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(54) **A chair**

(57) An easily assembleable and disassembleable chair which concurrently is easy to stow away and bring along, comprising an U-shaped seat frame (4) having a seat fabric (6) extending between parts (5,13) of the frame and being attached thereto by means of Velcros®

(14). The seat frame (4) has conical holes (9, 10) for receiving legs (2) and back rest posts (7). A back rest fabric (8) extends between the back rest posts (7) and may be tightened or slackened by turning the back rest posts (7) and thereby changing the winding of the back rest fabric (8) about these.

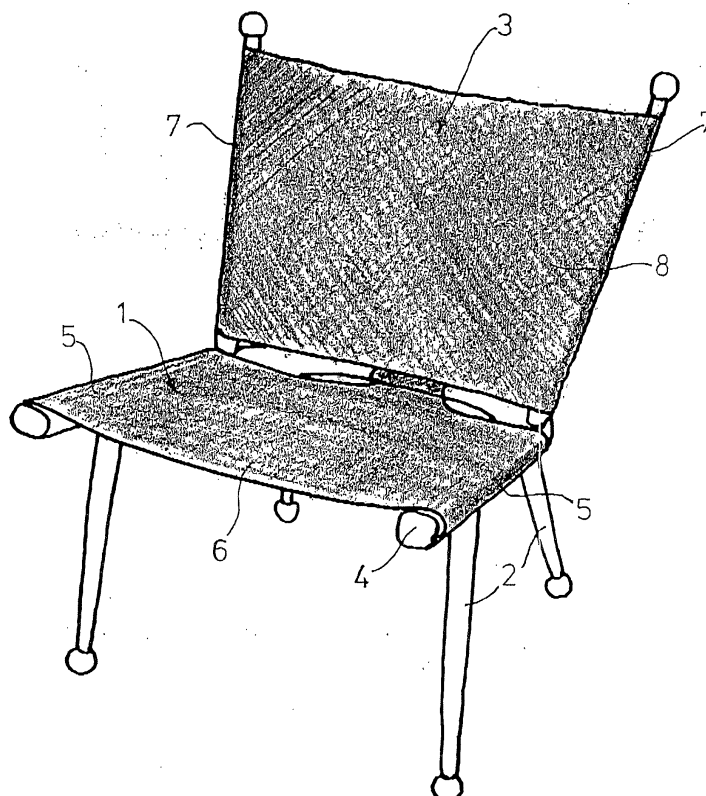


Fig. 1

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Description

[0001] The present invention relates to a chair of the type recited in the preamble of claim 1.

[0002] The purpose of the invention is to provide such a chair which is of a light and simple construction, which concurrently facilitates quick assembling and disassembling. The chair shall also be able to function as an extra chair which is easy to bring along and to put away when it is not in use. Concurrently, the chair should be simple and inexpensive to manufacture, be comfortable and also have the possibility of varying the form and tension of the sitting surface and back rest fabric.

[0003] This is obtained according to the invention in a chair of the type which is more closely defined in the patent claims.

[0004] For better understanding of the invention, it will be described more closely with reference to the exemplifying embodiment shown in the appended drawings, where:

Fig. 1 shows a perspective view of a chair according to the invention,

Fig. 2 shows the disassembled parts of the chair with the seat seen from the bottom side,

Fig. 3 shows the same parts as Fig. 2, but with the seat seen from the top side,

Fig. 4 shows a perspective view of the chair in Fig. 1 seen from behind, and

Fig. 5 shows a perspective view of the chair in Fig. 1 turned upside down.

[0005] The chair in Fig. 1 has a seat 1 having dependent legs 2 and an upwardly extending back 3 attached thereto. The seat has a frame 4, e.g. consisting of laminated wood, having side parts 5 with a seat surface fabric 6 attached thereto. The back 3 comprises two back posts 7 with a back fabric 8 extending therebetween. Legs and posts are preferably rotationally symmetric.

[0006] Fig. 2 shows further details of the various component parts of the chair. As may be seen, the frame 4 is provided with holes 9 for the chair legs 2 and holes 10 for the back rest posts 7. All the holes are slightly conical and are made with relatively high accuracy. The legs 2 has corresponding conical end portions 11, which also have relatively high production accuracy, and the same is true for the conical portions 12 of the back rest posts 7. The conical portions are made with relatively high accuracy so that these parts can be assembled in the frame 4 in a form and friction locking manner and in order for the ends of the respective conical portions to be about flush with the surface of the frame 4. The holes 9, 10 in the frame 4 are through-going.

[0007] As a result, if the legs 2 or back rest post 7

inadvertently should get so stuck in their respective holes that they cannot be removed by hand, they may easily be hammered out. One has surprisingly found that in a chair according to the invention made of wooden materials, the attachment of the legs and posts will be quite stable over a prolonged length of time and varying humidity, so that it has been unnecessary to use tools for disassembling or changing the dimensions of the parts.

[0008] From Fig. 2 it may also be seen that the sitting surface fabric 6, which in this embodiment consists of a net material, is attached to the bottom side of the side parts 5 of the frame 4 by means of Velcros®. The joining of the Velcro® parts will naturally be somewhat adjustable in order to vary the tension of the sitting fabric 6 and also the variation of the tension in the longitudinal direction of the seat. Furthermore, it may be seen that the sitting surface fabric 6 has a narrower rear portion 5, which is looped around the curved portion 13 of the frame 4 on the bottom side thereof, as opposed to the longitudinal side edges of the sitting surface fabric 6. This rear portion 15 may, by suitable tensioning, be used to influence the firmness and form of the sitting surface fabric 6.

[0009] The back rest fabric 8 is also attached to the back rest posts 7 by means of Velcros®. The back rest fabric 8 has surplus length and may therefore be tightened or slackened by being wound to a varying degree about the back rest posts before these are brought in place in their holes 10 in the frame 4, as it may be seen e.g. from figures 4 and 5.

[0010] It will be understood that the frame, legs and posts of the chair according to the invention easily may be manufactured with the sufficient accuracy from wooden materials. The wooden material is easy to form and machine with sufficient accuracy, and it may also be surface treated in a number of ways in order to satisfy particular needs both of an aesthetic and functional character. However, it will be understood that plastic also may be a suitable material, and the same is true for light metals. Under any circumstance, it will be possible to make the conical mating portions without special abutment collars or the like in order to limit the relative movements between the frame 4 and parts 2, 7 to be entered therein when assembling the chair. This is particularly important if the chair is to be made of wood.

[0011] It will also be understood that the chair according to the invention may be packed to a very compact form for storage and transportation. For this purpose one may envision that the sitting surface fabric 6 is removed from the frame 4 by loosening the Velcros® 14, whereupon the legs 2 are wrapped up in the back rest fabric 8, which in turn is wrapped up in the sitting surface fabric 6. Thus, one is left with the U-shaped frame 4 and a compact package consisting of the remaining parts of the chair. If one has several chairs, the frames and the part packages may be stored separately without any problems occurring during later assembling because

the packages and frames can be inter-changed since it is not necessary to have any particular fitting between the frame and its legs and back rest posts. The storing of several chairs can also take place very effectively by placing a plurality of frames, e.g. twelve of them, against each other with the opening facing upwards so that the frame together form a kind of cradle. Next, the twelve packages containing the remaining parts of the chairs are placed in this cradle. This compact storage can of course also be accomplished by placing the frames with their curved portion 13 on top or by having them stacked on top of each other. In any circumstance, the disassembled chairs will require an exceptionally small space.

[0012] Finally, it will be understood that the invention is not limited to the exemplifying embodiment shown in the drawings, but that it may be varied and modified in a number of ways within the frame of the following patent claims. For instance, the skilled person will understand that the sitting surface and back rest fabrics may be attached in other ways than by means of Velcros®, and the chair will also be able to function well even if one or both fabrics are attached permanently to their respective parts.

Claims

1. A chair comprising a seat (1) to which depending legs (2) and an upwardly extending back rest (3) are attached, where the seat (1) has a frame (4) having side parts (5) with a sitting surface fabric (6) extending therebetween, and where the back rest (3) comprises two back rest posts (7) with a back rest fabric (8) extending therebetween, the frame (4) being provided with conical holes (9, 10) for receiving mating conical end portions (11); (12) of the legs (4) and back rest posts (7),
characterised in that the frame (4) is shaped like a U without other transverse stiffening elements between the side elements of the frame (the legs of the U) than the curved portion (13) of the U.
2. A chair according to claim (1),
characterised in that the conical end portions (11, 12) of the legs (2) and back rest posts (7) are fixed in the holes (9, 10) of the frame (4) in a form and friction locking manner, without abutment means or binding agents.
3. A chair according to claim 1 or 2,
characterised in that the fabrics (6,8) are attached to the frame (4) and back rest posts (7) by means of Velcros® (14).
4. A chair according to a preceding claim,
characterised in that the back rest fabric (8) has excess length so that it may be tightened or slackened by being wound to a varying degree on the back rest posts (7).
5. A chair according to a preceding claim,
characterised in that the holes (9,10) in the frame (4) are through-going, thereby permitting that legs (2) or back rest posts (7) that are stuck may be hammered out.
6. A chair according to a preceding claim,
characterised in that the frame (4), the legs (2) and the back rest posts (7) consist substantially of wooden material.
7. A chair according to claim 6,
characterised in that at least some of the wooden material is replaced by plastic.
8. A chair according to a preceding claim,
characterised in that the sitting surface fabric (6) has a narrower rear portion (15) which extends under and is attached to the middle portion of the curved portion (13) of the frame (4).
9. A chair according to a preceding claim,
characterised in that the sitting surface fabric (6) and the back rest fabric (8) consist of a net-like material.
10. A chair according to a preceding claim,
characterised in that the conicity of the holes (9, 10) is adapted to the material and/or surface treatment of the parts (2, 4, 7) so that the chair may be assembled and disassembled by hand.

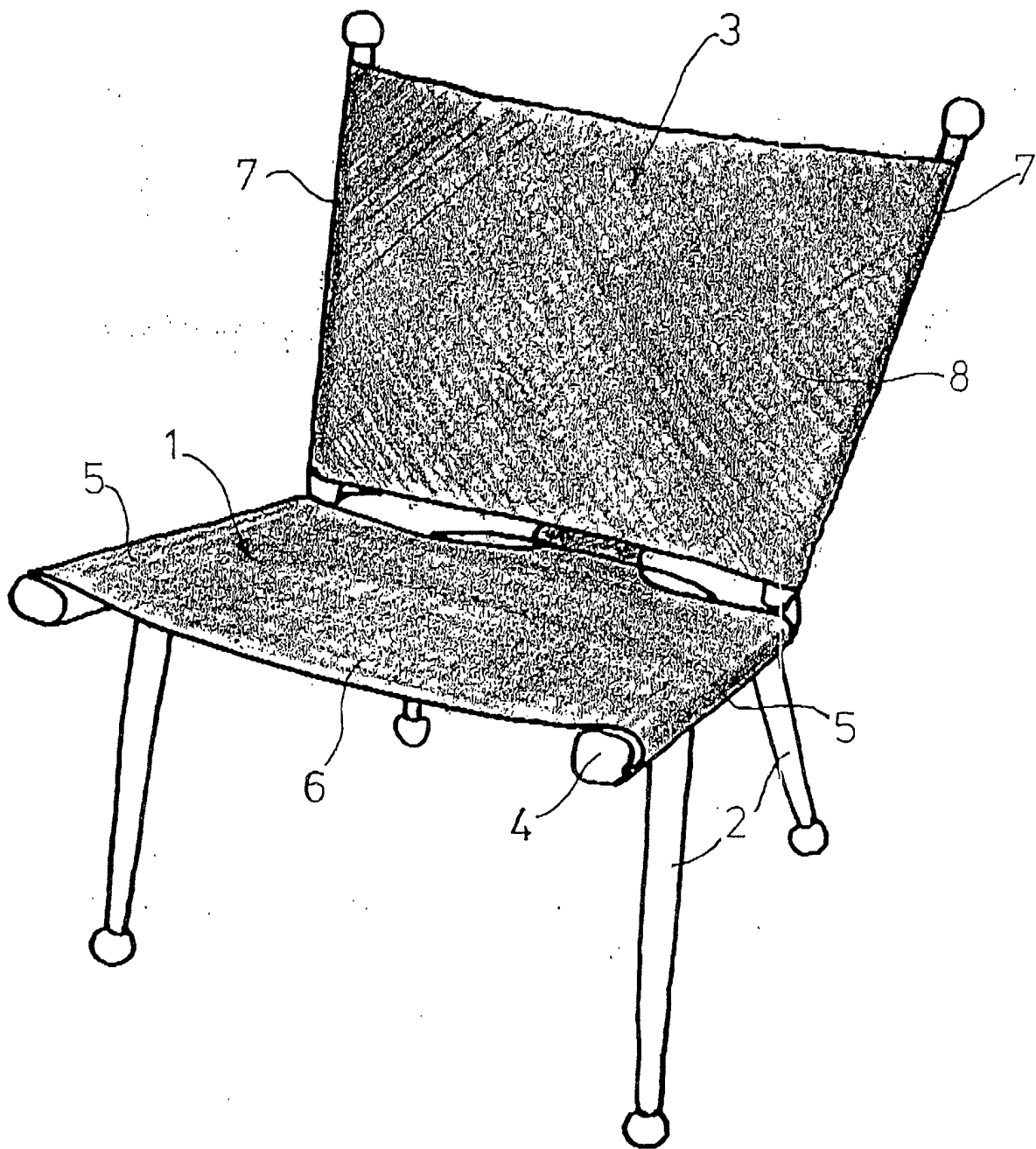
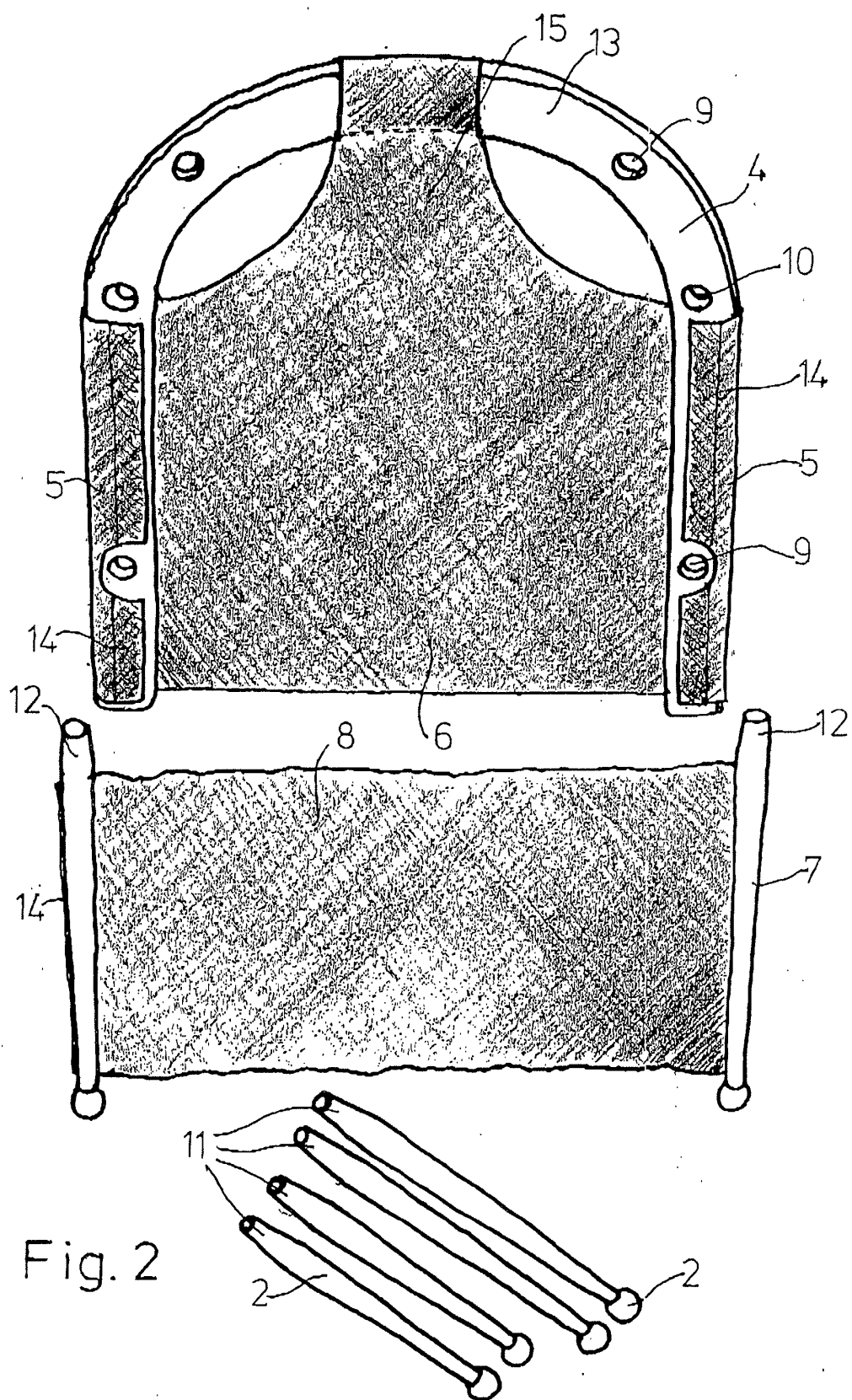


Fig. 1



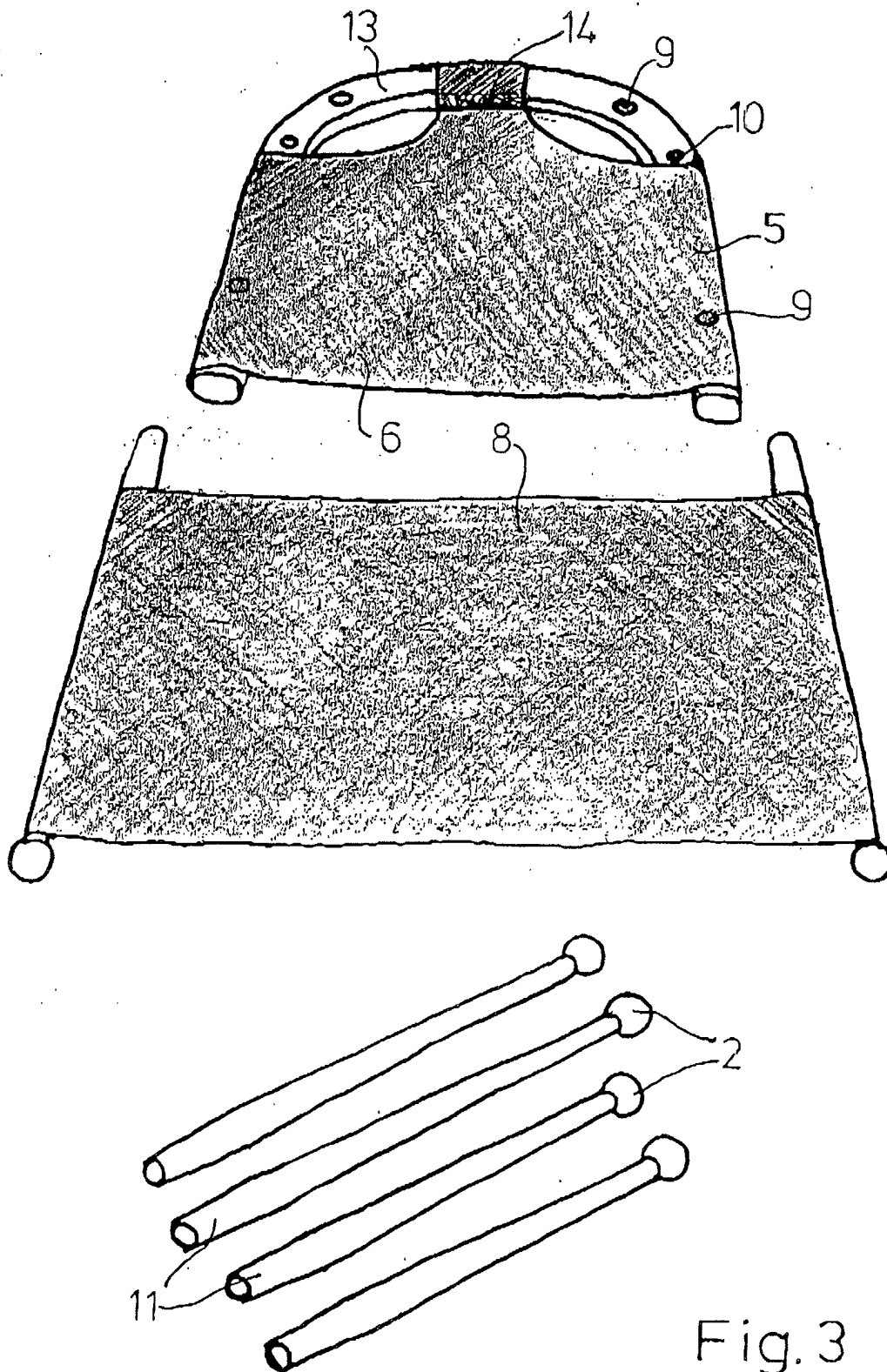


Fig. 3

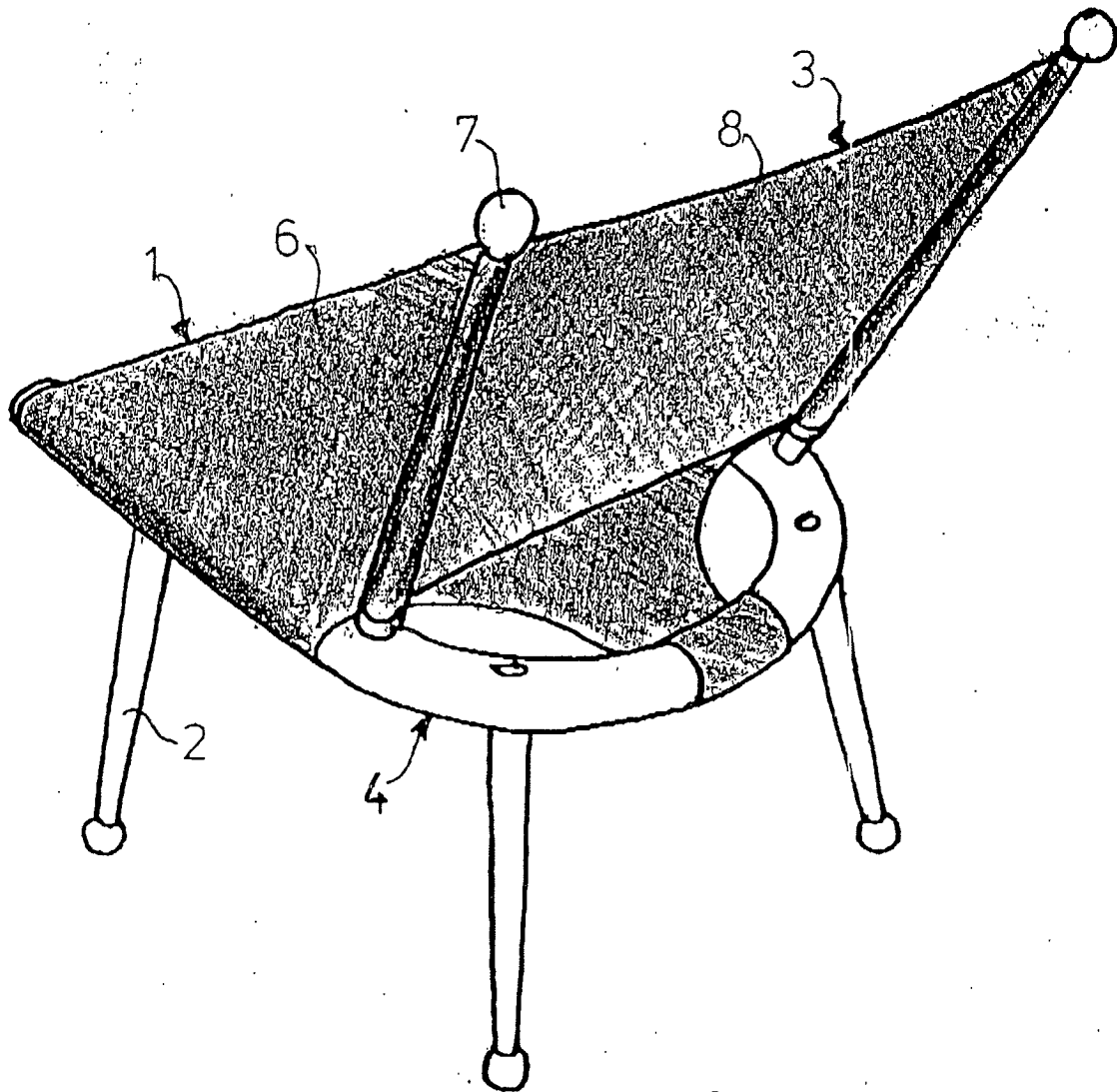


Fig. 4

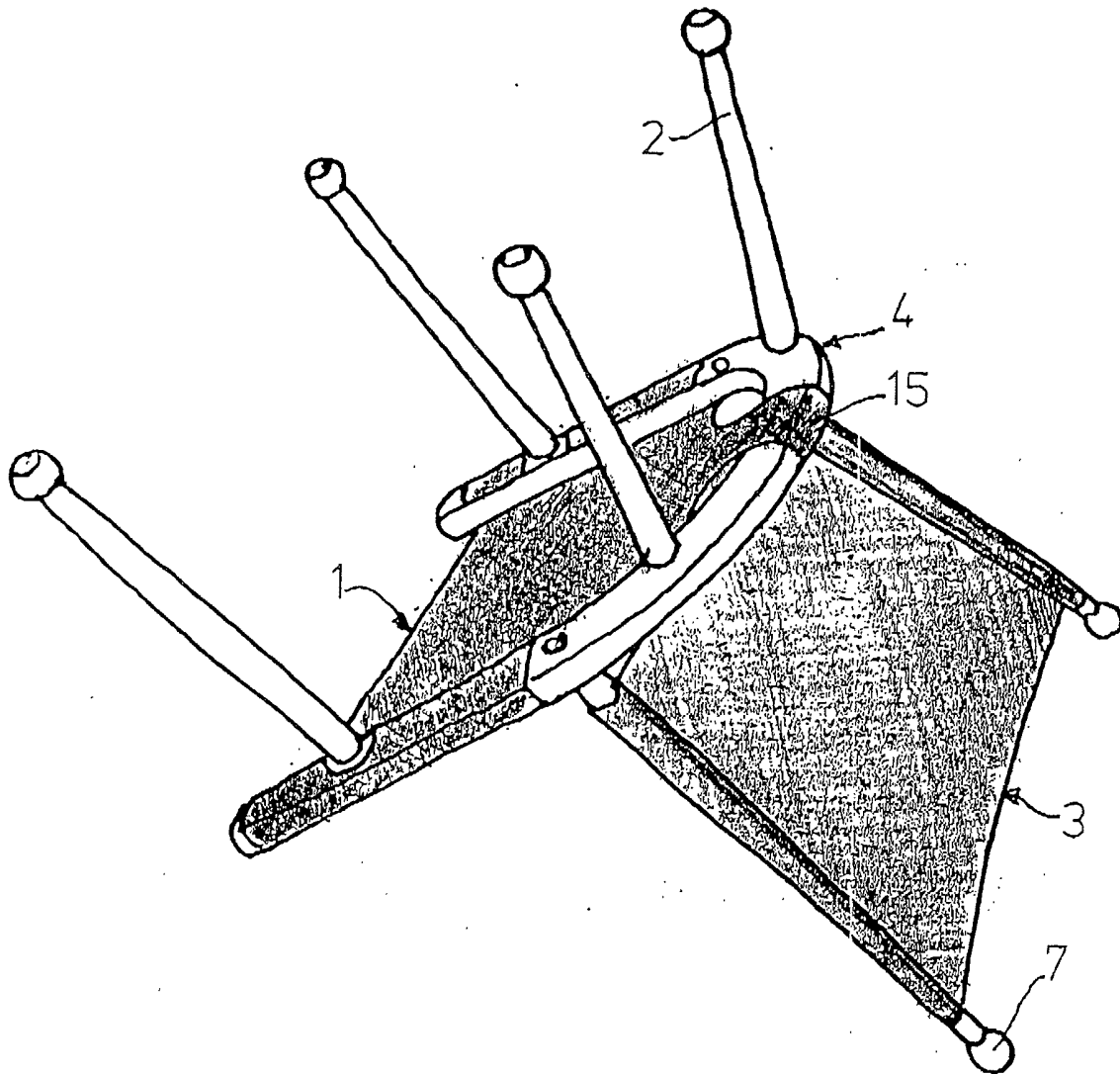


Fig. 5