

# WALK-AID RAILINGS

by **PAUL E. LEIMKUEHLER**

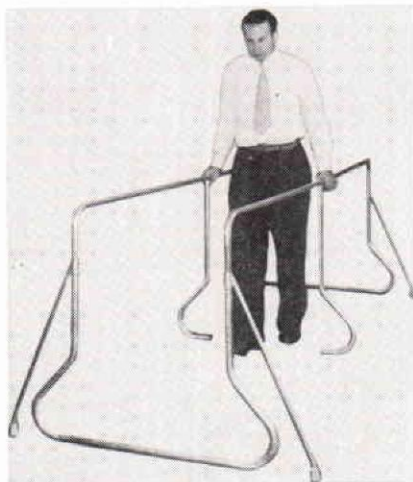
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*(Editor's Note: Here is a story showing how one OALMA member developed a new service for his patients. If you have worked out a new service, or have improved features of your establishment, let us have an account of it.)*

The old saying "Necessity is the mother of invention" is certainly a true statement when reviewing the history and development of the "Pel Walk Aid Railings."

When Paul Leimkuehler started in the artificial limb business, almost five years ago, his primary interest was to benefit the amputee as much as humanly possible. He offered free walking instruction to all new amputees, providing they would come into the shop two or three times each week for training between walking railings and mirrors. However, only about ten per cent of the amputees took advantage of the free training offered and even those ten per cent did not come in too often. Their excuses were numerous: "Taxi fare is too expensive" — "My son has to work during the day and can't drive me downtown" — or "It's just too hard for me to get out." It appears that no matter how much emphasis was put on the necessity of getting to the shop and learning how to walk properly, they still would not take advantage of the free service.

Paul learned to walk on an above-knee artificial leg in an Army hospital and realized how important it was to have railings during the first two months of walking training. One of the most important factors in learning to walk properly was to have confidence and no fear of falling. Railings appear to be the only solution to this problem because crutches always leave a fear of falling and any type of walker which has wheels may possibly roll away from the patient.



The railings in use.

If the walker does not have wheels and is picked up and moved along, then, of course, the style of walking is not developed properly. There was a real need for some type of railings that could be set up at home and yet be portable so that an average individual could take the railings home, set them up, use them at will and take them down whenever they were not needed.

The actual development of the railings from the time of the basic idea to the present date required more than three years.

One day, Paul was looking at a magazine advertisement of a major air line, and noticed the railing on the ramp leading up to the airplane. That gave him the idea of using bent steel tubing such as is used in kitchen

furniture. He found, much to his surprise, that with the thin walled steel tubing, he could get more strength and less weight than he could with using aluminum tubing. He immediately sat down and started to design a set of railings made of steel tubing and minimum of welding and special made parts. After he had a basic design, he contacted a tube bending company which has hydraulic benders and after some discussion with their engineers, came up with the approximate present design.

The unique design and sturdy construction of the Walk Aid railings provide maximum safety and stability necessary for the successful rehabilitation of a patient. These railings can be assembled in less than 5 minutes without the use of tools. The railings measure  $9\frac{1}{2}$  feet in overall length, and the height can be adjusted from  $30\frac{1}{2}$  to  $37\frac{1}{2}$  inches in 1 inch increments. Sections are constructed of cadmium plated steel tubing, and rubber mounts hold the railings stationary. Total weight is only 35 pounds. Because the length of the sections does not exceed 54 inches, the Walk-Aid railings can be laid flat on the floor of an automobile for portage. Heavy elastic straps hold the various components together while they are being carried or transported.

The Leimkuehler Limb Co. has been renting both the final design railings and various experimental models for the past two years and found many people benefited from the use of these railings. Some people have gone so far as to say that they felt they never could have learned to walk without the railings. Some people have attempted to get along without railings and could not learn to use their legs on crutches, but after they rented the railings for a month or two, progressed quite well and eventually learned to walk. Other handicapped people such as polio, paraplegic and hip fracture cases,



The railings are portable.

have made good use of these railings.

Paul designed the railings to aid his own customers. However, now that they are perfected, he is selling them to any company, hospital or institution who wants them. To his customers, he rents the railings for \$10.00 for the first month and \$8.00 for each additional month. Usually one or two months is sufficient, except in the case of a double A/K or an elderly patient. He has had an average of eight railings on rental for the past two years, so you can see that even without publicity there is a demand for the railings and, of course, the income from the rental is quite attractive at the same time. The rental of these railings to his patients is an added attraction to the type of service his company renders.

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