

Walking Chair

Robert Danziger

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Bob Danziger - *Video, Music, Sound and a book or two*

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WHAT MAKES IT DIFFERENT OR BETTER?

I needed to invent the “Walking Chair” because the walkers currently on the market are really designed to help someone who needs to walk only a few feet, or who have a balance problem that requires support in a number of directions. These regular walkers, known as “Rollators”, typically have a hard seat, a single metal bar for a backrest, and handholds that require the arm to be straight up and down. Good for balance, but not good for sitting or for walking any distance, especially over

parkland or other uneven terrain.

Further, although Rollators are made in my size, chairs at restaurants, theatres, friends houses, airports, and hotels are often not suited to me and can cause great pain. I can never count on a suitable chair being where I need to go. Now I generally have the most comfortable chair in the place.

I had found the sling seats and backs on traditional foldable wheelchairs extremely painful. The Walking Chair sling seat is rigid and the fabric tense enough that the fabric sags only a little, and the tension is adjustable. There is something about the “director chair” type sling on a normal wheelchair that allows the area around the spine to compress to the point where it is very painful for me.

Although some large person wheelchairs have gotten lighter, at the time I started this project I was hard pressed to find a portable wheelchair that weighed less than 100 pounds.

The Walking Chair weighs less than 20 pounds. There is detailed information below the pictures.







Detailed Description

I invented this walking chair to address problems from my size and a severely injured back. It's not in production, and I have no resources (or desire) to go into manufacturing and selling it, but I know it could do a lot of people a lot of good, so I thought I'd at least bring it to your attention.

The "Walking Chair" is equipped with two handles that are set like trekking poles so the chair can be pushed using a correct arm motion. Notice also the leaning bar at the top that allows me to stand and talk to people for much, much longer than I could without support. The chair can also be pushed with the leaning bar, which comes in real handy when my back is in a lot of pain. And the leaning bar also allows manipulation of the chair with one hand - which is very helpful when trying to open and get through a door.

The brakes are positioned to be easily used and adjusted from a standing or sitting position whether the arms are up or down. Pumping the brakes when going downhill gives an extra measure of control. And when standing and leaning, the brakes keep the chair from scooting forward because the leaning bar is positioned over the back wheels making a strong center of gravity.

Indeed one of the secrets of the “Walking Chair” is that it can be pushed from a variety of hand positions. My experience is that no single position is universally and eternally comfortable, and mirrors the reality that people who walk normally also often change the swing of their arms and other positions.

With the “Walking Chair” I can walk farther, safer than any currently available alternative. A really bad back can cause many setbacks, and the Walking Chair allows me to come back from those setbacks socially and physically much sooner and much safer.

The wide, plush armrests are much higher than the arms on ordinary chairs - something people with a bad back really appreciate.

Perhaps most important, the seat is based on a comfortable outdoor chair, and I can sit in it for 2 or 3 hours comfortably. In a regular chair, theatre seat, etc, I'm lucky to get more than a half hour before pain starts accumulating and building causing both me and my wife or other companions severe discomfort.

The width of the walking chair is under the standard width of a door. I weigh well over 350 pounds, and it reliably holds me and has for several years now. The chair can be folded (and reassembled) using quick releases so it fits into the trunk of a compact car.

Made from aluminum and outdoor sling seat mesh material, the Walking Chair is waterproof and so is easy to clean.

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Conclusion:

The Walking Chair has been a godsend to me and my family. My pain levels are way down, my physical fitness is much improved, my cultural opportunities have expanded to the broadest of my life, and I can be a much better husband. I hope there is a way for others in a similar position to myself to experience similar benefits.

I. Description of the Invention

MyWalkingChair is a combination of between hiking sticks, a walker, wheelchair, and the most comfortable lawn chair you ever sat in. Also ideal as a **transportation chair golf club trolley, spectator chair**, or even just outdoor furniture, **MyWalkingChair** can give years of additional walking and enjoying life to people with bad backs, joints, and other afflictions who can use a little assistance while walking, a good high place to lean, and a super-comfortable place to sit when a little more mobility is needed.

Indeed, one of the principal uses of **MyWalkingChair** is for people like me who have a bad back and can't sit on a hard surface like a typical restaurant, sports stadium, or even padded theatre seat. After a short while back pain accumulates to the point where my loved ones know I am in great pain. The whole experience becomes less than enjoyable for everyone. But with **MyWalkingChair** I can sit comfortably for hours – and my wife and I can enjoy a night out like we had never been able to before **MyWalkingChair**. And, while I can't play a full round of golf, with **MyWalkingChair** I can walk a hole or two and then wait for the pain to

subside, then walk another hole or two.

MyWalkingChair is also built to be comfortable for Big and Tall people as well as normal-sized folks. Handle height and seat cant are both adjustable. The rugged construction means that **MyWalkingChair** can be used at the park or golf course as easily as at home, in a restaurant or at the theatre.

Unlike other rolling walkers (Rollators) and wheelchairs, **MyWalkingChair** is **easily transportable**, and even when fully assembled rolls through a standard 30 inch door. The **wide compressible armrests** add width but turn in and compress when going through tight spaces.

MyWalkingChair **easily disassembles** into two or three pieces so the entire chair can be slipped into the back seat of a family car and removed and reassembled just as easily.

MyWalkingChair had to be invented because walkers and rollators are basically crutches. None are designed to walk any distance, but rather are designed to provide a lot of stability for a person over a short distance. Indeed they tend to be very uncomfortable and ergonomically unsuited to walking very far. In contrast, trekking poles (Leki, Black Diamond or REI) are built for walking long distances and have been used on famous hikes and climbs around the world. **MyWalkingChair** has arms and grips like trekking poles and can be walked with in a very similar way. Significantly, however, the user can grab, hold, lean on, and/or push **MyWalkingChair** in a variety of different ways and places to accommodate uneven terrain and their own physical issues. Some people, such as myself, also just like to change their hand positions frequently because my shoulders, upper back and hands get uncomfortable in one position like on walkers and rollators. This is similar to trekking poles that also allow the user to change positions. It is also similar to racing bicycles that may have handlebars with a tri-bar accessory or detachable and adjustable vertical handles.

MyWalkingChair has several modalities: it can be used like a traditional walker, pushed with the trekking pole assembly, pushed like a shopping cart, or leaned on and pushed using the leaning bar.

MyWalkingChair has a variety of unique features. Foremost among these is the **Leaning Bar** which fits between the handles. Like a standing desk or a bar, **MyWalkingChair** has a place to lean on at chest height which is very comfortable and can be very pain-relieving. Because of the wheel positions, you can also rest one foot like on a step – now recognized as a preferred ergonomic position for workers on their feet a great deal.

Other unique features include places for golf clubs, separate brake handles for both standing and sitting, but most importantly, the **wide compressible armrests**.

The **wide compressible armrests** may sound like a small thing, but they're not. They are critically important. They provide up to 5 inches of additional width to the chair so the arms can rest comfortably. But

because they are very simply constructed from foam and fabric, and are attached to the arm supports so they can turn, the armrests turn in or compress to get through a doorway, into the back of a car, or through other tight spots.

2. MyWalkingChair

General Discussion of Competition and Prior Art

With respect to **MyWalkingChair** I am unaware of anyone else attempting to invent or design such a chair for licensing. Companies that already make walkers with seats in them include Nova, Guardian, Invacare, Carex Roller/Walker, Momentum Roller/Walker, DMI 1032, Winnie Walker

Ergolator, Lifestyle Mobility Aids, Winmed, MJM. PMI, and Hugo.

All of these are substantially the same because they are primarily crutches with poorly designed seats and only a single bar for a seat

back. In contrast, **MyWalkingChair** has an **extremely comfortable seat** suitable for long-term sitting, ideal for a **spectator chair** at a sporting event or use at a restaurant with uncomfortable seats.

Why is the seat so comfortable?

- Everyone's back and joint problems are different, but for some people, like myself, on many days I can walk but then pain steadily accumulates, and only lying down on my side or sitting in a chair with the right curves, soft and breathable seat, and wide, high arm supports relieves the pain. However, once the pain disperses it is sort of like a reset button and I can walk another half-mile, take a few golf swings, or stand up at a party. But if the seat is the wrong material and/or the wrong shape, the pain will not lessen and can continue to increase. The vast majority of restaurants, theatres, museums, sporting events, parties, business meetings, even friend's houses are inaccessible because there is no seat that works, and each event becomes

an exercise in pain control. Having just the right kind of chair at hand whenever needed during a walk or other outing is the difference between:

- Walking ½ mile or so versus staying around the car
- Getting out versus laying in bed
- Playing 2 or 3 holes of golf versus watching it on TV
- Having a comfortable and enjoyable dinner with my wife versus hurrying things along because of accumulating pain levels
- Going to a museum versus seeing a picture on the Internet at home

Existing rollators are all pushed from the front and have only

a single position for the handholds which is ergonomic only if the user

is centered between the handles with the arms more or less straight down

(which is how physical therapist's are taught to instruct patients

they train on such a device). None boast multiple hand

positions or have a bar to lean on with upper arms while standing. This is similar to trekking poles that also allow the user to change positions. It is also similar to racing bicycles that may have handlebars with a tri-bar accessory or detachable and adjustable vertical handles.

In contrast, **MyWalkingChair** is pushed from the back and is much easier to roll thereby facilitating ease of walking. **Multiple hand holds** allow the user to change among a variety of ergonomic positions as the walk progresses, something people with bad backs really appreciate. In addition, the rear wheel (or an accessory) can be used to rest one foot off the ground, a significant ergonomic improvement being seen in many industrial applications. Handle height is adjustable as is the angle of the handle.

MyWalkingChair walks easily because there is an extra-long space between the handles and the first cross-member, thereby providing **extra room for the leg to swing forward** and take a comfortable stride without hitting shins or feet. Even more room is provided because the arms are in a natural bent position gripping a vertical handle in front of you as opposed to walkers and rollators where one is leaning on arms that are more or less straight down during part of the stride.

None of the existing Rollators have a glide on the back or sides to allow easy sliding for stowage of the Rollator on it's back, as does **MyWalkingChair**. Also, existing Rollator's are quite cumbersome to stowaway in a car, even

when folded. **MyWalkingChair** is easily disassembled into two or three pieces pieces for **easy stowage** and reassembles simply.

MyWalkingChair is also a **"golf bag" and trolley** that can hold all the clubs and other golf items normally

found in a golf bag. Rollators cannot do that.

MyWalkingChair is also a **Large Person Portable Chair** because a very high percentage of public and private places have chairs that are too small for large and obese people to sit comfortably. **MyWalkingChair** is a rollable, portable chair for very large people including football players, basketball players, sumo wrestlers, weightlifters, and similarly large people.

MyWalkingChair is an excellent **Spectator Chair** because many public events require considerable walking from parking to the viewing/seat location. Then, for example at golf tournaments, there are often either uncomfortable event chairs or none at all. One braking modification for the **Spectator Chair** is that the sitting brake engages automatically when the person sits down and cannot be rolled from the seated position. In addition, non-wheeled chairs can be designed to nest in the **Spectator Chair** so that a number of chairs could be carried to a location at one time. Additional space can also be used to carry food and supplies.

Transportation Chair – by adding footrests **MyWalkingChair** becomes an excellent chair for pushing a seated person. The **multiple handholds** will make pushing easier relative to normal wheelchair handles.

Another unique feature is the **dual braking/locking system**. All other Rollators have one brake handle location. **MyWalkingChair** has two brake handles - one for standing and one for sitting.

Unique Features

1. Ultra-light walker/chair. Prototype is made from plywood, steel and aluminum. The preferred embodiment uses lightweight aluminum tubes or plate, carbon fiber or similar lightweight materials.
2. Can extend your exercise walking by a number of years for many persons with bad backs and various other physical challenges
3. Ergonomic and comfortable chair
4. Leaning Bar like a standing desk to help while standing up
5. Multiple hand holds
6. Dual locking/braking system
7. Foldable for easy transport
8. All-terrain walker
9. Wide, padded, compressible armrests
10. Extra-long space for forward leg kick
11. Also usable as:
 1. Event spectator chair
 2. Portable chair
 3. Golf club carrier and trolley
 4. Transport chair - Transportation Chair – by adding footrests **MyWalkingChair** becomes an excellent chair for pushing a seated person. The multiple handholds will make pushing easier relative to normal wheelchair handles.
 5. Rehabilitation chair

6. Specialized chair for the very large
7. Outdoor furniture
12. Easy assembly and disassembly for use in travel, transport by car, etc.
13. Handle height is adjustable as is the angle of the handle.
 1. Mod 2 uses a pipe-in-pipe arrangement with the inner pipe having holes and a normally-closed spring-loaded pin goes through holes in both pipes. The upper and lower positions are fixed by channels and stops.
 2. Mod 4 uses straight pipes held by clamps from drum set hardware to raise and lower the pipes. The two pipes are spanned by aluminum bicycle handlebars fixed together in the middle. Adjustable handles are pressure-ring bound to the handlebars. The handlebars also act as the support for the leaning bar.
 3. Mod 6 uses a single arm on each side cut to a fixed length, and an adjustment hinge at base of the handles to adjust the angle of the handles as required.
14. Uses breathable outdoor fabric so heat buildup does not occur in injured areas (i.e. a disc injury) causing additional irritation
15. Arm height elevated for comfort
16. The cant of the chair can be changed – possibly can be done on wheelchairs but not walkers or rollators
17. Back and side glides easily makes stowing the chair easier when fully assembled because the glides help to slide MyWalkingChair on its side or back
18. Has multiple storage areas and pockets
19. Uses all outdoor materials that wash and dry off easily
20. 600 pound capacity
21. A double layer of fabric is used to increase strength and durability