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(54) **FOLDING STOOL FOR SPORTSMEN AND OTHER APPLICATIONS**

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- (57) **ABSTRACT**

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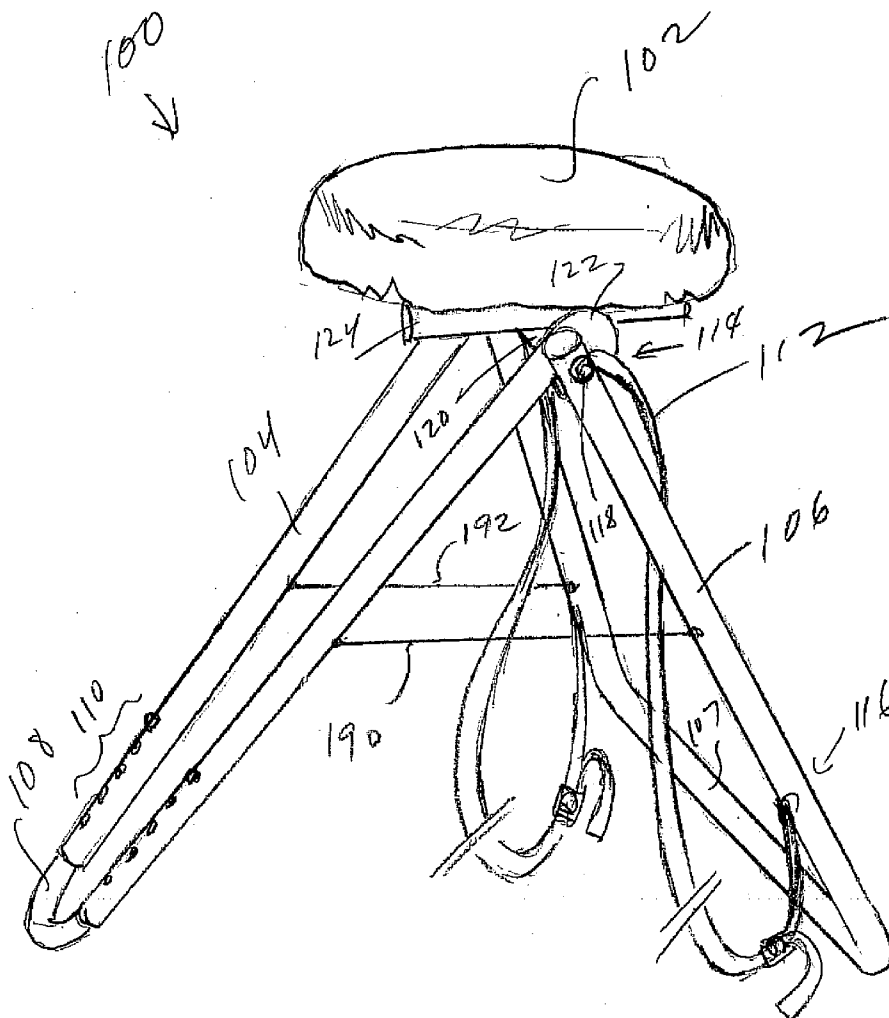
A lightweight, versatile stool for sportsmen and other applications comprises a seat and folding front and rear leg components pivotally attached thereto. The rear leg component establishes a plurality of rearward points of ground contact, whereas the front leg establishes a single point of forward ground contact. A set of shoulder straps preferably attached to the rearward leg component allows a user to carry the stool on his/her back with the leg components folded toward one another. The front leg component is length-adjustable, and a bar is provided for attaching a backpack or other accessories. The seat swivels and tilts relative to the front and rear leg components to accommodate differing terrains and to provide comfort. The forward leg component may be nested in the rearward leg component in substantially the same plane for a low carrying profile. The seat has a padded upper surface which rests against the back of a wearer to provide comfort while using the shoulder straps.

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**Related U.S. Application Data**

(60) **Provisional application No. 60/772,705, filed on Feb. 13, 2006.**



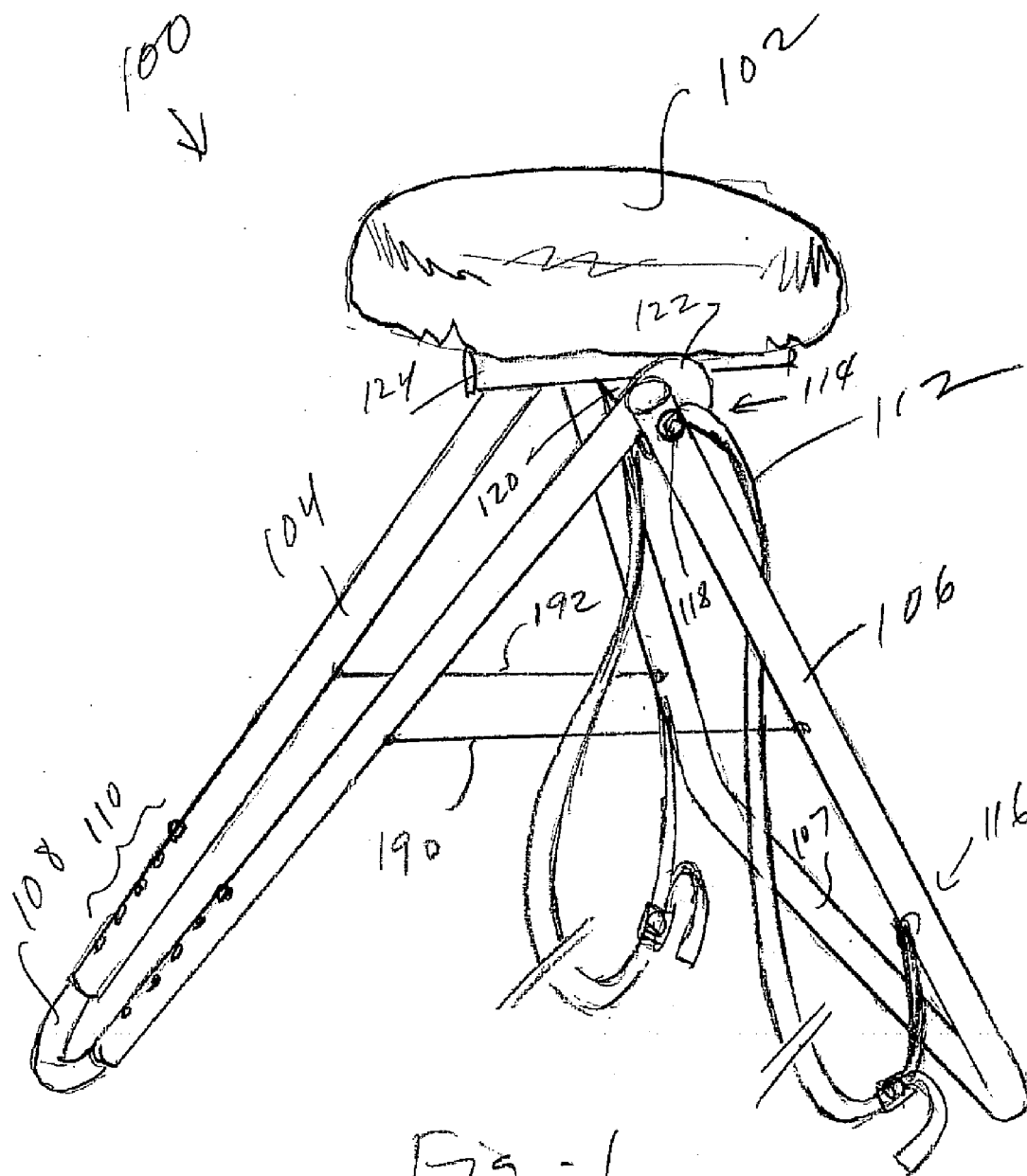
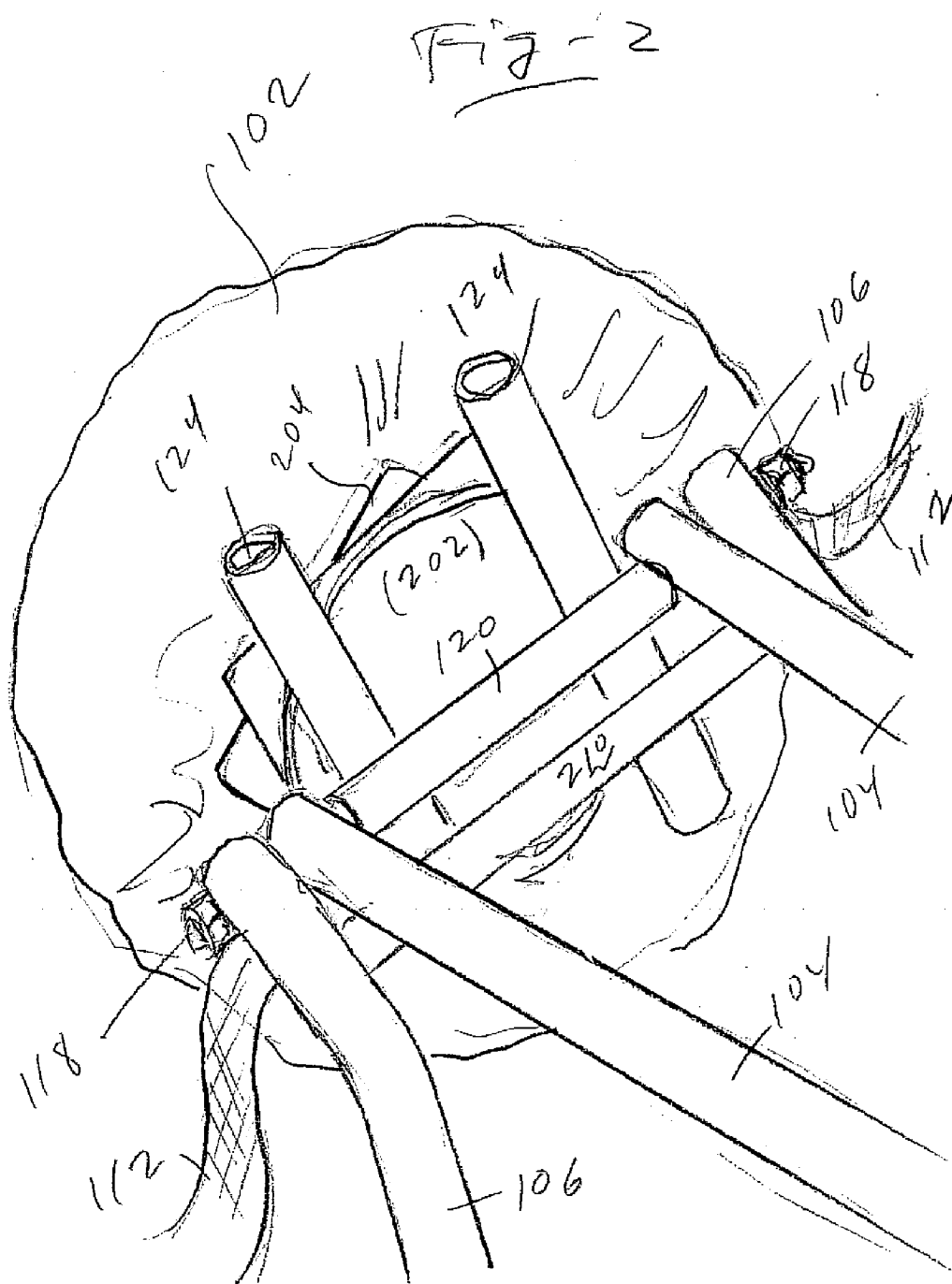


Fig - 1



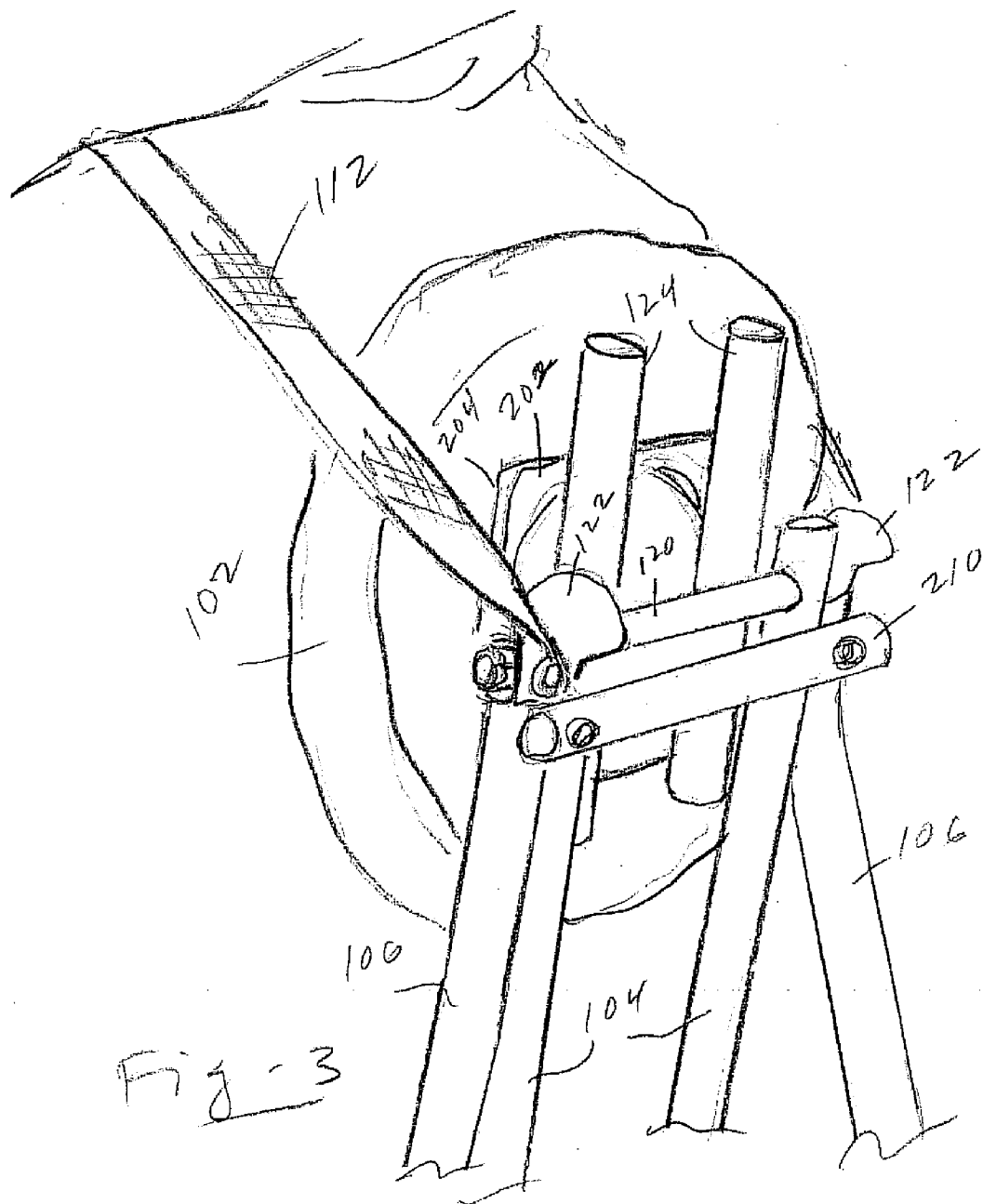


Fig. 3

**FOLDING STOOL FOR SPORTSMEN AND OTHER APPLICATIONS**

REFERENCE TO RELATED APPLICATION

[0001] This application claims priority to U.S. Provisional Patent Application Ser. No. 60/772,705, filed Feb. 13, 2006, the entire content of which is incorporated herein by reference.

FIELD OF THE INVENTION

[0002] This invention is directed to a folding stool that may be worn on a person's back with a backpack or other accessories attached thereto, making it ideal for hunters and other outdoor activities.

BACKGROUND OF THE INVENTION

[0003] It is often convenient for hunters and fishermen to have a chair to sit in while waiting in the field. To facilitate carrying, many shoulder worn chairs have been developed.

[0004] In U.S. Pat. No. 4,720,029, for example, a folding low seat chair is provided including opposite side arm portions and adjustable length shoulder strap loops supported therefrom whereby the chair, when unfolded, may be supported from the back of a user and utilized as a backpack frame for supporting relatively heavy and large bulk loads. The chair/backpack frame is constructed in a manner such that the weight of a person seated on the chair or a load supported therefrom when being used as a backpack frame serves to retain the chair in an unfolded position. Further, the back engaging portions of the chair and backpack frame are such that comfort and air circulation is afforded between the backpack frame and the user.

[0005] U.S. Pat. No. 4,676,548 discloses a combination pack and frame which is convertible to a chair. The frame includes a generally rectangular shaped back section fixedly connected to the pack and a generally rectangular seat section that is indirectly connected to the pack and pivotally connected to the back section. The back and seat sections contain back and seat support panels, respectively, that are integrally formed with the material of which the pack is constructed. Each of two adjustable shoulder straps is attached at one of its ends to the front portion of the seat section and at its opposite end to the bottom portion of the pack and which, in the chair mode, wrap around the chair legs to give the legs added support.

[0006] In U.S. Pat. No. 5,445,301, a combination backpack and stool includes a frame having an upper seat portion which is downwardly curved and is formed of front and rear opposed frame panels and a number of cross supports which rigidly join the front and rear frame panels one to another. A fabric cover member covers the frame and includes an access opening which allows access through the fabric cover member and into an interior of said frame so that a user may store articles therewithin. A cushion member is interposed between the downwardly curved upper seat portion of the frame and a corresponding portion of the fabric cover member so that the user will have a comfortable seat when seated upon the upper seat portion of the frame. A pair of shoulder straps are connected to the frame and/or fabric cover member so as to allow the frame to be carried upon a person's back.

[0007] A foldable chair generally comprising a frame, an upper body support, a lower body support, and a frame

support is described in U.S. Pat. No. 6,250,712. The frame preferably comprises a plurality of tubes that are connected to form the general outline of a rectangle. The upper body support is connected to the frame and also joins the lower body support through a central web of material. The frame support is pivotally connected to the upper tube of the frame. Further provided is a pair of adjustable shoulder straps that extend from the upper tube of the frame to the lower tube of the frame which permit the user to easily carry the folded chair on his or her back. When the chair is not needed for seating, the user can fold the frame support and lower body support inwardly toward the upper body support. Once secured in the folded configuration with a retaining strap, the chair can be carried in similar fashion as a backpack.

[0008] The above examples represent a few of many. Despite these designs, however, the need remains for a lightweight, shoulder-carried seating arrangement that provides terrain adjustment and other features that would be particularly welcomed by sportsmen, outdoorsmen, and others.

SUMMARY OF THE INVENTION

[0009] This invention resides in a lightweight, versatile stool for sportsmen and other applications. The article comprises a seat and folding front and rear leg components pivotally attached thereto. The rear leg component establishes a plurality of rearward points of ground contact, whereas the front leg establishes a single point of forward ground contact. A set of shoulder straps preferably attached to the rearward leg component allows a user to carry the stool on his/her back with the leg components folded toward one another.

[0010] In the preferred embodiment the front leg component is length-adjustable, and a bar is provided for attaching a backpack or other accessories. The seat swivels and tilts relative to the front and rear leg components to accommodate differing terrains and to provide comfort. The forward leg component may be nested in the rearward leg component in substantially the same plane for a low carrying profile. The seat has a padded upper surface which rests against the back of a wearer to provide comfort while using the shoulder straps.

BRIEF DESCRIPTION OF THE DRAWINGS

[0011] FIG. 1 is a perspective view drawing of the preferred embodiment of the invention;

[0012] FIG. 2 is a different view of the preferred embodiment; and

[0013] FIG. 3 is yet a further view of the preferred embodiment.

DETAILED DESCRIPTION OF THE INVENTION

[0014] FIG. 1 is a perspective view drawing of the preferred embodiment, depicted generally at 100. The article includes a seat 102, which may be covered with camouflage cloth, to which there is coupled a forward leg 104 and a rearward leg 106.

[0015] In the preferred embodiment, the rearward leg 106 has a lower bar 107 to increase ground contact, whereas the forward leg 104 couples to a more pointed component 108 slidingly received by portions 104 and adjustable in length through mechanism 110. This results in a chair which is

essentially “three-legged,” but with the front leg being adjustable to suit various terrains. Optional cables **190, 192** may be added as shown to prevent the legs from over-extending.

[0016] The legs **104, 106** are hingedly affixed to one another and to the seat through a rod **120**, held in position on either side with bolts **118**. The rod **120** is welded or otherwise fastened to a pair of members **124**, which, in turn, are attached to a rotating plate assembly **202, 204** coupled to the seat, best seen in FIG. 2. The combination of a tilting capability through tubular member **120**, and a rotating capability through plates **202, 204**, allows the seat **102** to both tilt and rotate in the preferred embodiment, again, to better suit rough/slanted terrains. The design allows the forward leg component **104** to be ‘nested’ in the rearward leg **106** component in the same plane, resulting in a low carrying profile. Plate **204** is bolted to a circular piece of wood or other material forming the seat.

[0017] At the top of each portion of front leg **104**, there are welded plates **122**, best seen in FIG. 3, which strike a transverse member **210**, welded or otherwise fastened to the rear leg **106**. This forms a convenient stop mechanism when the stool is fully engaged as shown in FIG. 1. In addition, the transverse bar **210** also serves as an exposed and convenient member upon which a backpack or other tools or accessories may be hung when carried by a wearer using shoulder straps **112**, as shown in FIG. 3.

[0018] In terms of materials, the various members are preferably made of a lightweight yet sufficiently strong material such as tubular aluminum or steel. The seat is preferably padded for comfort.

I claim:

- 1. A stool for sportsmen and other applications, comprising:
  - a seat;
  - a rear leg component hingedly coupled to the seat establishing a plurality of rearward points of ground contact;
  - a front leg component hingedly coupled to the seat establishing a single point of forward ground contact; and
  - a set of shoulder straps for carrying the stool on the back of a user with the leg components folded toward one another.

2. The stool of claim 1, wherein the front leg component is length-adjustable.

3. The stool of claim 1, further including a bar for attaching a backpack or other accessories.

4. The stool of claim 1, wherein the seat tilts relative to the front and rear leg components.

5. The stool of claim 1, wherein the seat swivels.

6. The stool of claim 1, wherein: the seat has a padded upper surface; and the upper surface rests against a back of a wearer using the shoulder straps.

7. The stool of claim 1, wherein the forward leg component may be nested in the rearward leg component in the same plane for a low carrying profile.

8. The stool of claim 1, wherein the rearward leg component is formed from a bent tubular member having opposing upper ends and a substantially flat bottom section.

9. The stool of claim 1, wherein the forward leg component is formed from a bent tubular member having opposing upper ends and a pointed bottom section.

10. The stool of claim 1, wherein: the forward leg component is formed from a bent tubular member having opposing upper ends and a pointed bottom section; and wherein the length of the pointed bottom section is length adjustable.

11. The stool of claim 1, wherein: the rearward leg component is formed from a bent tubular member having opposing upper ends and a substantially flat bottom section; the forward leg component is formed from a bent tubular member having opposing upper ends and a pointed bottom section; and a rod extending through the opposing ends of both leg components enabling the leg components to pivot independently about the axis of the rod.

12. The stool of claim 11, wherein the length of the pointed bottom section is length adjustable.

13. The stool of claim 11, wherein the rod also extends through a transverse seat support enabling the seat to pivot independently of the two leg components.

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