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MUSICAL INSTRUMENT STAND FOR MUSIC COMPOSITION AND USAGE METHOD THEREOF.

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The present invention relates to the technical field of musical instrument stands, and discloses a musical instrument stand for music composition, including: a placement table, including a folding table and a fixed table, herein after the two are bonded on the front and back and hinged mutually, the folding table may be folded up and down; an X-shaped support leg, including a pair of support rods, herein two support rods are arranged in X-shaped intersection and connected rotatably at an intersection portion; and there is a pair of X-shaped support legs mirrored on the left and right sides under the placement table; and a positioning structure, herein a rear top end of the X-shaped support leg is hinged with the fixed table, a front top end is movably connected with the folding table, and after movement, it is fixed together with the folding table by the positioning structure.

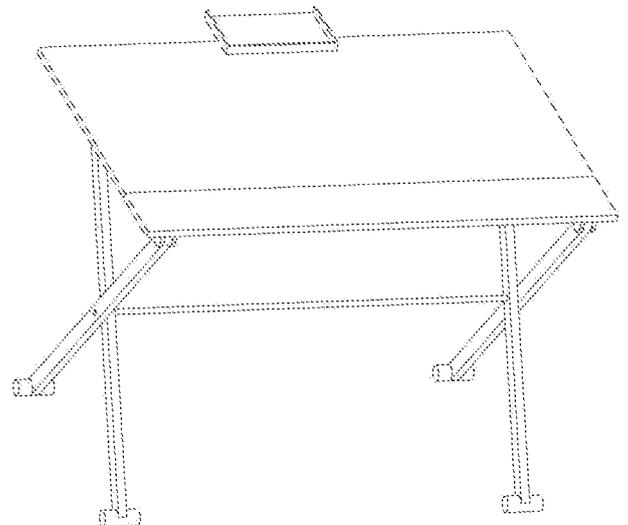


FIG. 1

MUSICAL INSTRUMENT STAND FOR MUSIC COMPOSITION AND USAGE METHOD THEREOF

Technical Field

The present invention relates to the technical field of musical instrument stands, in particular to a musical instrument stand for music composition and a usage method thereof.

Background Art

Musical instrument stands are one of essential tools for instrument performance. At present, for musical instruments such as a dulcimer and a Chinese zither, the musical instrument stands matched with it are generally in the form of a □-shaped frame structure, or an I-shaped frame structure or the like. It is not difficult to see that the existing musical instrument stands matched with the musical instruments such as the dulcimer and the Chinese zither are all fixed structures. Although it may stably support the musical instruments such as the dulcimer and the Chinese zither during use, it has two defects below:

1. the height of the musical instrument stand may not be adjusted according to the needs of a player;
and
2. when the musical instrument stand is not used, the musical instrument stand itself is relatively large in volume, and the occupied space is large, so it is inconvenient to carry and store.

Summary of the Invention

A technical problem to be solved by the present invention is to overcome the above technical difficulties and provide a musical instrument stand for music composition and a usage method thereof. The height of the musical instrument stand itself may be adjusted according to the needs of a player, and when the musical instrument stand is not used, it may be folded to reduce space occupation, thereby it is more convenient to carry and store.

In order to solve the above technical problem, technical schemes provided by the present invention are as follows:

A musical instrument stand for music composition includes:

a placement table, including a folding table and a fixed table, herein after the two are bonded on the front and back and hinged mutually, the folding table may be folded up and down;

an X-shaped support leg, including a pair of support rods, herein two support rods are arranged in X-shaped intersection and connected rotatably at an intersection portion; and there is a pair of X-shaped support legs mirrored on the left and right sides under the placement table; and

a positioning structure, herein a rear top end of the X-shaped support leg is hinged with the fixed table, a front top end is movably connected with the folding table, and after movement, it is fixed together with the folding table by the positioning structure.

Further, a beam rod is further included, the intersection portions of the two X-shaped support legs are rotatably sheathed and connected at two end portions of the beam rod respectively. When the musical instrument stand is unfolded and used, the overall structure is firmer.

Further, the positioning structure includes a guide rail groove and a handle screw; and the cross-section of the guide rail groove is an inverted U-shaped structure, a top plate is fixed on the lower side of the folding table, two side plates are correspondingly provided with positioning screw holes, a plurality of the positioning screw holes is uniformly arranged along a rail direction of the guide rail groove, the front top end of the X-shaped support leg is movably arranged between the two side plates of the guide rail groove, and the front top end is provided with a through hole in advance, the handle screw passes through the through hole and is threaded-connected with a pair of the positioning screw holes. It is convenient to fix the unfolded state of the musical instrument stand after being unfolded.

A usage method of the musical instrument stand for music composition includes the following steps:

Step 1: the placement table and the X-shaped support legs are unfolded respectively, and the front top end of the X-shaped support leg is fixed to a certain position in the corresponding guide rail groove by the handle screw, then the musical instrument stand is placed steadily on the placement table, and music composition and performance are performed; and

Step 2: after the performance, the handle screw is unscrewed firstly, the front top end of the X-shaped support leg is separated from the folding table, then the two X-shaped support legs are folded, and the folding table is folded downwards until a vertical state under the influence of gravity, since then, the folding of the musical instrument stand is completed.

The advantages of the present invention compared to existing technologies are as follows:

1. The musical instrument stand of the present invention may fix the unfolded placement table and X-shaped support legs together by the positioning structure, the unfolding operation is convenient and fast, and after being unfolded, the height of the musical instrument stand may be adjusted within a certain height range according to the needs of the player, which may better meet the placement needs of musical instruments such as a dulcimer and a Chinese zither when the player plays.
2. When the musical instrument stand of the present invention is not used, the placement table and the X-shaped support legs may be folded, thereby the space occupation of the musical instrument stand is smaller, and it is more convenient to store and carry.

Brief Description of the Drawings

FIG. 1 is a structure schematic diagram I of the present invention.

FIG. 2 is a structure schematic diagram II of the present invention.

FIG. 3 is a partial structure schematic diagram I of the present invention.

FIG. 4 is a partial structure schematic diagram II of the present invention.

As shown in the figures: 1. Folding table; 2. Fixed table; 3. Support rod; 4. Beam rod; 5. Guide rail groove; 6. Handle screw; 7. Positioning screw hole; 8. Hinge; 9. Support foot; and 10. Music score stand.

Detailed Description of the Invention

In the description of the present invention, it should be understood that the orientation or position relationship indicated by terms "center", "transverse", "up", "down", "left", "right", "vertical", "horizontal", "top", "bottom", "inside", "outside", and the like is an orientation or position relationship based on drawings, which is only for the convenience of describing the present invention and simplifying the description, rather than indicating or implying that an apparatus or element indicated must have a specific orientation, and be constructed and operated in the specific orientation, and therefore it may not be understood as limitations to the present invention. In addition, the terms "first" and "second" are only used for a descriptive purpose and may not be understood as indicating or implying relative importance or implicitly indicating the number of technical features indicated. Therefore, the features defined by the "first" and "second" may explicitly or implicitly include one or more of these features. In the description of the present invention, unless otherwise

specified, "multiple" means two or more. In addition, the term "including" and any variations thereof are intended to cover non-exclusive inclusion.

The present invention is further described in detail below in combination with implementation modes and the drawings of the description.

A musical instrument stand for music composition includes:

a placement table, including a folding table 1 and a fixed table 2, as shown in FIG. 2, herein the two are bonded on the front and back and hinged by a hinge 8, two hinge plates of the hinge 8 are respectively fixed on the lower sides of the folding table 1 and the fixed table 2, and a music score stand 10 is arranged on the upper side of the folding table 1;

an X-shaped support leg and a beam rod 4, as shown in Figs. 2 and 4, herein there is a pair of the X-shaped support legs mirrored on the left and right sides under the placement table, the X-shaped support leg includes a pair of support rods 3, the two support rods 3 are arranged in X-shaped intersection and the intersection portions are rotatably sheathed and connected at two end portions of the beam rod 4 respectively, a support foot 9 is formed at a bottom end of the support rod 3, and the support foot 9 is a cylindrical structure perpendicular to the support rod 3; and

a positioning structure, herein a rear top end of the X-shaped support leg is hinged with the fixed table 2, a front top end is movably connected with the folding table 1; as shown in Figs. 2 and 3, the positioning structure includes a guide rail groove 5 and a handle screw 6; and the cross-section of the guide rail groove 5 is an inverted U-shaped structure, a top plate is fixed on the lower side of the folding table 1, two side plates are correspondingly provided with positioning screw holes 7, a plurality of the positioning screw holes 7 is uniformly arranged along a rail direction of the guide rail groove 5, the front top end of the X-shaped support leg is movably arranged between the two side plates of the guide rail groove 5, and the front top end is provided with a through hole in advance, the handle screw 6 passes through the through hole and is threaded-connected with a pair of the positioning screw holes 7.

As shown in FIG. 1, a usage method of the musical instrument stand for music composition includes the following steps:

Step 1: the placement table and the X-shaped support legs are unfolded respectively, and the front top end of the X-shaped support leg is fixed to a certain position in the corresponding guide rail groove 5 by the handle screw 6, then the musical instrument stand is placed steadily, and a musical

instrument may be placed stably on the placement table. Then the player faces the fixed table 2 and places a music score on the music score stand 10, the music composition and performance may be performed.

Step 2: after the performance, the handle screw 6 is unscrewed firstly, the front top end of the X-shaped support leg is separated from the folding table 1, then the two X-shaped support legs are folded, and the folding table 1 is folded downwards until a vertical state under the influence of gravity. Then the handle screw 6 is threaded-connected into a certain pair of the positioning screw holes 7 on the corresponding guide rail groove 5, as to prevent the handle screw 6 from being easily lost due to being stored separately. Since then, the folding of the musical instrument stand is completed.

The present invention and the implementation modes thereof are described above, and this description is not restrictive. If those of ordinary skill in the art are inspired by it, without departing from the purpose of the present invention, embodiments similar to the technical schemes that are designed non-creatively shall all fall within the scope of protection of the present invention.

Claims

1. A musical instrument stand for music composition, characterized by comprising:

a placement table, comprising a folding table (1) and a fixed table (2), wherein after the two are bonded on the front and back and hinged mutually, the folding table (1) can be folded up and down;

an X-shaped support leg, comprising a pair of support rods (3), wherein two support rods (3) are arranged in X-shaped intersection and connected rotatably at an intersection portion; and there is a pair of X-shaped support legs mirrored on the left and right sides under the placement table; and

a positioning structure, wherein a rear top end of the X-shaped support leg is hinged with the fixed table (2), a front top end is movably connected with the folding table (1), and after movement, it is fixed together with the folding table (1) by the positioning structure.

2. The musical instrument stand for music composition according to claim 1, characterized by further comprising a beam rod (4), wherein the intersection portions of the two X-shaped support legs are rotatably sheathed and connected at two end portions of the beam rod (4) respectively.

3. The musical instrument stand for music composition according to claim 2, characterized in that the positioning structure comprises a guide rail groove (5) and a handle screw (6); and the cross-section of the guide rail groove (5) is an inverted U-shaped structure, a top plate is fixed on the lower side of the folding table (1), two side plates are correspondingly provided with positioning screw holes (7), a plurality of the positioning screw holes (7) is uniformly arranged along a rail direction of the guide rail groove (5), the front top end of the X-shaped support leg is movably arranged between the two side plates of the guide rail groove (5), and the front top end is provided with a through hole in advance, the handle screw (6) passes through the through hole and is threaded-connected with a pair of the positioning screw holes (7).

4. The musical instrument stand for music composition according to claim 3, characterized in that the folding table (1) and the fixed table (2) are hinged by a hinge (8), and two hinge plates of the hinge (8) are respectively fixed on the lower sides of the folding table (1) and the fixed table (2).

5. The musical instrument stand for music composition according to claim 1, characterized in that a support foot (9) is formed at a bottom end of the support rod (3), and the support foot (9) is a cylindrical structure perpendicular to the support rod (3).

6. The musical instrument stand for music composition according to claim 1, characterized in that a music score stand (10) is arranged on the upper side of the folding table (1).

7. A usage method of the musical instrument stand for music composition according to any one of claims 1~6, characterized by comprising the following steps:

Step 1: unfolding the placement table and the X-shaped support legs respectively, and fixing the front top end of the X-shaped support leg to a certain position in the corresponding guide rail groove (5) by the handle screw (6), then placing the musical instrument stand steadily on the placement table, and performing music composition and performance; and

Step 2: after the performance, unscrewing the handle screw (6) firstly, separating the front top end of the X-shaped support leg from the folding table (1), then folding the two X-shaped support legs, and folding the folding table (1) downwards until a vertical state under the influence of gravity, since then, completing the folding of the musical instrument stand.

Ansprüche

1. Ein Musikinstrumentenständer zum Komponieren von Musik, gekennzeichnet durch:
einen Platzierungstisch, der einen Klappstisch (1) und einen festen Tisch (2) umfasst, wobei der Klappstisch (1) nach dem Verbinden der beiden an Vorder- und Rückseite und dem gegenseitigen Anlenken auf- und zugeklappt werden kann;

ein X-förmiges Stützbein, das ein Paar Stützstangen (3) umfasst, wobei zwei Stützstangen (3) in einer X-förmigen Kreuzung angeordnet und an einem Kreuzungsabschnitt drehbar verbunden sind; und wobei ein Paar X-förmiger Stützbeine vorhanden ist, die auf der linken und rechten Seite unter dem Platzierungstisch gespiegelt sind; und

eine Positionierungsstruktur, wobei ein hinteres oberes Ende des X-förmigen Stützbeins mit dem festen Tisch (2) gelenkig verbunden ist, ein vorderes oberes Ende beweglich mit dem Klappstisch (1) verbunden ist und nach der Bewegung zusammen mit dem Klappstisch (1) mittels der Positionierungsstruktur fixiert ist.

2. Der Musikinstrumentenständer zum Komponieren von Musik gemäß Anspruch 1, dadurch gekennzeichnet, dass er zusätzlich eine Balkenstange (4) umfasst, wobei die Kreuzungsabschnitte der beiden X-förmigen Stützbeine drehbar ummantelt und jeweils an zwei Endabschnitten der Balkenstange (4) verbunden sind.

3. Der Musikinstrumentenständer zum Komponieren von Musik gemäß Anspruch 2, dadurch gekennzeichnet, dass die Positionierungsstruktur eine Führungsschienennut (5) und eine Griffschraube (6) umfasst; und der Querschnitt der Führungsschienennut (5) eine umgekehrte U-förmige Struktur ist; eine obere Platte ist an der Unterseite des Klappstisches (1) befestigt, zwei Seitenplatten sind entsprechend mit Positionierungsschraubenlöchern (7) versehen, eine Mehrzahl der Positionierungsschraubenlöcher (7) ist gleichmäßig entlang einer Schienenrichtung der Führungsschienennut (5) angeordnet, das vordere obere Ende des X-förmigen Stützbeins ist beweglich zwischen den beiden Seitenplatten der Führungsschienennut (5) angeordnet und das vordere obere Ende ist im Voraus mit einem Durchgangsloch versehen,

die Griffschraube (6) verläuft durch das Durchgangsloch und ist mit einem Paar der Positionierungsschraubenlöcher (7) verschraubt.

4. Der Musikinstrumentenständer zum Komponieren von Musik nach Anspruch 3, dadurch gekennzeichnet, dass der Klappptisch (1) und der feste Tisch (2) durch ein Scharnier (8) angelenkt sind und zwei Scharnierplatten des Scharniers (8) jeweils an den Unterseiten des Klappptisches (1) und des festen Tisches (2) befestigt sind.

5. Der Musikinstrumentenständer zum Komponieren von Musik gemäß Anspruch 1, dadurch gekennzeichnet, dass an einem unteren Ende der Stützstange (3) ein Stützfuß (9) ausgebildet ist und der Stützfuß (9) eine zylindrische Struktur senkrecht zur Stützstange (3) ist.

6. Der Musikinstrumentenständer zum Komponieren von Musik gemäß Anspruch 1, dadurch gekennzeichnet, dass an der Oberseite des Klappptisches (1) ein Notenständer (10) angeordnet ist.

7. Ein Verwendungsverfahren des Musikinstrumentenständers zum Komponieren von Musik gemäß einem der Ansprüche 1 bis 6, dadurch gekennzeichnet, dass es die folgenden Schritte umfasst:

Schritt 1: Ausklappen des Aufstelltisches und der X-förmigen Stützbeine und Befestigen des vorderen oberen Endes des X-förmigen Stützbeins an einer bestimmten Position in der entsprechenden Führungsschienennut (5) durch die Griffschraube (6), dann stabiles Platzieren des Musikinstrumentenständers auf dem Aufstelltisch und Ausführen von Musikkomposition und -darbietung; und

Schritt 2: Nach der Darbietung zuerst die Griffschraube (6) lösen, das vordere obere Ende des X-förmigen Stützbeins vom Klappptisch (1) trennen, dann die beiden X-förmigen Stützbeine zusammenklappen und den Klappptisch (1) unter dem Einfluss der Schwerkraft nach unten klappen, bis er eine vertikale Stellung einnimmt, und damit Vervollständigen des Zusammenklappens des Musikinstrumentenständers.

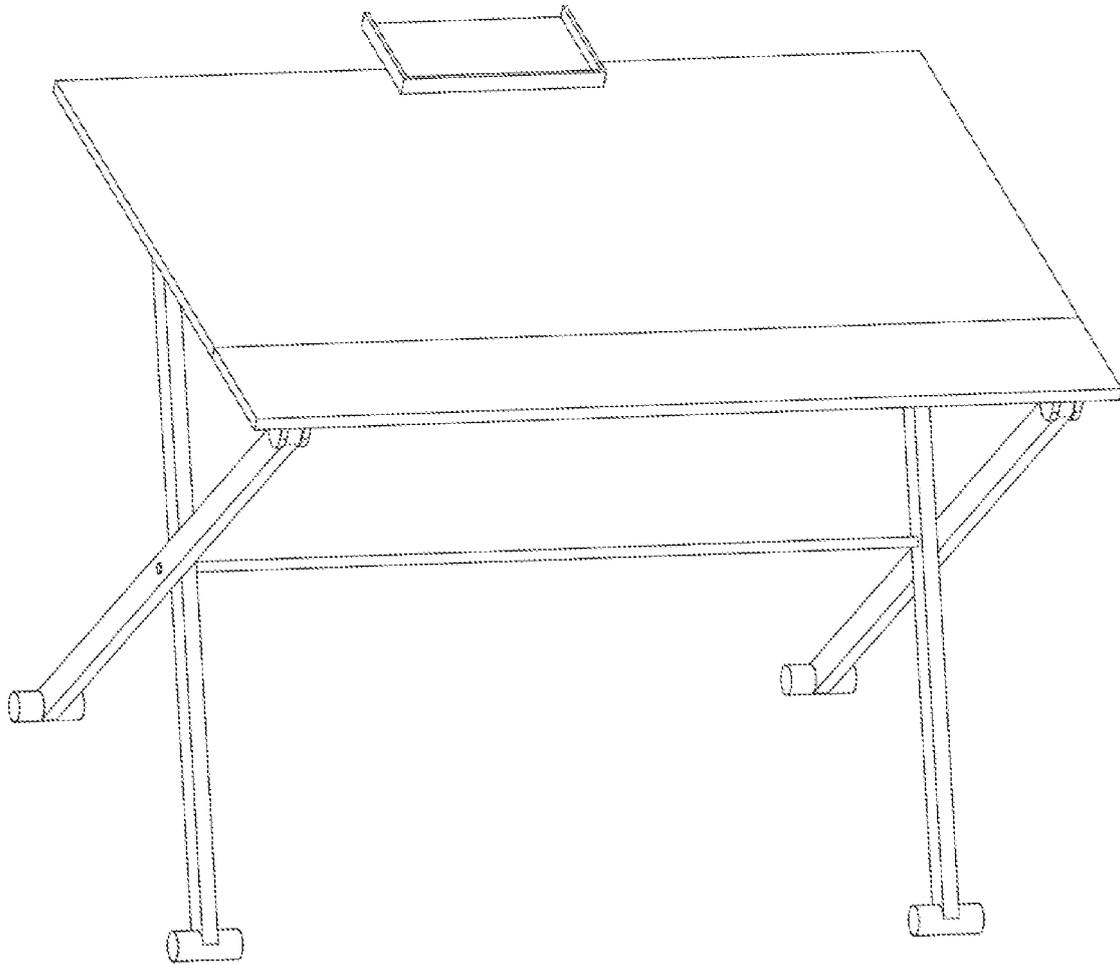


FIG. 1

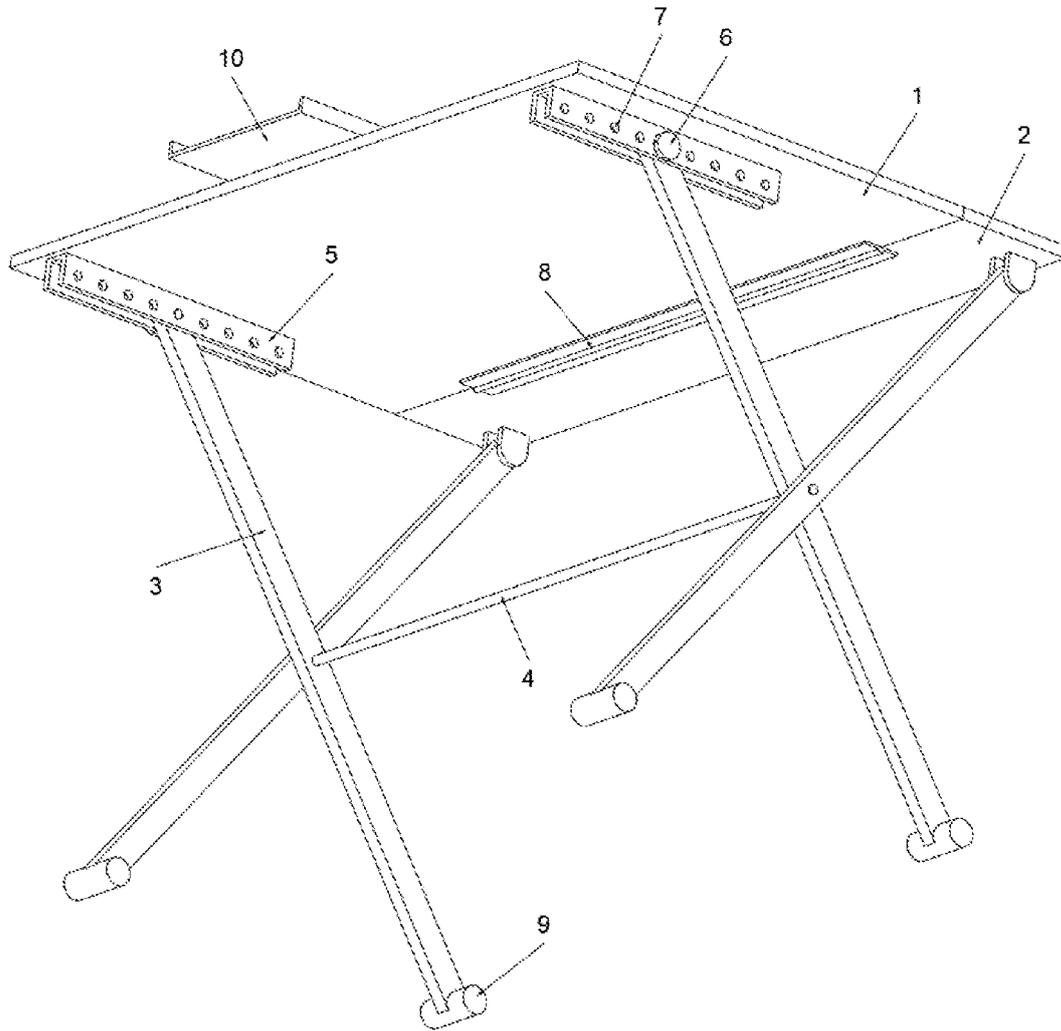


FIG. 2

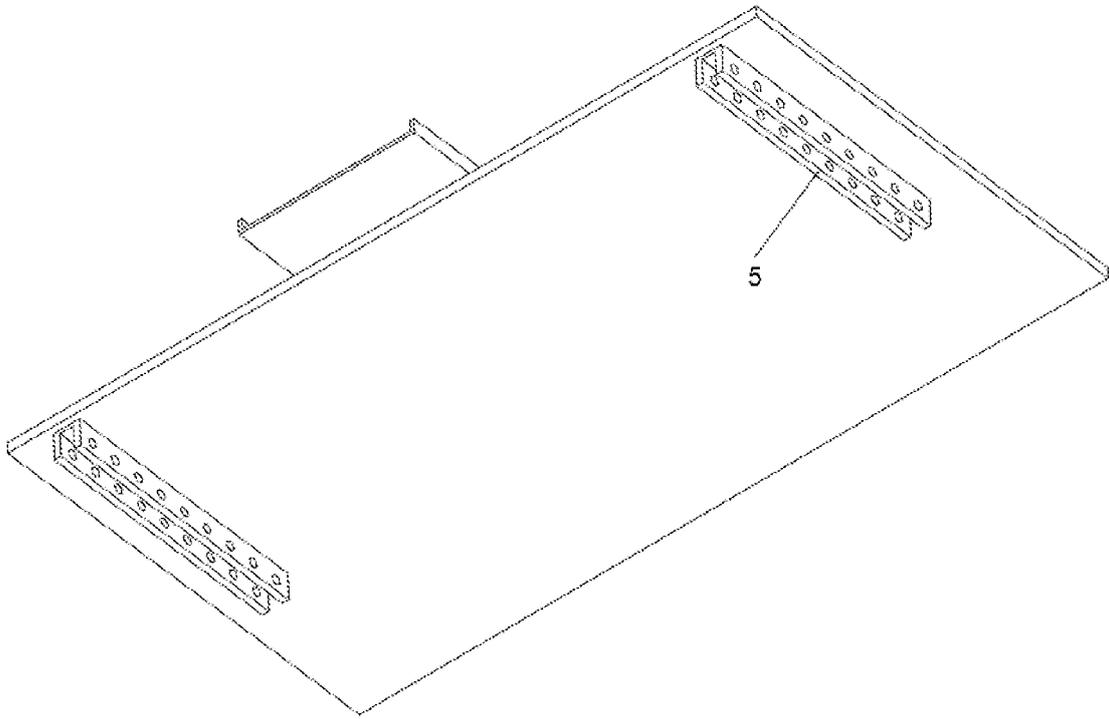


FIG. 3

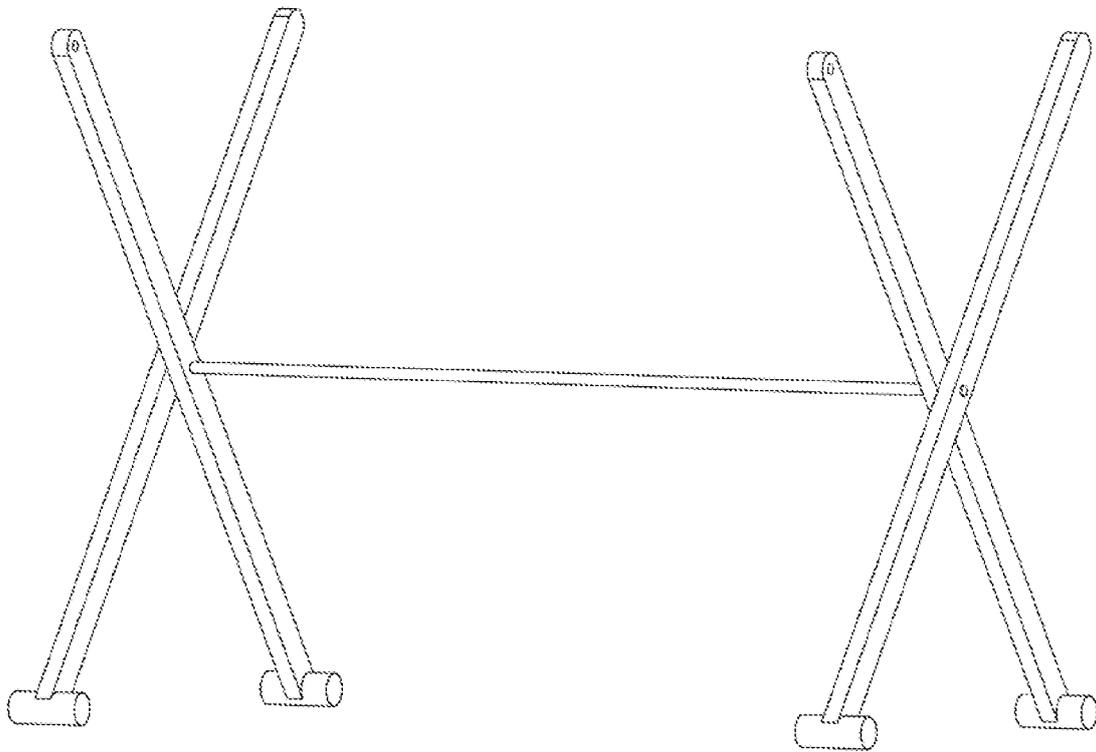


FIG. 4