

UNIVERSITI TEKNOLOGI MARA

CLIMBING SPINNING CART

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ABSTRACT

A cart is a tool that is usually used by people who need to carry heavy things or carry many objects. With as a strong open vehicle with two or four wheels. However, despite the cart can carry heavy and lots of weights it cannot climb stairs. This has become the main disadvantage for people who wants to carry an object through stairs. The main objective of this project is to make the cart which is able to climbing the stairs with the object or things that the user wants to bring upstairs. The machine works with the additional spinning wheel that was added at the side of the cart, thus it will be able to climb up the stairs. With the development of this cart, it will become more useful for the user.

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CHAPTER ONE

INTRODUCTION

1.1 Background of Study

This project is mainly to help people who have trouble to lift their belonging or things upstairs. Cart a device commonly used when they are heavy or the number of an object so many have become the main idea for this project. Cart is also known for a tool that can lift loads and object that is quite heavy and make the works even easier. The cart, usually drawn by a single animal, is known to have been in use by the Greeks and the Assyrians by 1800 bc (although it is generally assumed that such vehicles could have been used as early as 3500 bc as an extension of the invention of the wheel)[1]. Nowadays people usually used their energy to pull this cart.

Carrying or lifting an object upstairs is a common activity for people. However, it becomes much harder work if the object becomes heavier or the object becomes too many. The cart has become a useful device that can lift many and heavy things so if the design is developing so that the cart can climb it will become a more useful device. But, the cost is also the main factor of why people want to use this cart. The tensile-compressive stress when pulling and gripping is two major human factors in the design of this stair climbing cart [2].