

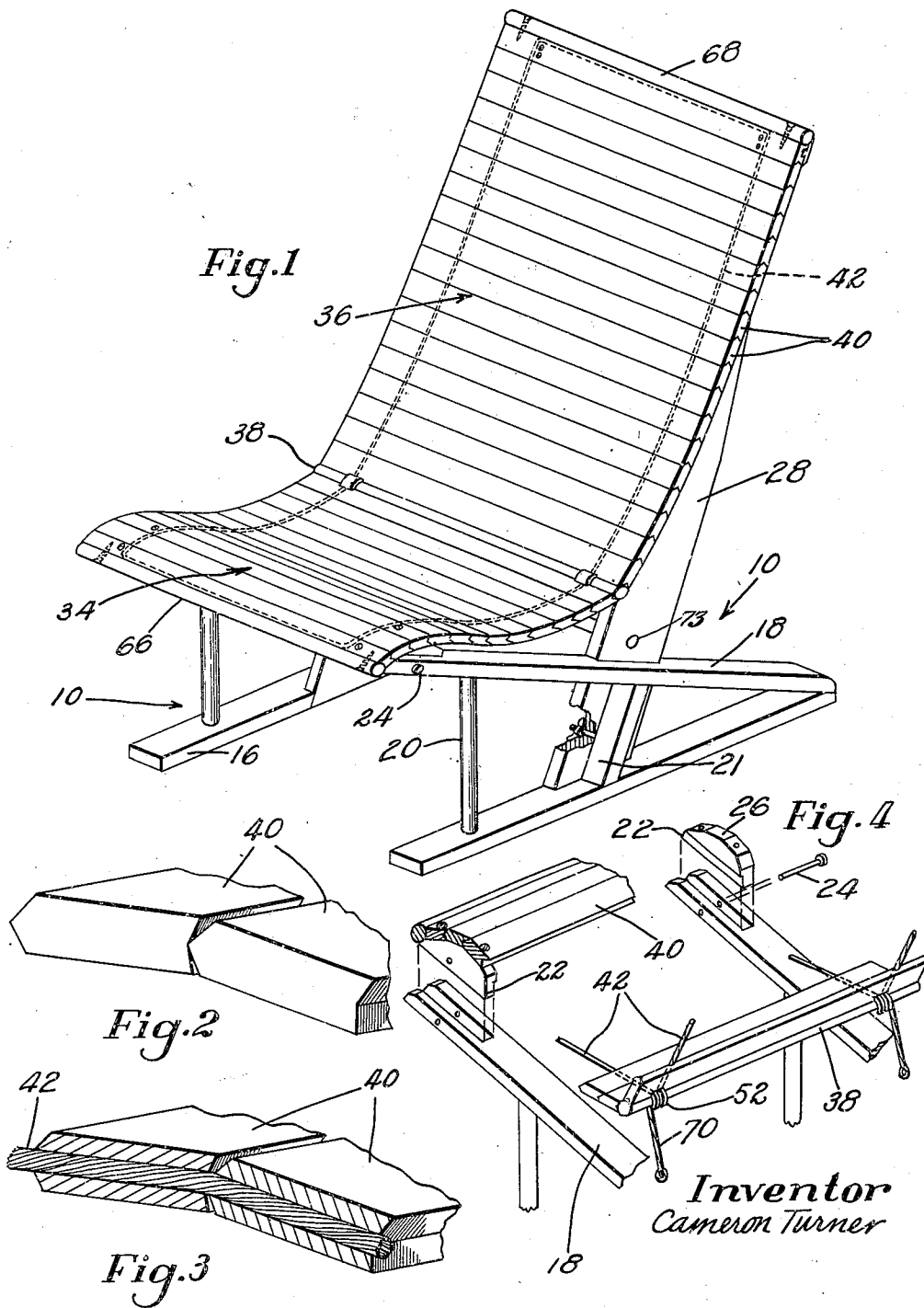
Nov. 15, 1949

C. TURNER
CHAIR

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2 Sheets-Sheet 1



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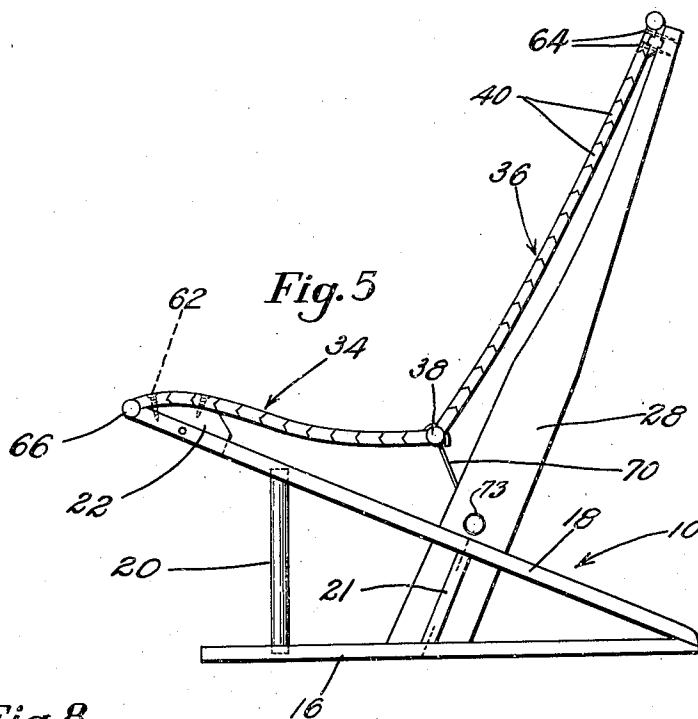
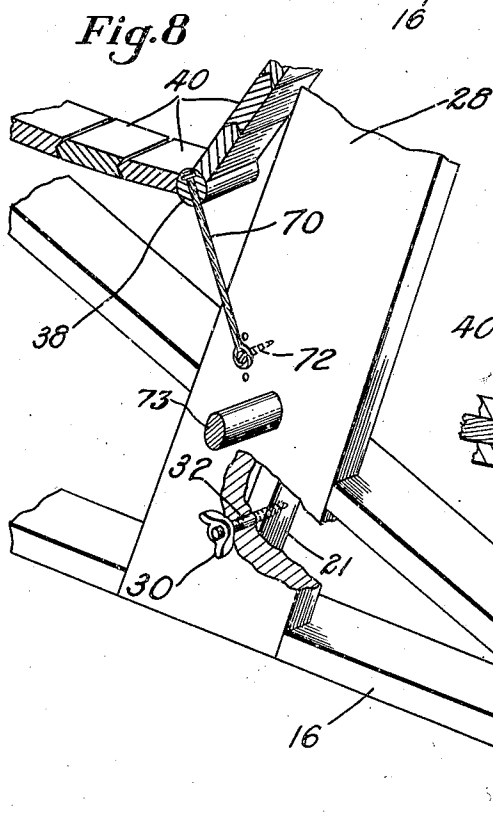
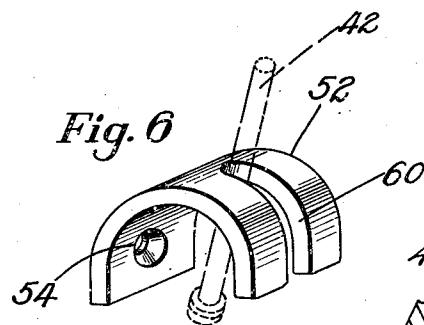
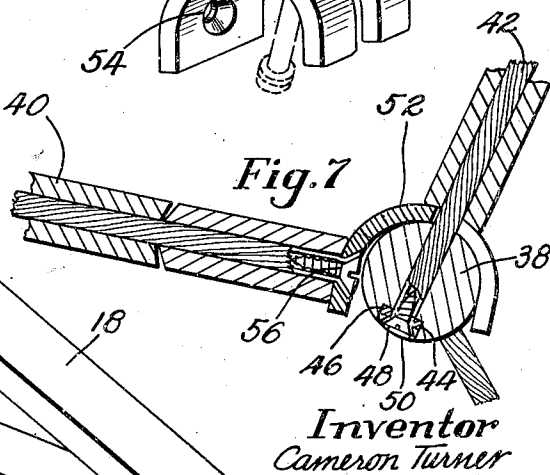
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CHAIR

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5 Claims. (Cl. 155-119)

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This invention relates to chairs and more particularly to an improved and novel chair provided with a flexible seat and back rest giving body-supporting comfort to the user not obtainable in chairs heretofore known. The seat and back rest comprises a series of slats of wood or the like strung on flexible cables and supported in such floating relationship that the seat and back rest sections automatically conform to the body of the person using the chair and supports him over substantial areas although without a winding or wrapping effect.

The base portion of my improved chair embodies a pair of side frame members having forwardly and upwardly-rearwardly extending portions providing a cradle for supporting the combined flexible seat and back rest at its two ends. The slats of the rest are of uniform shape and construction adaptable to mass production and they are assembled on cables in the form of seat and back sections flexibly connected together and providing perfect freedom of movement to conform to the body being supported.

The slats of the seat and back rest are strung on the cables in contacting engagement with each other and are cupped and rounded at their engaging edges to permit perfect freedom of relative movement thereby providing a high degree of flexibility. The cables in the seat and back sections are also disposed in alignment and the two sections are connected together by a rod located at their line of junction, the cable ends being connected to the rod to provide a pivotal joint at and between the sections. Flexible means are furthermore provided for anchoring the pivotal joint to the base of the chair in a manner permitting free adjusting movement of the seat and back rest as and for the purpose described. The primary object of the invention resides in the production of an improved chair embodying these novel features.

These and other features of the invention will be best understood and appreciated from the following description of a preferred embodiment thereof selected for purposes of illustration and shown in the accompanying drawing in which,

Fig. 1 is a perspective view of my improved chair,

Fig. 2 is a fragmentary end view of the cooperating rest slats,

Fig. 3 is a sectional view showing the engagement of the cable with the slats.

Fig. 4 is a view illustrating certain novel details of the chair construction,

Fig. 5 is a side elevation of the chair,

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Fig. 6 is a perspective view of a hook employed in connection with the cables,

Fig. 7 is a fragmentary sectional view showing the anchoring of the cable ends, and

Fig. 8 is an inside enlarged fragmentary view illustrating a flexible anchoring of the rest to the base.

My improved chair as illustrated in the drawing comprises a base portion embodying two like frame members 10 and a flexible rest including seat and back sections 34 and 36 and attached at its ends to the front and rear extremities of the base frame. Each frame member 10 comprises a broad bottom piece 16 for resting on the floor or ground and a forwardly and upwardly inclined piece 18 supported by a vertical post 20 and a brace 21. The forward end of each piece 18 is bifurcated to receive a contoured block 22 held in place by a pin 24 and provided with a convex top face 26. The two frame pieces 16 and 18 are recessed at their inner faces to receive an upwardly-rearwardly extending back piece 28. This piece is held in place by a wing nut 30 threaded onto a hanger screw 32 anchored to the brace 21.

The rest comprises a seat section 34 and a back section 36 pivotally secured together through the medium of a transverse rod 38 which extends between the two side frames but is not attached to them. Each section comprises a plurality of slats 40 of wood or other suitable material strung bead-like on cables 42. Two parallel reaches of cable extend through the slats in widely spaced relation and somewhat inwardly a uniform distance from the ends of the slats, this uniformity providing for the alignment of all cable holes in the slats. In the preferred form of the invention a single cable is employed in each section and its ends are anchored in a novel manner and secured to the juncture rod 38 providing relative pivotal movement between the sections, as will now be described. As shown in Figs. 3 and 7 one edge of each slat is beveled symmetrically in convex fashion and the other edge is given a flat sided concavity of wide angularity thus providing a freely moving contact or joint between adjacent slats.

The cable is of twisted wire and hollow in construction and one such cable is strung U-shaped through each section as illustrated. Each end of the back section cable 42 extends through the rod 38 and through a countersunk washer 44 in the bottom of a counterbored opening 46. A hardened screw 48 is threaded into the cable and its head forces the cable end portion into firm

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frictional holding contact with the washer. The screw head may be then covered with solder 50.

Each end of the seat section of the cable is secured in a similar manner to a metal clip or hook 52 on the transverse rod 38, and this hook is of strap metal construction and drilled at 54 to receive the cable anchoring screw 56. The cable end extends through the hole 54 and threading of the screw into the cable causes the screw head to bind against the cable end as illustrated in Fig. 7. The tightened screw can be finished by a covering of solder if desired. The engaging of the hooks with the rod 38 provides free pivotal movement between the rest sections. The hook is slotted at 60 to receive the back section cable and it is particularly noted that the placing of the seat and back section cables in alignment eliminates the placing of any undue strain on the rod 38. The screw threads bite into and thereby provide a firm grip on the cable strands.

The front end of the seat section 34 is supported on the faces 26 of the blocks 22 and is secured by screws 62, and the rear end of the back section 36 is secured by screws 64 to the top ends of the uprights 28, the two sections being freely suspended between the front and rear supports. The front and rear ends of the rest are also finished by end pieces 66 and 68 secured to the end slats by screws. Two flexible cables 70 anchor the rod 38 in position and are attached to the uprights 28 by screws 72 normally holding the sections in the position of Fig. 5 but permitting free and easy movement under the action of the body being supported, thus eliminating the necessity for springs otherwise needed to conform the supporting surfaces to the body of the user.

Attention is called to the fact that the two base side frames 10 are wholly independent of each other and may be separately built and then connected by two end pieces 66 and 68 and a rod or dowel 73. The entire chair may be knocked down and packed in small space merely by removing two pins and two wing nuts and screws 62 and 64 as will be apparent.

The combined back and seat sections are maintained in position by three point suspension, viz, the fixed slats at the forward ends of the side frame pieces 18 and at the upper ends of the back pieces 28, and the juncture rod 38 which is held by the short snubbing cables 70.

Having thus described and illustrated my invention what I claim as new and desire to secure by Letters Patent of the United States is,

1. A chair comprising a pair of connected side frame members disposed in spaced relation and having two forwardly extending elements providing a pair of widely spaced seat-anchoring supports at the front and having two upwardly extending elements at the back providing a pair of widely spaced back-anchoring supports, a combined seat and back rest comprising a plurality of slats strung in contact with each other on cables passing through the said slats adjacent to their ends, the slats having cupped socket joints at their engaging edges permitting free relative rocking movement of the slats, and a common transverse

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rod extending along the junction of said seat and back to which the ends of the cable are secured, and means anchoring said transverse rod to the frame members.

2. The chair defined in claim 1 in which the seat and back sections have their slats supported respectively by independent cables, said means for anchoring the flexible rod to the frame members being flexible.

3. A chair comprising a pair of connected side frame members disposed in spaced relation and having a pair of forwardly extending elements and a pair of upwardly extending elements, a seat and back rest comprising slats strung on cables, the rest comprising seat and back sections having their slats supported respectively by independent cables connected to the outermost slats which are connected to said elements, a rod extending along the junction of said seat and back sections and secured to the slat-supporting cable of one section and connecting means secured to the slat-supporting cable of the other section and having pivotal connection with the rod.

4. A chair comprising a seat and back rest comprising a plurality of slats, cables extending through and holding the slats in assembled relation, a transverse anchor rod, and anchoring means for one pair of cable ends comprising a screw passing through the anchor rod threaded into one of said pair of cable ends and binding its end portion into frictional holding contact with a surface of the anchor rod beneath the screw head, and means securing the other pair of cable ends to the anchor rod.

5. A chair comprising connected frame members each having a forwardly extending element and an upwardly extending rear element, a rest comprising seat and back sections embodying a plurality of slats strung on cables, a junction rod or the like located between and at the junction of the two sections, the cables in the two sections being in alignment longitudinally of the rest, hooks attached to the ends of certain of the cables and in engagement with the rod, the end portions of the other cables extending through openings in the hooks and attached to the rod, and means securing the outer ends of the sections to said forwardly and upwardly extending elements of the frame members.

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