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Duke et al.

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[54] **CHAIRS**

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[52] **U.S. Cl.** **297/355**

[51] **Int. Cl.**..... **A47c 1/00**

[58] **Field of Search** 297/355, 344, 327, 328, 297/457, 325, 326, 329, 317

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[57] **ABSTRACT**

A chair for outdoor use comprises a metal frame base and a moulded plastics body consisting of a seat and back disposed at an obtuse angle to one another. The body is adjustable into one a plurality of positions between an upright and a reclining position.

2 Claims, 2 Drawing Figures

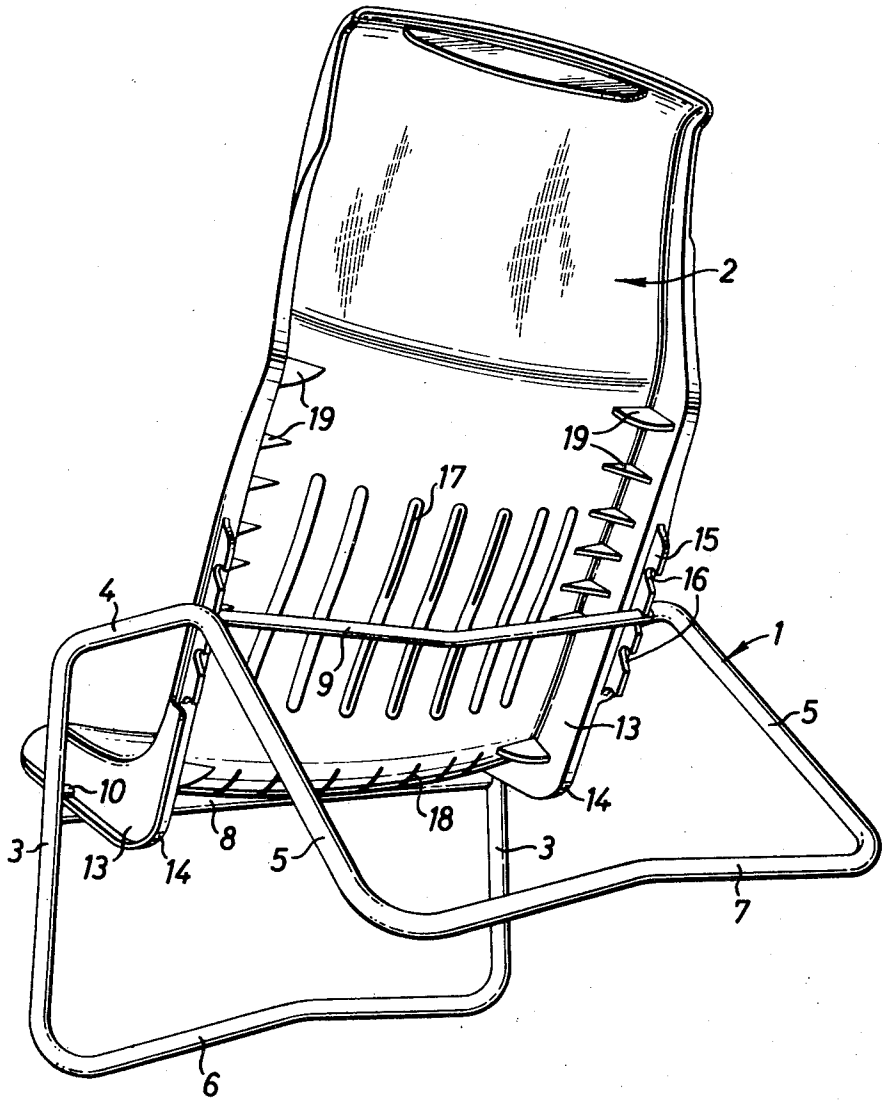


FIG. 1.

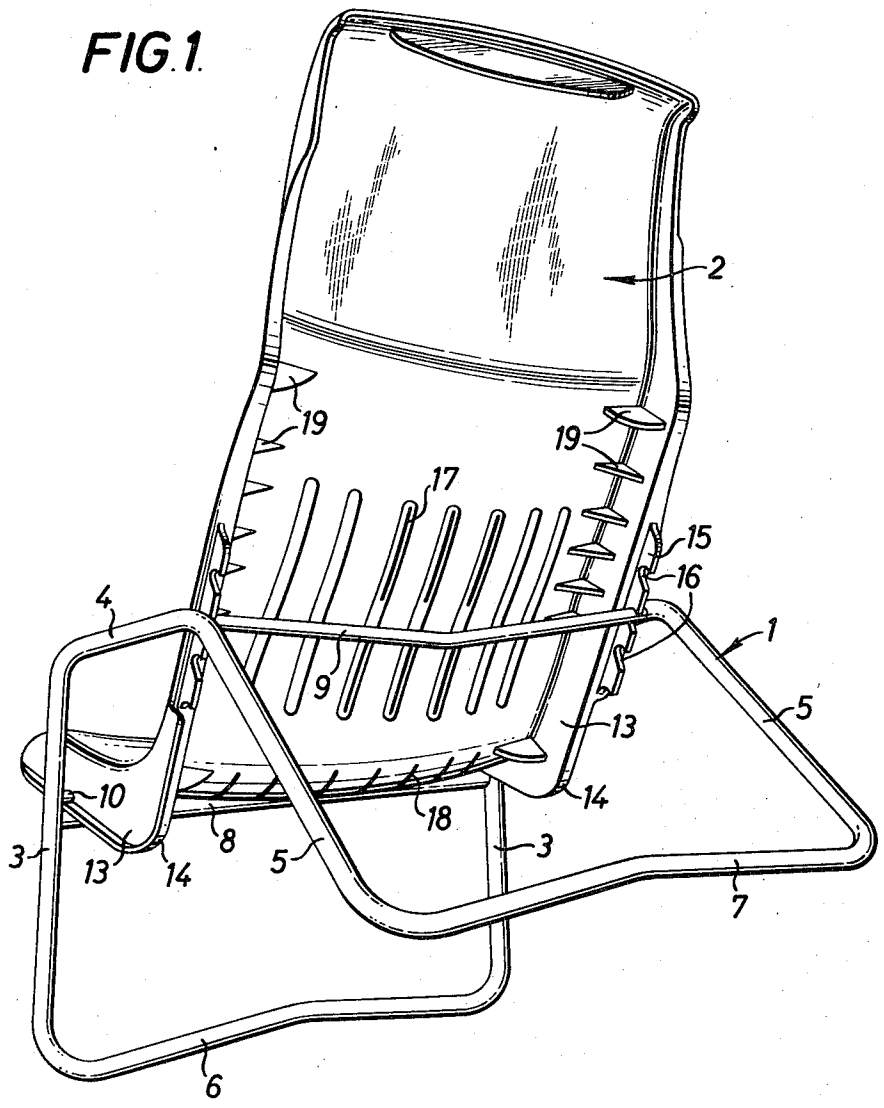
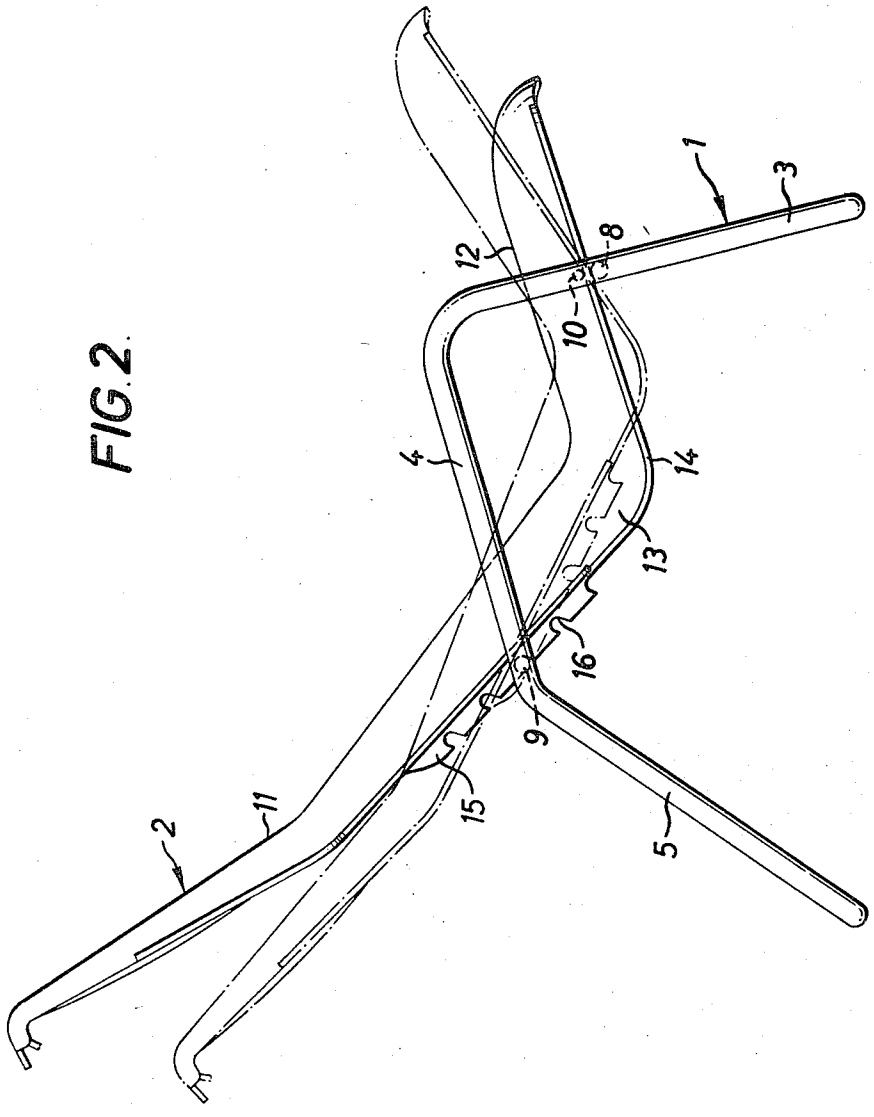


FIG. 2.



CHAIRS

This invention relates to chairs primarily for outdoor use. It is an objective of the present invention to provide a chair which will replace the conventional collapsible wood and canvas "deck" chair.

A chair in accordance with the present invention consists of a base which rests on a supporting surface and a body on which the user sits, the base and body being formed for detachable engagement with one another.

The body has sufficient rigidity to maintain the configuration in which it is formed. According to a preferred feature of the invention the body is moulded from a synthetic resin such as a polypropylene resin.

The body is preferably of angled configuration having a seat and a back disposed at an obtuse angle relatively to one another. Advantageously the body and base are detachably securable to each other in any one of a plurality of positions each position providing a different inclination of the seat and back relative to the ground. The back can be adjusted between a relatively upright position and a reclining position. In an embodiment laterally outwardly extending lips on the seat engage recesses on the base while notches in the back engage a cross rail on the base.

A particular embodiment of the invention will now be described by way of example with reference to the accompanying drawings wherein:

FIG. **1** is a rear perspective view of a chair in accordance with the invention; and

FIG. **2** is a side view of the chair of FIG. **1** showing two alternative seating positions.

The chair in accordance with the particular embodiment comprises a base element **1** in the form of a frame of tubular steel and a body shell **2** of moulded polypropylene.

The frame is formed from a generally rectangular loop deformed about two laterally extending axes to define sides of generally inverted U-shape. Each side has a front limb **3** inclined rearwardly from the vertical, an arm **4** portion extending rearwardly downwardly at about 90° from the upper end of the front limb and a rear limb **5** extending rearwardly and downwardly at approximately 150° from the rear end of the arm. The front and rear sides **6** and **7** of the rectangular frame bear on the ground. A front cross-member **8** also of tubular steel extends laterally between the front limbs of the sides and a rear cross-member **9** again of tubular steel extends between the rear parts of the arms. A short cylindrical projection **10** extends laterally inwardly from each front limb **3** immediately above the front cross-member **8.**

The body shell consists of a generally rectangular seat **12** and a generally trapezoidal back portion **11.** The seat **12** and the back **11** being inclined to one another at an angle of approximately 120°. A peripheral flange **13** extends downwardly at right angles to the seat and the back and a lip **14** extends laterally outwardly from the flange. A short flange **15** extends rearwardly from the undersurface of the lip and three U-shaped notches **16** for cooperation with the rear cross-member **9** are provided on the short flange **15.** Longitudinally extending slits **17** for ventilation are provided in the lower part of the back and shorter longitudinal slits **18** for water drainage are provided in the seat adjacent the angle. Triangular bracing pieces **19** are moulded into the rear corner between the main flange **13** and the back part of the body shell.

In use, the lip **14** at each side of the seat part of the moulding is located in the space between the front cross-member **8** and the inwardly directed projection **10** referred to above. This location can be achieved by placing the seat part so that the lip **14** rests on the upper part of the projection **10** and exerting downward pressure; the lip flexes resiliently past the projection. One registering pair of slots **16** on the flange **15** is engaged with the cross-member **9** to provide the required inclination of the back and seat. For adjustment another registering pair of slots **16** is selected, the lip **14** sliding in its locating space.

The solid lines in FIG. **2** illustrate one seating position while the dot-and-pick lines illustrate another seating position.

Chairs in accordance with the invention can be stacked one on top of the other in nested relationship. Alternatively the body shells and frames can be stacked separately.

We claim:

1. A chair comprised of a base and body;

said body including a seat and a back disposed at an angle with respect to said seat;

said seat having opposite sides and having a respective lip projecting outwardly from and extending a distance along each said seat side;

said back carrying a plural position chair base engagement means;

said base including a support for the chair; said base also including respective portions extending upwardly past said seat lips, and on those said base portions are respective guide elements for said lips, which said guide elements engage said lips in supporting relationship while said lips are slidable along their length on said guide elements;

said base also carrying plural positon chair back engagement means that are positioned and adapted to engage the said chair base engagement means on said back at any of a plurality of positions along said back and which engage said chair base engagement means on said back at one of said positions;

said guide elements comprising a respective pair of guiding posts for each said lip, with each said post extending over its said lip and one of said posts of each pair being above its respective said lip and the other said post of that said pair being below its respective said lip; said posts of each said pair being spaced apart a distance which enables the respective said lip to slide along its length between its said posts and to be guided in movement against substantial up and down shifting;

said seat and said back being rigid and being rigidly connected to each other;

said chair back engagement means on said base comprising a cross rail means and said chair base engagement means on said back comprises at least one rack with a plurality of cross rail means receiving notches thereon extending along the height of said back; said cross rail means being selectively engaged in one said notch and being movable to be engaged in each other said notch;

the said lip supporting posts below both said lips being joined and form a cross rail across said base.

2. The chair according to claim **1** wherein said back is provided with a pair of opposite parallel reinforcing panels along opposite longitudinal edges thereof;

said plural position chair base engagement means being set into said panels.

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