

Attachable and Foldable Seat

Summary of the Invention

This invention relates to an attachable seat. More particularly, this invention
5 relates to an attachable seat that is foldable. Still more particularly, this invention relates
to an attachable seat that may be folded into a compact, closed position when attached
and not in use.

Problem

10 It is a problem that many people have ailments or infirmities that hamper
movement. Often, these people require medical aids such as crutches, canes, walkers,
and the like for mobility. Furthermore, these people often require and/or desire to be
able to sit or lean when walking in public or performing certain routine functions such as
bathing.

15 To address the desire to keep mobile, there are many devices commonly available
that provide a seat or step to connect to a crutch, cane, walker, or the like to aid the user.
Users have found that these devices add additional weight or cause the device to be
unduly bulky. This makes use of the device difficult for the user. Therefore, users prefer
a device where the seat or step is removable when used in environments where space is
20 confined and/or environments where the user has plenty of other means for support, such
as a home.

Some of the seat attachments previously provided are removable. However, the
attachment mechanisms often make it hard for a person with ailments or infirmities to
easily remove and/or attach the seat to the desire device. Thus, those skilled in the art

are constantly striving to design a seat attachment that is both easily foldable and easily attachable for people with ailments and/or infirmities.

Summary of the Invention

5 The above and other problems are solved and an advance in the art is made by an attachable and foldable seat in accordance with this invention. A first advantage of an attachable and foldable seat in accordance with this invention is that the seat has an attachment mechanism that allows for a person with an ailment and/or infirmities to easily attach the seat to body, such as a wall or a walking aid. This allows the user to
10 easily remove the seat when the seat is not wanted and/or needed. For example, it is expected that a user can easily attach, detach, fold and unfold an attachable and foldable seat in accordance with this invention. A second advantage of an attachable and foldable seat in accordance with this invention is that the seat is easily folded and locked into a folded position to allow for storage while not in use. A third advantage of an attachable
15 and foldable seat in accordance with this invention is that the seat is designed to redistribute the load of applied to the seat to make the seat sturdy while sitting for most users. A fourth advantage of an attachable and foldable seat in accordance with this invention is that the seat may be attached to a number of different bodies. Thus, the seat is usable in more than one environment or situation to support the user.

20 An attachable and foldable seat in accordance with this invention is configured in the following manner. The base of the attachable and foldable seat is a seat having a first end, a second end, a first side, a second side, a first surface for sitting and a second surface. A first pivot member on the second end of the seat allows the seat to rotate from a first position in which the first and second surfaces of the seat are substantially parallel
25 to the ground to a second position in which the first and second surfaces of the seat are

substantially perpendicular to the ground. A first attachment member is also on the second end of the seat and attaches the seat to a body. Some examples of bodies include walking aids, walls, and other similar structures.

A leg has a base end that rests on the ground and a top end that connects to the first end of the seat and a top end that connects to the seat. A second pivot member connects the top end of the leg to the seat and allows the leg to rotate about the second pivot member between a first position in which the leg is substantially parallel to the bottom surface of the seat and a second position in which the leg is substantially perpendicular with the bottom surface of the seat.

In some embodiments, a first end of the first pivot member connects to the second end of the seat. A second end of the first pivot member then connects to the first attachment member. In some of these embodiments, the first pivot member is a hinge having a first side connected to the second end of the seat and a second side connected to the first attachment member.

In some embodiments, a first mounting bracket is attached to the body and connects the first attachment member to the body. An attachment locking member secures the first attachment member to the first mounting bracket. In some particular embodiments, a slot rail along an end of either the first attachment member or the first mounting bracket fits into a slot configured to receive the slot rail along an end of the opposing first attachment member or first mounting bracket. In some of these particular embodiments, the locking mechanism is provided by a biased protrusion that is biased in a first extendable position and movable to a second retracted position along either slot rail or an inner wall of said slot. A mated receiver that is a defined indenture in the opposing inner wall of the slot is mated with the biased protrusion. The mated receiver receives the biased protrusion when the slot rail is inserted into the slot to secure said slot

rail into said slot. A switch may be provided in some further embodiments that move the biased protrusion from the first extendable position to the second retracted position to allow the slot rail to be removed from the slot.

Some embodiments of the attachable and foldable seat in accordance with this invention provide a load distribution member that redistributes the load on the leg to add support to the seat. These embodiments may provide the load distribution members that have a first strut and a second strut. In some particular embodiments, the first strut extends at a first angle outward from the base end of the leg and rests on the ground and the second strut extends outward at a second angle from the base end of the leg and rests on the ground. In other particular embodiments, the first and second struts may extend at angle out of the top end of the leg and connect to the seat. The first and second struts are connected to the seat by two pivot members on opposing sides of the first end of the seat to facilitate rotating the leg. Still other embodiments may have both top and bottom struts.

A locking mechanism that holds the seat in the first position responsive to the seat being folded may be provided in some embodiment. The locking members may be formed by interlocking hinge slots or portions that are spaced with such a manner that allows rotation by hinge portions about a pin inserted into the slot when a force is applied and prevents movement when less than the required force is applied.

To add stability, some embodiments provide a leg attachment member that is attached to the leg distal from the seat and connects leg to the body. In some particular embodiments, the leg attachment member is connected to the leg by a rod. The rod is in turn connected to pivoting members at each end to allow the rod to rotate between a first position that is substantially perpendicular to the leg when the seat is unfolded and a second position in which the rod is substantially parallel to the leg when the seat is

folded. In some particular embodiments, a leg mounting bracket is attached to a body and connects the leg attachment member to the body. In some of these embodiments, a leg attachment locking member secures the leg attachment member to the leg mounting bracket. In still more particular embodiment, the leg attachment and pivoting members
5 are configured in a similar manner as the first attachment member and the first mounting bracket.

The seat may be configured differently in some embodiments. One alternative configuration is for the seat to include folding members. The folding members are connected to the seat by pivots on opposing sides of the seat and fold outward to provide
10 additional width to the seat. In other embodiments, the seat may have sliding members that slide in and out of slots in the opposing sides of the seat to expand the width of the seat.

Brief Description of the Drawings

15 The above and other features and advantage of an attachable and foldable seat are described in the following detailed description and shown in the following drawings:

Figure 1 illustrating a perspective view of a first embodiment of an attachable and foldable seat attached to a walking aid and in the unfolded position;

20 Figure 2 illustrating a perspective view of the first embodiment of an attachable and foldable seat attached to a walking aid and in the folded position;

Figure 3 illustrating a perspective view of a second embodiment of an attachable and foldable seat detached from a walking aid and in the unfolded position;

Figure 4 illustrating a perspective view of a top portion of the second embodiment of an attachable and foldable seat detached from a wall and in the unfolded position;

Figure 5 illustrating a perspective view of an attachment and pivoting member in accordance with one embodiment of this invention.

Figure 6 illustrating a perspective view of a first embodiment of a mounting bracket;

Figure 7 illustrating a perspective view of a second embodiment of a mounting bracket;

Figure 8 illustrating a perspective view of one embodiment of a leg attachment member;

Figure 9 illustrating a perspective view of a third embodiment of a seat in an extended position; and

Figure 10 illustrating a perspective view of a third embodiment of a seat in an unextended position.

Detailed Description

This invention relates to an attachable seat. More particularly, this invention relates to an attachable seat that is foldable. Still more particularly, this invention relates to an attachable seat that may be folded into a compact, closed position when attached and not in use. For ease of reference and clarity, components shown in more than one drawing are given the same reference numeral in each drawing.

Figures 1 and 2 show a first embodiment of an attachable and foldable seat 100 in accordance with this invention connected to walking aid 200, in this case a cane, and in both unfolded (Fig. 1) and folded positions (Fig. 2). It is envisioned that attachable and

foldable seat is provided for attachment to walking aids or to structures in other areas where an ill or infirm person may desire to lean and/or sit. Attachable and foldable seat is intended to be used as an independent means for sitting for short periods of time. Although, one skilled in the art will recognize that seat 100 can be used for longer
5 periods providing that attachable and foldable seat 100 is designed to hold a certain weight for a given period time and the time that attachable and foldable seat 100 can be used will depend upon the supporting structure, the weight of the user, and the amount of weight that attachable and foldable seat 100 is designed to support as a load.

Furthermore, the amount of weight that attachable and foldable seat 100 may
10 support will depend on material used to make attachable and foldable seat 100. For example, titanium will support more weight than either plastic or aluminium. However, one skilled in the art must choose the material used to make attachable and foldable seat 100 based both upon the weight attachable and foldable seat 100 is to support and the actual weight of attachable and foldable 100 as to allow the ill and infirm to easily carry
15 and manipulate attachable and foldable 100. This is decision left to those skilled in the art designing a particular embodiment of an attachable and foldable seat in accordance with this invention.

Attachable and foldable seat 100 includes seat 105 as a base. Seat 105 is a platform or substantially flat platform that has a first, front end; second, back end; first
20 side; second side; top surface; and bottom surface. Leg 110 is connected to the bottom surface of seat 105 substantially near the first end. One skilled in the art will recognize that in other embodiments that leg 110 may be connected to the bottom surface of seat 105 substantially near the second end, the first side, and/or the second side. This is a design choice left to those skilled in the art.

The second end of seat 105 connects to first pivot and attachment member 115. One skilled in the art will recognize that these may be two separate components connected to a common base or one integral component connected to seat 105. First pivot and attachment member 115 are attachable and detachable from mounting bracket
5 120. Mounting bracket 120 is a bracket that has a first member for connecting to body 200 and a second member that cooperates with first pivot and attachment member 115 to connect seat 105 to body 200.

First pivot and attachment member 115 are connected to seat 105 by a rotating member. In this embodiment, the rotating member is formed by a hinge. As shown in
10 figures 1 or 2, seat 105 has two hinge portions or slots that are fitted around a hinge member or slot of first pivot and attachment member 115. A pin is then inserted through the continuous slot formed by the hinge portions to allow seat 115 to rotate. One skill in the art will recognize that other types of rotating members may be used as long as the member allows seat 105 to rotate from a first position to a second position.

As shown in Figure 1, seat 105 may be in the first position where the top and
15 bottom surfaces of seat 105 are substantially parallel to the ground. Seat 105 may then be rotated or folded about the hinge to a second position shown in Figure 2 in which seat 105 is substantially proximate and substantially parallel to body 200. Preferably seat 105 rotates upwards as shown so that the top surface is facing body 200. However, it is
20 envisioned that other configurations where seat 105 rotates downward and the bottom surface of seat 105 is proximate body 200 are possible. When in the first, position, seat 105 may be held in place by a locking mechanism.

In this embodiment, the locking mechanism is provided by having a small tolerance in the spacing between hinge portions on seat 105 and first pivot and
25 attachment member 115. This small tolerance allows seat 105 to rotate when a threshold

force is applied and prevents movement when less than the threshold force is applied. One skilled in the art will recognize that this is a passive locking mechanism. However, it is envisioned that those skilled in the art can design alternative locking mechanism including, but not limited to, cams; and ball and/or pin/slot arrangements without
5 departing from this invention.

One embodiment of a pivot and attachment member is given with respect to Figure 5 and two embodiments of mounting bracket are given with respect to Figures 6 and 7. These embodiments are described in more details below. Thus, a complete description is not provided with respects to Figures 1 and 2 for brevity and clarity.

10 Leg 110 may be provided to add support to seat 105. Leg 110 has a base end that: rests on the floor; the body 200; or other surface, and a top end that connects to: a bottom surface; a side; and/or end of seat 105. In this embodiment, top end of leg 110 connects to the bottom surface of seat 105 substantially proximate the first end. One skilled in the art will recognize that in some embodiment leg 110 may be single pole or rod connected
15 to seat 105. However, in the embodiment shown in Figures 1 and 2, leg 105 includes load distribution members to distribute the load on seat 105 more evenly to allow seat 105 to support more weight. In this embodiment, the load distribution member includes struts 130 and 135 at a top end of leg 110 and struts 170 and 175 at the base end of leg 110.

20 Struts 130 and 135 extend out of the top end of leg 110 at opposing angles toward opposing sides of seat 105 and connect leg 110 to seat 105. To allow leg 110 to move to a compact folded position when seat 105 is moved from the first position to a second position, struts 130 and 135 are connected to the bottom surface of seat 105 by second and third pivot members 140 and 145. Second and third pivot members 140 and 145
25 allow leg 110 to rotate from a first position wherein the leg is substantially perpendicular

to the top and bottom surfaces of seat 105 to a second position where leg 110 is substantially parallel to the surfaces of seat 105. Those skilled in the art will note that substantially perpendicular preferably includes any angle with respect to the bottom surface of seat 105 from substantially 90 degrees to substantially 45 degrees. However,
5 it is envisioned that other embodiments may have angle with respect to the surface of seat 105 that are greater than 90 degrees and less than 45 degrees.

In this embodiment, second and third pivot members 140 and 145 are connected to the bottom surface of seat 105 substantially proximate the first end. Second and third pivot members are also connected to the bottom surface proximate on opposing sides one
10 of first and second sides of the seat 105. Although one skilled in the art will note that these positions are selected to maximize load distribution and that placement elsewhere is a design choice left to those skilled in the art.

Struts 170 and 175 are struts that extend outward and downward from the base end of leg 110 and contact the ground. In this embodiment, struts 170 and 175 are
15 shown as a u-shaped support. However, one skilled in the art will recognize that other configurations can be used.

Furthermore, a leg pivot and attachment member 160 distal or away from seat 105 may be provided to connect leg 110 to body 200 to add additional support and stability. Leg pivot and attachment member 160 is attachable and detachable from
20 mounting bracket 165. Mounting bracket 165 is a bracket that has a member for connecting to body 200 and a second member that cooperates with leg pivot and attachment member 160 to connect leg 110 to body 200.

Leg attachment and pivot member 160 also provides a pivot to allow leg 110 to move between the first and second positions in response to seat 105 moving between the
25 first and second position. In this embodiment, leg attachment and pivot member 160 and

mounting bracket 165 are of a similar design to the first pivot and attachment member 115 and mounting bracket 120. Thus, a complete description of the component is given below with respect to Figures 5 and 6. Although one skilled in the art will recognize that different systems may be used for each group and this is left as a design choice for those skilled in the art.

To allow leg 110 to be substantially perpendicular to the surface of seat 105 in the first position, leg pivot and attachment member 160 may be connected to rod 155. Rod 155 is a solid piece of material that extends between leg attachment member 160 and leg 110. Rod 155 is that connected to leg 110 by rod pivot member 150. Rod pivot member 150 and leg pivot and attachment member 160 are each connected to opposing ends of rod 155 by a hinge or other rotating component that allow rod 155 to move from a first position in which the length of rod 155 is substantially perpendicular to leg 110 to a second position in which rod 155 is substantially parallel to leg 110. Those skilled in the art will know that substantially perpendicular preferable includes any angle with respect to leg 110 from substantially 90 degrees to substantially 45 degrees. However, it is envisioned that other embodiments may have angle with respect to leg 110 that are greater than 90 degrees and less than 45 degrees.

Figure 3 and 4 shows a second embodiment, attachable and foldable seat 300, in accordance with this invention. Figure 3 shows attachable and foldable seat 300 detached from body 200. Attachable and foldable seat 300 is detached by removing first pivot and attachment member 115 from first mounting bracket 120 and removing leg pivot and attachment member 160 from leg mounting bracket 165. This process is better described below with regards to figures 5-8. In this embodiment, seat 105 is replaced by seat 305 which have extensions 307 and 308 that rotate about a pivot such as hinges 309 and 310 from a closed position substantially resting on a top or bottom surface of seat

305 to an open position where the extensions 307 and 308 are substantially parallel and planar to seat 305 to provide additional width to seat 305.

In this embodiment, a locking mechanism to secure extensions 307 and 308 is provided by having a small tolerance in the spacing between hinge portions on seat 305 and extension 307 and 308. This small tolerance allows extensions 307 and 308 to rotate when a threshold force is applied and prevents movement when less than the threshold force is applied. One skilled in the art will recognize that this is a passive locking mechanism. However, it is envisioned that those skilled and the art can design alternative locking mechanism including, but not limited to, cams; and ball and/or pin/slot arrangements without departing from this invention.

Figure 4 shows foldable and attachable seat 300 in which extensions 307 and 308 are in the closed position. Furthermore, figure 4 shows an alternative body, wall 200, to which first mounting bracket 120 and leg mounting bracket 160 are attached. One skilled in the art will recognize that foldable and attachable seat 300 may be attached to other types of bodies and the choice of connected body is left to those skilled in the art. As shown in Figure 4, foldable and attachable seat 300 is detached from wall 200 with first pivot and attachment member 115 decoupled from first mounting bracket 120 and leg pivot and attachment member decoupled from leg mounting bracket 165.

Figure 5 illustrates a pivot and attachment member 500 that is an exemplary embodiment of a pivot and attachment member 500. Pivot and attachment member 500 may be used as first pivot and attachment member 115 and/or leg attachment member 160. Furthermore, those skilled in the art will recognize that these components may be part of different components in some embodiments and may have different components that perform the same function in other embodiments.

Pivot and attachment member 500 includes base 505. In this embodiment, base 505 is a cubical block. However, those skilled in the art will recognize that the base 505 may be any number of other geometric shapes. A pivot member on one side of base 505 comprises hinge portion 520 and 530 extending out from one side of base 505. Each
5 hinge portion 520 and 530 includes a slot or opening through which a pin may be inserted. Hinge portions 520 and 530 are aligned with hinge portions of a cooperating member such as, but not limited to, seat 105 and rod 155. As shown in figure 5, hinge portions 520 and 530 would fit securely around hinge portions from the cooperating member. The hinge portions 520 and 530 are aligned with a cooperating member so that slots 525 and
10 535 are aligned with slots in hinge portions of the cooperating member to allow pin to extend through the slots and be secured in place by press fitting, caps, nuts, or any other manner decided upon by a maker of the system. To provide a locking mechanism, the hinge portions 520 and 530, and hinge portions of the cooperating member should be fitted together with a tolerance such that a predetermined threshold force is needed to
15 rotate the cooperating member around the pin of the hinge.

A second side of base 505 includes an attachment member. One skilled in the art will recognize that although the pivot member and attachment members are shown on opposing sides of base 505, the members may be placed on any side of base 505 with relation to one another. The attachment member includes a slot rail 510 that extend from
20 a top side to a bottom side along one of the surfaces of the base 505. Although slot rail 510 is shown to extend horizontally from the surface of the base 505, one skilled in the art will realize that other configurations including but not limited to vertical align protruding substantially perpendicular to surface of the base 505 may be used. As shown in this embodiment, slot rail 510 is connected by slimmer piece of material that is co-
25 extensive with slot rail 510. However, one skilled in the art will recognize that other

configuration where only one slot rail is only connected to base 505 are possible. Slot rail 510 has a receiver 515 that cooperates with a locking mechanism as described with reference to mounting brackets 600 and 700 shown in Figures 6 and 7 and described below.

5 Figure 6 shows a first embodiment of mounting bracket 600. Mounting bracket 600 may be used as first mounting bracket 115 and/or leg mounting bracket 165 when body 200 is a walking stick or similar body having a slim leg or pole like feature. Mounting bracket 600 includes mounting portion 610 and attachment portion 620. Mounting portion 610 affixes the mounting bracket to the body and attachment portions
10 620 cooperates with pivot and attachment member 500 to connect an attachable and foldable seat to the body.

 Mounting portion 610 includes two clamp members 630 and 635. Each clamp member is pivotable connected hinge or other pivot device to opposing sides of attachment portion 620. Each clamping portion has a curved inner surface distal from
15 the pivot end of clamp portions 630 and 635 to allow clamp portions 630 and 635 to be fitted around body 200. The ends of clamp members 630 and 635 then extend outward from the curved portion substantially parallel to one another. Openings 632 and 637 are provided in the respective ends and align with one another to allow a pin screw or other holding member to be placed through and secured into the openings to hold mounting
20 bracket in place on body 200. One skilled in the art will recognize that other embodiments such as a solid piece that slidably engages body 200 may be used for mounting portion 610 without diverging from this invention.

 In this embodiment, attachment portion 620 includes a slot 640 that is configured to receive slot rail 510 or pivot and attachment member 500. As shown in figure 6, slot
25 640 is an opening substantially through attachment portion 620 from a top side to a

bottom side in a substantially vertical alignment. Although one skilled in the art will recognize that the alignment and the sides through which slot 640 will depend on the configuration of slot 510 and may be arranged in any number of manner without departing from this invention. Niche 645 is an opening in a side of attachment portion 620 to expose slot 603 and allow the connector of slot rail 510 to slide along attachment portion 620 as slot rail 510 is inserted into slot 640. One skilled in the art will recognize the need and length of niche 645 will depend on the configuration of slot rail 510 and is left as a design choice to those skilled in the art. Furthermore, one skilled in the art will recognize that slot and slot rails may swapped or exchange on pivot and attachment member 500 and mounting bracket 600 without departing from this invention.

Two biased protrusions 650 extend out of opposing inner walls of slot 640. Although, it is envisioned that one biased protrusion may extend out of one inner wall in some embodiments and more than two biased protrusions may extend out of one or more inner walls in other embodiments. Biased protrusion 650 is moved between a first, biased position and a second position. In the first, biased position, the protrusion extends out of the inner wall and into a receiver 515 in slot rail 510. Biased protrusion 650 is held in this first position by a spring or other resilient means to secure the attachment. In the second position, bias protrusion 650 is substantially flush with the inner wall and substantially removed from receiver 515 to allow slot rail 510 to be removed from slot 640. A switch 660 is connected to biased protrusion 650 to allow protrusion 650 to be moved between the first and second positions when the switch is moved from a first to a second position. Furthermore, one skilled in the art will recognize that the receiver 515, biased protrusion 650 and switch 660 may be swapped between slot rail 510 and slot 640 without departing from this invention.

Figure 7 illustrates a second embodiment of a mounting bracket, mounting bracket 700. Mounting bracket 700 is used to connect an adjustable and foldable seat in accordance with this invention to a large, solid body such as a wall. In this embodiment, mounting bracket 700 includes attachment portion 620 and mounting portion 710. In this
5 embodiment, mounting portion 620 is the same as mounting portions 620 described with regards to mounting bracket 600 above and a description is omitted for brevity and clarity of the description.

In mounting bracket 700, mounting portion 710 is a base of solid material either affixed to or an integral attachment portion 620. In this embodiment, the base of
10 mounting portion 710 is on an opposing side of attachment portion 620 from slot 640. However, one skilled in the art will recognize other configurations are possible. The base of mounting portion 710 extends outward past at least two edges of attachment portion 620. In this embodiment, the base extends past opposing edges but this is a design choice left to those skilled in the art. On the portion extending past the edges of
15 attachment portion 620 are receiving holes 715 defined as opening through the base that are configured to receive nails, pins, screws, tacks or the like to secure mounting bracket 700 to the body. The exact number and locations of receiving holes 715 are left as a design choice of those skilled in the art.

Figure 8 is a close up view of leg pivot and attachment member 160 and leg
20 mounting bracket 165 in accordance to one embodiment of this invention. In this embodiment, leg mounting bracket 165 is provided by mounting bracket 600 and leg pivot and attachment member 165 is provided by pivot and attachment member 500. As can be seen in Figure 8, a slot rail of leg pivot and attachment member 160 inserts into a slot in leg mounting bracket 160 to attach attachable and foldable seat 100 to body 200.

Figures 9 and 10 illustrate seat 905 having extendable and retractable extensions in accordance with a third embodiment of this invention. Seat 905 has a base having a top surface; a bottom surface; a first, front end; a second, back end; a first side and a second side. Slots 920 on opposing first and second sides of seat 905 are configured to receive extensions 910 and 915. Preferably, extensions 910 and 915 are fitted into slots 920 with a tolerance that prevents movement if less than a threshold force is applied to secure extensions 910 and 915 in place in either the extended or retracted positions. Extension 910 and 915 slide into and out of slots 920 between a first extended position shown in Figure 9 and a second retracted position shown in Figure 10. One skilled in the art will recognize that although two extension are shown, one or more than two extension may be provides from any of the first side; second side; and first, front side. Furthermore, longer extension may be provided by telescoping components of the extensions in the slots.

It is further envisioned that a strap (Not Shown) and/or handle (Not Shown) may be incorporated into the seat 105 and/or leg 110 to allow the seat to be easily carried when not attached to a body. Furthermore, it is envisioned that the seat 105 and/or leg 105 may be collapsible (Not Shown) and/or foldable (Not Shown) to make the attachable and foldable seat more compact for ease of handling when not attached.

The above is a description of exemplary embodiments of an attachable and foldable seat in accordance with this invention. It is foreseeable that those skilled in the art can and will design alternative systems based on this disclosure that infringe on this invention as set forth in the claims below.

What is claimed is:

1. An attachable and foldable seat comprising:

a seat having a first end, a second end, a first side, a second side, a first surface for sitting and a second surface;

5 a first pivot member on said second end of said seat to allow said seat to rotate from a first position in which said first and second surfaces of said seat are substantially parallel to the ground to a second position in which said first and second surface of said seat are substantially perpendicular to the ground;

a first attachment member on said second end of said seat that attaches said seat to a
10 body;

a leg having a base end for resting on the ground and a top end connected to said first end of said seat; and

a second pivot member connected to said top end of said leg to allow said leg to rotate about said second pivot member between a first position in which said leg is
15 substantially perpendicular to said second surface of said seat and a second position in which said leg is substantially parallel with said seat.

2. The seat of claim 1 further comprising:

a first end of said first pivot member connected to said second end of said seat; and

20 a second end of said first pivot member connected to said first attachment member.

3. The seat of claim 2 wherein said first pivot member comprises:

a hinge having a first side connected to said second end of said seat and a second side connected to said first attachment member.

4. The seat of claim 1 further comprising:

a first mounting bracket attached to a body that connects said first attachment member to said body.

5 5. The seat of claim 4 further comprising:

an attachment locking member that secure said first attachment member to said first mounting bracket.

6. The seat of claim 4 further comprising:

10 a slot rail along a connecting end of a first one of said first attachment member and said first mounting bracket; and

a slot configured to receive said slot rail along a connecting end of a second one of said first attachment member and said first mounting bracket.

15 7. The seat of claim 6 further comprising:

a biased protrusion that is biased in a first extendable position and movable to a second retracted position along a first one of said slot rail and an inner wall of said slot; and

a mated receiver that is a defined indenture in a second one of said slot rail and said
20 inner wall of said slot that is mated with said biased protrusion to receive said biased protrusion when said slot rail is inserted into said slot to secure said slot rail into said slot.

8. The seat of claim 7 further comprising:

a switch that moves said biased protrusion from said first extendable position to
25 said second retracted position to allow said slot rail to be removed from said slot.

9. The seat of claim 1 wherein said leg comprises:

a load distribution member redistributing the load on said leg to add support to said seat.

5 10. The seat of claim 9 wherein said load distribution member comprises:

a first strut extending at a first angle outward from said base end of said leg for resting on the ground; and

a second strut extending outward at a second angle from said base end of said leg for resting on the ground.

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11. The seat of claim 9 wherein said load distribution member comprises:

a first strut extending at a first angle outward from said top end of said leg for connecting to said first end of said seat proximate a first one of said first side and said second side; and

15 a second strut extending at a second angle outward from said top end of said leg for connecting to said first end of said seat proximate a second one of said first side and said second side.

20 12. The seat of claim 11 wherein said second pivot member is connected to said second surface of said seat proximate said first end and said first side and connects a first one of said first strut and said second strut to said second surface of said seat and said seat further comprises:

a third pivot member connected to said second surface of said seat proximate said first end and said second side to connect to a second one of said first strut and said
25 second strut to said seat and allow said leg to rotate about said third pivot member

between a first position in which said leg is substantially perpendicular with said seat and a second position in which said leg is substantially parallel to said second surface of said seat.

5 13. The seat of claim 1 further comprising:

a locking mechanism for holding said seat in said first position responsive to said seat being folded.

14. The seat of claim 13 wherein said locking mechanism comprises:

10 a first hinge portion acting as said first pivot member; and

a second hinge portion acting as said second pivot member wherein spacing between said first portion and said second portion of said hinge are of such a tolerance to allow movement when a threshold force is applied and prevent movement when less than said threshold force is applied.

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15. The seat of claim 1 further comprising:

a leg attachment member that connects to said leg distal from said seat and connect said leg to said body.

20 16. The seat of claim 15 further comprising:

a rod connecting said leg attachment member to said leg;

a first leg pivoting member connecting said rod to said leg; and

a second pivoting member connecting said rod to said leg attachment member to said rod wherein said first and second pivot member allow said rod to rotate from a

position that is substantially parallel to said seat and a second position wherein said rod is substantially parallel to said leg.

17. The seat of claim 15 further comprising:

5 a leg mounting bracket attached to a body that connects said leg attachment member to said body.

18. The seat of claim 17 further comprising:

a leg attachment locking member that secure said leg attachment member to said
10 first mounting bracket.

19. The seat of claim 17 further comprising:

a slot rail along a connecting end of a first one of said leg attachment member and said leg mounting bracket; and
15 a slot configured to receive said slot rail along a connecting end of a second one of said leg attachment member and said leg mounting brackets.

20. The seat of claim 19 further comprising:

a biased protrusion that is biased in a first extendable position and movable to a
20 second retracted position along a first one of said slot rail and an inner wall of said slot;
and

a mated receiver that is a defined indenture in a second one of said slot rail and said inner wall of said slot that is mated with said biased protrusion to receive said biased protrusion when said slot rail is inserted into said slot to secure said slot rail into said slot.

21. The seat of claim 20 further comprising:

a switch that moves said biased protrusion from said first extendable position to said second retracted position to allow said slot rail to be removed from said slot.

5 22. The seat of claim 1 further comprising:

a first extension extending out of a first one of said first side, second side and front end said seat.

23. The seat of claim 22 further comprising:

10 a second extension extending out of a second one of said first and second side of said seat wherein said first one is one of said first side and said second side.

24. The seat of claim 22 further comprising:

15 a first pivot member connecting said first extension to said first one of said first side and said second side of said seat to allow said first extension to rotate between a first extended position substantially adjacent and substantially planar to said seat and a second position wherein said first extension is substantially parallel one of said first or second surface of said seat; and

20 a second pivot member connecting said second extension to said second one of said first side and said second side of said seat to allow said second extension to rotate between a first extended position substantially adjacent and substantially planar to said seat and a second position wherein said second extension is substantially parallel one of said first or second surface of said seat.

25. The seat of claim 22 further comprising:

a first slot for receiving said first extension in said first one of said first side and said second side of said seat to allow said first extension to slide between a first extended position wherein said first extension is protruding from said first slot and is substantially adjacent and substantially planar to said seat and a second position where said first extension is retracted in said first slot; and

a second slot for receiving said second extension in said second one of said first side and said second side of said seat to allow said second extension to slide between a first extended position wherein said second extension is protruding from said second slot and is substantially adjacent and substantially planar to said seat and a second position where said second extension is retracted in said second slot.

26. The seat of claim 1 wherein said body is a walking aid.

27. The seat of claim 1 wherein said body is a wall.

28. A method for configuring an attachable and foldable seat comprising:

attaching a seat having a first end, a second end, a first side, a second side, a first surface for sitting and a second surface to a body using a first attachment member on said second end of said seat that attaches said seat to a body;

rotating said seat about a first pivot member on said second end of said seat from a first position in which said first and second surfaces of said seat are substantially parallel to the ground to a second position in which said first and second surface of said seat are substantially perpendicular to the ground; and

causing a leg having a base end for resting on the ground and a top end connected

to said first end of said seat to rotate about a second pivot member connecting said leg to said seat in response to rotating said seat wherein said leg moves between a first position in which said leg is substantially parallel to said second surface of said seat and a second position in which said leg is substantially perpendicular with said seat.

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29. The method of claim 28 wherein a first end of said first pivot member connected to said second end of said seat, and a second end of said first pivot member connected to said first attachment member.

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30. The method of claim 29 wherein said first pivot member comprises a hinge having a first side connected to said second end of said seat and a second side connected to said first attachment member.

31. The method of claim 29 wherein said step of attaching comprises:

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connecting said first attachment member to a first mounting bracket attached to a body.

32. The method of claim 31 further comprising:

securing said first attachment member to said first mounting bracket.

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33. The method of claim 31 wherein said step of connecting comprises:

inserting a slot rail along a connecting end of a first one of said first attachment member and said first mounting bracket into a slot configured to receive said slot rail along a connecting end of a second one of said first attachment member and said first mounting brackets.

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34. The method of 33 further comprising:

securing a biased protrusion that is biased in a first extendable position and
movable to a second retracted position along a first one of said slot rail and an inner wall
of said slot into a mated receiver that is a defined indenture in a second one of said slot
5 rail and said inner wall of said slot that is mated with said biased protrusion to receive
said biased protrusion when said slot rail is inserted into said slot to secure said slot rail
into said slot.

35. The method of claim 34 further comprising:

10 moving a switch between a first and second position to cause said biased protrusion
to move from said first extendable position to said second retracted position to allow said
slot rail to be removed from said slot.

36. The method of claim 33 further comprising:

15 redistributing the load on said leg to add support to said seat.

37. The method of claim 36 wherein redistributing is provided by a first strut extending
at a first angle outward from said base end of said leg for resting on the ground, and a
second strut extending outward at a second angle from said base end of said leg for

20 resting on the ground.

38. The method of claim 36 wherein said redistributing is provided by a first strut
extending at a first angle outward from said top end of said leg for connecting to said
first end of said seat proximate a first one of said first side and said second side, and a

25 second strut extending at a second angle outward from said top end of said leg for

connecting to said first end of said seat proximate a second one of said first side and said second side.

39. The method of claim 28 wherein said second pivot member is connected to said
5 bottom surface of said seat proximate said first end and said first side and connects a first one of said first strut and said second strut to said bottom surface of said seat and said seat and a third pivot member is connected to said bottom surface of said seat proximate said first end and said second side to connect to a second one of said first strut and said second strut to said seat and allow said leg to rotate about said third pivot member
10 between a first position in which said leg is substantially perpendicular with said seat and a second position in which said leg is substantially parallel to said bottom surface of said seat.

40. The method of claim 28 further comprising:
15 locking said seat in said first position responsive to said seat being folded.

41. The method of claim 40 wherein said locking is provided by a first hinge acting as said first pivot member and a second hinge acting as said second pivot member wherein spacing between portions of the hinge are of such a tolerance to allow movement when a
20 force is applied and prevent movement when little or no force is applied.

42. The method of claim 28 further comprising:
connecting said leg to said body with a leg attachment member that connects to said leg distal from said seat.

43. The method of claim 42 further comprising:

pivoting a rod connecting said leg attachment member to said leg in response to pivoting said seat with a first leg pivoting member connecting said rod to said leg and a second pivoting member connecting said rod to said leg attachment member to said rod
5 where in said first and second pivot member allow said rod to rotate from a position that is substantially parallel to said seat and a second position wherein said rod is substantially parallel to said leg.

44. The method of claim 42 wherein said step of connecting said leg to said body

10 comprises:

connecting said leg attachment member to said leg mounting bracket attached to said body.

45. The method of claim 44 further comprising:

15 securing said leg attachment member to said first mounting bracket.

46. The method of claim 44 wherein said step of connecting comprises:

inserting a slot rail along a connecting end of a first one of said leg attachment member and said leg mounting bracket into a slot configured to receive said slot rail
20 along a connecting end of a second one of said leg attachment member and said leg mounting brackets.

47. The method of claim 46 further comprising:

inserting a biased protrusion that is biased in a first extendable position and
25 movable to a second retracted position along a first one of said slot rail and an inner wall

of said slot into a mated receiver that is a defined indenture in a second one of said slot rail and said inner wall of said slot that is mated with said biased protrusion to receive said biased protrusion when said slot rail is inserted into said slot to secure said slot rail into said slot.

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48. The method of claim 47 further comprising:

moving a switch between to a first and a second position to move said biased protrusion from said first extendable position to said second retracted position to allow said slot rail to be removed from said slot.

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49. The method of claim 28 further comprising:

pivoting a first extension connected to a first one of said first side and said second side of said seat between a first extended position substantially adjacent and substantially planar to said seat and a second position wherein said first extension is substantially

15 parallel one of said first or second surface of said seat; and

pivoting a second extension connected to a second one of said first side and said second side of said between a first extended position substantially adjacent and substantially planar to said seat and a second position wherein said second extension is substantially parallel one of said first or second surface of said seat.

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50. The method of claim 28 further comprising:

moving a first extension in and out of a first slot in a first one of said first side and said second side of said seat to allow said first extension to slide between a first extended position wherein said first extension is protruding from said first slot and is substantially

25 adjacent and substantially planar to said seat and a second position where said first

extension is retracted in said first slot; and

moving a second extension in and out of a second slot in a second one of said first side and said second side of said seat to allow said second extension to slide between a first extended position wherein said second extension is protruding from said second slot
5 and is substantially adjacent and substantially planar to said seat and a second position where said second extension is retracted in said second slot.

51. The method of claim 28 further comprising:

affixing said mounting bracket to a walking aid.

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52. The method of claim 28 further comprising:

affixing said mounting bracket to a wall.