

# Supporting Rod to Climb Stair Case for Disable Personnel

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One of the major difficulties faced by the elders and the differently abled people at present day is climbing up & down a staircase. To overcome this difficulty either they have to get assistance from someone or they have to avoid using staircase. Even the getting assistance is quite risky since both have to be synchronized themselves with each other. Therefore, an effective method to climb staircase was introduced. A simple, light in weight climbing device is made. This device consists of a clamping mechanism and a rigid, strong handle. To improve the grip & to avoid damages to side rail rubber sleeves are used around the clamping mechanism. Initially the climbing device has to be fixed properly to one of the side rails of the staircase using the clamping mechanism. If the person wants to go up, then he/she can pull him/her up with the handle. If the person wants to go down, then he/she can transfer his/her weight to the handle & come down. Next he/she has to adjust the device for the next step. Likewise step by step the person can climb the staircase. This device can be easily fabricated with few steel parts & rubber sleeves. Further the design can be adjusted to fit the exact requirements of the user (i.e. Shape & dimensions of the side rails, length of the handle, height of the person, weight of the person). Thus, it is evident that this device is suitable and can be used by the elderly and the differently able people without any form of assistance.

## **Awards Won:**

Fourth Award of \$500