

[54] **TWO-PIECE CHAIR**
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[51] Int. Cl. **A47c 4/02**

[58] Field of Search 297/440, 442, 443, 444,
297/446, 447, 56, 18

[56] **References Cited**
UNITED STATES PATENTS

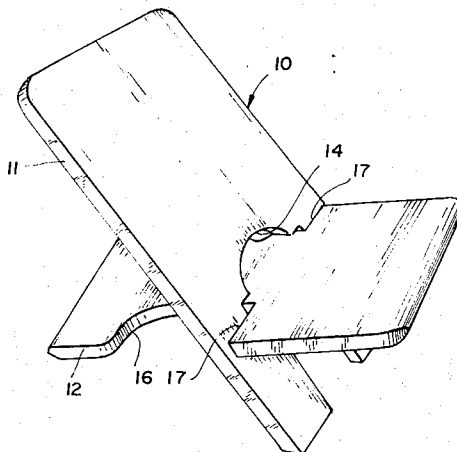
1,949,951	3/1934	Bozarth.....	297/56
2,518,955	8/1950	Stelzer.....	297/442
3,752,532	8/1973	Yarus.....	297/440

Primary Examiner—Jordan Franklin
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 Ziesenheim

[57] **ABSTRACT**

The specification discloses a two-piece chair comprising two flat elements of substantial thickness one of which provides a back-rest and forward leg support and the other of which provides a seat and rear leg support of the chair. The back-rest element has a T-slot which extends longitudinally from the lower end and terminates in a transverse slot. The seat element is essentially of hour-glass shape having a neck portion which enables the seat element to be moved into intersecting interlocked relation with the transverse slot of the back-rest element so that the two elements assume an X position when assembled. The chair elements may be cast or molded of plastic material or metal, or fabricated of wood.

4 Claims, 6 Drawing Figures



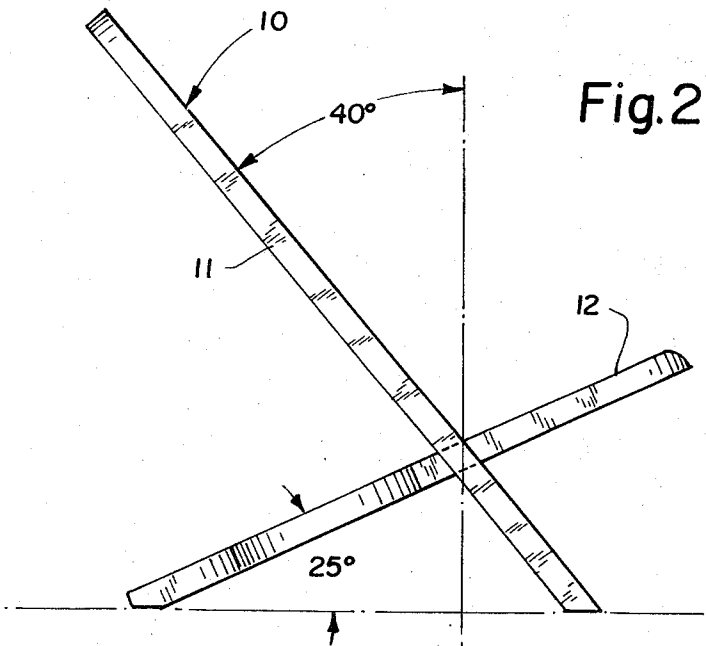
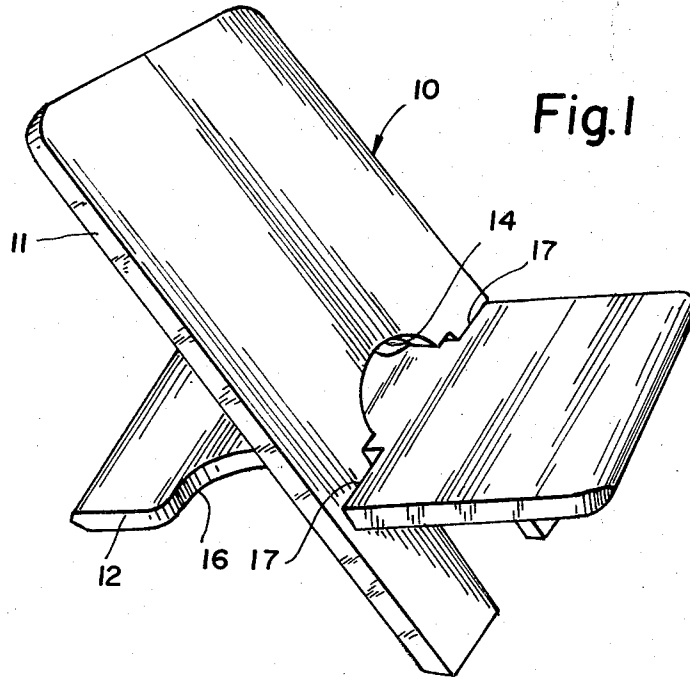


Fig.3.

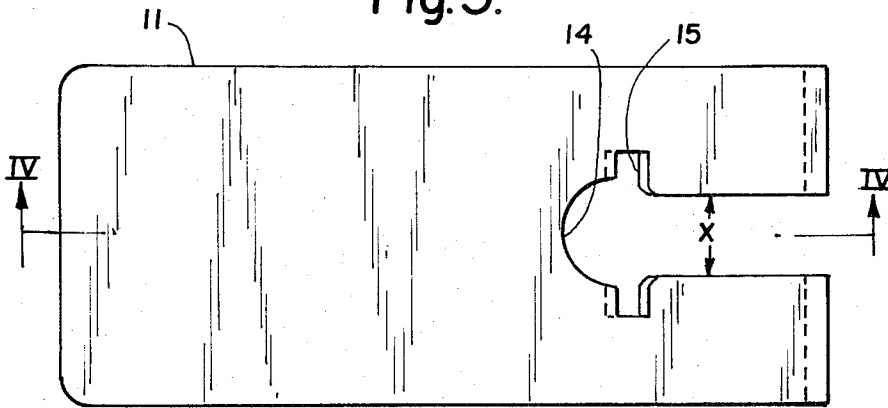


Fig.4.

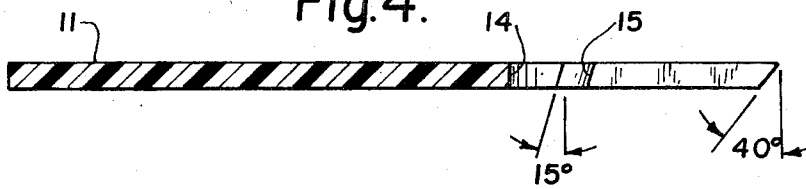


Fig.5.

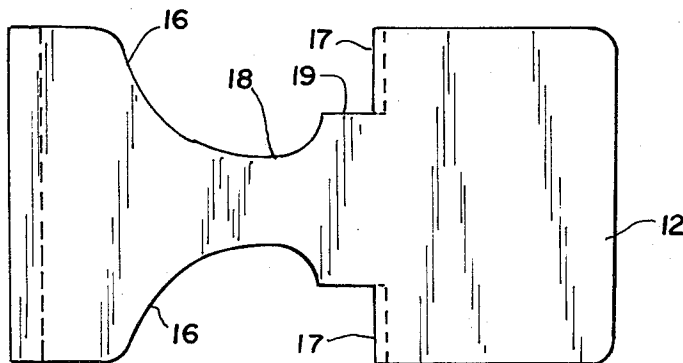
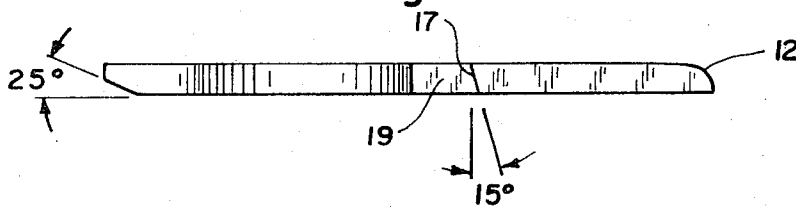


Fig.6.



TWO-PIECE CHAIR

This invention relates to chairs of the collapsible or knock-down type and particularly to such chairs limited to but several elements and readily assembled and disassembled without supplementary securing means being required or removed.

Chairs of the collapsible or knock-down type in a variety of different designs have been known and in use for many years. Examples of different designs of chairs of the knock-down type are shown in U.S. Pat. Nos. 1,747,900 (Jenny), 2,479,086 (silverman), and 2,534,413 (Cenis). In these patents the various parts of the chair are slotted and dovetailed to fit together so as to remain locked in assembled position without auxiliary securing means, such as screws, nails and the like.

Other simplified chair designs are typified in Pat. No. 1,949,951 (Bozarth) which discloses two intersecting boards arranged to be locked together to form a chair and Pat. No. 2,439,322 (Thaden) which discloses a two-piece chair of which the seat and legs constitute one piece of inverted U-shape and the back-rest constitutes another piece of L-shape. The back-rest piece is inserted through a slot in the seat portion and reacts on the underside of the seat to which it is anchored by a wing-nut. Pat. No. 2,670,787 (Vandas et al.) discloses a chair made of a malleable metal sheet blank severed or slit so as to enable the blank to be formed into a chair.

It is an object of my invention to provide a novel design of chair requiring only two pieces of sheet material slotted and cut so as to interfit and lock into an essentially X-shape forming a lounging chair, without requiring auxiliary securing means. The nature of the design is such also that the two members may be readily separated and placed in compact side-by-side knocked-down relation. While the members may be made of any suitable material, such as metal or wood, I prefer to mold them out of plastic material, such as polyethylene.

A preferred form of the invention will be more specifically described hereinafter in connection with the accompanying drawings, wherein:

FIG. 1 is a perspective view of the chair in its assembled state,

FIG. 2 is an elevational side view of the chair as assembled in FIG. 1,

FIG. 3 is a plan view of one element constituting the back-rest and front leg portion of the chair,

FIG. 4 is a cross-sectional view, taken on line IV—IV of FIG. 3, FIG. 5 is a plan view of the second element constituting the seat and rear leg portion of the chair, and

FIG. 6 is a side elevational view of the element shown in FIG. 5.

Referring to the drawings, FIGS. 1 and 2, the chair 10 comprises two elements of sheet material, one element 11 constituting the back-rest and front leg portion of the chair, and the other element 12 constituting the seat and rear leg portion of the chair.

As shown in FIGS. 3 and 4, the element 11 is formed essentially out of a rectangular flat sheet of substantially uniform thickness. One end of the sheet, the ground engaging end, is beveled at an angle such as 40°, thus corresponding to the angle of 40° from the vertical of the back-rest portion when the elements are assembled, as shown in FIG. 2. Extending longitudinally in-

ward from the ground-engaging end of element 11 is a T-slot, having a longitudinal portion or slot 13 the width of which is designated by the symbol X. The inner end of the slot 13 terminates in a semi-circular contour 14 slightly larger in diameter than the width X of the slot 13. Intersecting the slot 13 adjacent to the semi-circular contour 14 is a transverse portion or slot 15, of the T-slot, the opposite edges of which are slanted at a slight angle, such as 15°, with respect to a plane perpendicular to the opposite faces of the element 11 (FIG. 4).

The second element 12, as shown in FIGS. 5 and 6 is formed out of an essentially rectangular flat sheet into an hour-glass shape having stepped recesses 16 extending inwardly towards each other from opposite edges of the element. At one end of each recess 16 is a right angle forming a shoulder 17, the flat edge of which is disposed at a slight angle, such as 15°, to a plane perpendicular to opposite flat faces of the element. One end of element 12, the ground-engaging end, is beveled at an angle, such as 25° to the horizontal, to conform to the angle which the element 12 assumes in the assembled condition of the chair (FIG. 2). A neck 18 is formed between the two recesses 16, the width of which is slightly less than the diameter of the semi-circular contour 14 of the element 11 for a reason presently explained. Formed between the neck 18 and the shoulder 17 is a wider neck 19 of uniform width.

The elements 11 and 12 are conveniently molded of plastic material, such as polyethylene, though they may be made of other materials, such as metal or wood.

In order to assemble the two elements 11 and 12, the neck 18 of element 12 is inserted into the slot 13 of element 11, in parallel relation to the side edges of the slot 13, until one edge of the neck 18 engages the semi-circular contour 14. The element 12 is then turned through 90° until the two elements 11 and 12 intersect each other at a right angle. The element 12 is then moved longitudinally toward the element 11 to slide the neck 19 into the transverse slot 15 until the shoulder 17 engages the upper face of the element 11. The two elements are now in assembled relation and may be set down on the floor as shown in FIG. 2.

It will be noted that neck 19 of element 12 is locked in the transverse slot 15 of element 11 by engagement of the shoulders 17 with the upper face of element 11. The frictional force with which the two elements are interlocked is accentuated as the weight of a person is placed on the seat portion of element 12 and pressure is exerted on the back rest portion of element 11.

In order to disassemble the elements 11 and 12, the neck 19 of element 12 is first pulled out of the transverse slot 15 of element 11 sufficiently to align the narrow neck 18 with the circular contour 14. The element 12 may now be turned back through 90° to place the neck 18 parallel to the edges of slot 13, whereupon the element 12 may then be withdrawn from slot 13 and the two elements completely separated.

To store the elements 11 and 12 in disassembled state, they may be conveniently placed in side-by-side relation and thus compactly arranged with a minimum space requirement.

While I have shown the elements 11 and 12 as of flat rectangular shape, it will be apparent that various modifications may be made in peripheral shape or in the contour of the seat and back-rest portions to accommo-

date the human form within the terms of the following claims.

I claim:

1. A two-piece chair comprising a back-rest element and a seat element adapted for interfitting engagement to form a chair, wherein the improvement comprises a back-rest element made of sheet material of substantially uniform thickness and having a T-slot therein which opens at one end constituting the ground-engaging end thereof, and a seat element made of sheet material of substantially uniform thickness having neck portion of reduced width between the ends thereof, the two elements being interfitted by inserting the neck portion of the seat element within the transverse portion of the T-slot in the back-rest element, and wherein the T-slot of the back-rest element comprises a longitudinally extending slot which opens at the ground-engaging end of the element, a transverse slot intersecting the longitudinally extending slot, and a semi-circular recess on the inward side of the transverse slot having a diameter larger than the width of said longitudinally extending slot, and wherein the neck portion of the seat element has a width narrower than the diameter of the semi-circular recess whereby said seat element may be turned into a position at a right angle to the back-rest element prior to inserting the neck por-

tion into the transverse slot of the T-slot in the back-rest element.

2. A two-piece chair according to claim 1, wherein said seat element has a pair of transverse shoulders at the upper extremity of said neck portion for engaging the face of the back-rest element when said elements are interengaged.

3. A two-piece chair according to claim 2, wherein the edges of said pair of transverse shoulders are slanted at an angle to the faces of the seat element conformably to the slope of the back-rest element when said elements are interengaged.

4. A two-piece chair according to claim 2, wherein the opposite edges of the transverse slot portion of the T-slot in said back-rest element are slanted at an angle to the faces of the back-rest element to snugly hold the seat element therebetween, and wherein the said seat element has a pair of transverse shoulders at the upper extremity of said neck portion for engaging the face of the back-rest element when said elements are interengaged, the edges of said shoulders being slanted at an angle to the faces of the seat element corresponding to the angle of slant of the opposite edges of the transverse slot portion of the T-slot with respect to the faces of the back-rest element.

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