

Design and Functional Analysis of a Convenient Household Stair-climbing Device

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Commercial locomotion devices for stairs negotiation are now expensive and not available. House adaptation or limitation of living space to ground floor will be the common choice for the patients who encounter great difficulties in climbing stairs at own home. Consequently, it would condense the daily activity space of ground floor for other family members and decreases their quality of life. In this study, we tried to design a convenient, practical, protected, and inexpensive advice for stair climbing underlying an idea of both increasing the stairs' base of support and being capable of adjusting the positions of hand support. We hope it could help the patients with lower limbs dysfunction to negotiate stairs independently and safely without need for adapting their home environment. (FJPT 2010;35(3):263-267)

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