STOOL FOR A MUSICIAN

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ABSTRACT

The invention relates to a musician’s stool comprising a seat having a rigid base. In the stool, said rigid base comprises a plane portion that is intended to be horizontal and that is extended by a curved portion whose radius of curvature decreases continuously all the way to the edge of said seat so that the angle formed between the tangent of the surface of said curved portion and the plane of said plane portion increases going from the zone of said seat connecting said curved portion to said plane portion all the way to the edge of the seat.
STOOL FOR A MUSICIAN

[0001] The present invention relates to a stool for a musician, and in particular to a piano stool.

BACKGROUND OF THE INVENTION

[0002] Known stools for musicians comprise a substantially rigid plane and horizontal seat, optionally covered in a covering of very flexible foam to make the stool more comfortable, and conventional upholstery.

[0003] Stools of that type present various problems. Firstly, the ideal angle of support for the musician on the stool varies depending on the size and the morphology of the musician, and possibly also on the kind of music being played; because of its unvarying shape, such a known stool is unsuitable for satisfying all these constraints. Thus in particular, the musician cannot select the angle relative to the horizontal with which the buttocks are supported.

[0004] In particular, concerning size, given that the height of a piano or a harp, for example, is determined, the only elements that can be varied are the height and the position of the stool; consequently, the angle between the vertical and the plane constituted by the musician’s thighs must be varied, which means that the point of support of the musician on the stool is not always appropriate.

[0005] As to the morphology of the musician (back/leg ratio, curve of the back, tilting of the pelvis, etc.), this varies from individual to individual, and as a result the ideal support angle is not the same for everybody.

[0006] In addition, after sitting for a certain length of time on a stool of that type, blood flow can become affected by the bar effect produced by pressure exerted between the musician’s legs, and more particularly thighs, and the edge of the stool.

[0007] Document U.S. Pat. No. 4,671,570 discloses a musician’s chair that is adjustable as a function of the type of instrument being played, and intended more particularly for musicians playing wind instruments or string instruments.

[0008] The seat of that chair is of curved shape and it can be inclined using cam mechanisms, where the musician determines inclination by acting on a lever.

[0009] Like the above-described stool, such a chair cannot satisfy all of the constraints that arise in the performance of music, nor does it solve the problem of poor blood circulation due to sitting for a considerable length of time on such a chair.

OBJECTS AND SUMMARY OF THE INVENTION

[0010] An object of the present invention is thus to enable a musician’s stool to be designed that is suitable for a variety of types of instrument, and to a variety of sizes and morphologies of musician, and also to a variety of types of pieces being played.

[0011] The present invention also seeks to provide such a stool that makes it possible to avoid the interference with blood circulation that arises using prior art stools.

[0012] To this end, the present invention provides a musician’s stool comprising a seat having a rigid base, wherein said rigid base comprises a plane portion that is intended to be horizontal and that is extended by a curved portion whose radius of curvature decreases continuously all the way to the edge of said seat so that the angle formed between the tangent of the surface of said curved portion and the plane of said plane portion increases going from the zone of said seat connecting said curved portion to said plane portion all the way to the edge of the seat.

[0013] Because of the particular shape of the curved portion of the stool of the invention, the musician can select a position for the stool as a function of the instrument being played, as a function of the musician’s size and morphology, or indeed as a function of the type of piece being played, and furthermore this particular shape is much less harmful to blood circulation than are prior art shapes.

[0014] More precisely, when the musician is sitting on a prior art stool, there exists a point of localized compression where the musician is sitting, whereas with the stool of the invention, such a point of compression is replaced by a compression zone of greater extent. In addition, with the stool of the invention, the point where the musician’s ischia are supported (i.e. those portions of bone that are to be found at the bottom and the back of the pelvis) lies in the compression zone instead of being at a relatively large distance therefrom. This provides a better distribution of the weight of the body over the stool, better equilibrium, and better blood flow.

[0015] Advantageously, the angle formed between the tangent to the surface of the curved portion and the plane of the plane portion increases from 0° to 50°. This range of angles is optimum for obtaining the desired effect while maintaining a sitting position that is comfortable and favorable to blood circulation.

[0016] In an embodiment of the invention, the radius of curvature of said curved portion decreases from the zone of said seat connecting said curved portion to said plane portion all the way to the edge of the seat.

[0017] According to an advantageous characteristic, said seat is covered in a covering of material that is sufficiently firm to follow the outline of said seat. By way of example, the covering is a material based on cellular polyurethane of hardness close to that of SYLOMER R25.

[0018] According to another characteristic of the invention, the projection of said curved portion onto the plane of said plane portion is of a length not less than the length of said plane portion. This provides a sitting position that is comfortable and under good conditions.

BRIEF DESCRIPTION OF THE DRAWING

[0019] Other characteristics and advantages of the present invention appear from the following description of an embodiment of the invention given by way of non-limiting illustration.

[0020] The sole FIGURE is a perspective view of the seat of a musician’s stool in accordance with the invention.

MORE DETAILED DESCRIPTION

[0021] The FIGURE shows the seat 10 of a musician’s stool of the invention. The top portion of this seat, i.e. the
portion 11 on which the musician sits, has a plane portion towards the rear that is extended by a curved portion 12. To clarify the drawing, the join between these two portions is represented by a chain-dotted line; nevertheless, it will be understood that in practice the two portions 11 and 12 run one into the other without any separation.

The curved portion 12 is at the front of the stool while the plane portion 11 is towards the rear of the stool. The term “front” is used relative to the stool to designate the portion thereof which is located at the front when a musician is sitting thereon.

More precisely, the plane portion 11 that is intended to be horizontal is defined on top by a segment AB of length approximately equal to 16.5 centimeters (cm).

The radius of curvature of the curved portion 12 decreases going from the rear of the seat 10 towards the front thereof. As shown in the diagram, its top portion is subdivided into a plurality of arcs BC, CD, DE, EF, and FG. The radii of curvature of these various arcs decrease going from the rear of the seat 10 towards the front.

In the example shown in the FIGURE, the radii of curvature of the various arcs are thus as follows:

- \( R_{BC} = 56 \text{ cm} \)
- \( R_{CD} = 39 \text{ cm} \)
- \( R_{DE} = 21 \text{ cm} \)
- \( R_{EF} = 11 \text{ cm} \)
- \( R_{FG} = 3.5 \text{ cm} \)

In addition, the angle between the tangents to the points B, C, D, E, and F and the plane of the plane portion 11 increases going from the point B to the point F. These tangents are thus successively at angles of 0°, 10°, 20°, 30°, and 48° respectively at the point B, C, D, E, and F.

The length of the projection of the curved portion 12 on the plane of the plane portion 11 is about 23.5 cm.

Finally, the height of the seat 10 in the plane portion 11 is approximately 9 cm.

The seat 10 can be made of any material that is sufficiently rigid, for example it can be made of wood. It is covered in its top zone with a covering (not shown) made of a material that is sufficiently firm to follow the outline of the seat 10 very closely. This material can be constituted in particular by a cellular polyurethane of hardness comparable to that of SYLOMER R25 and having a thickness of 25 millimeters (mm). This material is covered in a thin layer of horse hair or cotton, itself covered by cloth and upholstery to choose.

A stool of the invention can be used by any type of musician. It is particularly suitable for pianists.

The single figure shows the seat alone of a musician’s stool of the invention, but clearly such a seat provided with a suitable carrying structure (e.g. four legs) is used to form the stool of the invention.

Naturally, the present invention is not limited to the embodiment described above.

In particular, the dimensions given above are given by way of example and other dimensions could be selected providing the main characteristics of the invention is complied with, i.e. the curvature of its curved portion.

Furthermore, it is possible to manufacture the seat for the stool of the invention out of any suitable material.

Finally, any means can be replaced by equivalent means without going beyond the ambit of the present invention.

1. A musician’s stool comprising a seat having a rigid base, wherein said rigid base comprises a plane portion that is intended to be horizontal and that it is extended by a curved portion whose radius of curvature decreases continuously all the way to the edge of said seat so that the angle formed between the tangent of the surface of said curved portion and the plane of said plane portion increases going from the zone of said seat connecting said curved portion to said plane portion all the way to the edge of the seat.

2. A stool according to claim 1, wherein said angle increases from 0° to 50°.

3. A stool according to claim 1 or claim 2, wherein the radius of curvature of said curved portion decreases from the zone of said seat connecting said curved portion to said plane all the way to the edge of the seat.

4. A stool according to claim 1 or claim 2, wherein said seat is covered in a covering of material that is sufficiently firm to follow the outline of said seat.

5. A stool according to claim 4, wherein said covering of the material is based on cellular polyurethane having hardness close to that of SYLOMER R25.

6. A stool according to claim 1 or claim 2 wherein the projection of said curved portion onto the plane of said plane portion is of a length not less than the length of said plane portion.

7. A stool according to claim 1, wherein the radius of curvature of said curved portion decreases from the zone of said seat connecting said curved portion to said plane all the way to the edge of the seat, and wherein said seat is covered in a covering of material that is sufficiently firm to follow the outline of said seat.

8. A stool according to claim 7, wherein said covering of the material is based on cellular polyurethane having hardness close to that of SYLOMER R25.

9. A stool according to claim 1, wherein the radius of curvature of said curved portion decreases from the zone of said seat connecting said curved portion to said plane all the way to the edge of the seat and wherein the projection of said curved portion onto the plane of said plane portion is of a length not less than the length of said plane portion.

10. A stool according to claim 1, wherein said seat is covered in a covering of material that is sufficiently firm to follow the outline of said seat and wherein the projection of said curved portion onto the plane of said plane portion is of a length not less than the length of said plane portion.

11. A stool according to claim 1, wherein said covering of the material is based on cellular polyurethane having hardness close to that of SYLOMER R25 and wherein the projection of said curved portion onto the plane of said plane portion is of a length not less than the length of said plane portion.