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(57) Abstract :

ABSTRACT: A wheelchair, which provides mobility and independence, is essential for people with locomotion disabilities, as they have limitations in their ability to walk or stand. Quite often, users experience certain issues such as pressure sores, back pain, and other physical discomforts while using a wheelchair regularly. To overcome these problems, we have proposed a wheelchair that can be transformed into a bed using a two-bar linkage with a slot lock mechanism. For the fullest comfort of the patient as well as the attendee, we have designed the wheelchair by considering standard ergonomic aspects like seating comfort, ease of transforming the wheelchair into a bed and vice versa with utmost safety, etc. Though with better comfort and ease of mobility, the cost of our wheelchair is more similar to that of an ordinary wheelchair.

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