

[54] COMPOSABLE SEAT STRUCTURE

[76] Inventor: **Alfredo Martini**, Via della Giardina,
Monza, Italy

[22] Filed: **Nov. 27, 1970**

[21] Appl. No.: **92,995**

[30] Foreign Application Priority Data

Jan. 17, 1970 Italy 19493A/70

[52] U.S. Cl. **297/445, 297/248**

[51] Int. Cl. **A47c 7/00, A47c 7/20, A47c 1/12**

[58] Field of Search **297/239, 248, 249,
297/440, 445, 450, 451, 452, 458**

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Primary Examiner—Casmir A. Nunberg

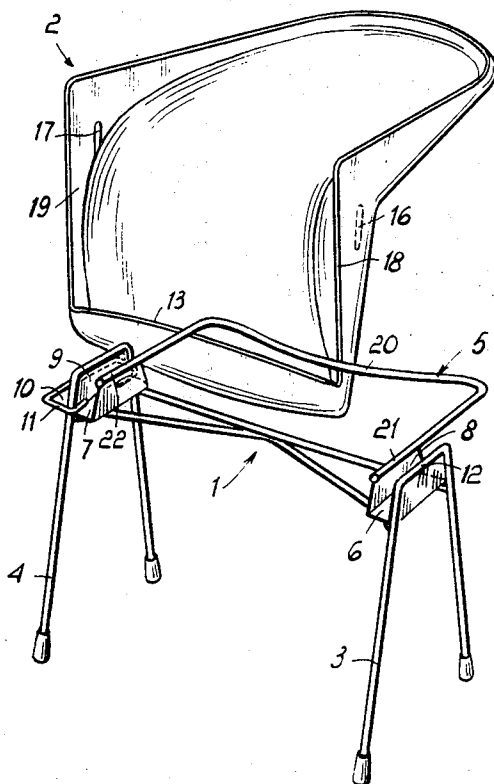
Attorney—Guido Modiano and Albert Josif

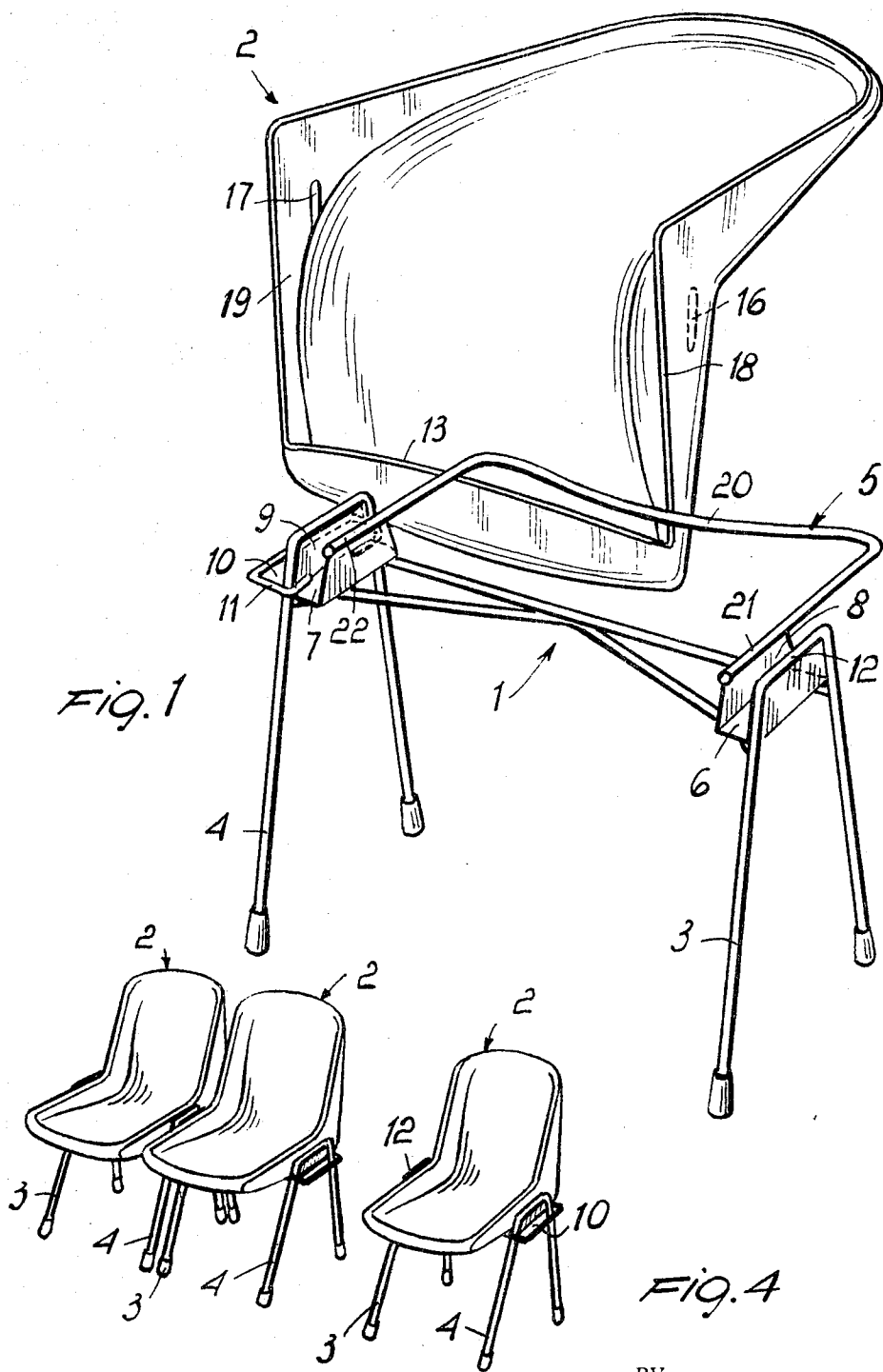
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ABSTRACT

A modular composable seat structure suitable to be connected to other adjacent modular seats comprising a rigid carrying frame and a single piece seat member and a snapping means for removably connecting the said seat member to the said carrying frame.

1 Claim, 4 Drawing Figures





BY

Alfredo MARTINI
INVENTOR.
Albert Josef
AGENT

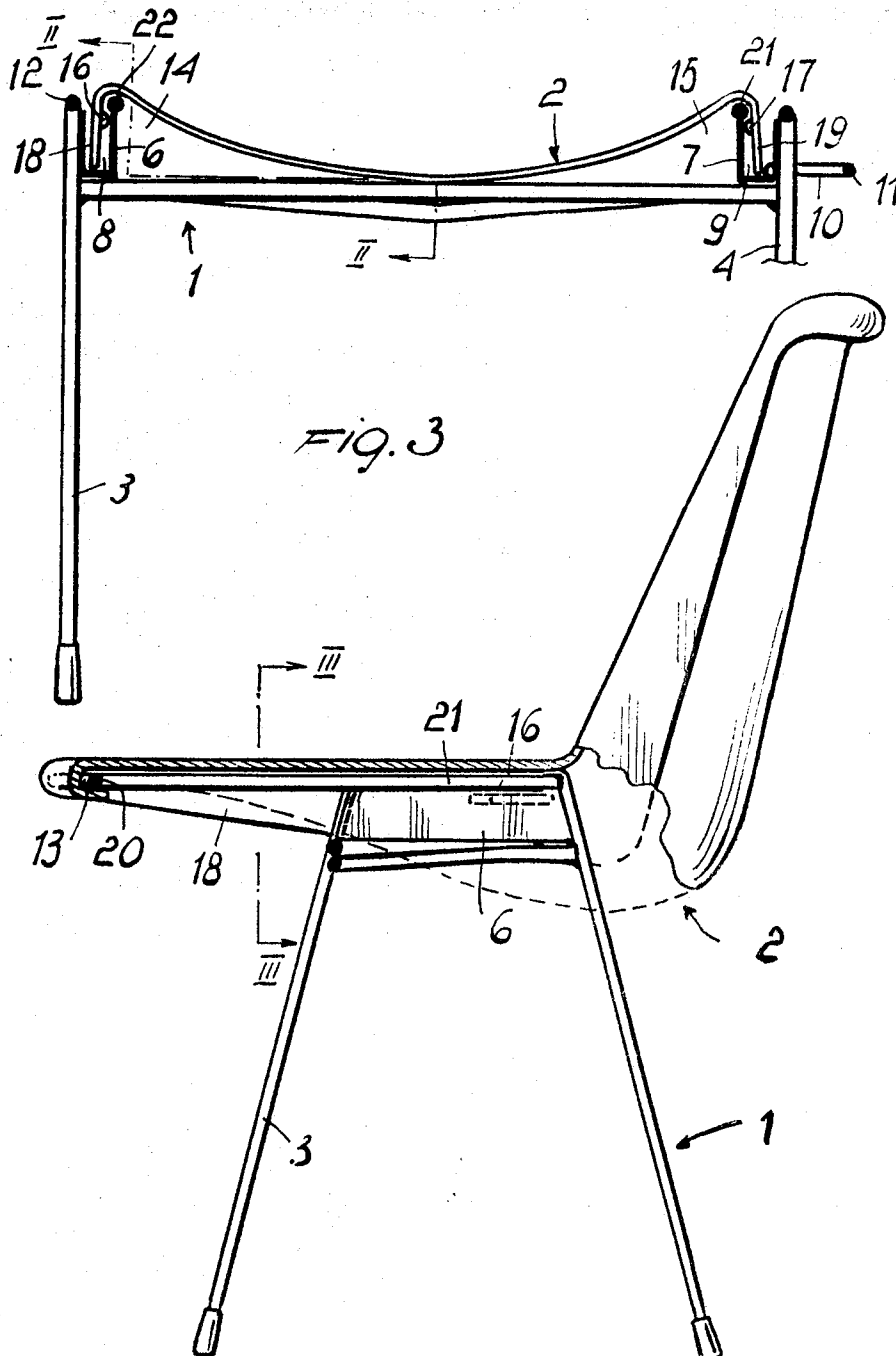


FIG. 2

BY

Alfredo MARTINI
INVENTOR.

Albert J. Joffe
AGENT

COMPOSABLE SEAT STRUCTURE

BACKGROUND OF THE INVENTION

The present invention relates to a composable seat structure suitable to be connected to other adjacent seats of equal type, to form a series of supported ranks, for example for meeting halls, or for entertainment premises etc.

Numerous seat structures are known formed of a carrying frame, and of a bearing body, generally in plastic material made in one piece, which connects to such a frame. Normally, the union of these forming elements (frame and bearing body) implies the carrying out of more or less laborious operations, and in any case, requiring the application of auxiliary fixing means, such as screws, bolts, and the like.

SUMMARY OF THE INVENTION

One object of the present invention is that of substantially obviating these inconveniences, by making available a seat structure, which, different from what was known up to now, should be such as to permit an assemblage which takes place with extreme rapidity without the employment of connecting means, between frame and bearing body, extraneous to these two elements.

Another object of the invention is that said seat structure be devised in a manner as to permit the formation of "rigid" ranks of seats, without the need to resort in this case either, to mutually connecting means extraneous to the seats themselves. As a result, there is a substantial saving of time in the construction of such ranks, formed on a multiplicity of seats, and consequently the possibility of a rapid putting up or clearing away of community meeting halls in a very short time, and without any difficulty.

According to the invention there is provided a composable seat structure of the type formed by a carrying frame and by a bearing body, characterized by the fact that said bearing body is connected to said frame by rapid snap-spring joining means.

BRIEF DESCRIPTION OF THE DRAWINGS

The invention will better appear from the detailed description of a preferred, but not exclusive, embodiment, of a seat structure according to the invention, illustrated purely indicatively, and by no means as a limitation, in the attached drawings, in which:

FIG. 1 shows the seat in which the bearing body is shown partly folded-up and separated from the relative frame;

FIG. 2 is a section of the structure executed according to the outline II—II of FIG. 3;

FIG. 3 is a transverse section of said structure executed according to the outline III—III of FIG. 2;

FIG. 4 shows, by way of example, how the union of more seats, for the formation of a series of supported ranks of seats, takes place.

DESCRIPTION OF THE PREFERRED EMBODIMENT

With reference to such FIGS., the seat or chair structure according to the invention consists of a supporting frame 1 and of a bearing body or seating shell 2. The frame 1 is for example produced in tubular metal bars and consists substantially of a pair of shoulders 3 and 4 formed from a bar bent in the shape of a U so as to

represent a pair of legs, and of a U-shaped holding member or frame portion 5 which is appointed to support the bearing body 2. The member 5 is arranged in a horizontal plane and is connected to the shoulders 3 and 4 through a pair of channel-like connecting members indicated at 6 and 7. Moreover between the shoulders 3 and 4 and the holding member 5 is materialized a pair of supports 8 and 9, provided with parallel vertical lateral walls and with a bottom. The dept of the members 6 and 7 is greater than the width thereof.

Laterally to the shoulder 4 is defined a slot-like or loop piece 10, characterized for example by a rod 11, bent like a C. The slot or passage 10 is dimensioned in a way to receive the upper cross portion 12 of the shoulder 3 of an adjacent seat, fixing in such a way the stable connection (but easily removable by simple disengagement of a seat with respect to the other) of two adjacent seats.

The bearing body 2 is made, for example, by pressing of a suitable plastic material, and is structuralized in one piece forming frontally or a pocket downwardly and rearwardly bent front portion 13, and at its two sides a pair of cavities 14 and 15. In the same bearing body are furthermore made two longitudinal prominences or projections 16 and 17, in the proximity of the bottom of the cavities 14 and 15.

The assemblage of the seat occurs in an extremely simple way; the rear part 20 of part 5 of the frame is inserted into the pocket 13, whereupon the bearing body is pressed towards the bottom in a way that its wings or sidewalls 18 and 19 projecting vertically are placed inside the channel-like members 6 and defining an interspace between the ends 21 and 22 of the U-shaped frame portion 5 and the cross portion 12 of the legs 3 and 4. Correspondingly the tubular ends 21 and 22 of the member 5, are inserted inside the cavities 14 and 15, springing over the prominences 16 and 17, fixing in this way the frame to the bearing body. The lateral walls of the channel-like connecting members 6 and 7 have for this purpose a thickness smaller than that of the ends 21 and 22, as visible from FIGS. 1 and 3, and project laterally into said members 6 and 7. As shown particularly in FIG. 3, the sidewalls 18 and 19 are slightly spreaded apart when engaged into the channel-like connecting members 6 and 7, that is the distance between the projections 16 and 17 is slightly smaller than the distance between the walls of the members 6 and 7 fixed to the ends 21 and 22.

Naturally, in order to disconnect the bearing body from the frame it is sufficient to exercise a traction on the bearing body such as to cause the disconnection of the ends 21 and 22 from the prominences 16 and 17, subsequently slipping off, towards the front, the pocket 13 from the length 20.

Obviously the frames, as well as the bearing bodies 2, are easily stockable one on top of the other.

In addition to this, every seat can be jointed to the adjacent seat in the way as stated above forming "rigid" ranks of seats, of a desired length.

The invention thus conceived is open to numerous modifications and variations, all within the scope of the inventive concept. So, for example, the spring joint of the bearing body to the frame, can be achieved by different means.

Furthermore, all the details are substitutable with other technically equivalent means.

Naturally the materials employed as well as the dimensions, can vary according to the needs.

I claim:

1. A composable chair structure comprising:

a supporting frame of metal bars having two parallel 5
U-shaped leg structures spaced apart and transverse connection members for rigidly connecting said leg structures, including a substantially U-shaped frame portion arranged substantially in a horizontal plane and having two end portions for 10
connection to said leg structures,

a seating shell with a back integrally made of plastics material and removably mounted on said supporting frame by means of a snap connection,

said seating shell having a downwardly and rearwardly bent front portion for engaging the transverse portion of said U-shaped frame portion, 15
wherein according to the improvement,

said U-shaped frame portion is secured to said leg structures by interposition of a respective channel-like connecting member defining an interspace be- 20

tween the respective end of said U-shaped frame portion and the cross portion of the corresponding U-shaped leg structure.

said channel-like members having lateral vertical walls with a thickness smaller than that of said ends of said U-shaped frame portion and said cross portion of said leg structures, whereby said ends and said cross portion laterally project withing said interspace.

and said seating shell defines downwardly and rearwardly bent parallel sidewalls, the downwardly bent portions of said sidewalls being provided at least on one side with projections and being insertable within said interspaces, said projections cooperating with said ends of said U-shaped frame portion through resilient deformation so said sidewalls with with respect to one another thereby to clamp said sidewalls within said interspaces, respectively, and locking said seating shell on said supporting frame.

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