

Climbing Gear Removal Tool

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Products, Materials, and Services

Abstract

USU's climbing gear removal tool is a technology designed to allow rock climbers to remove nut pieces from rock in a less painful and more efficient way.

Problem

Rock climbers often struggle to remove tight wedge or "nut" protection gear pieces from rock cracks. Various methods are used, including hitting a nut removal tool with the palm of the hand, which can be painful and dangerous.

Solution

This technology allows for nut removal using only one hand. It allows the climber to remove the nut piece without jarring or hitting motions and protects one's hand from injury and pain.

Value Proposition

Commercializing this technology would assist in improving the safety, convenience, and comfort of the rock climber through increased product efficiency.

Benefit

Rock climbers use a variety of equipment, including wedge pieces or "nuts" that can be wedged into rock to help protect them from injury when a fall occurs. These nuts can be difficult to remove. Current nut removal tools often do not generate enough force to remove them easily. In an effort to remove a stuck nut, climbers will sometimes use a small rock or the palm of their hand to hit the tool and generate enough force to extract the nut from the rock – an awkward and painful process. This lightweight climbing gear removal tool allows climbers to more easily extract the nuts using only one hand.

Commercializing this technology benefits companies that design outdoor products and tools associated with climbing activities. It also improves safety, convenience, and comfort for the climber.

Market Application

As an improvement to removal of climbing protection gear, the technology would serve as a useful addition to companies manufacturing climbing hardware and related products.

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