US 20130257130A1

(19) United States

(12) Patent Application Publication

(10) Pub. No.: US 2013/0257130 A1

(43) Pub. Date: Oct. 3, 2013

WANG

(54) **FORMING STRUCTURE OF ARMREST AND CHAIR-LEG FOR BAMBOO CHAIR**

(76) Inventor: **WEN-TSAN WANG**, Taipei City (TW)

(21) Appl. No.: **13/433,253**

(22) Filed: **Mar. 28, 2012**

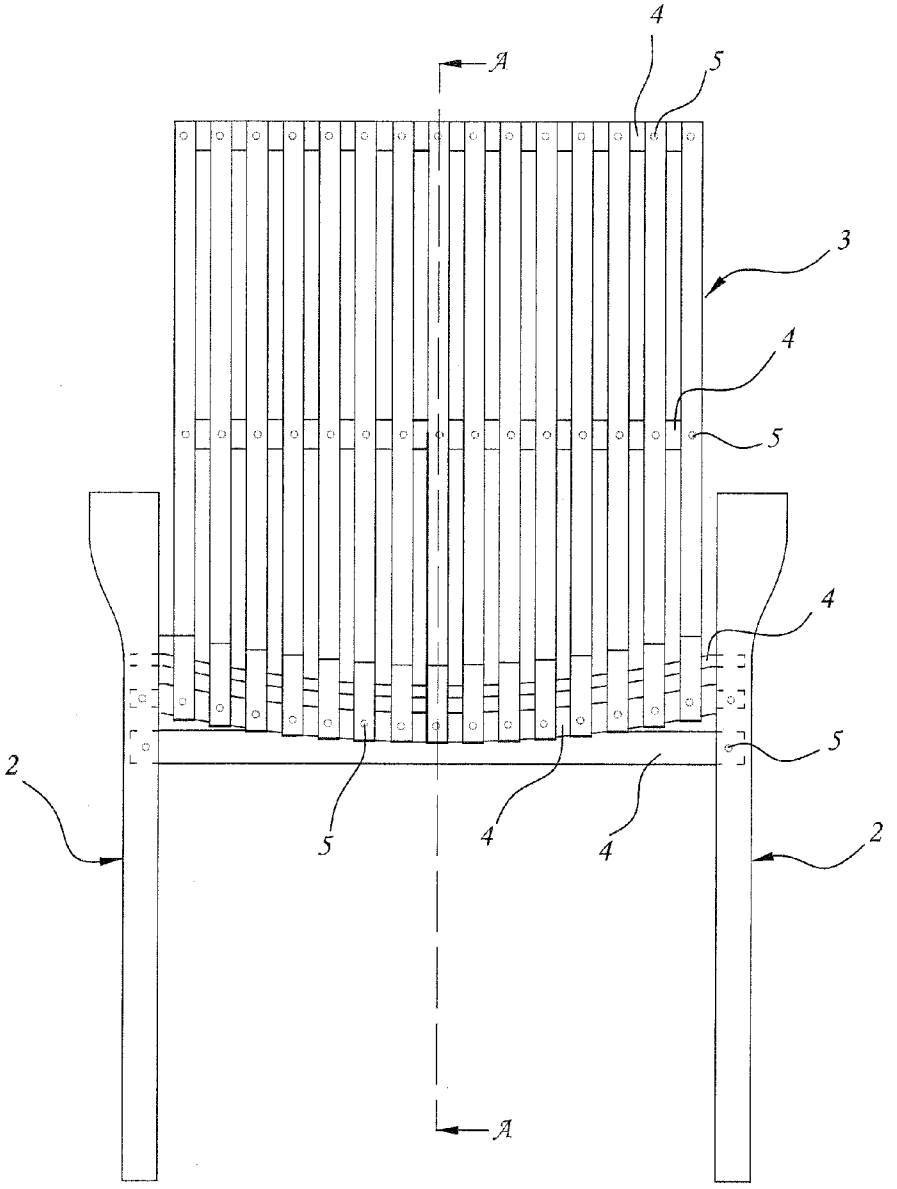
Publication Classification

(51) **Int. Cl.**
A47C 7/54 (2006.01)

(52) **U.S. Cl.**
USPC **297/411.2**

(57) **ABSTRACT**

A forming structure of the armrest and the chair-leg for a bamboo chair comprising the armrest and the chair-leg with a general ⌐-shape formed by bending the bamboo material, which the height of the armrest is higher than the height of the chair-leg. Two opposite outer surfaces of the chair-leg are adjoined with two opposite inner surfaces of the armrest to form a one-body armrest-leg unit. The bamboo chair is formed by combining a plurality of bamboo-seat units between two armrest-leg units to increase the load-bearing strength and enhance the one-body look-and-feel.



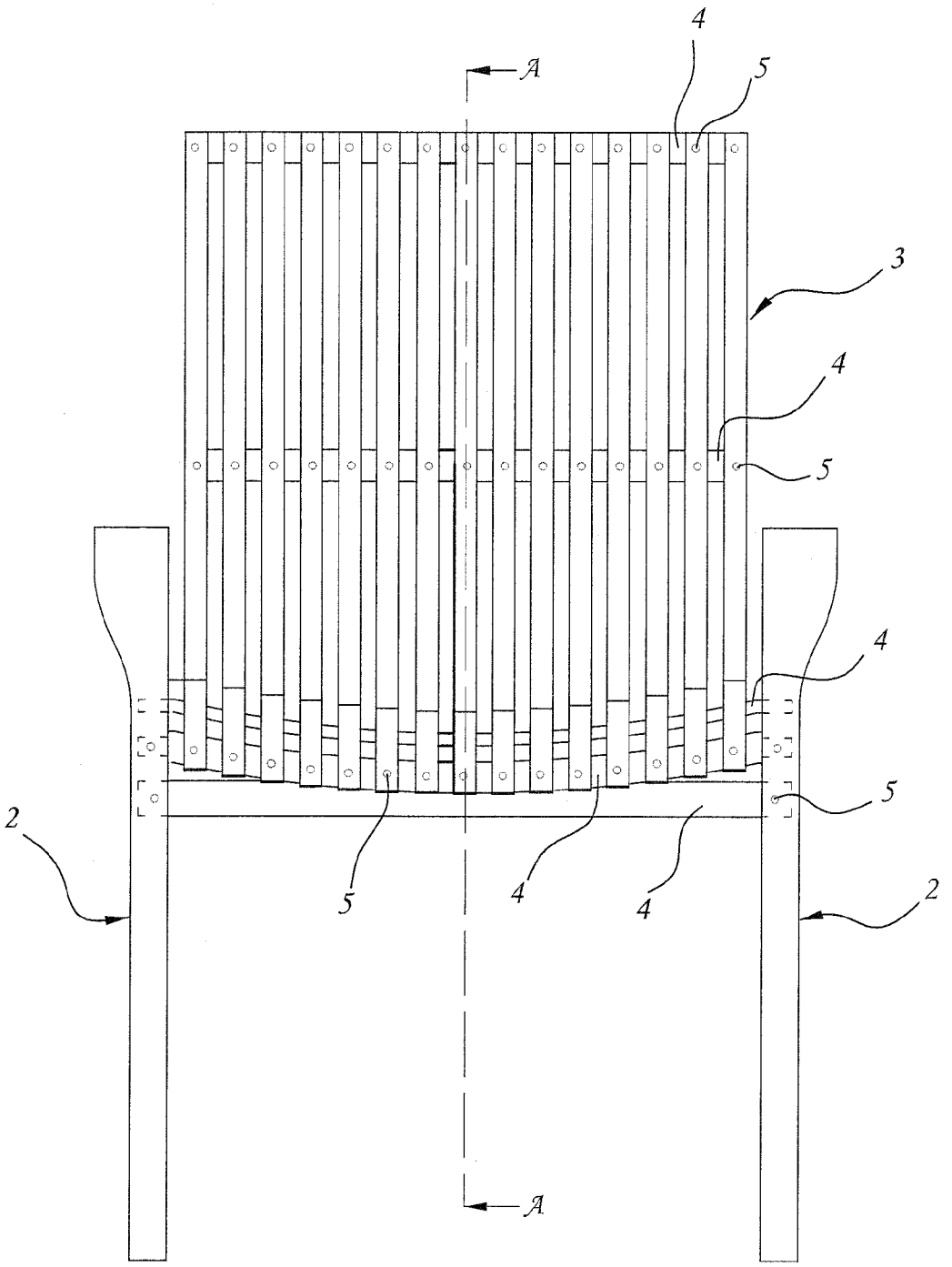


FIG.1

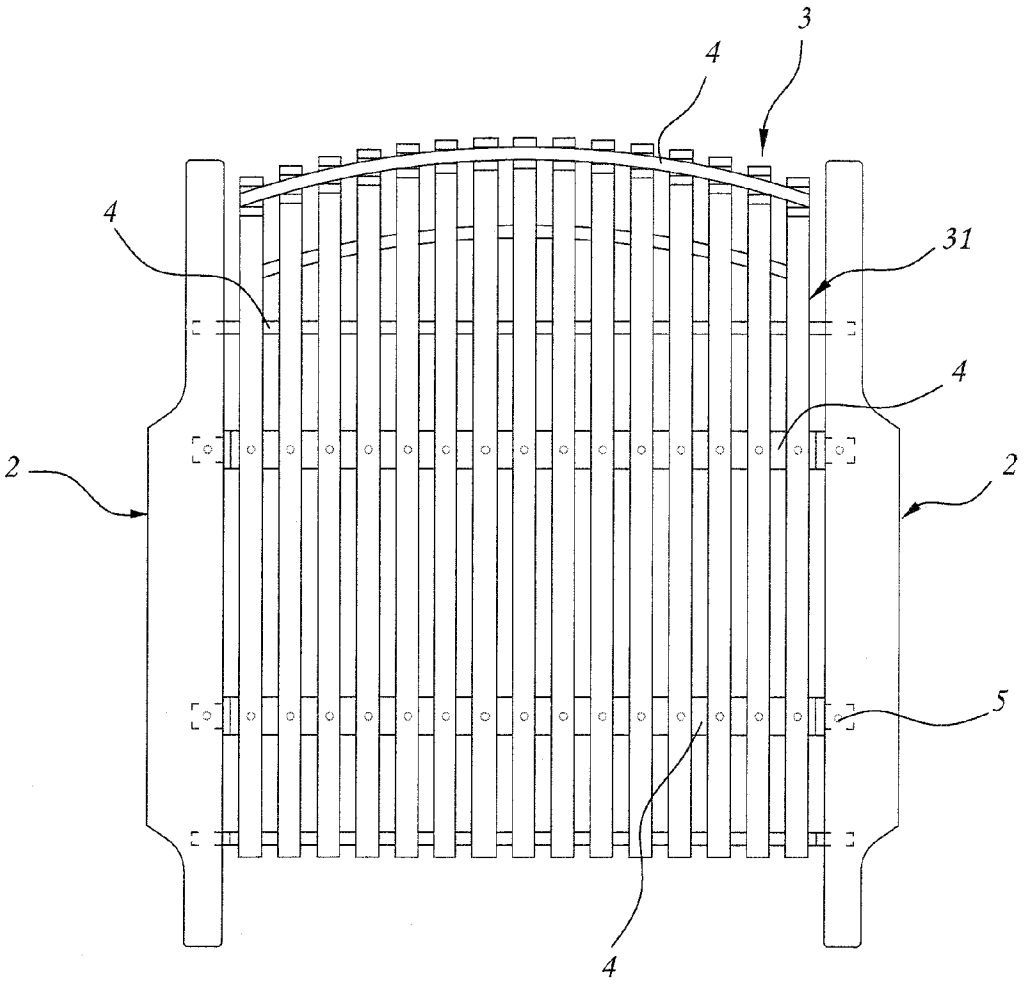


FIG.2

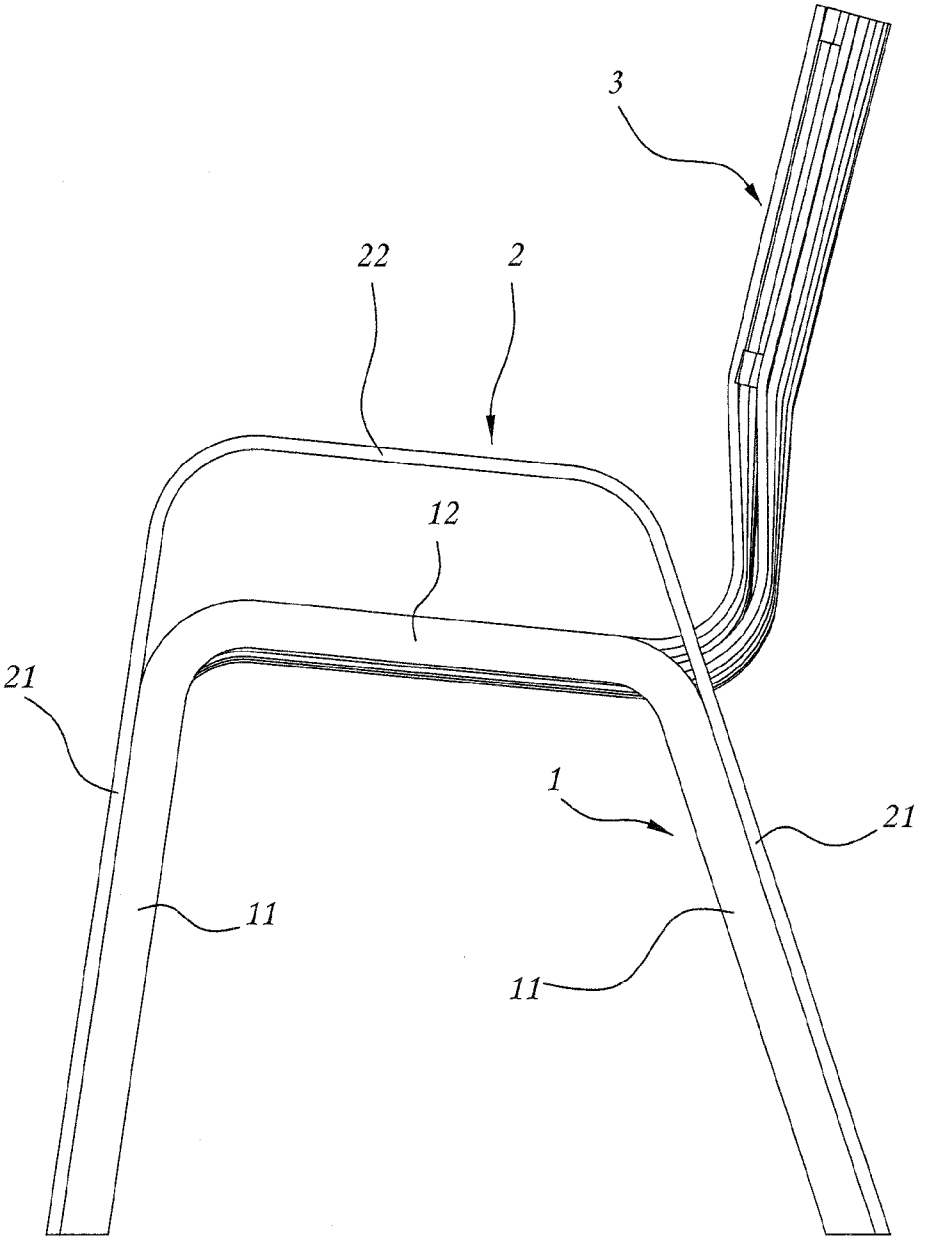


FIG.3

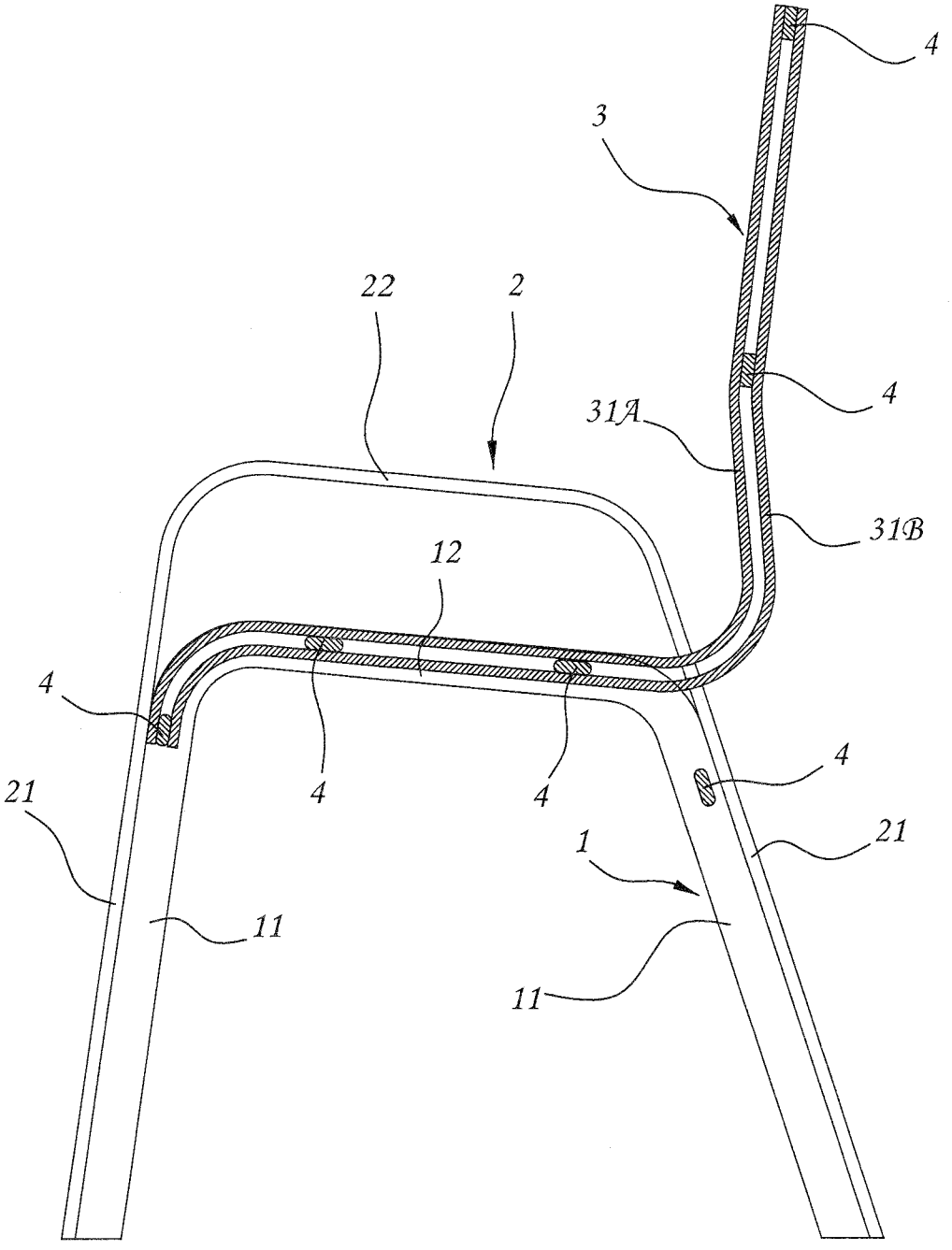


FIG.4

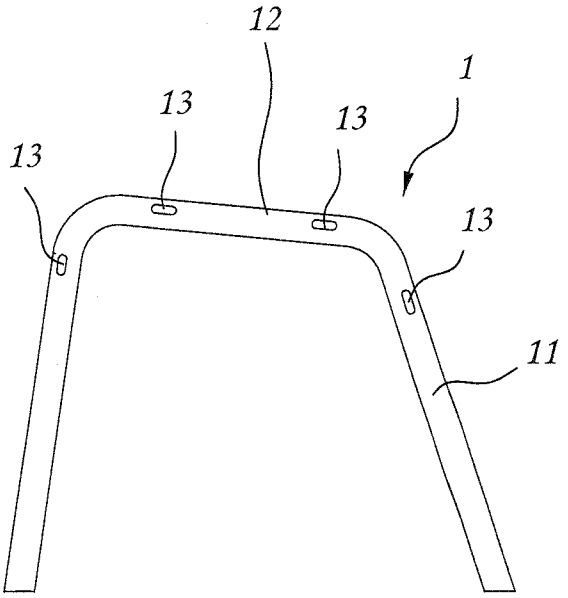


FIG.5A

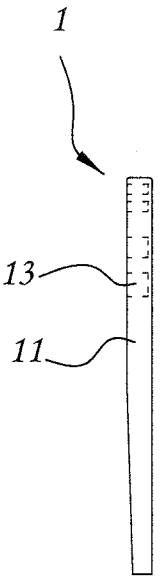


FIG.5B

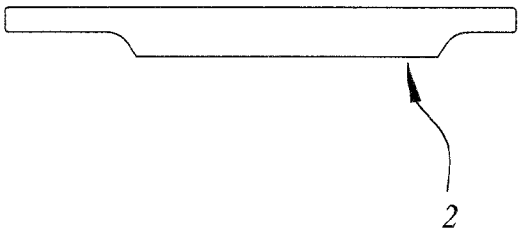


FIG.6C

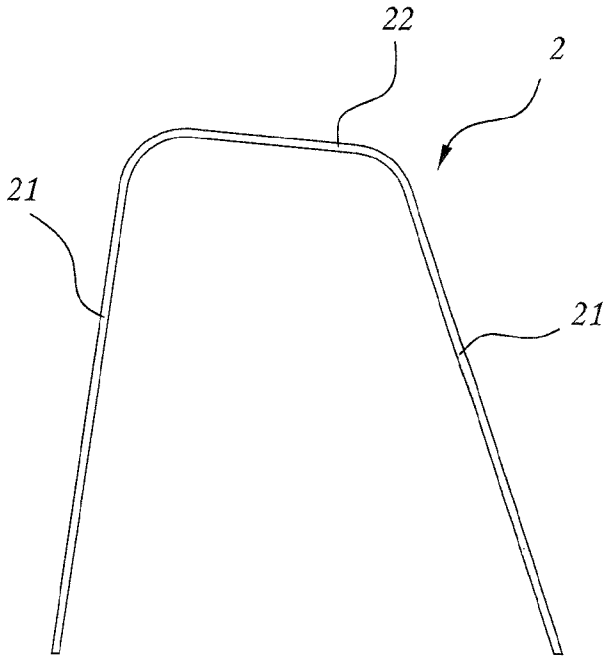


FIG.6A

FIG.6B

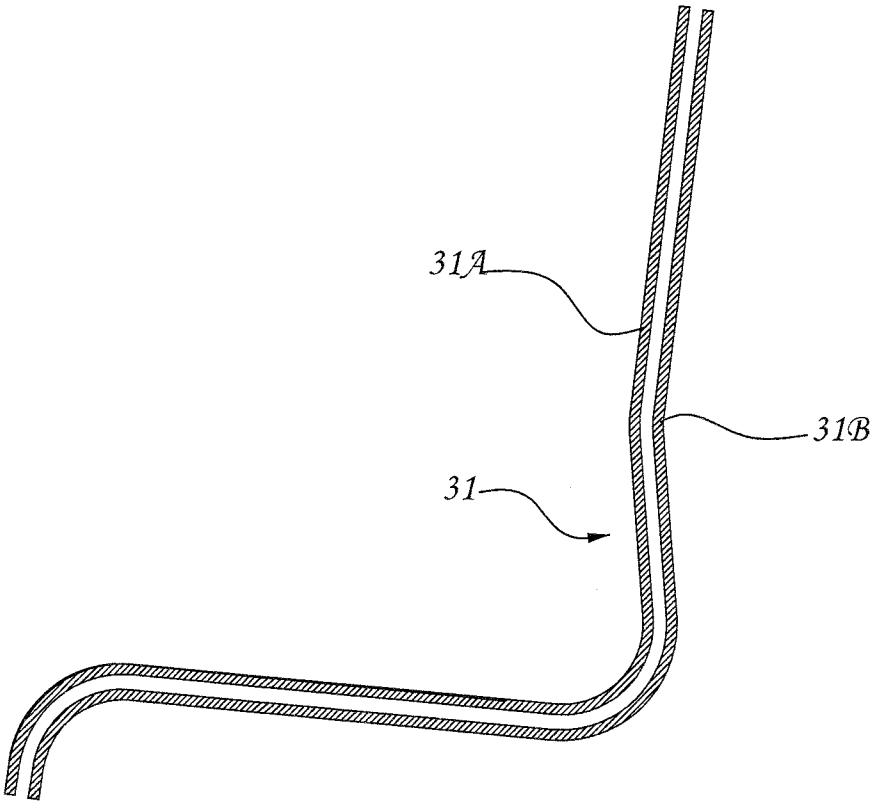


FIG.7

FORMING STRUCTURE OF ARMREST AND CHAIR-LEG FOR BAMBOO CHAIR

BACKGROUND OF THE INVENTION

[0001] a) Field of the Invention

[0002] The present invention relates to a bamboo chair made of the bamboo material, and more particularly, to the structure which combines the armrest and chair-leg into one-body by using the bamboo material to increase the load-bearing strength and enhance the one-body look-and-feel of the bamboo chair.

[0003] b) Description of the Prior Art

[0004] Normally, the material adopted for the chair includes many kinds, such as wood, plastic, metal, and leather, etc. Besides the practical function; the chair has the decoration effect owing to its delicate manufacturing and graceful appearance. Moreover, the chair made of bamboo or wood material is adored by the antique lover because of its primitive character.

[0005] In general, the structure of the chair includes a bottom portion; a support portion; and a seat portion no matter what material of the chair is made. The bottom portion is used to touch the ground, and the seat portion is used to provide for the hip of the user to sit. The support portion is connected between the bottom portion and the seat portion to support the seat portion. However, the weaving and knitting fabrication method is adopted for nearly all the conventional bamboo chair so as to make the bamboo chair be lack of elasticity after being formed. It will easily make the user feel uncomfortable after a long-time sitting.

SUMMARY OF THE INVENTION

[0006] The object of the present invention is to provide a kind of structure for the bamboo chair that ingeniously connects and combines the armrest with the chair-leg into a one-body, so as to increase the whole strength of the bamboo chair and make its look-and-feel more delicate.

[0007] One feature of the present invention is bending the bamboo material in advance to form the armrest and the chair-leg with a general ㄇ-shape, and the height of the armrest is higher than the height of the chair-leg.

[0008] Furthermore, the side surface of the chair-leg is set with a plurality of concave holes, and the seat is set with a plurality of lateral bamboo strips in the present invention. Two ends of the lateral bamboo strip are respectively matched into the concave holes of the chair-leg.

[0009] The lateral bamboo rods of the present invention are fixed to the chair-leg by using the fixing elements after inserting the lateral bamboo rods into the concave holes of the chair-leg, and so as to avoid the separation between the seat and the chair-leg because of the bearing weight.

[0010] The chair-leg and the armrest made of bamboo material of the present invention have two legs and two armrest-legs respectively, and the two legs tilt an angle toward the leaving direction for each other. The two armrest-legs also tilt an angle toward the leaving direction for each other.

[0011] The technical measure of the present invention to construct the seat is utilizing a plurality of lateral bamboo strips to form a continuous bended shape, and laminating the first bamboo seat-component and the second bamboo seat-component in parallel pairs to construct a seat unit. A plurality of lateral bamboo rods are set between the first bamboo seat-component and the second bamboo seat-component, and two ends of the lateral bamboo rods are respectively protruded out of two sides of the seat for a proper length. The first bamboo seat-component and the second bamboo seat-component of the seat unit are separated out laminated space by using the lateral bamboo rods. Therefore, the bamboo seat with the bamboo chair-back is constructed by nailing each first bamboo seat-component and each second bamboo seat-component with the lateral bamboo rods.

[0012] The present invention utilizes good elasticity feature of the bamboo material and crafted technical art to further combine the bamboo armrest with the bamboo chair-leg into a one-body structure, so as to increase the whole strength of the bamboo chair and make its look-and-feel more delicate. Therefore, the present invention with excellent performance and practical application is new and innovative. Consequently, the present invention satisfies all the requirements of the patent law.

BRIEF DESCRIPTION OF THE DRAWINGS

[0013] FIG. **1** is a front-view plane schematic diagram to illustrate a bamboo chair after forming according to one embodiment of the present invention;

[0014] FIG. **2** is a top-view plane schematic diagram of FIG. **1**;

[0015] FIG. **3** is a side-view plane schematic diagram of FIG. **1**;

[0016] FIG. **4** is a cross-sectional plane schematic diagram along the A-A direction of FIG. **1**;

[0017] FIG. **5**A and FIG. **5**B are the side-view and front-view plane schematic diagrams to respectively illustrate the structure of the chair-leg formed in advance of the present invention; and

[0018] FIG. **6**A to FIG. **6**C are the side-view, front-view, and top-view plane schematic diagrams to respectively illustrate the structure of the armrest formed in advance of the present invention; and

[0019] FIG. **7** is a cross-sectional plane schematic diagram along the A-A direction of FIG. **1** to illustrate the structure of the seat unit formed in advance of the present invention.

DESCRIPTION OF THE PREFERRED EMBODIMENT

[0020] The detailed explanation of the present invention is described as following. The described preferred embodiments are presented for purposes of illustrations and description, and they are not intended to limit the scope of the present invention.

[0021] The foregoing aspects and many of the accompanying objects, functions, and advantages of this invention will become more readily appreciated as the same becomes better understood by reference to the following detailed description, when taken in conjunction with the accompanying drawings.

[0022] Firstly, please refer to FIG. **1** to FIG. **3**, the bamboo chair according to the preferred embodiment of the present invention is formed by a plurality of bamboo components. The bamboo chair comprises the chair-leg **1** and the armrest **2** with a general ㄇ-shape formed by bending the bamboo material; and the seat **3** formed by continuous bending the bamboo material. The chair-leg **1** and the armrest **2** are combined to form a one-body armrest-leg unit, and the seat **3** is fixed between two armrest-leg units.

[0023] Next, the chair-leg **1** of the present invention is formed by bending the bamboo material to have a general

⌐-shape as shown in FIG. **5**A and FIG. **5**B. The chair-leg **1** has the legs **11** faced each other on two opposite sides; and the leg-connection portion **12** positioned thereon to connect two legs **11**. The two legs **11** may tilt an angle toward the leaving direction for each other, so as to enlarge the support area between the lower ends of the legs **11** and the ground. And, the side surface of the chair-leg **1** may set with a plurality of concave holes **13**.

[0024] Then, the structure of the armrest **2** for the present invention is also formed by bending the bamboo material to have a general ⌐-shape as shown in FIG. **6**A to FIG. **6**C. The armrest **2** has the armrest-legs **21** faced each other on two opposite sides; and the armrest-leg-connection portion **22** positioned thereon to connect two armrest-legs **21**. The two armrest-legs **21** may tilt an angle toward the leaving direction for each other, so as to enlarge the support area between the lower ends of the armrest-legs **21** and the ground. And, the overall height of the armrest **2** is higher than which of the chair-leg **1**. Preferably, the tilted angle of the armrest-legs **21** is the same as which of the legs **11** of the chair-leg **1**. And, the size of the opposite inner sides of the armrest-legs **21** is preferably the same as which of the opposite outer sides of the legs **11** of the chair-leg **1**.

[0025] Through the structure of the chair-leg **1** and the armrest **2** described above, the implemented way of the present invention for combining the chair-leg **1** with the armrest **2** into a one-body is to combine the two opposite outer surfaces of the legs **11** and the two opposite inner surfaces of the armrest-legs **21** so as to form a one-body armrest-leg unit.

[0026] Furthermore, as shown in FIG. **4** and FIG. **7**, the above-mentioned armrest-leg unit needs to cooperate with the seat **3** for practical usage. The seat **3** in the embodiment of the present invention is also made of bamboo material, which comprises a plurality of lateral bamboo strips formed in a continuous bended shape to construct the bamboo seat. The first bamboo seat-component **31** A and the second bamboo seat-component **31**B are laminated in pairs to construct a seat unit **31**. The seat units **31** are paralleled lineup, and a plurality of lateral bamboo rods **4** are set between the first bamboo seat-component **31**A and the second bamboo seat-component **31**B. And, two ends of the lateral bamboo rods **4** are respectively protruded out of two sides of the seat **3** for a proper length. The first bamboo seat-component **31**A and the second bamboo seat-component **31**B of the seat unit **31** are separated out laminated space by using the lateral bamboo rods **4**. Then, the bamboo seat **3** with the bamboo chair-back is constructed by using the fixing elements **5** to nail each first bamboo seat-component **31**A and each second bamboo seat-component **31**B with the lateral bamboo rods **4**.

[0027] The assembly way of the seat **3** with two armrest-leg units is direct inserting the lateral bamboo rods **4** positioned in two sides of the seat **3** into the concave holes **13** of the chair-leg **1** and fixing them. Preferably, the tight fastening is applied between the two ends of the lateral bamboo rods **4** and the concave holes **13**. Moreover, the lateral bamboo rods **4** may be further drilled holes in the proper positions near their free ends. And, the inner surfaces of the chair-leg **1** may be drilled corresponding holes in the proper positions to make the corresponding holes correspond to each other after the lateral bamboo rods **4** entering into the concave holes **13**. Then, the complete fixing between the lateral bamboo rods **4** and the chair-leg **1** is obtained by using the fixing elements **5** to nail into the corresponding holes. Accordingly, the better load-bearing strength and the one-body look-and-feel are achieved by the present invention.

[0028] The foregoing descriptions of specific embodiments of the present invention have been presented for purposes of illustrations and description. They are not intended to be exclusive or to limit the invention to the precise forms disclosed, and obviously many modifications and variations are possible in light of the above teaching. The embodiments were chosen and described in order to best explain the principles of the invention and its practical application, to thereby enable others skilled in the art to best utilize the invention and various embodiments with various modifications as are suited to particular use contemplated. It is intended that the scope of the invention be defined by the Claims appended hereto and their equivalents.

What is claimed is:

1. A forming structure of an armrest and a chair-leg for a bamboo chair, comprising:

the chair-leg with a general ⌐-shape formed by bending bamboo material, wherein the chair-leg has two legs; and

the armrest with a general ⌐-shape formed by bending bamboo material, wherein the armrest has two armrest-legs, and the height of the armrest is higher than the height of the chair-leg;

wherein two opposite outer surfaces of the legs of the chair-leg are adjoined with two opposite inner surfaces of the armrest-legs of the armrest to form a one-body armrest-leg unit.

2. The forming structure of an armrest and a chair-leg for a bamboo chair according to claim **1**, wherein the bamboo chair is set with a seat, and the corresponding side surfaces of the two legs is set with a plurality of concave holes; wherein the seat is set with a plurality of lateral bamboo strips, and two ends of the lateral bamboo strip are respectively matched into the concave holes.

3. The forming structure of an armrest and a chair-leg for a bamboo chair according to claim **2**, further comprising a plurality of lateral bamboo rods and a plurality of fixing elements; wherein the lateral bamboo rods are fixed to the chair-leg by the fixing elements after the lateral bamboo rods are inserted into the concave holes.

4. The forming structure of an armrest and a chair-leg for a bamboo chair according to claim **1**, wherein the two legs of the chair-leg tilt an angle toward the leaving direction for each other, and the two armrest-legs of the armrest tilt an angle toward the leaving direction for each other.

5. The forming structure of an armrest and a chair-leg for a bamboo chair according to claim **2**, wherein the seat is constructed by a plurality of seat units, and two armrest-leg units are combined by the seat intervened.

* * * * *