



A Multipurpose crutch for physically Challenged people

Student Award

Consolation

Master Rakesh Kumar Patra

Nayagarh, Orissa

Scout: Ama Akha Pakha

Background

When a disabled/differently enabled person walking with crutches feels tired and needs to rest, finding a place to sit is not always easy. Rakesh Kumar Patra has thought of a solution. He had made a crutch that has a foldable seat, a headlight, an alarm and even an umbrella holder-cum-stand.

Rakesh comes from a business family. He lives with his parents, brother and a sister. He is studying in class ten in his village's high school. He loves the village environment with its temple, river and forests.

Rakesh has been a bit of an inventor and in his efforts to develop innovative products he has been guided by his uncle while his father, though not against his experiments, urges him to do well in studies as well. Rakesh was in class seven when he developed this multipurpose crutch for handi-capped people.

Being a sensitive child, Rakesh remains distressed

with many social issues. He feels uneasy about the sale of liquor in his village; he is worried about the fact that his school has no library or scientific laboratory equipment, but most of all he is concerned about physically challenged individuals.

Genesis

A keen observer, Rakesh saw that physically challenged people of his village faced acute difficulties while walking in sun, rain and in the darkness of nights. He realized that whenever they felt tired, and wished to sit down, they faced a lot of difficulty. Sitting on the ground was not possible as after doing so getting back on their feet would be quite difficult task. Also, it was difficult for them to see and walk in the dark.

This made him think hard and he conceived the idea of a multipurpose crutch: a crutch, which can have a light and sound source, a sitting mechanism and an indicator also.

He discussed the concept with his teacher Gopinath Pradhan of Gopalpur M.E. School and sought his

help. A local carpenter made wooden frames for the crutch. It took Rakesh one year to add on the extra features and he had it ready in 2003.

Innovation

The crutch incorporates multiple use options. It has light wooden frame fitted with a buzzer, a glow light, a seat and an umbrella stand. A user can walk with the help of this crutch very comfortably despite all the add-on features.

There have been designs of seat being incorporated in crutches but in those cases, both the crutches have been involved in the seating mechanism while in Rakesh's model the seat along with other simple utilities have been provided in a single crutch.

For the mute user Rakesh's model has a battery-powered buzzer, which can be switched on while crossing roads; the buzzer can warn other passersby or any rushing vehicle. The upper part of the crutch has a light for night use and the lower part has a red indicator bulb. A 9-volt battery powers all these circuits.

The user can unfold the seat to rest on and fold it back after use. The crutch has a side stand, which



accommodates a foldable umbrella. When going out in sun or in rain, the user can open out the umbrella and use it. Even while being seated, the user can use the umbrella.

