therefore to provide a chair structure which can be shipped or stored in a relatively small flat container and which can be assembled after removal from the container without the use of tools, adhesives, staples or fasteners of any kind.

A further object of the present invention is to provide a chair structure which, when assembled, has no exposed flaps or fasteners and hence requires no masking slip cover.

A further object of the present invention is to provide a chair structure formed of folded fibreboard or the like which is light in weight and yet rigid and sturdy.

The full nature of the invention will be understood from the accompanying drawings and the following description and claims:

Fig. 1 is a perspective view of the casing structure blank partially folded.

Fig. 2 is a perspective view of the casing blank in erected position.

Fig. 3 is a perspective view of the core structure.

Fig. 4 is a perspective view of the core structure partially inserted into the casing structure.

Fig. 5 is a perspective view of the casing structure, with the core structure inserted therein and with the back rest panel partially in place.

Fig. 6 is a perspective view showing the arm rest panels partially in place.

Fig. 7 is a perspective view of the completed structure with the exception that the seat panel is not completely lowered into place.

Referring initially to Figs. 1 and 2, the chair structure includes a blank forming a generally rectangular tube which is folded along the fold lines 10, 11, 12 and 13.

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The rectangular configuration is thus formed by side sections 14 and 16, rear section 17 and front section 18. As may be seen from Fig. 1, the blank may be collapsed for storing. It will also be evident that in Fig. 1, the front section 18 (visible in Fig. 2) underlies the side section 14 and the side section 16 (visible in Fig. 2) underlies rear section 17.

The side section 14 is scored to provide a panel 14a which is further scored along its lower margin so that its lower marginal area can be folded inwardly, as shown in Fig. 2. The marginal area of the panel 14a is provided with a series of slots 19 which engage the core structure to be subsequently described. The upper portion of the side section 14 is scored along spaced parallel lines to provide an arm rest panel 14b. The terminal scoring on the panel 14b provides a slotted flap 14c. In its upper right-hand area the section 14 also includes the flaps 14d and 14e, and, at its upper left-hand margin carries flap 14f. It will be understood that the side section 16, not visible, in Fig. 1, is a duplicate of the section 14, and in referring to the panels carried by the section 16, the letter references used in describing the panels of section 14 are also used to identify corresponding panels on side section 16.

The rear section 17 is scored in its lower marginal area to provide a base panel 17a centrally slotted at 21. The inwardly foldable marginal area of the base panel 17a is slotted at 22 to accommodate the core structure to be subsequently described. The upper area of the rear section 17 is scored along parallel horizontal lines to provide a back rest panel 17b whose inwardly foldable upper marginal area is slotted at 23 to accommodate the core structure. The upper side marginal areas of the panel 17b also carries the flaps 17c and 17d and side-wardly extending flaps 17e and 17f.

As shown in Fig. 2, the front section 18 is scored along its lower marginal area to provide a base panel 18a which is identical to the panel 17a and similarly slotted at 26 and 27. The upper area of the section 18 is scored to provide the seat panel 18b and adjacent each side of the seat panel carries the flaps 18c and 18d.

The core structure, now to be described, is shown in Fig. 3, and includes aligned, spaced generally L-shaped members 28. The members 28 are supported in spaced relation by the transverse, generally U-shaped struts 29 and by the transverse strut 31, the struts 29 being centrally slotted at 32. As will be evident from Fig. 3 the struts and the members 28 are interfitted by means of mutual slots. The two outer L-shaped members 28 have a substantially wider base leg than the intermediate L-shaped members whereby the upper margins of the base legs of the outer L-shaped members provide arm support areas and the base legs of the intermediate L-shaped members provide a chair seat support area. The upwardly extending legs of the L-shaped members provide a chair back support area.

The casing structure and core structure may both be formed of any suitable relatively rigid, foldable material, preferably corrugated fibreboard. While the core structure is shown in Fig. 3 in its finished configuration, it will be understood that it can be collapsed, by pivoting along certain of its mutual slotted connections, into a relatively flat configuration. It will be evident from Fig. 1 that the casing structure may be collapsed into a relatively flat configuration, and with the panels folded inwardly, both the core structure and the casing structure may be packaged or stored in a container which has a length only slightly longer than the combined widths of sections 14 and 17 and a width only slightly larger than the height of either of these sections.

The assembly of the chair structure will now be described. The casing structure is initially erected from

its position of Fig. 1 to its position of Fig. 2. The panels 17a and 18a are then folded inwardly and thereafter the panels 14a and 16a are folded inwardly to close the base of the casing structure. The panels 14a and 16a overlie the panels 17a and 18a, and the inwardly folded margins of the panels 14a and 16a are accommodated in the slots 21 and 26. The casing structure may then be set upright and the core structure inserted therein, as shown in Fig. 4. It will be understood that when the core structure is seated in the casing, the slots 19 in the panel 14a and their counterpart slots in the panel 16a accommodate the lower margins of the struts 28. The slots 22 and 27 in the panels 17a and 18a, respectively, accommodate the lower margins of the L-shaped members 28.

With the core structure in place within the casing, the panel 17b of the back section may be moved into place, as shown in Fig. 5, with its tabs 17e and 17d accommodated in an appropriately positioned slot indicated at 36. The tabs 17c and 17d overlie the arm rest support area. Next the panels 14b and 16b may be brought into place, as shown in Fig. 6, with their terminal portions overlying the chair seat support area and with the slots in their terminal flaps 14c and 16c meshing with the slots 32 in the core structure struts 29. Finally, the panel 18b of the front section may be moved into place, as shown in Fig. 7, with the slots 37 formed in the inwardly folded marginal area of the panel 18b accommodating the intermediate L-shaped members 28 of the core structure.

The chair structure just described is light in weight and can therefore be easily moved for furniture rearrangement. Interlocking of the core structure and casing provides the chair with the required rigidity. As previously mentioned, by removing the core structure from the casing structure, both may be collapsed into a relatively flat configuration which facilitates economical shipment or storage. When assembled, the chair has no exposed flaps or fasteners. By providing the casing surfaces with a decorative or cloth-simulating design, a satisfactory aesthetic effect may be obtained without the use of a decorative slip cover.

While the invention has been disclosed and described in some detail in the drawings and the foregoing description, they are to be considered as illustrative and not restrictive in character, as other modifications may readily suggest themselves to persons skilled in this art and within the broad scope of the invention, reference being had to the appended claims.

The invention claimed is:

1. An article of furniture comprising a casing structure and a core structure, said core structure comprising aligned, spaced, generally L-shaped members, transverse struts extending between said L-shaped members and interfitted therewith by means of mutual slots, the two outer L-shaped members having a substantially wider base leg than the intermediate L-shaped members whereby the upper margins of the base legs of said outer members provide chair arm support areas, the base legs of the intermediate L-shaped members provide a chair seat support area and extending legs of said L-shaped

members provide a chair back support area, said casing structure comprising a generally rectangular tube folded from a blank of stiff sheet material and including side sections, a front section and a rear section, each of said sections carrying at its lower margin a base panel foldable into overlapping relation to close the base of said casing structure, said core structure being accommodated in said casing with the lower margins of the base legs of said L-shaped members adjacent the base of said casing, said side sections of said casing each having panels adapted to enclose the adjacent chair arm support area and to extend into the chair seat support area, said front section of the casing having a panel adapted to cover said chair seat support area and to overlie the extending portions of said side section panels, said rear section of the casing having a panel adapted to cover said chair back support area, said casing structure and said core structure being separately collapsible to a relatively flat configuration for facilitating transport or storage.

2. An article of furniture comprising a casing structure and a core structure, said core structure comprising aligned, spaced, generally L-shaped fibreboard members, transverse fibreboard struts extending between said L-shaped members and pivotally interfitted therewith, the two outer L-shaped members having a substantially wider base leg than the intermediate L-shaped members whereby the upper margins of the base legs of said outer members provide chair arm support areas, the base legs of the intermediate L-shaped members provide a chair seat support area and the extending legs of said L-shaped members provide a chair back support area, said casing structure comprising a generally rectangular tube folded from a fibreboard blank and including side sections, a front section and a rear section, a base panel carried by at least one of said sections at its lower margin and foldable to close the base of said casing structure, said core structure being accommodated in said casing with the lower margins of the base legs of said L-shaped members adjacent the base of said casing, said side sections of said casing each having panels adapted to enclose the adjacent chair arm support area and to extend into the chair seat support area, said front section of the casing having a panel adapted to cover said chair seat support area and to overlie the extending portions of said side section panels, said rear section of the casing having a panel adapted to cover said chair back support area, said casing structure and said core structure being separately collapsible to a relatively flat configuration for facilitating transport or storage.

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