

[54] CHAIR AND METHOD OF MAKING A CHAIR

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[57] ABSTRACT

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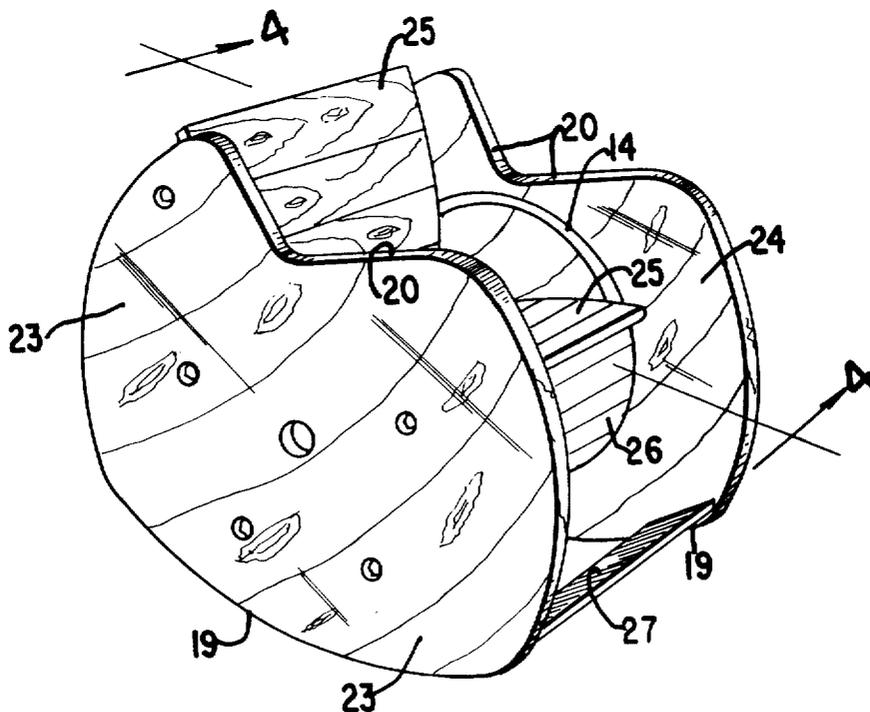
A chair is made from an empty cable spool by altering the flanges of the cable spool to form side members for the chair. The slats which comprised the hubs of the spool are used to form the seating portion of the chair and a support portion to lend structural integrity to the chair. Tension bolt means from the cable spool span the side members and urge them together.

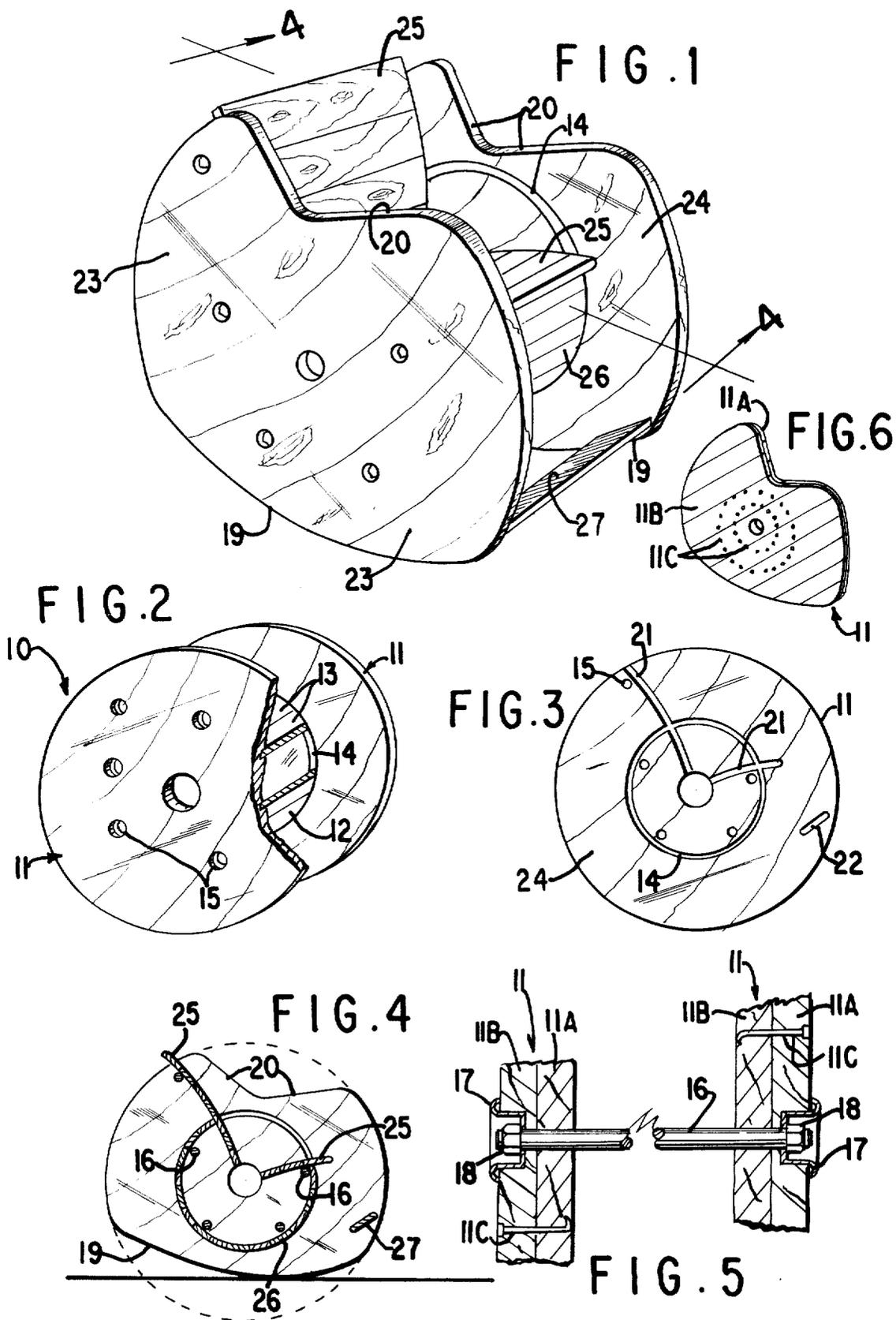
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5 Claims, 6 Drawing Figures





CHAIR AND METHOD OF MAKING A CHAIR

This invention relates to furniture, and more particularly, to a chair and a method of making it. Wooden chairs having planar side members forming the chair bottom and the support for the seating portion of the chair are well known in the prior art. Such chairs generally have a one- or two-piece wooden panel forming the seating portion, and this panel is deformed in order to achieve the desired contour of the seating surface. To hold such chairs in assembled relation, the seating portion is directly secured to the side members.

These chairs all suffer from common disabilities. First, labor is required to deform the panels of the seating portion. Secondly, if such panels are bought in a predetermined, predeformed shape, the cost of the raw material for working the chair is increased. Finally, such chairs are subject to easy breakage since the only structural support is provided at the interfaces of the seating portion and the side members.

A problem seemingly unrelated to these deficiencies in the chair construction is that of disposal of wooden or suitable material cable spools used to carry heavy-duty cable when the spools are empty. These cable spools have two planar flanges with circular hub channels in facing surfaces thereof. A plurality of slats are disposed in these hub channels and form the hub of the cable. Tension bolt means span the flanges to hold them together and secure the slats in place. Judging from the abundance of these cable spools, in many instances, the companies manufacturing and using heavy-duty cable find it more economical to make new spools than to pay the transportation costs of having them returned for rewinding.

One of the objects of the invention is to make chairs from cable reels in a simple manner.

In accordance with the present invention, the first step of the method comprises altering the flanges of a disassembled cable spool. The flanges are altered by forming a seat channel in the surface of each flange in which the hub channels are formed, by changing the shape or profile of the flanges to form a chair bottom, and by providing corresponding apertures in each flange. The altered flanges are then reassembled by placing some of the slats in the seat channels to form a seating surface, placing some of the slats in the hub channel, and securing the flanges together with the tension bolt means in cooperation with the corresponding apertures formed in the flanges.

The chair thus formed has two planar side members which are mirror images of each other. A seat portion comprising a first plurality of slats and a support portion comprising a second plurality of slats are head in assembled relation with the side members by tension bolt means spanning the side members.

These and other objects, advantages and features will become apparent from the following description and drawings.

In the drawings:

FIG. 1 is a perspective view of a chair in accordance with one embodiment of the present invention and made in accordance with the method of the present invention;

FIG. 2 is a perspective view partially broken away, of an empty cable spool of the type, which when disassembled, is used in the method of the present invention;

FIG. 3 is a side view of a flange of the cable spool showing the hub channel and additional channels formed therein;

FIG. 4 is a sectional view along lines 4—4 of FIG. 1;

FIG. 5 is a detailed view of the tension bolt means used in the present invention and shows a laminated construction; and

FIG. 6 is a perspective end view of one of the flanges showing the laminated construction.

Referring now to the drawings wherein like numerals refer to like elements throughout the present invention will be described in detail.

An empty wooden cable spool 10 (FIG. 2) has flanges 11 and hub 12. Hub 12 comprises a plurality of slats 13 arranged with their ends in a circular hub channel 14, one of slats 13 being removed to show hub channel 14. A plurality of tension bolt means 16 span flanges 11 and extend through corresponding apertures in flanges 11 to urge flanges 11 together and hold cable spool 10 in assembled relation. One of the tension bolt means is seen in detail in FIG. 5 and comprises rod 16 threaded in both ends. Cup members 17 fit into the counterbores and provide a bearing surface against which nuts 18 can be tightened to urge flanges 11 together. Cable spool 10 is easily disassembled by removing nuts 18.

The method of making the chair shown in FIG. 1 begins with an empty cable spool 10 disassembled. In the chair form illustrated, flanges 11 are altered by cutting the edges to form a chair bottom and chair arms. In the rocking chair form illustrated, the flanges 11 are cut to form rocking chair runners 19 and chair arms 20. Arms 20 could be omitted or a chair bottom of different configuration could be provided.

Seat channels 21 (FIG. 3) and foot rest channels 22 can be formed in each flange. The foot rest channels 22 may be omitted. Holes 15 are also provided in flanges 11 and may either be the original holes or new ones as needed.

The altered flanges comprise right- and left-hand side members 23 and 24 which are mirror images of each other. Side members 23 and 24 are placed in parallel, facing relationship, the latter being defined as that position in which seat channels 21 and foot rest channels 22, respectively, are in alignment so that a line drawn between corresponding parts of the channels will be mutually perpendicular to side members 23 and 24.

The next step in the method of making the chair is assembly, beginning with placing the ends of some of slats 13 in seat channels 21 to form the seating portion 25, some of slats 13 in hub channels 14 to form a support portion 26, and at least one slat 13 in foot rest channel 22 to form a foot rest 27.

The next step is placing the tension bolt means in corresponding holes 15 to urge side members 23 and 24 together. Support portion 26 and the tension bolt means are placed so that access to the seating surface is unobstructed.

The conventional cable spool flanges are laminated with one side of the flange having slats 11A angularly disposed relative to the other slats 11B of the other side. The slats can be joined together in various manners such as clinched nails 11C. The nails can be in a configuration such as seen in FIG. 6. As a result, the construction is particularly strong and safe.

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The chair made according to the above method is of strong construction and provides a convenient and useful disposition of empty cable spools.

It should be apparent that variations can be made in details of construction and the method of forming chairs and other types of furniture without departing from the spirit of the invention except as defined in the appended claims.

What is claimed is:

1. A chair including a planar, right-hand side member having apertures therethrough and channel means comprising a circularly arcuate hub channel and a seat channel in a surface thereof, a planar left-hand side member comprising the mirror image of said right-hand side member wherein said side members are disposed in parallel, facing relationship, a seat portion for forming a seating surface comprising a first plurality of slats, each having ends disposed in said seat channels, a support portion for further supporting said side members comprising a second plurality of slats, each having ends disposed in said hub channels wherein access to said seating surface is unobstructed, and a plurality of ten-

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sion bolt means for urging said side members together, each spanning said side members and extending through corresponding apertures and wherein access to said seating surface is unobstructed by said tension bolt means.

2. A chair as claimed in claim 1 wherein said channel means further comprises a foot rest channel and said chair further includes a foot rest portion comprising at least one slat having the ends thereof disposed in said foot rest channels.

3. A chair as claimed in claim 1 wherein the bottom of said side members provides rocking chair runners for said chair.

4. A chair as claimed in claim 1 wherein the said side members are shaped to provide arm rests.

5. A chair as claimed in claim 1 wherein each of said tension bolt means comprises a rod threaded on both ends, cup-shaped member cooperating with said apertures, and nuts threaded into said rod ends cooperating with said cup-shaped members.

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